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## Understanding business valuation : a practical guide to valuing small to medium-sized businesses

Gary R. Trugman

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**Gary R. Trugman** is a Certified Public Accountant licensed in the states of New Jersey, New York, Connecticut, and Florida. He is Accredited in Business Valuation (ABV) by the American Institute of CPAs and is a Master Certified Business Appraiser (MCBA) as designated by the Institute of Business Appraisers Inc. He is also an Accredited Senior Appraiser (ASA) in Business Valuation by the American Society of Appraisers. Gary is regularly court appointed and has served as an expert witness in federal court and state courts in several jurisdictions, testifying on business valuation, business and economic damages, and other types of litigation matters.

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Gary was born in New York and received his undergraduate degree from The Bernard M. Baruch College of the City University of New York. He was the first business appraiser in the United States to earn a Masters in Valuation Sciences from Lindenwood College. His masters thesis topic was "Equitable Distribution Value of Closely Held Businesses and Professional Practices." Gary's appraisal education also includes various courses offered by The Institute of Business Appraisers, the American Society of Appraisers, the American Institute of CPAs, and others. He has taught federal income taxation at Centenary College, financial statement analysis in the masters degree program at Lindenwood College, and several topics at the AICPA National Tax School in Champaign, Illinois. He is a member of The Institute of Business Appraisers Inc., the American Society of Appraisers, the American Institute of Certified Public Accountants, the Florida Institute of Certified Public Accountants, the New Jersey Society of Certified Public Accountants, the Connecticut Society of Certified Public Accountants, and the New York State Society of Certified Public Accountants.

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Understanding Business Valuation: A Practical Guide to Valuing Small to Medium Sized Business

Third Edition

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AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

# Gary R. Trugman

# Understanding BUSINESS VALUATION

**A Practical Guide  
to Valuing Small  
to Medium Sized Businesses**

THIRD EDITION



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Small to Medium Sized Businesses

**GARY R. TRUGMAN**

CPA/ABV, MCBA, ASA, MVS

## *Notice to Readers*

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## *Dedication*

To Linda, my wife and business partner

This is the third time that you put up with me working on this book  
It must be love . . . or in the alternative, you must be nuts!!!

Thanks for everything. It would never happen without you.





# PREFACE

Here we go again. This time it's the third edition. I really have to get a life. Oh, I forgot, business valuation is my life. Do you feel sorry for me yet? Well, since you don't, and you probably bought this book, keep reading.

I said it the last two times, and I will say it again: This is just what we need, another book on business valuation. Years ago, there were only a limited number of books on this topic—mostly finance texts. Today, you cannot read everything that is being published unless you have no life. Oh gee, that's me. Anyway, for those of you with a limited life, there are definitely some books on this topic that are worth reading. I can no longer list only two or three books that are my favorites because so many good books on this topic have been published over the last several years that the list has grown too much. I have included many references to these books throughout this edition, so you should have no problem figuring out which ones I like.

Okay, so why did I do this again, and what is new in this edition? I did it again because I find that there is still a need for this stuff to be explained in plain, uncomplicated English, in a manner that helps apply appraisal theory to real world practice. Please don't get me wrong! I am not claiming to know everything. In fact, I am afraid of what I don't know. But I also finally realize that there are things in this world we may never understand. As to the new stuff in this edition, I will tell you about it soon.

The purpose of this book is to provide some guidance on the theory, as well as on how to apply it in a meaningful fashion. Whether or not I'm successful is up to you. First, some basic ground rules:

1. To get the most out of this book, you must read it, not only in its entirety but also in the sequence in which it is written. Don't go to the chapter on capitalization rates without reading the earlier sections of the book. Otherwise, you may not understand what you are capitalizing and why. It is also important to make sure that you read the exhibits and the appendixes at the time they are referenced. The exhibits have been included as an integral part of this book. If you skip over them, or if you go back to them later, you may miss a valuable point that I am trying to make.
2. In general, I do not think in terms of complex mathematical formulas. I do not like equations with lots of parentheses, nor do I like formulas that have Greek letters in them. Therefore, if you really get off on mathematical equations, this book is not for you. Believe it or not, I want readers to understand this stuff! In certain sections of this book, you will see some mathematical formulas. You will even see some Greek letters. The notation may be different from that found in other books. Concentrate on the concepts and not on the letters and symbols used.
3. I am a firm believer of the KISS theory (keep it simple, stupid). This does not mean, however, that business valuations are simple. Quite the contrary! If you are at all like me, after reading this book you will never feel comfortable doing a business valuation again. This can be an extremely subjective process. For the accountants out there, this is not at all like accounting, where the debits have to equal the credits. What you will learn is that there is no black and white answer. There are a million shades of gray. To quote a good friend of mine, the answer to most questions is, "It depends."
4. The concepts discussed in this book cannot be read and applied as if they were in a vacuum. Many of the items discussed will—directly or indirectly—affect other parts of the valuation process. You must be a big picture type of person.
5. In some of the exhibits, I cheated. They were so good in the last edition that I decided to merely update the dates to freshen them up. If I messed up because the interest rates are not from that exact period, please forgive me. I am much more concerned with the concepts than the dates. In some instances, where I felt the exhibit was date sensitive, I did not change the dates. In some cases, I also changed the location of the business to protect the confidentiality of the client, so here, too, if it is a little inconsistent, please forgive me.

6. This book is not intended to present every alternative to every situation. Just because I have included something in this book, please do not rely solely on my writings. There may be facts and circumstances that could negate my opinion. You will find that there is no substitute for common sense in this process.
7. In some instances, I will be illustrating points from the negative. Several of the exhibits contain sections of actual reports critiquing someone else's work. Learn from what they may have done wrong.
8. Please don't shoot the messenger! Throughout this book, several topics will be discussed that are controversial. Some may not even have a definitive answer. But you must think about these issues when you do a business valuation.
9. While reading this book, you are going to be exposed to my own form of humor. This is not intended to insult anyone but, rather, to add a little levity to what can be a very dry and technical topic. Although business valuation tends to be extremely complex, let's have some fun while we learn. You just can't take this stuff too seriously.
10. And finally, in much of what I am trying to teach, I have made many of the mistakes that I am trying to prevent you from making. Someone once told me that I will learn from my mistakes. By now, I am a genius!

With that stuff out of the way, please enjoy my attempt to explain what little I know about business valuation.



# ACKNOWLEDGMENTS

There are several people whom I must acknowledge for their contributions to this book. These people are not listed in any special order, but they are all very important to me. The first person is admittedly the most important. First and foremost, I have to thank Linda Trugman CPA/ABV, MCBA, ASA, MBA. As you can see, she is much more qualified than merely being my wife. She is my business partner of 24 years, and I have to thank her for her countless hours in assisting me to make this book more readable, logical, and technically accurate. She is also the primary author of the chapter on Estate and Gift Valuations. I hope she doesn't ask me for a portion of my royalties!

Next, my special thanks to William Quackenbush, ASA (and probably his wife, Robin), for being my other technical reviewer of the entire book. I kept sending Bill chapters, and he kept telling me about my mistakes. All kidding aside, Bill was a tremendous sport for spending his summer, fall, and holidays with my manuscript. His comments, by not being a CPA, made this book better for the non-CPAs that will use this book. He made me not take things for granted.

Some other thanks are in order. The new chapter on standards was reviewed by Ed Dupke CPA/ABV, Michael Crain CPA/ABV, ASA, CFA, and James Hitchner CPA/ABV, ASA. These folks were involved with the creation and ultimate passage of the new AICPA business valuation standard. If they could not review this chapter, I would not have known who to ask. They are some of the most qualified people that I know.

Some more special thanks to other contributors to this book. I asked my good friend Robert Schlegel, ASA, MCBA, to help me with a chapter on intangibles, and he sure came through. Bob filled a void that was missing in the two editions of this book, a basic chapter on valuing intangible assets. And instead of having my staff lose billable time by working on the data gathering chapter for me, I decided to go to one of the best, Eva Lang CPA/ABV, ASA. Eva is perhaps one of the best researchers that I have ever had the privilege of knowing. Nobody knows how to Google the way Eva does!

One more, quick thank you goes to Karin Gerber, my administrative assistant that spent countless hours fixing my manuscript so that it could be delivered in a usable format to the AICPA. The conversion from Word Perfect (which I use) to Word (which the AICPA wanted) is more challenging than wrestling an alligator. She took the time and had the patience to convert my files despite the normal workload of supporting our valuation team's efforts to get client work out the door.

And one more special thanks—to my editor, Andrew Grow, who made my life so much better with this third edition. Besides really caring, Andrew helped make this book the success that I think it will be. His comments, questions, and suggestions were invaluable. I really felt like I had a friend at the AICPA. It just proves the old saying that the third time really is the charm. You made a kid from the Bronx sound like he is from Manhattan. Actually, more important—you let me keep my Bronx accent! Thanks. Thank you so very much. Additional thanks go to the publications department within the AICPA.

And finally, one more thank you goes to two different groups of practitioners. The first group consists of the many practitioners I have taught with over the years, who have taught me so much. This list goes on and on and just keeps getting longer as I get older. You know who you are. The second group of practitioners consists of all of the students who have attended my classes, participants at conferences who have attended the sessions I have spoken at, and all of my colleagues who have had such flattering things to say to me over the years about my teaching, my writings and, particularly, the first two editions of this book. It is hard to make me humble, but you have succeeded.



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# INTRODUCTION

This book has been methodically organized to help you get the most out of it that you possibly can. Each chapter contains lots of new stuff since the last edition, so you might want to go through them all in sequence. There are even a couple of new chapters mixed in the middle. The chapters are set up as follows:

- Chapter 1 provides background stuff regarding why businesses are appraised, who appraises them, and the various appraisal organizations. Although you probably fit into one of the categories discussed, you should be aware of the other types of valuation analysts and their standards because you will most likely run across them in your endeavors.
- Chapter 2 is brand new. Most of this chapter consists of an annotation of the new AICPA business valuation standard. Other standards are also covered in this chapter. This chapter is so important (and also so long) that I made it into its own chapter.
- Chapter 3 gets you started in the appraisal process. In this chapter, I discuss the things that you must know to start an assignment. Chapter 3 includes information about engagement letters, conflicts of interest, internal work programs, and the initial document request.
- Chapter 4 takes you through the basic appraisal principles and theory behind the stuff that we are trying to figure out how to do. We will learn that the term value has many different meanings in business valuation, and we will discuss some of the more important meanings. Because so much of the valuation work we do involves taxes, this chapter will also point out the influence of the Internal Revenue Service on what we do.
- Chapter 5 includes a discussion of internal and external sources of information that will be gathered by the appraiser. Numerous references are provided as to where you can locate information. This chapter lists all types of neat sites on the Internet for doing the required research.
- Chapter 6 walks you through the process of what to do with the data that was gathered during the appraisal process. This chapter includes a discussion of economic, industry, company, and financial analysis. This is one of the most important chapters in the valuation process. It will help you arrive at the numbers needed to apply valuation methodologies to, as well as help you assess the riskiness of the income stream of the appraisal subject.
- Chapter 7 presents the first part of market approach to valuation. The underlying theory for the market approach is presented in this chapter. The balance of the chapter concentrates on the guideline public company method, including more detail on how to perform the analysis involving publicly traded companies. You will have to read this chapter to find out about SGLPTL.
- Chapter 8 presents the second half of the market approach. This chapter includes a detailed discussion of the guideline transaction method, including a description of the various databases available to find merger and acquisition information involving closely held businesses. This chapter takes you step by step through the process of using this method, including making you aware of the potential pitfalls. Using internal transactions and rules of thumb are also discussed in this chapter.
- Chapter 9 presents the asset based approach to valuation. Here also, several methods are explored, and there is a discussion of how to find and communicate with other types of appraisers.
- Chapter 10 presents the income approach to valuation. For small and medium sized businesses, this chapter may be one of the most important. Single period and multiperiod models are presented. Forecasting financial information is also included in this chapter because it is the very essence of this approach to valuation. A brand new section on valuing S corporations and other types of pass through entities has been added to this chapter.
- Chapter 11 is the chapter that everyone will want to turn to! Discount rates and capitalization rates are discussed. Lots of theory and, hopefully, practical guidance has been included in this chapter. This chapter has been significantly changed from the last edition. An in-depth discussion about the Duff & Phelps Risk Premium Study and the new Butler-Pinkerton Model has been added to this chapter. This may cause even the experienced valuation analysts to change the manner in which they do things.

- Chapter 12 includes a discussion on valuation premiums and discounts. Learn when to use different premiums and discounts, as well as how to support your opinion. This revised chapter now includes a discussion on some of the more controversial issues still being debated among practitioners.
- Chapter 13 contains an annotated version of Revenue Ruling 59-60. This revenue ruling is so important that I decided to include it as a separate chapter. You can never get enough of a Revenue Ruling that is over 40 years old but has the makings of being the best writing in business valuation of all time (maybe with the exception of my book).
- Chapter 14 addresses the appraisal report. Learn how to prepare and defend the report and learn some tips regarding presentation techniques. This chapter has been updated to include the new reporting requirements of the AICPA's business valuation standard.
- Chapter 15 is brand new. This is a basic chapter on intangible assets. There are several examples to help you learn how to value different types of intangibles. There are some really good reference materials cited in this chapter as well.
- Chapter 16 addresses valuation assignments that are performed for estate and gift tax purposes. Learn about the chapter 14 (of the Internal Revenue Code) requirements, the adequate disclosure requirements, and family limited partnership valuations. There are many court cases referenced in this chapter. Also, learn about the new appraiser penalties if you mess up.
- Chapter 17 covers issues involved in divorce valuations. Valuations performed as part of a divorce assignment entail very unique considerations for the appraiser.
- Chapter 18 contains a discussion on unique aspects of valuing professional practices. Learn what factors should be considered in valuing different types of professional practices, making these assignments different from valuing an operating company. Also included in this chapter is a detailed analysis on the valuation of work in process for a contingent fee law firm.
- Chapter 19 addresses valuation assignments for shareholder disputes, including issues involving the fair value standard of value. There are some new exhibits in this chapter addresses very significant issues regarding fair value.
- Chapter 20 is a discussion of some of my favorite court cases. In fact, the name of this chapter is "My Favorite Court Cases." Pretty catchy, isn't it? This chapter has a few really good court cases that will help you understand some important issues regarding valuation. A new case has been added since the last edition. It involves S corps and fair value.
- Chapter 21 contains a discussion about economic damages. There are several new exhibits addressing different types of damages issues in this chapter.
- And finally, the accompanying CD-ROM contains some reports for you to plagiarize. I only hope that you will give our firm proper attribution. Several new sample reports are included so that you can see the difference between the different types of reports.

While the material in this book is not necessarily unique, it has been organized in a manner that is intended to provide you with a logical analysis of the appraisal process. Many of the exhibits contain actual sections of appraisal reports to help emphasize the subject matter. Make sure you read them!

## STEPS OF AN APPRAISAL

---

This book proceeds in a sequence that resembles the steps of performing an appraisal. The chapters will address these steps in detail. Because you are probably dying to know what these steps are, I list them here:

1. Define the appraisal engagement.
2. Gather the necessary data to perform the engagement.
3. Analyze the data that you gathered.
4. Estimate the value of the interest being appraised.
5. Write the report to communicate the value.

## NOTATION SYSTEM USED IN THIS BOOK

---

A source of confusion for those trying to understand financial theory and methods is the fact that financial writers have not adopted a standard system of notation. While I have attempted to follow the most common notation system, I may have deviated along the way. This should not concern you.

Following are the symbols used in this book:

- Value at a point in time:

$PV$  = Present value

$FV$  = Future value

- Cost-of-capital and rate-of-return variables:

$k$  = Discount rate (generalized)

$k_e$  = Discount rate for common equity capital (cost of common equity capital); unless otherwise stated, it generally is assumed that this discount rate is applicable to the net cash flow available to common equity

$k_d$  = Discount rate for debt (*Note:* for complex capital structures, there could be more than one class of capital in any of the above categories, in which case expanded subscripts would be required.)

$c$  = Capitalization rate

$C_{pt}$  = Capitalization rate for a pretax benefit stream

$C_{at}$  = Capitalization rate for an after-tax benefit stream

CP = Control premium

$t$  = Tax rate (expressed as a percentage of pretax income)

$R_f$  = Rate of return on a risk-free security

$\beta$  = Beta ( a coefficient, usually used to modify a rate-of-return variable)

$(R_m - R_f)$  = Risk premium for the “market” (usually used in the context of a market for equity securities such as NYSE or S&P 500)

SCA = Specific company adjustment

SCP = Small company premium

WAAC = Weighted average cost of capital

- Income variables:

$E$  = Expected economic income (in generalized sense [i.e., could be dividends], any of several possible definitions of cash flow, net income, and so on; also called a benefit stream)

EBIT = Earnings before interest and taxes

EBITDA = Earnings before depreciation, interest, and taxes (“depreciation” in this context usually includes amortization)

- Periods or variables in a series:

$i$  = The  $i$ th period, or the  $i$ th variable in a series (may be extended to the  $j$ th variable, the  $k$ th variable, and so on)

$n$  = The number of periods or variables in the series, or the last number in the series

$\infty$  = Infinity

O = Period, the base period, usually the latest year immediately preceding the valuation date

- Weightings

$W$  = Weight

$W_e$  = Weight (percentage) of common equity in capital structure

$W_p$  = Weight of preferred equity in capital structure

$W_d$  = Weight (percentage) of debt in capital structure

*Note:* For purposes of computing a weighted average cost of capital (WAAC), it is assumed that the above weightings are at market value.

- Growth:

$g$  = Rate of growth

- Mathematical functions:

$\Sigma$  = Sum of (add up all the variables that follow)

# CHAPTER 1

## Overview of Business Valuation

### CHAPTER GOALS

Business valuation is process oriented. As such, I thought that I should start the process at the beginning. Therefore, this chapter is designed to

- Give you a very brief history about the valuation profession.
- Explain why businesses are appraised.
- Provide some background about who values businesses.
- Familiarize you with the professional appraisal organizations.

What did you expect at this point, the complicated stuff? Be patient, and we will get there.

### INTRODUCTION

Business valuations are performed for companies and interests in companies of all sizes and types. The conceptual principles are the same for companies of different sizes, but very often, the manner in which these principles are applied varies greatly. The level of data available for the appraisal of small and mid-sized companies tends to be considerably lower than the amount of information that is available for larger businesses. When there is a lack of data available for the smaller companies, either certain methodologies cannot be used, or the result should be considered less reliable. The valuation analyst must be more careful in circumstances where less data is available because having less data creates a larger risk of not being able to interpret the existing data properly. The valuation analyst should understand the business valuation process from the large company, more theoretical basis, in order to adapt these concepts properly to its smaller counterparts. However, valuing smaller businesses can be extremely challenging because most of the empirical data that is regularly used by a valuation analyst applies to larger companies and only tangentially to smaller ones.

### A BRIEF WALK DOWN MEMORY LANE

---

Let's take a couple of giant steps to cover this material. More detail was in the last edition of this book, so if you are a history buff, buy the second edition on eBay. Over the last 15 to 20 years, the business valuation industry has gone through staggering changes. We have seen the following occur:

- 1987—Establishment of the Appraisal Foundation. This organization was set up by seven real estate organizations and the American Society of Appraisers in response to the growing problem facing the real estate appraisal world. This organization is the creator of the *Uniform Standards of Professional Appraisal Practice* (USPAP). The provisions of the USPAP include Standards 9 and 10, which pertain to business valuations. Standard 3, Appraisal Review, also now applies to business valuation.
- 1989—Passage of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA). Among other provisions, this law requires all who perform real estate appraisals involving a *federally related transaction* to follow the USPAP. There was quite a bit of confusion when this law was first passed because



the business valuation profession thought that it would also be subject to this act. However, it is pretty clear now that it was only real estate appraisers who were subject to the federally related transaction portion of the legislation. However, many of the appraisal organizations have encouraged all appraisers to follow the USPAP as a “best practices” technique.

- 1991—Formation of the National Association of Certified Valuation Analysts. This organization initially targeted CPAs who were looking to gain a credential in business valuation. It has since expanded its membership base to include non-CPAs and government employees. Although the “new kid on the block,” this organization has made unbelievable strides in becoming a major player in our field.
- 1997—The American Institute of CPAs Executive Board passes a specialty designation known as *Accredited in Business Valuation* (ABV). The first examination was given in November 1997. This designation, especially because it is appended to the CPA (CPA/ABV), gains immediate recognition in the marketplace among all of the credentials available in our field.
- 1998—The American Institute of Certified Public Accountants (AICPA), through great insight and foresight, published the first edition of my book. (Hey, don’t laugh—it could not have been that bad—this is the third edition and you either bought it or it was given to you as a birthday present!)
- 2005—The AICPA sent out an exposure draft of the first business valuation standard in its history.
- 2006—The AICPA sent out another exposure draft of its business valuation standard.
- 2007—The AICPA sent out another exposure draft of its business valuation standard. This time it was approved and passed. This is so important an event in our history that I have devoted a complete chapter to this new standard (see chapter 2).
- 2008—The third edition of my book gets published. And they say it would never happen!

## WHY ARE BUSINESSES APPRAISED?

---

Business valuation assignments will vary depending on their purpose. Therefore, it is imperative that the valuation analyst understand the purpose of the assignment before the process can begin. More often than not, the purpose will influence the standard of value, the methodologies used, the level of research performed, and possibly the date of the valuation. This does not mean that the valuation analyst takes shortcuts or aims for a high or low value. Examples of how these items can impact the assignment can be demonstrated by understanding that certain types of business valuations are guided by specific sets of rules, such as state statutes, IRS regulations, or Department of Labor regulations, or if a minority interest is being valued, certain adjustments may not be made to the company’s financial statements because the minority interest cannot legally effectuate such adjustments. Valuations performed for divorce purposes may have case law restrictions that must be considered (for example, separating professional goodwill from the goodwill of the enterprise). If you have never done a business valuation, this stuff probably has you wondering what I am talking about. Be patient, this will start to make more sense as we proceed. Box 1.1 explains the variety of reasons that business valuation engagements are performed.

## MERGERS, ACQUISITIONS, REORGANIZATIONS, SPIN-OFFS, LIQUIDATIONS, AND BANKRUPTCY

Business valuations are frequently performed when one company acquires another company, when a company is targeted for an acquisition, when a company’s capital structure is reorganized, when a company splits up, or when a company enters bankruptcy in liquidation or reorganization. The transactions may include entire or partial acquisitions, divestitures, liquidation, or recapitalization. Mergers will generally require both companies to be valued, while an acquisition may require only a single valuation. The terms of the transaction generally include cash, notes, stock, or a combination of these forms of payment.

In bankruptcy, in addition to the involvement of the different classes of creditors and the shareholders, the approval of the bankruptcy court is usually required. Closely held companies with two or more definable divisions may be split up or spun off into separate corporations. Reasons for doing this can include estate tax considerations, family conflict, or sale of only part of the total business. Valuations are necessary for tax purposes, financial reporting, and, if applicable, equitable distribution of the assets among family members. In the

liquidation of a corporation, the valuation analyst's allocation of the assets distributed to the stockholders may be required to substantiate subsequent depreciation and other deductions claimed. Many publicly traded companies have acquired closely held businesses by using restricted stock (Rule 144 stock) as the form of payment. Restricted stock is discussed in chapter 12. The advantage of using stock as a form of payment is that the acquirer does not have to use cash to make the acquisition. Frequently, the transaction can also provide the seller with a tax free transaction under Internal Revenue Code (IRC) section 1031. It also provides the seller with the opportunity to take advantage of the tax deferred appreciation of owning the acquirer's stock. This can be a good or bad thing. This can also create work for the valuation analyst.

### Box 1.1 Reasons For A Business Valuation Engagement

- Mergers, acquisitions, reorganizations, spin-offs, liquidations, and bankruptcy
- Allocation of purchase price (tax and financial reporting)
- Estate, gift, and income taxes
- Marital dissolution
- ESOPs
- Buy-sell agreements
- Stockholder disputes
- Financing
- Ad valorem taxes
- Incentive stock option considerations
- Initial public offerings
- Damages litigation
- Insurance claims
- Charitable contributions
- Eminent domain actions
- Fairness opinions

## ALLOCATION OF PURCHASE PRICE (TAX OR FINANCIAL REPORTING)

An allocation of purchase price may be performed for either tax or financial reporting purposes. Each of these assignments will be accomplished based on the applicable set of rules for the intended purpose. The tax rules have been around longer, so I am going to start with them. The current financial reporting rules came about in 2002 and continue to evolve.

Years ago, both the purchaser and seller would determine their own values and treat the purchase and sale of the assets differently. The purchaser did not want to buy goodwill because it was not tax deductible, and the seller wanted to sell goodwill because it was subject to lower capital gains tax treatment. This created some very interesting allocations between the buyer and the seller. The all around loser was Uncle Sam. However, the Tax Reform Act of 1986 changed all of that. IRC section 1060 requires that when a business is acquired, a valuation must be performed to support the allocation of the total purchase price to the component parts for income tax purposes. The law requires a uniform allocation of the purchase price based on an appraisal of the underlying assets. The IRS now pays more attention to these transactions to ensure that the purchase price allocation is reasonable and is treated consistently by both the purchaser and the seller. An inappropriate or inconsistent allocation of the purchase price can result in an increased tax liability and, in some instances, penalties.

In 1993, the tax law changed, providing for intangible assets to be amortized over 15 years. This change reduced the necessity for valuation analysts to allocate the purchase price between different classes of intangible assets that had different amortization periods, or no amortization period (for example, goodwill) under the old law. Allocation of purchase price continues to be a required service, although the tax law has made it a little easier.

Not all allocations of purchase price are performed for income tax purposes. In some instances, an allocation may be performed when it is necessary to value certain components of a company and not the entire equity of an enterprise. This can be illustrated by the following situation. A company was sold, and the value of the transaction was known. However, the \$17 million sales price was problematic because our client thought that her husband's business was worth \$5 million. After all, he told her this when they settled their divorce action based on this value. To say the least, she was not happy when she found out that the business was sold for \$17 million, with the transaction closing about two weeks after the divorce was finalized. The court decided that she was entitled to her equitable share of the excess (due to the husband's fraud), but because the divorce was in a state that did not consider personal goodwill or personal covenants not to compete as part of equitable distribution, she was entitled to the nonpersonal portion (See chapter 17 for an extensive discussion about *personal goodwill*).

The valuation analyst representing the husband allocated a large portion of the purchase price to personal goodwill or a personal covenant not to compete, or both. We had to allocate the purchase price to support the value of what our client was entitled to receive. This is an example of a nontax allocation of purchase price.

In addition to allocating the purchase price for tax purposes, generally accepted accounting principles (GAAP) also require these types of valuations. The valuation analyst is frequently being called on to provide valuation services with respect to pronouncements made by the Financial Accounting Standards Board (FASB). They include, but are not necessarily limited to, FASB Statement of Financial Accounting Standard No. 141, *Business Combinations*; No. 142, *Goodwill and Other Intangible Assets*; and No. 157, *Fair Value Measurements*, all of which deal with issues such as the determination of the fair value of assets acquired and impairment of goodwill. These topics will be covered in more detail in chapter 15.

## ESTATE, GIFT, AND INCOME TAXES

The valuation of a closely held business or business interest is important to estate planners as they consider the effect of the unified estate and gift tax credit on lifetime transfers of property. Although this is not a tax book, valuation analysts working in this area are urged to consult the appropriate IRC sections and regulations for specifics on the unified estate and gift tax requirements. If you think that finance books on business valuation are fun reading, try the tax code. You will never have so much fun!

IRC section 2036(c), relating to estate freeze techniques, was repealed and superseded by a new, complex set of rules in chapter 14 of the IRC (sections 2701–2704). These rules can be advantageous to the client, but the IRC and IRS regulations include strict provisions for compliance. Valuation analysts, therefore, should familiarize themselves with these tax provisions. Chapter 16 of this book contains specific information about estate and gift tax valuations. Also included in this chapter are the new rules that pertain to defining a *qualified appraiser*, as well as penalties if you get caught!

In addition to these items, the IRC contains special rules for the redemption of stock in a closely held company when the owner dies, and the value of the stock represents more than 35 percent of the gross estate. Valuation analysts need to be aware of the alternatives under IRC section 303.

Valuations performed for income tax purposes may include S corporation conversions due to the built-in gains tax issues that arise if a sale occurs before the 10-year period required by the IRC. Although these assignments do not occur as often as they did a few years ago, valuation analysts are still being approached to perform this assignment, especially in circumstances where the client did not listen to its tax accountants when he or she said that the client needed to do the appraisal at the time of the conversion. Clients frequently said, “I have no intention of selling my business during then next 10 years, so I am not worried about it.” Guess what? The 10-year built-in gains tax kicked in when the client received an offer to sell that was too good to pass up. Valuation analysts should consult applicable sections of the tax law to properly understand the unique requirements of S corporation valuations performed for a conversion. S corporation valuation issues are discussed further in chapter 10.

## MARITAL DISSOLUTION

In a marital dissolution, most of a couple’s assets and liabilities are valued, regardless of whether a state follows equitable distribution or community property rules. Frequently, one of the assets included in the marital estate is an interest in a closely held business. It is typical to have the business valued in its entirety if it is a small business, but sometimes only a portion of the business (for example, a minority interest) is valued in a large business. Usually the business is not divided between the spouses. Instead, one spouse keeps the business, and the other receives different assets of equal value. Because marital dissolution laws vary significantly from state to state, the valuation analyst must be aware of the rules of the state in which the divorce takes place. For example, in some states, goodwill associated with a professional is excludable from distribution, while in other states, it is includable.

Another item that the valuation analyst must be aware of is the standard of value (covered in chapter 4) used in the jurisdiction of the marital dissolution. Frequently, fair market value is the standard of value discussed, but the application from state to state varies greatly from the definition found in the tax laws. This can be illustrated by reviewing cases from various states. For example, in Florida, fair market value has been interpreted to be the value of the business, assuming that the business owner walks away without a covenant not to compete. In most instances, fair market value assumes a covenant not to compete. Logically, what willing buyer would purchase a business if the

seller could open up next door and compete with him or her? In Pennsylvania, fair market value excludes personal goodwill. Clearly, the valuation analyst cannot be expected to know every state law, but he or she should ask the client's attorney for information before proceeding in a direction that may have his or her report thrown out for failure to comply with the rules of the jurisdiction. Chapter 17 contains specific information about divorce valuations.

## EMPLOYEE STOCK OWNERSHIP PLANS

An employee stock ownership plan (ESOP) is an incentive ownership arrangement funded by the employer. In general, employer stock is contributed instead of cash. ESOPs provide capital, liquidity, and certain tax advantages for private companies whose owners do not want to go public. An independent valuation analyst must value the employer's securities, at least annually, and must determine the price per share supporting transactions with participants, plan contributions, and allocations within the ESOP. Valuation analysts are urged to become familiar with the rules promulgated by the Department of Labor before they begin an ESOP engagement.

## BUY-SELL AGREEMENTS

A buy-sell agreement allows a partner or stockholder in a closely held business to acquire the interest of a partner or stockholder who withdraws from the business. The agreement may contain a designated price or a formula to determine the price that the remaining owners of the entity will pay to acquire the interest. The price or the formula needs to be updated periodically. Payment terms and conditions of sale are also generally provided. A client may ask a valuation analyst to assist in determining which valuation method is appropriate in such an agreement.

Buy-sell agreements are also used frequently to establish a value for a transaction between the partners or stockholders in the event of death, disability, or retirement. It is common to see different formulas for each event. The valuation analyst must be aware of IRC section 2703 and its effect on valuations when there is a buy-sell agreement in effect.

In working with the client, the valuation analyst should caution him or her about the use of a single formula. Formulas do not always appropriately consider the economic and financial climate at the valuation date, stand the test of time, or achieve the parties' intentions. Therefore, their usage should be limited. Instead, the basis of a buy-sell agreement should be a valuation. If an extensive valuation is required, it should be performed by a qualified valuation analyst.

## STOCKHOLDER DISPUTES

Stockholder disputes can range from breakups of companies resulting from disagreements between stockholders to stockholder dissent relating to mergers, dissolutions, and similar matters. Because many states allow a corporation to merge, dissolve, or restructure without unanimous stockholder consent, many disputes have arisen over the years because minority stockholders have felt that the action of the majority had a negative impact on them. Dissenting stockholders have filed lawsuits to allow their shares to be valued as if the action never took place.

In such cases, the value of the stockholder's interest is what it was immediately before the change; it does not reflect the impact of the proposed change on the value of the corporation. In these instances, the value is generally determined according to the standard of fair value, based on the case law within the state of incorporation. When a valuation analyst accepts an engagement relating to a stockholder action, it is advisable for him or her to request the client's legal counsel to clarify the value definition used in the particular state. The valuation analyst cannot address such issues as control premiums, minority discounts, and discounts for lack of marketability without adequate legal information about the value definition to be used.

Many states also have statutes to protect minority shareholders from being "oppressed" (abused) by the controlling shareholder(s). This is another instance where the valuation analyst must become familiar with the statutes and case law of the jurisdiction in which the legal action is pending. Chapter 19 contains some specific information about shareholder dispute valuations.

## FINANCING

A valuation of the business may provide lenders or potential investors with information that will help the client obtain additional funds. Financial statements present information about a business based on historical amounts. For a new business, the traditional statement may closely reflect the estimated current value. However, this is

generally not the case for an established business that has developed intangible value over the years. Assets with intangible value (such as special trademarks, patents, customer lists, and goodwill) may not be reflected in the financial statements. Furthermore, other assets and liabilities of the business (such as real estate and equipment) may be worth significantly more or less than the book value as recorded under GAAP.

## AD VALOREM TAXES

In some jurisdictions, ad valorem taxes are based on the value of property used in a trade or business. Various entities are subject to ad valorem taxation and, therefore, the fair market value of such properties must frequently be determined to ascertain the amount of tax. Regulations and case law differ significantly from jurisdiction to jurisdiction. To determine the appropriate standard of value for these properties, the valuation analyst needs to consult the client's lawyer.

## INCENTIVE STOCK OPTION CONSIDERATIONS

Many large companies provide fringe benefits in the form of incentive stock option plans that allow their employees to purchase the company's stock at a certain point in time and at a stated price. Employees pay no taxes when the incentive stock option is granted or when the stock option is exercised. Employees do pay tax, however, when they sell the stock received through the exercise of the option. To qualify as an incentive stock option, a stock's option price must equal or exceed its fair market value when the option is granted. Accordingly, the valuation of a closely held company has a significant effect on its incentive stock option plan.

Over the past decade, stock options have become a major component of employee compensation packages. This is especially true for start-up companies that may not have the cash flow to pay market rates of compensation to its employees. Instead, the employee works for the company for a lower salary but a very generous stock option plan. The computer industry has produced many millionaires as a result of these programs. Oh, to be a geek!

## INITIAL PUBLIC OFFERINGS

A substantial amount of legal and accounting services must be rendered to bring a private business to the public marketplace. From a financial standpoint, the corporation's accounting records and statements are carefully reviewed and amended, if necessary. The capital structure may need enhancement, and executive benefit plans may need revisions. More important, the corporation's stock is valued for the initial offering.

The underwriter must exercise a great deal of judgment about the price the public may be willing to pay for the stock when it is first offered for sale. Such factors as prior years' earnings, potential earnings, general stock market conditions, and the stock prices of comparable or guideline companies need to be considered to determine the final offering price. The client may ask the valuation analyst to support the offering price by performing a valuation.

## DAMAGES LITIGATION

Many court cases involve damages. Some cases relate to compensation sought for patent infringements, illegal price fixing, breaches of contract, lost profits, or lost business opportunities, while others relate to lender liability, discrimination, and wrongful death actions. The valuation analyst may also be asked to perform hypothetical valuations of a company to determine the amount of damages resulting from the loss of business value to the stockholders. These types of valuations generally require the valuation analyst to value the company twice. The first valuation determines the value of the company at the present time. The second valuation is based on what the company would have been worth had a certain action taken place or not taken place. The difference is generally a measure of damages.

Practitioners are cautioned to be aware of such court decisions as *Daubert*<sup>1</sup> and *Kumho Tire*<sup>2</sup> to ensure that the methodologies employed in these and other types of litigation are generally accepted in the literature. Using methods that are not generally accepted can result in the expert's disqualification in a litigation. This is sure to make for unhappy clients and attorneys. Chapter 21 contains specific information pertaining to economic damages.

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<sup>1</sup> *William Daubert, et al. v. Mzw Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S. Ct. 2786, 125 L.Ed.2d 469 (1993).

<sup>2</sup> *Kumho Tire Company, Ltd., et al. v. Patrick Carmichael, et al.*, 119 S. Ct. 1167, 143 L.Ed.2d 238 (1999).



## INSURANCE CLAIMS

Cases involving risk insurance claims focus on the loss of income because of business interruptions and the value of such separate business assets as inventory and equipment. A valuation may be required to support the owner's position or the insurer's position. The loss of income would be determined based on documentable lost profits. The value of individual business assets, such as inventory and equipment, would be based on the replacement cost of these assets.

## CHARITABLE CONTRIBUTIONS

Owners of closely held businesses may wish to give all or part of their interest in a business to a favorite charity. Although shares of stock in a closely held business are donated to charity infrequently, this option exists, and the valuation analyst must be aware of the rules concerning the necessary documentation to be included in a valuation report for the deductibility of such gifts. Current tax laws encourage charitable donations by permitting a tax deduction equal to the fair market value of certain appreciated capital gains property. For gifts of property in excess of \$500, the IRS requires that donors provide documentation to support the deduction for the year in which the gift was given. If the amount of the tax deduction warrants the expense, donors can obtain a valuation of the gift. If the value of the gift exceeds \$5,000, an appraisal is required.

## EMINENT DOMAIN ACTIONS

An eminent domain action takes place when government exercises its right to take over property and must compensate the owner for any resulting reduction in the value of the property. For example, a business may have to forfeit a prime location to accommodate the widening of a street. Although the business can relocate, its value may be adversely affected during the period of the move or as a result of changing locations. An expert opinion on the monetary effect of the condemnation may be necessary to support the business owner's claim or the government's offer.

As part of the business valuation, the valuation analyst should become familiar with the demographics of the area and should assess the impact of the change in location. In assessing the impact, the business valuation analyst needs to remember that real estate valuation analysts have often said that the key to a business's success is "location, location, location." Projections may be required to calculate the losses. A valuation of the business, both before the condemnation and after the move, may be required. The expenses of the actual move need to be considered in the valuation.

## FAIRNESS OPINIONS

A service that is very closely related to business valuation is the fairness opinion. A fairness opinion is generally required when a publicly traded corporation is involved in a merger, acquisition, or other type of transaction where the board of directors wants to have an independent valuation analyst give its blessing to the transaction. This is a high risk type of service, and it should not be performed by a valuation analyst unless he or she really understands the nuances of the fairness opinion.

This service is frequently provided by investment bankers (with deep pockets). However, many appraisal firms also offer this service. After the Sarbanes-Oxley<sup>3</sup> legislation was passed, many smaller publicly traded companies have gone private, requiring fairness opinions. The purpose of the fairness opinion is for the valuation analyst to opine that the transaction is fair to the stockholders. The valuation analyst does not determine value because there is already an agreed upon price for the transaction. The valuation analyst should read many other publications, including actual fairness opinions, before even thinking about doing one. Think liability!

## WHO VALUES BUSINESSES?

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There is a considerable amount of competition among business valuers. There are a growing number of full time valuation analysts in the business, but they are outnumbered by the part time valuation analysts, who spend much of their time in other areas. It is important to understand who the other players in the field are because you will

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<sup>3</sup> Sarbanes-Oxley Act of 2002 (Pub. L. No. 107-204, 116 Stat. 745).



come across them if your practice is anything like mine. Understanding the strengths and weaknesses of your opposition, particularly in a litigation engagement, will allow you to properly assist the attorney with whom you are working so that he or she can cross examine the other expert more thoroughly.

Among the groups providing business appraisal services are the following:

- Business valuation analysts
- Accountants (CPAs)
- Business brokers
- College professors (finance and economics)
- Commercial real estate appraisers
- Investment bankers
- The Internet (the newest entry into our field!)

Each group of professionals brings something unique to the practice of business valuation. Each group has its advantages and disadvantages, although the better business valuation analysts have crossed over boundaries and obtained some of the advantages of the other groups. Each of these groups is discussed in the following sections.

## BUSINESS VALUATION ANALYSTS

Professional business valuation analysts are those individuals who provide business appraisal services as their main area of focus. They are generally well educated in business valuation, and this includes having an understanding of issues involved in the fields of finance, economics, security analysis, and accounting, among others. Most of these individuals either have received some form of accreditation from a professional appraisal organization or are currently pursuing these credentials (credentials are discussed later in this chapter).

Many of these individuals work in an environment where they are exposed to businesses of a particular type (for example, professional practices, large companies, small companies, or a particular industry). One difficulty that these individuals may encounter is trying to value a company that is not in their area of specialization. For example, a valuation analyst who is accustomed to using public stock market information to value large closely held companies may have a difficult time valuing the small hardware store (not The Home Depot).

## ACCOUNTANTS (CPAs)

Over the past two decades, the number of accountants performing business valuations has grown exponentially. An accountant's background and training provide both advantages and disadvantages with regard to being a business valuation analyst.

Accountants have several advantages in rendering business valuation services. They are educated in financial concepts and terminology. This gives the accountant a distinct advantage in understanding financial statements. It also may give the accountant the ability to analyze the financial statements using the same analytical tools (for example, ratio analysis) that he or she employs to perform other types of accounting services.

Working with numbers is another clear advantage for the accountant. We bean counters can count beans better than anyone else. Accountants are also frequently exposed to revenue rulings and tax laws. This can represent a significant advantage over other types of valuation analysts, especially when tax related appraisals are being performed. To illustrate this point, our firm performed a valuation assignment for the IRS (I know, the so-called bad guys! They really are not a bad group to work for once you get to know them.) where the subject of the valuation was a 1.6 percent beneficial interest in a trust. The taxpayer's valuation analyst took a discount for lack of marketability, which we pointed out as being incorrect because of specific IRS regulations that pointed to mortality tables that took this into consideration. Don't try to figure out all of the details; suffice it to say that our awareness of the tax laws gave us a distinct advantage over the non-CPA valuation analyst.

However, there are disadvantages as well. Accountants are used to working with financial statements and concepts that are either GAAP oriented or tax oriented. These concepts deal with book value rather than market value. Accountants are also frequently uncomfortable working with forecasts of the operating performance of the business being valued. Accountants are historians by nature. Financial statements generally report the past, not the future.

Over the years, accountants have been exposed to a large number of malpractice lawsuits, particularly in the audit area. Recently, the lawsuits have gone beyond the audit arena into litigation support engagements. As a result,

accountants tend to be concerned with malpractice exposure because of the subjective nature of business valuation. The debits do not equal the credits; therefore, is the answer correct? Accountants also have to be concerned with potential conflicts of interest (for example, preparing tax returns for the business and then adjusting the officer's compensation in the appraisal as being excessive). Even if there is not a conflict of interest, there can be a perceived bias in certain types of assignments.

## BUSINESS BROKERS

Business brokers have a distinct advantage as business valuation analysts because they are involved with actual transactions in the marketplace. Because fair market value comes from the market, the business broker is frequently more familiar with the market for the business being appraised.

However, many business brokers do not complete appraisal training. They are generally salespeople, as opposed to valuation analysts. They will tell you that a similar business sold for \$1 million, and that the appraisal subject is, therefore, also worth \$1 million, but they may not understand the effect on value that the terms of the transaction can have. What if the similar business sold with terms of 20 percent down, with the balance being paid off over 10 years with no interest? The present value of this transaction would be quite a bit less than \$1 million. Business brokers are generally involved in the investment value standard and often have trouble switching to fair market value due to their lack of appraisal training.

Business brokers are also very quick to value a business based on "rules of thumb." Rules of thumb can be dangerous. They are discussed in chapter 8. It has also been my experience that some brokers tend to sell the same type of business for the same multiple of earnings or gross revenues, over and over again, which tends to make them market makers instead of interpreters of the market—which is actually the role of the valuation analyst. Frequently, the business broker also lacks training in financial statement analysis.

## COLLEGE PROFESSORS

Another group of valuation analysts who are visible in the field are college professors with backgrounds in economics and finance. Many professors are entering this field because they have time after school or as a means to supplement their income (not a bad part time job). Sometimes these folks even have Ph.D.s. Almost every time I have a Ph.D. on the opposite side of a case, it reminds me that Ph.D. stands for *philosophically different*. Sometimes these guys are out in left field with their theory of the universe. There is no doubt that the vast majority of these individuals understand the theory, but some (not all) demonstrate two shortcomings: first, they try to apply some very complex formulas to simple little businesses, and second, they cannot explain what they did in language that most regular people can understand. Many of these individuals are very strong in their comprehension of financial modeling and formulas. Although the mathematical formula may be correct, the answer may still be wrong.

## COMMERCIAL REAL ESTATE APPRAISERS

Over the past decade, we have seen a growing number of commercial real estate appraisers entering the field of business valuation. Included among the students of courses that I have taught are members of this profession who are trying to expand their businesses. Changes in real estate appraisal have left many appraisers looking to fill up their work week.

Although real estate appraisers understand the valuation process and principles, they often have a difficult time with the accounting aspects of financial reporting. They also have some difficulty making the transition into business valuation, where the ability to verify comparables is not always possible. Finally, although many real estate appraisals involving a capitalization of income use capitalization rates between 8 percent and 12 percent, real estate appraisers have a difficult time understanding the substantially higher capitalization rates used to appraise small businesses.

## INVESTMENT BANKERS

Investment bankers are frequently employed to perform valuations for a wide variety of assignments, including estate and gift tax valuations, initial public offerings, and going private, as well as for other purposes. More often than not, the investment bankers perform pretty large valuation assignments. They are brought into assignments for reasons that come before the issue of the fee. It is much different from the local hardware store.

## THE INTERNET

Did you know that you can get a business valuation done on the Internet? There are Web sites that allow you to put in your credit card number, some financial data about a company, and out comes a business valuation. Some sites even claim that the report is in compliance with standards! We actually had one prospective client ask us how we differentiate ourselves from an Internet site, particularly because our fee quote was considerably higher. The question just did not deserve an answer. We told the prospect that you get what you pay for! We also told her that she can talk to us and get an answer (rather than talk to the computer and get no response). For that matter, my name does not start with “www.”

There are many Web sites available to have a business valuation done. Many of them seem to be designed and administered by college professors (or for all I know, their graduate students). The fees range from as low as \$99 to a high of \$6,000. By the time you finish reading this book and realize how much work you need to do to produce a credible appraisal, you may wonder how these fees are possible!

## PROFESSIONAL APPRAISAL ORGANIZATIONS

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When one thinks of business valuation, several organizations come to mind, including the following:

- The American Institute of Certified Public Accountants
- The American Society of Appraisers
- The Institute of Business Appraisers
- The National Association of Certified Valuation Analysts
- The CFA Institute
- The Appraisal Foundation

## THE AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS (AICPA)

The AICPA is not an appraisal organization, but its members probably provide the largest percentage of the appraisals performed because of their sheer numbers. In 1981, the AICPA established a membership section for CPAs who provide management advisory services, recognizing that AICPA members provide services other than audit and tax. Today, that section is known as the Forensic and Valuation Services (FVS) section. The AICPA recognizes business valuation services as an important component of CPA services.

An ABV designation was approved by the AICPA Council in the fall of 1996, and the first examination was given in November 1997. This has been an area of specialization recognized by the accounting profession. At the time that this edition was written, there were about 2,600 accredited individuals. To obtain this accreditation, a candidate must

1. be a member in good standing of the AICPA.
2. hold a valid and unrevoked CPA certificate or license issued by a legally constituted state authority.
3. pass a comprehensive business valuation examination.

Box 1.2 describes additional requirements that must be completed before the ABV certificate is awarded, but may be completed at any time within 24 months of passing the AICPA ABV examination.

This may seem like a lot, but it can't be that bad. After all, I am an ABV! For more information about obtaining the credential, go to the following Web site  
<http://bvfls.aicpa.org/Memberships/Eligibility+Requirements+for+the+ABV+Credential.htm>.

Because the requirements change from time to time, you should visit this site for the most current requirements.

## THE AMERICAN SOCIETY OF APPRAISERS (ASA)

The ASA is a multidisciplinary organization specializing in all types of appraisals. The organization was founded in 1936, but by 1981, there was a growing need within the organization (which was primarily a real estate dominated

**Box 1.2 Additional Requirements to Become An ABV**

ABV requirements include the following:

- Business experience requirements (minimum of 15 points; maximum of 35 points).
- Provide evidence of business experience of 6 business valuation engagements and projects or 150 hours that demonstrate substantial experience and competence. If experience is documented in engagements, each engagement is valued at two and half 2.5 points. Alternatively, business experience can be documented in valuation hours of which every 50 hours is equal to 5 points.
- A minimum of fifteen 15 points or maximum of 35 points are required to successfully meet this requirement.
- Substantial experience required must be obtained during a valuation engagement and project which is defined as: "Sufficient research and analysis to arrive at a conclusion or estimate of value, of an entity, instrument, or economic benefit requiring a documented conclusion." In order to obtain what is to be considered substantial experience, the candidate must be able to document sufficient experience in the following aspects of valuation science:
  - Defining the engagement and project objectives
  - Planning the specific procedures appropriate to the engagement and project
  - Developing a basis for a conclusion
  - Documenting a conclusion
- Pay an application fee.

professional appraisal organization) to recognize business valuation as a specialty. In 1981, ASA established a business valuation committee after recognizing the business valuation discipline as a separate specialization. ASA has approximately 5,200 members, about 2,100 of whom are in the business valuation discipline. Of that group, about 1,100 are credentialed.

ASA accredits its members by requiring candidates to pass an extensive series of written examinations, usually given at the end of four, 3-day training courses. Candidates are also required to submit two appraisal reports that the International Board of Examiners must approve and that demonstrate knowledge and compliance with appraisal theory and standards.

ASA has two levels of accreditation based on the experience of the applicant. First, a designation of Accredited Member (AM) is granted to those individuals who meet the other requirements and have greater than two, but less than five, years of full time experience. ASA gives credit for partial years for those applicants who do not perform appraisals on a full time basis. CPAs (and chartered financial analysts [CFAs], discussed in the coming section) are given one year of appraisal experience for being a CPA (CFA) for five years. Second, those applicants with five or more years of experience are granted the Accredited Senior Appraiser (ASA) designation.

## THE INSTITUTE OF BUSINESS APPRAISERS, INC. (IBA)

A funny thing happened in 1978. Raymond Miles, an engineer by educational background and a licensed business broker, searched for a professional organization that he could join that was involved solely with the appraisal of businesses. Miles concluded that no such organization existed. So he started his own. This was the start of IBA. Miles got people to join the organization by soliciting membership through a 700-piece mailing. Today, IBA has approximately 3,500 members, of whom, approximately 525 have been certified as business appraisers. IBA's primary focus is the small closely held business.

The Certified Business Appraiser (CBA) designation is earned after the applicant passes a written examination and submits two appraisal reports which the Qualifications Review Committee must approve. In addition to a four-year college degree, the applicant must have successfully completed at least 90 classroom hours of upper level course work. At least 24 hours of this course work must have been obtained from courses given by IBA. The balance can come from any of the other business valuation organizations (including the AICPA). In lieu of the 90-hour requirement, the applicant may demonstrate five years of full time, active experience as a business appraiser. CBAs are also required to document 24 hours of continuing professional education every two years.

Candidates for the CBA designation may be exempt from the examination if they hold an ASA designation, an ABV designation, a CVA designation (discussed in the coming section), or completion of the AICPA's Certificate of Educational Achievement (CEA) program in business valuation. Accredited by IBA (AIBA) is IBA's junior designation, which is awarded to individuals who pass the written examination given at the end of an 8-day workshop, and upon submittal and acceptance of one appraisal report to the Qualifications Review Committee.

IBA also has a Master Certified Business Appraiser (MCBA) designation, which is given to individuals who have held the Certified Business Appraiser designation for not less than 10 years, and must have 15 years of full time experience as a business appraiser. That individual must have been endorsed by senior business appraisers as leading contributors to the profession's body of knowledge. I don't know how, but I am an MCBA. IBA also has some other designations regarding litigation and appraisal review.

## THE NATIONAL ASSOCIATION OF CERTIFIED VALUATION ANALYSTS (NACVA)

Founded in 1991, the NACVA is one of the newest organizations accrediting appraisers. This organization has several designations. To become a Certified Valuation Analyst (CVA), the applicant must hold a valid and unrevoked CPA license (CA in Canada), complete a five-day training workshop, and pass a two-part examination (after 2007, the five-day training, while still recommended by NACVA, is no longer required). Personal and business references must also be supplied by the applicant. NACVA also awards an Accredited Valuation Analyst (AVA) designation for those individuals who are not CPAs, but hold a business degree from an accredited university and can demonstrate business valuation experience. Certain credentialed individuals (for example, CFAs and CMAs) may be exempt from part of the examination. NACVA also provides the certification of Government Valuation Analyst (GVA) to those individuals who are employed by a government agency, have a level of GS-12 or higher, and have two years of experience in performing business valuations. At the time this book was written, NACVA had approximately 7,000 members, of whom, about 6,150 were designated.

## THE CFA INSTITUTE

The CFA Institute is not really an appraisal organization. This organization grants the designation, Chartered Financial Analyst (CFA), after an applicant passes three extensive annual examinations. The CFA designation has more of a public company orientation (mostly portfolio and asset management) than the designations of the appraisal organizations that primarily deal with closely held companies. There is no report requirement, and the experience level needed for one to obtain this designation is three years.

## THE APPRAISAL FOUNDATION

Established in 1987, the Appraisal Foundation is not an appraisal organization. This organization was set up by seven real estate organizations and ASA, which was the only multidisciplinary organization, in response to a growing problem facing the real estate appraisal world. Real estate appraisers lacked standards to provide consistency in their work product. As a result, relying on these real estate appraisals caused bad bank loans to be made, creating severe problems for lending institutions. Facing some form of regulation in the near future, the Appraisal Foundation promulgated a set of standards relative to appraisals. These standards are known as the *Uniform Standards of Professional Appraisal Practice*. Although these were primarily intended to cover real estate appraisals, ASA used its influence to have standards included for its other disciplines as well: personal property and business valuation. The USPAP is discussed in greater detail throughout this book.

## CONCLUSION

Because this was only the first chapter of the book, you are probably starting to doze off. What did you expect? This is introductory stuff. It gets better. By now, you are at least familiar with some history of the profession, who appraises businesses, why businesses are appraised, and appraisal organizations. I know the suspense of the next chapter is probably killing you, so let's move on.

## CHAPTER 2

# *Business Valuation Standards*

### CHAPTER GOALS

This is an extremely important chapter. Whether you are a full time valuation analyst, or a CPA who provides other services, such as preparing financial plans for your clients, this chapter is sure to have an effect on you. I have dedicated this chapter solely to business valuation standards. Therefore, this chapter is only designed to

- Familiarize you with the new business valuation standard of the AICPA.
- Familiarize you with some of the old, but yet required, standards of the AICPA.
- Familiarize you with the standards of the other appraisal organizations.

Whatever you do, do not skip this chapter! I know that reading standards is about as exciting as watching paint dry on the wall, but if you are a valuation analyst, a CPA, or a member of the AICPA who provides valuation services as part of your client services, you really need to understand these standards to perform your assignments properly. I promise that this stuff will get more exciting soon.

### INTRODUCTION

Different organizations have different standards, and so the question that often arises is: What standards should I follow? Anyone who belongs to a professional organization knows that each organization mandates that its members follow its own set of standards. The discussion that follows is intended to give some helpful suggestions, but it is up to each individual to make certain that the proper sets of standards are followed. The following standards are discussed:

- AICPA Statement on Standards for Valuation Services No. 1
- AICPA Statement on Standards for Consulting Services No. 1 (and others)
- Institute of Business Appraisers (IBA) Standards
- American Society of Appraisers (ASA) Standards
- *Uniform Standards of Professional Appraisal Practice* (USPAP)
- National Association of Certified Valuation Analysts (NACVA) Standards

### AICPA STATEMENT ON STANDARDS FOR VALUATION SERVICES NO. 1

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The AICPA Statement on Standards for Valuation Services (SSVS) No. 1, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*, vol. 2, VS sec. 100), was issued at the end of June 2007 and is effective for engagements entered into on or after January 1, 2008. Therefore, by the time that you are reading this book, these are the rules that all members of the AICPA must follow. In fact, for CPAs who practice in jurisdictions whose board of accountancy (or equivalent) adopts the AICPA standards, they must also follow this standard, even if they are not a member of the AICPA. Therefore, I am providing you with the entire standard, with my own annotations, so that you can hopefully follow these rules in practice. My annotations are located in the boxes included within the text of the standard.



## FOREWORD

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### WHY ISSUED

Valuations of businesses, business ownership interests, securities, or intangible assets (hereinafter collectively referred to in this foreword as *business valuations*) may be performed for a wide variety of purposes including the following:

1. Transactions (or potential transactions), such as acquisitions, mergers, leveraged buyouts, initial public offerings, employee stock ownership plans and other share based plans, partner and shareholder buy-ins or buy-outs, and stock redemptions.
2. Litigation (or pending litigation) relating to matters such as marital dissolution, bankruptcy, contractual disputes, owner disputes, dissenting shareholder and minority ownership oppression cases, and employment and intellectual property disputes.
3. Compliance oriented engagements, including (a) financial reporting and (b) tax matters such as corporate reorganizations; S corporation conversions; income, estate, and gift tax compliance; purchase price allocations; and charitable contributions.
4. Planning oriented engagements for income tax, estate tax, gift tax, mergers and acquisitions, and personal financial planning.

#### Author's Note

Do you think that the authors read chapter 1 of my book? Many of these items will be discussed throughout the book.

In recent years, the need for business valuations has increased significantly. Performing an engagement to estimate value involves special knowledge and skill.

Given the increasing number of members of the AICPA who are performing business valuation engagements or some aspect thereof, the AICPA Consulting Services Executive Committee has written this standard to improve the consistency and quality of practice among AICPA members performing business valuations. AICPA members will be required to follow this standard when they perform engagements to estimate value that culminate in the expression of a conclusion of value or a calculated value.

#### Author's Note

Notice that they said "AICPA members will be required to follow this standard." This is not optional.

The Consulting Services Executive Committee is a body designated by AICPA Council to promulgate technical standards under Rule 201, *General Standards* (AICPA, *Professional Standards*, vol. 2, ET sec. 201.01), and Rule 202, *Compliance With Standards* (AICPA, *Professional Standards*, vol. 2, ET sec. 202.01), of the AICPA Code of Professional Conduct.

## VALUATION OF A BUSINESS, BUSINESS OWNERSHIP INTEREST, SECURITY, OR INTANGIBLE ASSET

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### INTRODUCTION AND SCOPE

1. This statement establishes standards for AICPA members (hereinafter referred to in this statement as members) who are engaged to, or, as part of another engagement, estimate the value of a **business**,<sup>1</sup> **business ownership**

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<sup>1</sup> This statement includes two glossaries. Appendix B is the International Glossary of Business Valuation Terms (IGBVT), jointly developed by the AICPA, the American Society of Appraisers (ASA), the Canadian Institute of Chartered Business Valuators, the National Association of Certified Valuation Analysts, and the Institute of Business Appraisers. The IGBVT is reproduced verbatim in appendix B, "International Glossary

**interest, security, or intangible asset** (hereinafter collectively referred to in this statement as **subject interest**). For purposes of this statement, the definition of a business includes not-for-profit entities or activities.

#### Author's Note

Don't go bouncing around looking for the definitions of the terms used in this document. Many of them will be defined in later chapters as I discuss them. This will all make sense by the time you finish this book. As much as I hate to suggest this, you may want to reread this chapter after you have finished the book because it will really make more sense at that point.

2. As described in this statement, the term **engagement to estimate value** refers to an engagement or any part of an engagement (for example, a tax, litigation, or acquisition related engagement) that involves estimating the value of a subject interest. An engagement to estimate value culminates in the expression of either a **conclusion of value** or a **calculated value** (see paragraph 21). A member who performs an engagement to estimate value is referred to, in this statement, as a **valuation analyst**.

3. Valuation analysts should be aware of any governmental regulations and other professional standards applicable to the engagement, including the AICPA Code of Professional Conduct and the Statement on Standards for Consulting Services (SSCS) No. 1, *Consulting Services: Definitions and Standards* (AICPA, *Professional Standards*, vol. 2, CS sec. 100), and the extent to which they apply to engagements to estimate value. Compliance is the responsibility of the valuation analyst.

#### Author's Note

It is really ironic that I once heard a CPA testify under pressure that as a CPA, "we have no business valuation standards." However, we have probably had the most rigorous set of standards of any organization that I know of. Although they may not have been labeled as business valuation standards, they clearly relate to the manner in which we conduct ourselves in every assignment that we undertake.

4. In the process of estimating value as part of an engagement, the valuation analyst applies **valuation approaches** and **valuation methods**, as described in this statement, and uses professional judgment. The use of professional judgment is an essential component of estimating value.

## Exceptions from this Statement

5. This statement is not applicable to a member who participates in estimating the value of a subject interest as part of performing an attest engagement defined by Rule 101 of the AICPA Code of Professional Conduct (for example, as part of an audit, review, or compilation engagement).

#### Author's Note

An attest engagement falls under a completely different set of rules. Those rules have an objective to attest to a firm's representations on its financial statements, and have nothing to do with business valuation. Because the purpose of an attest engagement is so much different than a valuation engagement, this is a logical exception.

6. This statement is not applicable when the value of a subject interest is provided to the member by the client or a third party, and the member does not apply valuation approaches and methods, as discussed in this statement.

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of Business Valuation Terms." Appendix C provides definitions for terms included in this statement, but not defined in the IGBVT. The terms defined in appendix B are in boldface type the first time they appear in this statement; the terms defined in appendix C are in italicized boldface type the first time they appear in this statement.

 **Author's Note**

This exception relates to the situation, for example, when a client provides the CPA with the value of her business for inclusion in a bank loan application, and the CPA does nothing to establish or validate the client's value. It may also apply when the client or another person, such as a real estate appraiser, provides the value for inclusion in an "intangible" tax return.

7. This statement is not applicable to internal use assignments from employers to employee members not in the *practice of public accounting*, as that term is defined in the AICPA Code of Professional Conduct (AICPA, *Professional Standards*, vol. 2, ET sec. 92.25). (Interpretation No. 1, "Scope of Applicable Services" of *Statement on Standards for Valuation Services*, Illustrations 24 and 25).

8. This statement is not applicable to engagements that are exclusively for the purpose of determining economic damages (for example, lost profits) unless those determinations include an engagement to estimate value. See also Interpretation No. 1, Illustrations 1, 2, and 3.

 **Author's Note**

Many times, litigation assignments, particularly those calling for the calculation of economic damages, may require either a lost profits component, a lost business value component, or sometimes both. While the lost profits portion of the assignment is clearly excluded from this standard, a determination of the loss of value pertaining to a business enterprise or part thereof is subject to this standard. Economic damages are discussed in greater detail in chapter 21.

9. (a) This statement is not applicable to mechanical computations that do not rise to the level of an engagement to estimate value; that is, when the member does not apply valuation approaches and methods and does not use professional judgment. See Interpretation No. 1, Illustration 8.

 **Author's Note**

If a CPA determines the value of 100 shares of IBM stock to report on an estate tax return, they have made a mechanical calculation because it only involves multiplying the number of shares by the share value, which is easily ascertainable. The AICPA standard does not apply to this calculation.

(b) This statement is not applicable when it is not practical or not reasonable to obtain or use relevant information; as a result, the member is unable to apply valuation approaches and methods that are described in this statement.<sup>2</sup>

### Jurisdictional Exception

10. If any part of this statement differs from published governmental, judicial, or accounting authority, or such authority specifies valuation development procedures or valuation reporting procedures, then the valuation analyst should follow the applicable published authority or stated procedures with respect to that part applicable to the valuation in which the member is engaged. The other parts of this statement continue in full force and effect (Valuation Services Interpretation No. 1).

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<sup>2</sup> Unless prohibited by statute or by rule, a member may use the client's estimates for compliance reporting to a third party if the member determines that the estimates are reasonable (based on the facts and circumstances known to the member). See Interpretation No. 1, "Scope of Applicable Services" of *Statement on Standards for Valuation Services and Statement for Standards on Tax Services No. 4*.

### Author's Note

What does this really mean? If someone else makes the rules, and you are playing in their backyard, you have to follow their rules. For example, if you are engaged to value a business for a divorce in a state that excludes personal goodwill from equitable distribution, you cannot hide behind this standard to avoid carving out the personal goodwill piece of the pie. So if you represent the nonbusiness owner-spouse, don't think that you can get away with ignoring personal goodwill to pump up the value. Besides the fact that this is unethical (because advocacy for a client should never be done as an expert witness), the law of the land supersedes this standard. However, all other provisions of this standard will still apply.

## OVERALL ENGAGEMENT CONSIDERATIONS

### Professional Competence

11. Rule 201A, *Professional Competence*, of the AICPA Code of Professional Conduct (AICPA, *Professional Standards*, vol. 2, ET. sec. 201.01), states that a member shall “undertake only those professional services that the member or the member’s firm can reasonably expect to be completed with professional competence.” Performing a valuation engagement with professional competence involves special knowledge and skill. A valuation analyst should possess a level of knowledge of valuation principles and theory and a level of skill in the application of such principles that will enable him or her to identify, gather, and analyze data, consider and apply appropriate valuation approaches and methods, and use professional judgment in developing the estimate of value (whether a single amount or a range). An in-depth discussion of valuation theory and principles, and how and when to apply them, is not within the scope of this statement.

### Author's Note

Lucky for you that even though “an in-depth discussion of valuation theory and principles, and how and when to apply them, is not within the scope of this statement,” it is covered throughout this book. Once you have read this book, you should have much more of an understanding of your own level of competence to perform business valuations. Buying this book was your first step to becoming competent!

One of the most humbling experiences that we all have, as professionals, is knowing when to admit that we are really not competent to perform a particular assignment. I learned a long time ago that **CPA** does not stand for **Can Perform Anything**. There are certain types of assignments that I pass on regularly because I know that it is not in the best interest of the perspective client to have me perform the assignment because I don't have as much expertise in this area, and there may be people out there who are much more qualified than me to do a certain job. I also know that my mal-practice carrier is much happier with me for not doing jobs that will get my firm sued.

12. In determining whether he or she can reasonably expect to complete the valuation engagement with professional competence, the valuation analyst should consider, at a minimum, the following:

- a. Subject entity and its industry
- b. Subject interest
- c. **Valuation date**
- d. Scope of the valuation engagement
  - i. Purpose of the valuation engagement
  - ii. **Assumptions and limiting conditions** expected to apply to the valuation engagement (paragraph 18)
  - iii. Applicable **standard of value** (for example, **fair value** or **fair market value**), and the applicable **premise of value** (for example, going concern)
  - iv. Type of valuation report to be issued (paragraph 48), intended use and users of the report, and restrictions on the use of the report
- e. Governmental regulations or other professional standards that apply to the subject interest or to the valuation engagement

 **Author's Note**

While many of these items seem to be common sense, valuation analysts get themselves in trouble by not truly understanding the many considerations that must enter into the process of accepting an engagement. Many of the terms that are used above will be discussed in great detail in the next chapter, when I discuss engagement considerations. Be patient, and I will get there soon.

## Nature and Risks of the Valuation Services and Expectations of the Client

13. In understanding the nature and risks of the *valuation services* to be provided, and the expectations of the client, the valuation analyst should consider the matters in paragraph 12, and in addition, at a minimum, the following:

- a. The proposed terms of the valuation engagement
- b. The identity of the client
- c. The nature of the interest and ownership rights in the business, business interest, security, or intangible asset being valued, including **control** characteristics and the degree of **marketability** of the interest
- d. The procedural requirements of a valuation engagement and the extent, if any, to which procedures will be limited by either the client or circumstances beyond the client's or the valuation analyst's control
- e. The use of and limitations of the report, and the conclusion or calculated value
- f. Any obligation to update the valuation

## Objectivity and Conflict of Interest

14. The AICPA Code of Professional Conduct requires objectivity in the performance of all professional services, including valuation engagements. Objectivity is a state of mind. The principle of objectivity imposes the obligation to be impartial, intellectually honest, disinterested, and free from conflicts of interest. If necessary, where a potential conflict of interest may exist, a valuation analyst should make the disclosures and obtain consent as required under Interpretation No. 102-2, "Conflicts of Interest," under Rule 102, *Integrity and Objectivity* (AICPA, *Professional Standards*, vol. 2, ET sec. 102.03).

 **Author's Note**

I am going to address conflicts of interest in the next chapter. This is another way that valuation analysts, and more specifically, CPA valuation analysts, can get themselves in trouble.

## Independence and Valuation

15. If valuation services are performed for a client for which the valuation analyst or valuation analyst's firm also performs an attest engagement (defined by Rule 101 of the AICPA Code of Professional Conduct), the valuation analyst should meet the requirements of Interpretation No. 101-3, "Performance of Nonattest Services," under Rule 101, *Independence* (AICPA, *Professional Standards*, vol. 2, ET sec. 101.05), so as not to impair the member's independence with respect to the client.

 **Author's Note**

In other words, you cannot be everything to every client. The term *independence* is a term of art in the accounting profession. AICPA standards and state board of accountancy laws require a CPA to be independent when they perform attest services for a client. Performing a valuation for an attest client could impair the CPA's independence for the attest engagement. A CPA firm might need to decline a valuation engagement for an attest client and refer the work to someone else. Sometimes it pays to refer that client to someone else who can do a competent job so that you can

 **Author's Note** *(continued)*

continue to service the client in other areas. This is a great way to form relationships with your colleagues. You refer to them, and they will refer to you. Client sharing—what a wonderful thing!

## Establishing an Understanding with the Client

16. The valuation analyst should establish an understanding with the client, preferably in writing, regarding the engagement to be performed. If the understanding is oral, the valuation analyst should document that understanding by appropriate memoranda or notations in the working papers. (If the engagement is being performed for an attest client, AICPA Ethics Interpretation 101-3 requires the engagement understanding to be in writing.) Regardless of whether the understanding is written or oral, the valuation analyst should modify the understanding if he or she encounters circumstances during the engagement that make it appropriate to modify that understanding.

 **Author's Note**

I have to be honest with you. You have to be nuts to perform an assignment without a written engagement letter. While the standards allow an oral agreement, the money you save by not having your attorney draft your engagement letter should be used for your psychiatrist. Engagement letters are discussed in great detail in the next chapter.

17. The understanding with the client reduces the possibility that either the valuation analyst or the client may misinterpret the needs or expectations of the other party. The understanding should include, at a minimum, the nature, purpose, and objective of the valuation engagement, the client's responsibilities, the valuation analyst's responsibilities, the applicable assumptions and limiting conditions, the type of report to be issued, and the standard of value to be used.

## Assumptions and Limiting Conditions

18. Assumptions and limiting conditions are common to valuation engagements. Examples of typical assumptions and limiting conditions for a business valuation are provided in appendix A, "Illustrative List of Assumptions and Limiting Conditions for a Business Valuation." The assumptions and limiting conditions should be disclosed in the valuation report (paragraphs 52(1), 68(g), and 71(m)).

 **Author's Note**

Best practices, and my attorney, say that the assumptions and limiting conditions where appropriate, should also be part of your engagement letter to put your client on notice at the inception of the engagement. This will be discussed in more detail in the next chapter.

## Scope Restrictions or Limitations

19. A restriction or limitation on the scope of the valuation analyst's work, or the data available for analysis, may be present and known to the valuation analyst at the outset of the valuation engagement or may arise during the course of a valuation engagement. Such a restriction or limitation should be disclosed in the valuation report (paragraphs 52(m), 68(e), and 71(n)).

## Using the Work of Specialists in the Engagement to Estimate Value

20. In performing an engagement to estimate value, the valuation analyst may rely on the work of a third party specialist (for example, a real estate or equipment appraiser). The valuation analyst should note in the assumptions and limiting conditions the level of responsibility, if any, being assumed by the valuation analyst for the work of the third party specialist. At the option of the valuation analyst, the written report of the third party specialist may be included in the valuation analyst's report.



 **Author's Note**

As a valuation analyst, we are regularly faced with using other appraisers to accomplish our assignments. The standard states that using other appraisers is okay as long as we disclose the level of responsibility in the report. However, if you know that the work of the third party is wrong or does not meet professional standards, it would be foolish, and very dangerous, to try to stick your head in the sand and ignore the bad work that you will be relying upon. We had an assignment that required us to rely on a real estate appraiser to determine the underlying value of the real estate for a family limited partnership. The real estate appraisal was so bad that my partner had to tell the client's attorney that we could not use this value in our analysis. Another real estate appraiser was hired, and the job went fine thereafter. The worst that could have happened is that we would have been fired from the assignment. I would much rather have that happen than to rely on what we know is bad work.

## DEVELOPMENT

### Types of Engagement

21. There are two types of engagements to estimate value—a **valuation engagement** and a **calculation engagement**. The valuation engagement requires more procedures than does the calculation engagement. The valuation engagement results in a conclusion of value. The calculation engagement results in a calculated value. The type of engagement is established in the understanding with the client (paragraphs 16 and 17):

- a. **Valuation engagement**—A valuation analyst performs a valuation engagement when (1) the engagement calls for the valuation analyst to estimate the value of a subject interest and (2) the valuation analyst estimates the value (as outlined in paragraphs 23–45) and is free to apply the valuation approaches and methods he or she deems appropriate in the circumstances. The valuation analyst expresses the results of the valuation as a conclusion of value; the conclusion may be either a single amount or a range.
- b. **Calculation engagement**—A valuation analyst performs a calculation engagement when (1) the valuation analyst and the client agree on the valuation approaches and methods the valuation analyst will use and the extent of procedures the valuation analyst will perform in the process of calculating the value of a subject interest (these procedures will be more limited than those of a valuation engagement) and (2) the valuation analyst calculates the value in compliance with the agreement. The valuation analyst expresses the results of these procedures as a calculated value. The calculated value is expressed as a range or as a single amount. A calculation engagement does not include all of the procedures required for a valuation engagement (paragraph 46).

 **Author's Note**

Once again, you really need to apply some common sense as to which type of engagement will be right for a particular circumstance. The AICPA standard is identifying *valuation engagement* and *calculation engagement* as terms of art just as *audit*, *review*, and *compilation* are terms of art in the accounting literature. Although I will discuss this in more detail in a later chapter, it is important enough for me to put it here also. On many occasions, a client does not need a comprehensive analysis but needs a limited analysis. The standard is flexible enough to accommodate a variety of client needs. Clients frequently suffer from sticker shock when they hear the fee for performing a valuation engagement. Therefore, they may ask for less. You, as the professional, must exercise your good judgment to determine if performing a lesser assignment will suffice for the client's situation. You should discuss this with the client. For example, if performing a valuation for estate tax purposes, the client may want you to do less. You have to be aware of the requirements and not give in to the client. A calculation engagement will generally not suffice for an estate tax valuation.

You also need to consider how you and your client will come out of an assignment if you do less than a comprehensive analysis. When representing a client in a divorce litigation, you may be asked to provide calculations for mediation. If the mediation does not result in a settlement, you may then be asked to testify to your calculations. The one that may be hurt the most on cross-examination is you, when you testify that you did not do a comprehensive valuation analysis. The judge may only hear that you did not do a thorough job. The fact that the client did not want to pay you to perform a full valuation engagement may be forgotten, especially if the other expert did one. You need to properly guide the client as to the best assignment under the circumstances.

## Hypothetical Conditions

22. Hypothetical conditions affecting the subject interest may be required in some circumstances. When a valuation analyst uses hypothetical conditions during a valuation or calculation engagement, he or she should indicate the purpose for including the hypothetical conditions and disclose these conditions in the valuation or calculation report (paragraphs 52(n), 71(o), and 74).

## Valuation Engagement

23. In performing a valuation engagement, the valuation analyst should
- analyze the subject interest (paragraphs 25–30)
  - consider and apply appropriate valuation approaches and methods (paragraphs 31–42)
  - prepare and maintain appropriate documentation (paragraphs 44–45)

### Author's Note

These topics are covered throughout this book. Analyzing the subject interest is covered in chapter 6. The valuation approaches and methods appear in chapters 7–10. Documentation is taught to every accountant on earth. Even if you are not an accountant, documenting your work is like motherhood and apple pie.

24. Even though the list in paragraph 23 and some requirements and guidance in this statement are presented in a manner that suggests a sequential valuation process, valuations involve an ongoing process of gathering, updating, and analyzing information. Accordingly, the sequence of the requirements and guidance in this statement may be implemented differently at the option of the valuation analyst.

## Analysis of the Subject Interest

25. The analysis of the subject interest will assist the valuation analyst in considering, evaluating, and applying the various valuation approaches and methods to the subject interest. The nature and extent of the information needed to perform the analysis will depend on, at a minimum, the following:

- Nature of the subject interest
- Scope of the valuation engagement
- Valuation date
- Intended use of the valuation
- Applicable standard of value
- Applicable **premise of value**
- Assumptions and limiting conditions
- Applicable governmental regulations or other professional standards

26. In analyzing the subject interest, the valuation analyst should consider financial and nonfinancial information. The type, availability, and significance of such information vary with the subject interest.

### Author's Note

Gathering information, both financial and nonfinancial, is discussed in several of the following chapters. Document checklists are discussed in chapter 4, gathering economic and industry information is discussed in chapter 5, gathering benchmark data is discussed in chapter 6, gathering guideline company data is discussed in chapter 7, and so forth.

## Nonfinancial Information

27. The valuation analyst should, as available and applicable to the valuation engagement, obtain sufficient nonfinancial information to enable him or her to understand the subject entity, including its

- nature, background, and history.
- facilities.

- organizational structure.
- management team (which may include officers, directors, and key employees).
- classes of **equity** ownership interests and rights attached thereto.
- products or services, or both.
- economic environment.
- geographical markets.
- industry markets.
- key customers and suppliers.
- competition.
- **business risks**.
- strategy and future plans.
- governmental or regulatory environment.

### Ownership Information

28. The valuation analyst should obtain, where applicable and available, ownership information regarding the subject interest to enable him or her to

- determine the type of ownership interest being valued and ascertain whether that interest exhibits control characteristics.
- analyze the different ownership interests of other owners and assess the potential effect on the value of the subject interest.
- understand the classes of equity ownership interests and rights attached thereto.
- understand the rights included in, or excluded from, each intangible asset.
- understand other matters that may affect the value of the subject interest, such as:
  - *For a business, business ownership interest, or security*: shareholder agreements, partnership agreements, operating agreements, voting trust agreements, buy-sell agreements, loan covenants, restrictions, and other contractual obligations or restrictions affecting the owners and the subject interest.
  - *For an intangible asset*: legal rights, licensing agreements, sublicense agreements, nondisclosure agreements, development rights, commercialization or exploitation rights, and other contractual obligations.

### Financial Information

29. The valuation analyst should obtain, where applicable and available, financial information on the subject entity such as

- historical financial information (including annual and interim financial statements and key financial statement ratios and statistics) for an appropriate number of years.
- prospective financial information (for example, budgets, forecasts, and projections).
- comparative summaries of financial statements or information covering a relevant time period.
- comparative common size financial statements for the subject entity for an appropriate number of years.
- comparative common size industry financial information for a relevant time period.
- income tax returns for an appropriate number of years.
- information on compensation for owners including benefits and personal expenses.
- information on key man or officers' life insurance.
- management's response to inquiry regarding:
  - advantageous or disadvantageous contracts.
  - contingent or off-balance-sheet assets or liabilities.
  - information on prior sales of company stock.

#### Author's Note

If you think about it, this information is a great start for a document checklist of items to ask for in either the initial document request or the management interview. I will discuss these items in greater detail in the upcoming chapters.

30. The valuation analyst should read and evaluate the information to determine that it is reasonable for the purposes of the engagement.

#### Author's Note

While this seems to be common sense, you would be amazed at how often I have seen valuation analysts ask for a boatload of documents and never bother to look at them. The idea is to ask for relevant information for the valuation, and then you should review the information received to make certain that not only is it what you asked for, but it is useable. For example, in doing a valuation as of June 15, 2007, you may ask for an accounts receivable aging as of that date. If it is not available, the client may either send you the aging for May 31, 2007 or June 30, 2007. In some cases, the schedule sent to you may not even be close to these time frames. You should review the document to make certain that it is relevant for your valuation. If June 15 data is unavailable, May 31 may be perfectly acceptable as long as you inquire about any large transactions that may have occurred between June 1 and June 15. However, June 30 data may not work because in most instances, the valuation is supposed to be based on information that is “known or knowable” as of the valuation date. Using subsequent information may be improper in many circumstances. I will discuss this point in more detail later.

### Valuation Approaches and Methods

31. In developing the valuation, the valuation analyst should consider the three most common valuation approaches:

- **Income (Income-based) approach**
- **Asset (Asset-based) approach** (used for businesses, business ownership interests, and securities) or **cost approach** (used for intangible assets)
- **Market (Market-based) approach**

#### Author's Note

These are the three main approaches to business valuation. They are discussed in detail in chapters 7–10. Intangible assets are discussed in chapter 15.

32. The valuation analyst should use the valuation approaches and methods that are appropriate for the valuation engagement. General guidance on the use of approaches and methods appears in paragraphs 33–41, but detailed guidance on specific valuation approaches and methods and their applicability is outside the scope of this statement.

#### Author's Note

Once again, you made the right choice by purchasing this book. Detailed guidance on specific approaches and methods and their applicability may be outside the scope of this statement, but it is included in unbelievable detail throughout this book. After all, isn't that really the reason you bought this book to begin with?

33. *Income Approach.* Two frequently used valuation methods under the income approach include the **capitalization of benefits method** (for example, earnings or cash flows) and the **discounted future benefits method** (for example, earnings or cash flows). When applying these methods, the valuation analyst should consider a variety of factors, including but not limited to, the following:

- a. *Capitalization of benefits (for example, earnings or cash flows) method.* The valuation analyst should consider the following:
  - **Normalization** adjustments
  - Nonrecurring revenue and expense items
  - Taxes
  - **Capital structure** and financing costs
  - Appropriate capital investments
  - Noncash items

- Qualitative judgments for risks used to compute discount and **capitalization** rates
  - Expected changes (growth or decline) in future benefits (for example, earnings or cash flows)
- b. *Discounted future benefits method (for example, earnings or cash flows)*. In addition to the items in item a above, the valuation analyst should consider:
- Forecast/projection assumptions
  - Forecast/projected earnings or cash flows
  - **Terminal value**
- c. For an intangible asset, the valuation analyst should also consider, when relevant,
- remaining useful life.
  - current and anticipated future use of the intangible asset.
  - rights attributable to the intangible asset.
  - position of intangible asset in its life cycle.
  - appropriate discount rate for the intangible asset.
  - appropriate **capital or contributory asset charge**, if any.
  - research and development or marketing expense needed to support the intangible asset in its existing state.
  - allocation of income (for example, **incremental income**, **residual income**, or **profit split income**) to intangible asset.
  - whether any tax amortization benefit would be included in the analysis.
  - discounted multi-year excess earnings
  - market royalties.
  - relief from royalty.

#### Author's Note

The income approach, and its related methods, is covered in chapter 10. Discount rates and capitalization rates are covered in chapter 11. Although intangible assets are covered in chapter 15, this book is not really intended to cover this group of assets in as much detail as it deserves. This could be the subject of another entire book. In fact, there are books solely dedicated to intangible assets and intellectual property. Three of the books in my library include *Intellectual Property: Valuation, Exploitation, and Infringement Damages*,<sup>3</sup> *Valuing Intangible Assets*,<sup>4</sup> and *Valuation for Financial Reporting, Fair Value Measurements and Reporting, Intangible Assets, Goodwill and Impairments*.<sup>5</sup>

### Asset Approach and Cost Approach

34. A frequently used method under the asset approach is the adjusted net asset method. When using the adjusted net asset method in valuing a business, business ownership interest, or security, the valuation analyst should consider, as appropriate, the following information related to the premise of value:

- Identification of the assets and liabilities
- Value of the assets and liabilities (individually or in the aggregate)
- Liquidation costs (if applicable)

#### Author's Note

The "asset approach" is covered in chapter 9. Identification of assets, valuation, and liquidation methods are discussed in detail.

<sup>3</sup> See the bibliography included in appendix 19 for the complete reference.

<sup>4</sup> See the bibliography included in appendix 19 for the complete reference.

<sup>5</sup> See the bibliography included in appendix 19 for the complete reference.

35. When using methods under the cost approach to value intangible assets, the valuation analyst should consider the type of cost to be used (for example, reproduction cost or replacement cost), and, where applicable, the appropriate forms of depreciation and obsolescence and the remaining useful life of the intangible asset.

#### Author's Note

Terms such as *reproduction cost* and *replacement cost* will be defined by me in the appropriate chapter. Be patient, and we will get there eventually.

### Market Approach

36. Three frequently used valuation methods under the market approach for valuing a business, business ownership interest, or security are

- **guideline public company method.**
- ***guideline company transactions method.***
- guideline sales of interests in the subject entity, such as business ownership interests or securities.

Three frequently used market approach valuation methods for intangible assets are

- comparable uncontrolled transactions method (which is based on arm's-length sales or licenses of guideline intangible assets).
- comparable profit margin method (which is based on comparison of the profit margin earned by the subject entity that owns or operates the intangible asset to profit margins earned by guideline companies).
- ***relief from royalty method*** (which is based on the royalty rate, often expressed as a percentage of revenue that the subject entity that owns or operates the intangible asset would be obligated to pay to a hypothetical third-party licensor for the use of that intangible asset).

For the methods involving guideline intangible assets (for example, the comparable profit margin method), the valuation analyst should consider the subject intangible asset's remaining useful life relative to the remaining useful life of the guideline intangible assets, if available.

37. In applying the methods listed in paragraph 36 or other methods to determine valuation pricing multiples or metrics, the valuation analyst should consider

- qualitative and quantitative comparisons.
- arm's-length transactions and prices.
- the dates and, consequently, the relevance of the market data.

#### Author's Note

Not sure what this means? Don't worry, neither do I. All kidding aside, these items will all be discussed in chapters 7 and 8 (and possibly elsewhere).

38. The valuation analyst should set forth in the report the rationale and support for the valuation methods used (paragraph 47).

39. *Rules of Thumb.* Although technically not a valuation method, some valuation analysts use rules of thumb or industry benchmark indicators (hereinafter, collectively referred to as **rules of thumb**) in a valuation engagement. A rule of thumb is typically a reasonableness check against other methods used and should generally not be used as the only method to estimate the value of the subject interest.

#### Author's Note

I am going to state this again later, but rules of thumb are so badly misused that I am going to state it here also. A rule of thumb is nothing more than a sanity check for the many hours that you will spend performing a valuation assignment. It should never, and I mean never, be used as a stand alone method of valuation. Depending on whom you speak with,  
*(continued)*



 **Author's Note (continued)**

many businesses have multiple rules of thumb. For example, the 2007 *Business Reference Guide*<sup>6</sup> list seven different rules of thumb for restaurants, and if you break down the type of restaurant, it lists many more. Many of the rules of thumb have wide variations ending up with nothing more than a number that is unsupported.

## Valuation Adjustments

40. During the course of a valuation engagement, the valuation analyst should consider whether valuation adjustments (discounts or premiums) should be made to a **pre-adjustment** value. Examples of valuation adjustments for valuation of a business, business ownership interest, or security include a **discount for lack of marketability or liquidity** and a **discount for lack of control**. An example of a valuation adjustment for valuation of an intangible asset is obsolescence.

 **Author's Note**

Valuation adjustments (premiums and discounts) are discussed in chapter 12.

41. When valuing a controlling ownership interest under the income approach, the value of any **nonoperating assets**, nonoperating liabilities, or **excess or deficient operating assets** should be excluded from the computation of the value based on the operating assets and should be added to or deleted from the value of the operating entity. When valuing a noncontrolling ownership interest under the income approach, the value of any nonoperating assets, nonoperating liabilities, or excess or deficient operating assets may or may not be used to adjust the value of the operating entity depending on the valuation analyst's assessment of the influence exercisable by the noncontrolling interest. In the asset based or cost approach, it may not be necessary to separately consider nonoperating assets, nonoperating liabilities, or excess or deficient operating assets.

 **Author's Note**

Topics such as controlling or noncontrolling ownership interests, nonoperating assets, and liabilities, as well as excess or deficient operating assets are also discussed in this book. These topics will make much more sense once you have had the opportunity to read about them.

## Conclusion of Value

42. In arriving at a conclusion of value, the valuation analyst should
- correlate and reconcile the results obtained under the different approaches and methods used.
  - assess the reliability of the results under the different approaches and methods using the information gathered during the valuation engagement.
  - determine, based on items *a* and *b*, whether the conclusion of value should reflect (1) the results of one valuation approach and method or (2) a combination of the results of more than one valuation approach and method.

## Subsequent Events

43. The valuation date is the specific date at which the valuation analyst estimates the value of the subject interest and concludes on his or her estimation of value. Generally, the valuation analyst should consider only circum-

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<sup>6</sup> See the bibliography included in appendix 19 for the complete reference.

stances existing at the valuation date and events occurring up to the valuation date. An event that could affect the value may occur subsequent to the valuation date; such an occurrence is referred to as a **subsequent event**. Subsequent events are indicative of conditions that were not known or knowable at the valuation date, including conditions that arose subsequent to the valuation date. The valuation would not be updated to reflect those events or conditions. Moreover, the valuation report would typically not include a discussion of those events or conditions because a valuation is performed as of a point in time—the valuation date—and the events described in this subparagraph, occurring subsequent to that date, are not relevant to the value determined as of that date. In situations in which a valuation is meaningful to the intended user beyond the valuation date, the events may be of such nature and significance as to warrant disclosure (at the option of the valuation analyst) in a separate section of the report in order to keep users informed (paragraphs 52(p), 71(r), and 74). Such disclosure should clearly indicate that information regarding the events is provided for informational purposes only and does not affect the determination of value as of the specified valuation date.

#### Author's Note

This gets back to the concept of using information that is “known or knowable.” The standard is saying that it is okay to disclose this item, but it should not affect your value conclusion. For example, I once valued a bicycle shop for a divorce as of December 31, 1997. On January 3, 1998 there was a fire that destroyed the business. Because a fire was not known or knowable on December 31, 1997, it would not have affected my valuation. However, if I was representing a prospective purchaser of the business, wouldn't common sense dictate that I disclose to my client the fact that the business burnt down? Even in a divorce, wouldn't the judge who has to determine equitable distribution want to know that an asset has been destroyed? This is an instance where a subsequent event needs to be disclosed. By the way, in this situation, the spouse of the business owner torched the place, was convicted of arson, and my client received the full value of the bicycle shop in equitable distribution as of December 31, 1997. The insurance proceeds were sufficient to restore and probably increase the value of the shop.

## Documentation

44. Documentation is the principal record of information obtained and analyzed, procedures performed, valuation approaches and methods considered and used, and the conclusion of value. The quantity, type, and content of documentation are matters of the valuation analyst's professional judgment. Documentation may include

- information gathered and analyzed to obtain an understanding of matters that may affect the value of the subject interest (paragraphs 25–30).
- assumptions and limiting conditions (paragraph 18).
- any restriction or limitation on the scope of the valuation analyst's work or the data available for analysis (paragraph 19).
- basis for using any **valuation assumption** during the valuation engagement.
- valuation approaches and methods considered.
- valuation approaches and methods used including the rationale and support for their use.
- if applicable, information relating to subsequent events considered by the valuation analyst (paragraph 43).
- for any rule of thumb used in the valuation, source(s) of data used, and how the rule of thumb was applied (paragraph 39).
- other documentation considered relevant to the engagement by the valuation analyst.

45. The valuation analyst should retain the documentation for a period of time sufficient to meet the needs of applicable legal, regulatory, or other professional requirements for records retention.

## Calculation Engagement

46. In performing a calculation engagement, the valuation analyst should consider, at a minimum, the following:

- a. Identity of the client
- b. Identity of the subject interest
- c. Whether or not a business interest has ownership control characteristics and its degree of marketability
- d. Purpose and intended use of the calculated value
- e. Intended users of the report and the limitations on its use
- f. Valuation date
- g. Applicable premise of value
- h. Applicable standard of value
- i. Sources of information used in the calculation engagement
- j. Valuation approaches or valuation methods agreed upon with the client
- k. Subsequent events, if applicable (paragraph 43)

In addition, the valuation analyst should comply with the documentation requirements listed in paragraphs 44 and 45. The quantity, type, and content of documentation are matters of the valuation analyst's professional judgment.

## THE VALUATION REPORT

47. A valuation report is a written or oral communication to the client containing the conclusion of value or the calculated value of the subject interest. Reports issued for purposes of certain controversy proceedings are exempt from this reporting standard (paragraph 50).

48. The three types of written reports that a valuation analyst may use to communicate the results of an engagement to estimate value are: for a valuation engagement, a detailed report or a summary report; and for a calculation engagement, a calculation report.

### For a Valuation Engagement

- a. *Detailed Report*: This report may be used only to communicate the results of a valuation engagement (conclusion of value); it should not be used to communicate the results of a calculation engagement (calculated value) (paragraph 51).
- b. *Summary Report*: This report may be used only to communicate the results of a valuation engagement (conclusion of value); it should not be used to communicate the results of a calculation engagement (calculated value) (paragraph 71).

For a valuation engagement, the determination of whether to prepare a detailed report or a summary report is based on the level of reporting detail agreed to by the valuation analyst and the client.

### For a Calculation Engagement

- c. *Calculation Report*: This type of report should be used only to communicate the results of a calculation engagement (calculated value); it should not be used to communicate the results of a valuation engagement (conclusion of value) (paragraph 73).

49. The valuation analyst should indicate in the valuation report the restrictions on the use of the report (which may include restrictions on the users of the report, the uses of the report by such users, or both) (paragraph 65(d)).

### Author's Note

The detailed report, referred to previously, is a more formal or comprehensive report than the summary report. Over the years, detailed reports have been called *formal*, *comprehensive*, *self-contained*, and who knows what else depending on the set of standards or the textbook that you were looking at. Regardless of what it is called, the detailed report is detailed. It should contain what an uninformed user of the report needs to know and explain it clearly. Paragraph 51 of the standard, as well as chapter 14 of this book describes what should be included in a detailed report. A sample detailed report is included on the CD-ROM that came with this book.

A summary report has less detail than a detailed report. Previously, you may have seen this also called a *letter report* or an *informal report*. A sample summary report is also provided on the CD-ROM provided with this book. Someone once asked me what the difference was between a detailed report and a summary report. My response was

### Author's Note (continued)

about \$3,000. All kidding aside, the difference is the amount of time it might take to write a 100 page report versus a 15 page report. You still must do all of the work required to provide a supportable conclusion of value. It is only the document that changes. A calculation report has also been included on the CD-ROM that is part of this book. With all three reports being included, you really got your money's worth for this book!

## Reporting Exemption for Certain Controversy Proceedings

50. A valuation performed for a matter before a court, an arbitrator, a mediator or other facilitator, or a matter in a governmental or administrative proceeding, is exempt from the reporting provisions of this statement. The reporting exemption applies whether the matter proceeds to trial or settles. The exemption applies only to the reporting provisions of this statement (paragraphs 47–49 and 51–78). The developmental provisions of the statement (paragraphs 21–46) still apply whenever the valuation analyst expresses a conclusion of value or a calculated value (Valuation Services Interpretation No. 1).

### Author's Note

This is an important paragraph. What it basically states is that if you are doing your job as part of a litigation, arbitration, mediation, or the like, you do not have to follow the reporting requirements of this standard. This means that because you may be subject to testimony, including cross-examination, you and your client's attorney must determine how much (or how little) to put into a report, if you do a report at all. Be aware, however, that there are certain rules, such as Rule 26 of the *Rules of Federal Civil Procedure* that might require certain inclusions in the report. Despite the type of report, you still must follow all of the developmental provisions of the standard. Essentially, you still must do the proper job.

## Detailed Report

51. The *detailed report* is structured to provide sufficient information to permit intended users to understand the data, reasoning, and analyses underlying the valuation analyst's conclusion of value. A detailed report should include, as applicable, the following sections titled using wording similar in content to that shown:

- Letter of transmittal
- Table of contents
- Introduction
- Sources of information
- Analysis of the subject entity and related nonfinancial information
- Financial statement/information analysis
- Valuation approaches and methods considered
- Valuation approaches and methods used
- Valuation adjustments
- Nonoperating assets, nonoperating liabilities, and excess or deficient operating assets (if any)
- Representation of the valuation analyst
- Reconciliation of estimates and conclusion of value
- Qualifications of the valuation analyst
- Appendices and exhibits

The above listed report sections and the detailed information within the sections described in the following paragraphs 52–77 may be positioned in the body of the report or elsewhere in the report at the discretion of the valuation analyst.

## Introduction

52. This section should provide an overall description of the valuation engagement. The information in the section should be sufficient to enable the intended user of the report to understand the nature and scope of the valuation

engagement, as well as the work performed. The introduction section may include, among other things, the following information:

- a. Identity of the client
- b. Purpose and intended use of the valuation
- c. Intended users of the valuation
- d. Identity of the subject entity
- e. Description of the subject interest
- f. Whether the business interest has ownership control characteristics and its degree of marketability
- g. Valuation date
- h. Report date
- i. Type of report issued (namely, a detailed report) (paragraph 51)
- j. Applicable premise of value
- k. Applicable standard of value
- l. Assumptions and limiting conditions (alternatively, these often appear in an appendix) (paragraph 18)
- m. Any restrictions or limitations in the scope of work or data available for analysis (paragraph 19)
- n. Any hypothetical conditions used in the valuation engagement, including the basis for their use (paragraph 22)
- o. If the work of a specialist was used in the valuation engagement, a description of how the specialist's work was relied upon (paragraph 20)
- p. Disclosure of subsequent events in certain circumstances (paragraph 43)
- q. Any application of the jurisdictional exception (paragraph 10)
- r. Any additional information the valuation analyst deems useful to enable the user(s) of the report to understand the work performed

If the above items are not included in the introduction, they should be included elsewhere in the valuation report.

#### Author's Note

Keep in mind that this list is not meant to be all inclusive, and the order is flexible and at the discretion of the valuation analyst.

### Sources of Information

53. This section of the report should identify the relevant sources of information used in performing the valuation engagement. It may include, among other things, the following:

- a. For valuation of a business, business ownership interest, or security, whether and to what extent the subject entity's facilities were visited
- b. For valuation of an intangible asset, whether the legal registration, contractual documentation, or other tangible evidence of the asset was inspected
- c. Names, positions, and titles of persons interviewed and their relationships to the subject interest
- d. Financial information (paragraphs 54 and 56)
- e. Tax information (paragraph 55)
- f. Industry data
- g. Market data
- h. Economic data
- i. Other empirical information
- j. Relevant documents and other sources of information provided by or related to the entity

54. If the financial information includes financial statements that were reported on (audit, review, compilation, or attest engagement performed under the Statements on Standards for Attestation Engagements [SSAEs]) by the valuation analyst's firm, the valuation report should disclose this fact and the type of report issued. If the valuation

analyst or the valuation analyst's firm did not audit, review, compile, or attest under the SSAEs to the financial information, the valuation analyst should so state and should also state that the valuation analyst assumes no responsibility for the financial information.

#### Author's Note

The vast majority of valuations that are performed will generally include a limiting condition in the report that the financial statements were accepted, without independent verification, and are being accepted as is. This is important, especially for CPAs because many clients will use *CPA* and *auditor* as being synonymous. You want to make sure that the reader of the report is very clear on what you did and did not do.

55. The financial information may be derived from or may include information derived from tax returns. With regard to such derived information and other tax information (paragraph 53(e)), the valuation analyst should identify the tax returns used and any existing relationship between the valuation analyst and the tax preparer. If the valuation analyst or the valuation analyst's firm did not audit, review, compile, or attest under the SSAEs to any financial information derived from tax returns that is used during the valuation engagement, the valuation analyst should so state and should also state that the valuation analyst assumes no responsibility for that derived information.

56. If the financial information used was derived from financial statements prepared by management that were not the subject of an audit, review, compilation, or attest engagement performed under the SSAEs, the valuation report should

- identify the financial statements.
- state that, as part of the valuation engagement, the valuation analyst did not audit, review, compile, or attest under the SSAEs to the financial information and assumes no responsibility for that information.

### **Analysis of the Subject Entity and Related Nonfinancial Information**

57. The valuation analyst should include a description of the relevant nonfinancial information listed and discussed in paragraph 27.

### **Financial Statement/Information Analysis**

58. This section should include a description of the relevant information listed in paragraph 27. Such description may include

- a. the rationale underlying any normalization or **control adjustments** to financial information.
- b. comparison of current performance with historical performance.
- c. comparison of performance with industry trends and norms, where available.

### **Valuation Approaches and Methods Considered**

59. This section should state that the valuation analyst has considered the valuation approaches discussed in paragraph 31.

### **Valuation Approaches and Methods Used**

60. In this section, the valuation analyst should identify the valuation methods used under each valuation approach and the rationale for their use.

61. This section should also identify the following for each of the three approaches (if used):

- a. Income approach:
  - Composition of the representative benefit stream
  - Method(s) used, and a summary of the most relevant risk factors considered in selecting the appropriate **discount rate**, the capitalization rate, or both
  - Other factors as discussed in paragraph 33



- b. Asset based approach or cost approach:
- *Asset based approach*: Any adjustments made by the valuation analyst to the relevant balance sheet data
  - *Cost approach*: The type of cost used, how this cost was estimated, and, if applicable, the forms of and costs associated with depreciation and obsolescence used under the approach and how those costs were estimated
- c. Market approach:
- For the guideline public company method:
    - The selected guideline companies and the process used in their selection
    - The pricing multiples used, how they were used, and the rationale for their selection. If the pricing multiples were adjusted, the rationale for such adjustments
  - For the guideline company transactions method, the sales transactions and pricing multiples used, how they were used, and the rationale for their selection. If the pricing multiples were adjusted, the rationale for such adjustments
  - For the guideline sales of interests in the subject entity method, the sales transactions used, how they were used, and the rationale for determining that these sales are representative of arm's length transactions
62. When a rule of thumb is used in combination with other methods, the valuation report should disclose the source(s) of data used and how the rule of thumb was applied (paragraph 39).

### Valuation Adjustments

63. This section should (a) identify each valuation adjustment considered and determined to be applicable, for example, discount for lack of marketability, (b) describe the rationale for using the adjustment and the factors considered in selecting the amount or percentage used, and (c) describe the preadjustment value to which the adjustment was applied (paragraph 40).

### Nonoperating Assets and Excess Operating Assets

64. When the subject interest is a business, business ownership interest, or security, the valuation report should identify any related nonoperating assets, nonoperating liabilities, or excess or deficient operating assets and their effect on the valuation (paragraph 41).

### Representation of the Valuation Analyst

65. Each written report should contain the representation of the valuation analyst. The representation is the section of the report wherein the valuation analyst summarizes the factors that guided his or her work during the engagement. Examples of these factors include the following:

- a. The analyses, opinions, and conclusion of value included in the valuation report are subject to the specified assumptions and limiting conditions (see paragraph 18), and they are the personal analyses, opinions, and conclusion of value of the valuation analyst.
- b. The economic and industry data included in the valuation report have been obtained from various printed or electronic reference sources that the valuation analyst believes to be reliable (any exceptions should be noted). The valuation analyst has not performed any corroborating procedures to substantiate that data.
- c. The valuation engagement was performed in accordance with the American Institute of Certified Public Accountants Statement on Standards for Valuation Services.
- d. The parties for which the information and use of the valuation report is restricted are identified; the valuation report is not intended to be and should not be used by anyone other than such parties (paragraph 49).
- e. The analyst's compensation is fee based or is contingent on the outcome of the valuation.
- f. The valuation analyst used the work of one or more outside specialists to assist during the valuation engagement. (An outside specialist is a specialist other than those employed in the valuation analyst's firm.) If the work of such a specialist was used, the specialist should be identified. The valuation report should include a statement identifying the level of responsibility, if any, the valuation analyst is assuming for the specialist's work.

- g. The valuation analyst has no obligation to update the report or the opinion of value for information that comes to his or her attention after the date of the report.
- h. The valuation analyst and the person(s) assuming responsibility for the valuation should sign the representation in their own name(s). The names of those providing significant professional assistance should be identified.

#### Author's Note

Under the various other sets of standards, this section is frequently called *appraiser's certification*. The accounting profession does not like the word *certification* because the reader may get confused because the auditor certifies financial statements. *Certify* and *certification* are terms of art in the accounting profession, so the AICPA valuation standard avoids these terms. Therefore, it is called a *representation*. If it looks like a duck, quacks like a duck. . . . Just be clear that you did not do an audit or even appear to do an audit.

### Representations Regarding Information Provided to the Valuation Analyst

66. It may be appropriate for the valuation analyst to obtain written representations regarding information that the subject entity's management provides to the valuation analyst for purposes of his or her performing the valuation engagement. The decision whether to obtain a representation letter is a matter of judgment for the valuation analyst.

#### Author's Note

Representation letters are considered to be risk management tools within the accounting profession. However, while I am clearly risk adverse, I do not like to get representation letters when I perform valuation services because I believe that it is a procedure that is covered under the attestation standards. I do not want anyone to misconstrue the service that I am providing to look like an audit or review. However, there are many CPAs who feel more comfortable getting a representation letter from the client. This is clearly a professional preference. Many of my friends think that I am nuts. Maybe I am, but that does not change the way I feel. For those accountants who are reading this book with a few gray hairs like me, I used to work for Max Rothenberg & Company CPAs (look up in your old auditing text book the matter referred to as *1136 Tenants Cooperative v. Max Rothenberg & Company CPAs*). That firm got clobbered in a malpractice suit for providing services that appeared to be an audit even though the firm was not engaged to do an audit. My general feeling is that if the client does not give me good information, the end result will be a bad valuation. I will be covering myself with documentation, memos to the file, and, where appropriate, sending sections of my report (for example, history of the business) to the client to verify the accuracy. Do what you believe is right for your circumstances. Don't just follow what I say because I said it.

### Qualifications of the Valuation Analyst

67. The report should contain information regarding the qualifications of the valuation analyst.

### Conclusion of Value

68. This section should present a reconciliation of the valuation analyst's estimate or various estimates of the value of the subject interest. In addition to a discussion of the rationale underlying the conclusion of value, this section should include the following or similar statements:

- a. A valuation engagement was performed, including the subject interest and the valuation date.
- b. The analysis was performed solely for the purpose described in this report, and the resulting estimate of value should not be used for any other purpose.
- c. The valuation engagement was conducted in accordance with the Statement(s) on Standards for Valuation Services of the American Institute of Certified Public Accountants.
- d. A statement that the estimate of value resulting from a valuation engagement is expressed as a conclusion of value.

- e. The scope of work or data available for analysis is explained, including any restrictions or limitations (paragraph 19).
- f. A statement describing the conclusion of value, either a single amount or a range.
- g. The conclusion of value is subject to the assumptions and limiting conditions (paragraph 18) and to the valuation analyst's representation (paragraph 65).
- h. The report is signed in the name of the valuation analyst or the valuation analyst's firm.
- i. The date of the valuation report is included.
- j. The valuation analyst has no obligation to update the report or the conclusion of value for information that comes to his or her attention after the date of the report.

#### Author's Note

What is important to remember about this section of the standard is that we are being provided with the information that should be contained in a good valuation report. The task force that wrote this standard really bent over backwards to provide all of us with guidance in this document, eliminating much of the guess work as to what are the true meanings behind the statement. They are not telling us that we must make our reports look like cookie cutters, but rather that each valuation report must contain an appropriate level of information to allow the intended reader to understand not only what the valuation analysis is all about, but also what steps we perform in rendering our services.

69. The following is an example of report language that could be used, but is not required, when reporting the results of a valuation engagement:

We have performed a *valuation engagement*, as that term is defined in the Statement on Standards for Valuation Services (SSVS) of the American Institute of Certified Public Accountants, of [DEF Company, GHI business ownership interest of DEF Company, GHI security of DEF Company, or GHI intangible asset of DEF Company] as of [valuation date]. This valuation was performed solely to assist in the matter of [purpose of the valuation]; the resulting estimate of value should not be used for any other purpose or by any other party for any purpose. This valuation engagement was conducted in accordance with the SSVS. The estimate of value that results from a valuation engagement is expressed as a conclusion of value.

[If applicable] We were restricted or limited in the scope of our work or data available for analysis as follows: [describe restrictions or limitations].

Based on our analysis, as described in this valuation report, the estimate of value of [DEF Company, GHI business ownership interest of DEF Company, GHI security of DEF Company, or GHI intangible asset of DEF Company] as of [valuation date] was [value, either a single amount or a range]. This conclusion is subject to the Statement of Assumptions and Limiting Conditions found in [reference to applicable section of valuation report] and to the Valuation Analyst's Representation found in [reference to applicable section of valuation report]. We have no obligation to update this report or our conclusion of value for information that comes to our attention after the date of this report.

[Signature]

[Date]

## Appendices and Exhibits

70. Appendices or exhibits may be used for required information or information that supplements the detailed report. Often, the assumptions and limiting conditions and the valuation analyst's representation are provided in appendices to the detailed report.

## Summary Report

71. A summary report is structured to provide an abridged version of the information that would be provided in a detailed report, and therefore, need not contain the same level of detail as a detailed report. However, a summary report should, at a minimum, include the following:

- a. Identity of the client
- b. Purpose and intended use of the valuation
- c. Intended users of the valuation
- d. Identity of the subject entity
- e. Description of the subject interest
- f. The business interest's ownership control characteristics, if any, and its degree of marketability
- g. Valuation date
- h. Valuation report date
- i. Type of report issued (namely, a summary report) (paragraph 48)
- j. Applicable premise of value
- k. Applicable standard of value
- l. Sources of information used in the valuation engagement
- m. Assumptions and limiting conditions of the valuation engagement (paragraph 18)
- n. The scope of work or data available for analysis including any restrictions or limitations (paragraph 19)
- o. Any hypothetical conditions used in the valuation engagement, including the basis for their use (paragraph 22)
- p. If the work of a specialist was used in the valuation (paragraph 20), a description of how the specialist's work was used, and the level of responsibility, if any, the valuation analyst is assuming for the specialist's work
- q. The valuation approaches and methods used
- r. Disclosure of subsequent events in certain circumstances (paragraph 43)
- s. Any application of the jurisdictional exception (paragraph 10)
- t. Representation of the valuation analyst (paragraph 65)
- u. The report is signed in the name of the valuation analyst or the valuation analyst's firm
- v. A section summarizing the reconciliation of the estimates and the conclusion of value as discussed in paragraphs 68 and 69
- w. A statement that the valuation analyst has no obligation to update the report or the calculation of value for information that comes to his or her attention after the date of the valuation report

72. Appendices or exhibits may be used for required information (paragraph 70) or information that supplements the summary report. Often, the assumptions, limiting conditions, and the valuation analyst's representation are provided in appendices to the summary report.

## Calculation Report

73. As indicated in paragraph 48, a calculation report is the only report that should be used to report the results of a calculation engagement. The report should state that it is a calculation report. The calculation report should include the representation of the valuation analyst similar to that in paragraph 65, but adapted for a calculation engagement.

74. The calculation report should identify any hypothetical conditions used in the calculation engagement, including the basis for their use (paragraph 22), any application of the jurisdictional exception (paragraph 10), and any assumptions and limiting conditions applicable to the engagement (paragraph 18). If the valuation analyst used the work of a specialist (paragraph 20), the valuation analyst should describe in the calculation report how the specialist's work was used and the level of responsibility, if any, the valuation analyst is assuming for the specialist's work. The calculation report may also include a disclosure of subsequent events in certain circumstances (paragraph 43).

75. Appendices or exhibits may be used for required information (paragraph 72) or information that supplements the calculation report. Often, the assumptions and limiting conditions and the valuation analyst's representation are provided in appendices to the calculation report.

76. The calculation report should include a section summarizing the calculated value. This section should include the following (or similar) statements:

- a. Certain calculation procedures were performed; include the identity of the subject interest and the calculation date.
- b. Describe the calculation procedures and the scope of work performed or reference the section(s) of the calculation report in which the calculation procedures and scope of work are described.
- c. Describe the purpose of the calculation procedures, including that the calculation procedures were performed solely for that purpose and that the resulting calculated value should not be used for any other purpose or by any other party for any purpose.
- d. The calculation engagement was conducted in accordance with the Statement on Standards for Valuation Services of the American Institute of Certified Public Accountants.
- e. A description of the business interest's characteristics, including whether the subject interest exhibits control characteristics, and a statement about the marketability of the subject interest.
- f. The estimate of value resulting from a calculation engagement is expressed as a calculated value.
- g. A general description of a calculation engagement is given, including that (1) a calculation engagement does not include all of the procedures required for a valuation engagement and (2) had a valuation engagement been performed, the results may have been different.
- h. The calculated value, either a single amount or a range, is described.
- i. The report is signed in the name of the valuation analyst or the valuation analyst's firm.
- j. The date of the valuation report is given.
- k. The valuation analyst has no obligation to update the report or the calculation of value for information that comes to his or her attention after the date of the report.

77. The following is an example of report language that could be used, but is not required, in reporting a calculation engagement:

We have performed a *calculation engagement*, as that term is defined in the Statement on Standards for Valuation Services (SSVS) of the American Institute of Certified Public Accountants. We performed certain calculation procedures on [DEF Company, GHI business ownership interest of DEF Company, GHI security of DEF Company, or GHI intangible asset of DEF Company] as of [calculation date]. The specific calculation procedures are detailed in paragraphs [reference to paragraph numbers] of our calculation report. The calculation procedures were performed solely to assist in the matter of [purpose of valuation procedures], and the resulting calculation of value should not be used for any other purpose or by any other party for any purpose. This calculation engagement was conducted in accordance with the SSVS. The estimate of value that results from a calculation engagement is expressed as a calculated value.

In a calculation engagement, the valuation analyst and the client agree on the specific valuation approaches and valuation methods the valuation analyst will use and the extent of valuation procedures the valuation analyst will perform to estimate the value of the subject interest. A calculation engagement does not include all of the procedures required in a *valuation engagement*, as that term is defined in the SSVS. Had a valuation engagement been performed, the results might have been different.

Based on our calculations, as described in this report, which are based solely on the procedures agreed upon as referred to above, the resulting calculated value of [DEF Company, GHI business ownership interest of DEF Company, GHI security of DEF Company, or GHI intangible asset of DEF Company] as of [valuation date] was [calculated value, either a single amount or a range]. This calculated value is subject to the Statement of Assumptions and Limiting Conditions found in [reference to applicable section of valuation report] and to the Valuation Analyst's Representation found in [reference to applicable section of valuation report]. We have no obligation to update this report or our calculation of value for information that comes to our attention after the date of this report.

[Signature]

[Date]

## Oral Report

78. An oral report may be used in a valuation engagement or a calculation engagement. An oral report should include all information the valuation analyst believes necessary to relate the scope, assumptions, limitations, and the results of the engagement so as to limit any misunderstandings between the analyst and the recipient of the

oral report. The member should document in the working papers the substance of the oral report communicated to the client.

#### Author's Note

I was going to include an oral report on the CD-ROM with this book, but then I realized that this was not a book-on-tape. Use your imagination, and read one of the sample reports aloud; that should suffice.

## EFFECTIVE DATE

79. This statement applies to engagements to estimate value accepted on or after January 1, 2008. Earlier application is encouraged.

#### Author's Note

Guess what? By the time that you have read this chapter, the rules are already in effect. So, how many valuations have you done since January 1, 2008 that did not follow these standards? You need to follow these rules if you belong to the AICPA. If you are not an accountant, these rules are a good guide to performing valuation services. You probably will be following most of these rules anyway because the different appraisal organizations have similar rules.

This standard includes several appendixes that are also important. However, I do not want to have you read each one yet. Appendix A is an Illustrative List of Assumptions and Limiting Conditions for a Business Valuation. This will be covered in chapter 14 when I discuss reports. Appendix B is the International Glossary of Business Valuation Terms. I already have this as appendix 5 in this book, so I am not going to repeat it here. Appendix C is a Glossary of Additional Terms. I have included this as appendix 6 in this book.

#### Author's Note

Now, just when you thought that we were done with this AICPA standard, here comes what I consider to be the bonus that was included with the standard, Interpretation No. 1-01, *“Scope of Applicable Services” of Statement on Standards for Valuation Services No.1, Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset*. This is an important part of the document because it explains many of the areas that CPAs who perform valuation services only occasionally are concerned with. It also contains sections that pertain to business valuers, so don't stop reading yet!

## INTERPRETATION NO. 1-01, “SCOPE OF APPLICABLE SERVICES” OF STATEMENT ON STANDARDS FOR VALUATION SERVICES NO. 1, VALUATION OF A BUSINESS, BUSINESS OWNERSHIP INTEREST, SECURITY, OR INTANGIBLE ASSET

### BACKGROUND

1. The Statement on Standards for Valuation Services (SSVS) establishes standards of performance and reporting for all AICPA members performing those valuation services that are within the scope of the statement. When originally proposed on March 30, 2005, the exposure draft contained a list of questions and answers (Appendix A of the March 30, 2005 exposure draft) that were intended to assist members in determining if an engagement, particularly with regard to litigation or tax engagements, fell within the scope of the statement. Through the exposure draft process, it was determined that the questions and answers were an integral part of the statement and should be made authoritative. This interpretation is part of the AICPA's continuing efforts at self-regulation of its members in valuation practice, and its desire to provide guidance to members when providing valuation services. The



interpretation does not change or elevate any level of conduct prescribed by any standard. Its goal is to clarify existing standards.

## GENERAL INTERPRETATION

2. The SSVSs apply to an engagement to estimate value if, as all or as part of another engagement, a member determines the value of a business, business ownership interest, security, or intangible asset (SSVS paragraphs 1 and 2). In the process of estimating value, professional judgment is used to apply valuation approaches and valuation methods as described in the SSVSs (SSVS paragraph 4).

3. In determining whether a particular service falls within the scope of the statement, a member should consider those services that are specifically excluded:

- Audit, review, and compilation engagements (SSVS paragraph 5)
- Use of values provided by the client or a third party (SSVS paragraph 6)
- Internal use assignments from employers to employee members not in the practice of public accounting (SSVS paragraph 7)
- Engagements that are exclusively for the purpose of determining economic damages (for example, lost profits) and that do not include an engagement to estimate value (SSVS paragraph 8)
- Mechanical computations that do not rise to the level of an engagement to estimate value (SSVS paragraph 9(a))
- Engagements where it is not practical or reasonable to obtain or use relevant information and, therefore, the member is unable to apply valuation approaches and methods described in this statement. (SSVS paragraph 9(b))
- Engagements meeting the jurisdictional exception (SSVS paragraph 10)

4. A member should be diligent in determining if an engagement falls within the scope of the statement. Unless specifically excluded by the SSVS, if the engagement requires a member to apply valuation approaches and methods, and use professional judgment in applying those approaches and methods, the SSVS would apply. In determining the scope and requirements of the engagement, a member should consider the client's needs, or the requirements of a third party for which the valuation is intended, including governmental, judicial, and accounting authorities. In addition, a member should consider other professional standards that might apply.

## SPECIFIC ILLUSTRATIONS

5. The following illustrations address general fact patterns. Accordingly, the application of the guidance discussed in the "General Interpretation" section to variations in general facts, or to particular facts and circumstances, may lead to different conclusions. In each illustration, there is no authority other than that indicated.

## ILLUSTRATIONS RELATING TO LITIGATION ENGAGEMENTS AND CERTAIN CONTROVERSY PROCEEDINGS

6. *Illustration 1.* Do lost profits damage computations fall within the scope of the statement?

7. *Conclusion.* No, unless the computations are undertaken as part of an engagement to estimate value (SSVS paragraphs 1, 2, and 8).

### Author's Note

This means that if you perform litigation support services in the form of lost profit analysis, the service performed is excluded from this standard. However, you probably want to make sure that you follow the guidance in the other AICPA standards and practice aids.

8. *Illustration 2.* Is an economic damages computation that incorporates a terminal value within the scope of the statement?

9. *Conclusion.* The use of a terminal value exclusively for the determination of lost profits is not within the scope of this statement unless that determination will be used as part of an engagement to estimate value (*Illustration 1*).

#### Author's Note

If you do not know what a terminal value is, you probably should not be doing this type of work until you meet the competency provisions of the AICPA standards. However, do not worry. I will be discussing terminal values in chapter 10 as part of the Income Approach.

10. *Illustration 3.* If a start-up business is destroyed, is the economic damages computation within the scope of the statement?

11. *Conclusion.* There are two common measures of damages: lost profits and loss of value. If a valuation analyst performs an engagement to estimate value to determine the loss of value of a business or intangible asset, the statement applies. Otherwise, the statement does not apply (*Illustration 1*). In order to determine whether the statement applies, a member acting as an expert witness should evaluate whether the particular damages calculation constitutes an engagement to estimate value with respect to the business, business interest, security, or intangible asset or whether it constitutes a lost profits computation.

#### Author's Note

If you perform this type of work, do not let the standard determine whether you choose between a lost profits analysis or a business valuation. The case law of the presiding jurisdiction, as well as the facts and circumstances of the case must be the determining factors. Speak with legal counsel to get the answer. If it is lost business value, then follow the standards.

12. *Illustration 4.* Does the statement include any exceptions relating to litigation or controversy proceedings?

13. *Conclusion.* Yes, the statement includes a reporting exemption for certain controversy proceedings (SSVS paragraph 50); however, there is no litigation or controversy proceeding exemption from the developmental provisions of the statement (SSVS paragraphs 21–46) in circumstances in which an engagement to estimate value is performed (*Illustration 1*).

14. *Illustration 5.* Is the statement's reporting exemption for litigation or controversy proceedings (see SSVS paragraph 50) the same as the "litigation exemption" in the AICPA attestation standards?

15. *Conclusion.* No, the so-called "litigation exemption" is provided for in the AICPA attestation standards and is further discussed in the attestation interpretations. The attestation standards do not apply to engagements in which a practitioner is engaged to testify as an expert witness in accounting, auditing, taxation, or other matters, given certain stipulated facts. This is clarified in the attestation interpretation, which states, in part, that the attestation standards do not apply to litigation services engagements when (among other requirements) the practitioner "has not been engaged to issue and does not issue an examination, a review, or an agreed upon procedures report on the subject matter, or an assertion about the subject matter that is the responsibility of another party." (Interpretation No. 3, "Applicability of Attestation Standards to Litigation Services," of chapter 1, "Attest Engagements," of Statement on Standards for Attestation Engagements No. 10, *Attestation Standards: Revision and Recodification*, as revised [AICPA, *Professional Standards*, vol. 1, AT sec. 9101.34–42].) However, unlike the AICPA attestation standards, which do not apply in any capacity to litigation or controversy proceeding situations, as discussed above, the statement's exemption for litigation or certain controversy proceedings is an exemption from the reporting provisions of the Statement (SSVS paragraphs 47–78).

## ILLUSTRATIONS RELATING TO TAX ENGAGEMENTS

16. *Illustration 6.* When does the statement apply to members who determine values related to tax reporting and planning engagements?

17. *Conclusion.* The statement applies when the member is engaged to estimate the value of a business, business ownership interest, security, or intangible asset (SSVS paragraph 1). The application of valuation approaches and methods and the use of professional judgment (SSVS paragraph 4) are required, unless an exception applies (SSVS paragraphs 5–10).

#### Author's Note

Tax practitioners, like business valuers, who are a member of the AICPA are subject to this standard if the services rendered fall within the services covered by this standard. This is similar to the fact that if I prepare a tax return, there are rules that I must follow. The first rule is “Go to a psychiatrist because I must be going nuts!” I gave up my tax practice many years ago and cannot imagine why I would want to go back. However, if a tax practitioner is engaged to determine a value for estate or gift tax purposes, the same standards need to be followed whether the tax practitioner performs the service or a valuation analyst does it. It would make no sense to have different sets of standards for the same organization depending on the section that the member practices under.

What about the tax practitioner who is going to prepare an intangibles tax return for the client and needs the value of the business for inclusion in the return? If the client does not want to pay for a valuation engagement, let the client estimate the value and provide it to you for inclusion in the tax return. Just make sure that you get it in writing from the client and have them sign an engagement letter indicating that you are to use the value given to you by them.

18. *Illustration 7.* If the sole purpose of an engagement is reporting a value in a tax return and the statement applies to this engagement, are any separate reports (specifically, valuation reports) required to be issued? To whom are those reports required to be provided? Is a report required to be attached to the tax return? Are any specific disclosures required?

19. *Conclusion.* The statement requires the preparation of a written or oral valuation report (SSVS paragraphs 47–78) that is communicated to the client (SSVS paragraph 47) but does not require that any report be attached to the tax return or mandate any other tax specific disclosures. In limited circumstances, a taxing authority may require its own report, which would obviate the need for a separate valuation report (SSVS paragraph 10 and *Illustration 18*). There is also a reporting exemption for certain controversy proceedings (SSVS paragraph 50 and *Illustration 4*).

20. *Illustration 8.* Are mechanical computations of value, for example, computations using actuarial tables, excluded from the statement?

21. *Conclusion.* Mechanical computations of value are excluded from the statement if they do not rise to the level of an engagement to estimate value, that is, if the member does not apply valuation approaches and methods, and does not use professional judgment, as described in the statement (SSVS paragraph 9(a)).

22. Examples of services that do **not** rise to the level of an engagement to estimate value include: (a) computations of a remainder interest under a grantor retained annuity trust (GRAT) using actuarial tables; (b) determining the value of relatively small blocks (relative to the total amount of corporate stock outstanding) of publicly traded stock whose per share price is readily ascertainable; (c) preparing a tax return using the valuation of a business that was provided by a third party appraiser, or by the client (SSVS paragraph 6); and (d) calculating cash “hold back” requirements for tax contingencies (SSVS paragraphs 1, 4, and 9(a)).

23. Examples of services that rise to the level of an engagement to estimate value include: (a) valuing a block of publicly traded stock, if the analysis includes consideration of a discount for blockage, lockup, or other contractual or market restrictions such that valuation approaches and methods are applied, and professional judgment is used to determine the fair value, fair market value, or other applicable standard of value; (b) valuing stock that is not publicly traded; and (c) computing the fair market value of assets in a charitable remainder trust (CRT), if the engagement requires the application of valuation approaches and methods, and the use of professional judgment to estimate the fair market value.

24. *Illustration 9.* Does the “jurisdictional exception” (SSVS paragraph 10) provide that an engagement to estimate value is not subject to the statement if a member determines and reports values using procedures mandated or

 **Author's Note**

So what the standard is really saying is that if all you are doing is opening up the *Wall Street Journal* and multiply the number of shares times the share price, that is a mechanical calculation not covered by the standard. However, if you plan to take a discount, for example, blockage (discussed in chapter 12), you just became subject to the standard. If you have to think, rather than merely use your calculator, you are subject to the standard.

allowed by the Internal Revenue Code (IRC), Internal Revenue Service (IRS) regulations, court cases, or other published guidance and other sources of federal, state, and local law solely for purposes of tax return preparation and other tax services using these methods?

25. *Conclusion.* No, the “jurisdictional exception” would not exempt the engagement from this statement, even if the engagement’s sole purpose was to value a subject interest (SSVS paragraph 1) for tax reporting purposes. Only the portion of the statement that differs from the published governmental or judicial authority is superseded for purposes of the engagement. The remainder of the statement applies to the engagement.

26. *Illustration 10.* Is an interest in a publicly traded partnership whose shares are frequently traded considered a “security” under the statement? Is an interest in a family limited partnership (FLP), or in another nontraded partnership, considered a “security” under the statement?

27. *Conclusion.* Whether interest constitutes a “security” is a legal determination. However, where the value of a security is readily ascertainable, a valuation analyst does not need to apply valuation approaches and methods and use professional judgment. Accordingly, the valuation of such an interest would not be subject to the statement (SSVS paragraphs 1 and 9(a)). An interest in a nonpublicly traded partnership, such as an FLP, whether considered a security or not, is a business ownership interest. The valuation of such nonpublicly traded interest requires the application of valuation approaches and methods and the use of professional judgment, and, accordingly, would be subject to the statement (SSVS paragraphs 1, 4, and Illustration 6), unless the exception under SSVS paragraph 9(b) applies (Illustration 13e). If the engagement requires the valuation analyst to consider and apply adjustments, for example, valuation discounts or premiums, then the engagement would be subject to the statement.

28. *Illustration 11.* A client engages a member to provide advice for planning purposes (such as estate planning, personal financial planning, or merger and acquisitions planning). The client holds an ownership interest in a family business being operated as a limited liability company, an interest in a private real estate limited partnership, publicly traded stock, a personal residence, and a retirement account (not an IRA). Is this a valuation engagement subject to the statement?

29. *Conclusion.* It depends. Providing technical advice, without reference to values for the various assets, is not subject to the statement. However, if a member calculates a value to illustrate various planning options, he or she may fall under the statement with regard to various assets. If one or more of the assets for which value is to be determined for purposes of the plan illustrations is a business, business ownership interest, security, or intangible asset, and the client or a third party does not provide the values for these assets, or the member does not use assumed or hypothetical values as part of the overall engagement, the member performing the valuation(s) is subject to the statement with regard to these assets (SSVS paragraph 1 and *Illustration 6*). In this example, if the member applies valuation approaches and methods and uses professional judgment to determine the value of the ownership interest in the family business or the interest in the private real estate limited partnership in order to provide planning advice, the statement would apply. In contrast, if the client or a third party provides the values for these assets, or the member uses assumed or hypothetical values, the statement would not apply because the member would not be applying valuation approaches and methods and using professional judgment. In addition, the exception under SSVS paragraph 9(b), where it is not practical or reasonable to obtain or use relevant information, could apply (see *Illustration 13e*). The computation of the “estimated estate tax” or other taxes once the values have been determined, assumed, or provided is not subject to the statement, as the computation is a tax computation but would be subject to the Statement on Standards for Tax Services (*Illustration 10* at paragraph 27 of this interpretation).

30. *Illustration 12.* There are many instances where a tax engagement involves the need for a member to estimate value. The estimation of value may not be the primary purpose of the engagement, but rather a necessary task to perform or item to consider, when making a tax determination concerning the reporting of a transaction on a tax return. Consider the following practice situations:

31. *Illustration 12a.* A member has been engaged to determine the deductibility of interest on a nonrecourse loan. Under applicable regulations, interest on a nonrecourse loan cannot be deducted if it is clear that the company will be unable to service the debt. For purposes of tax reporting, a conclusion must be reached concerning the ability of the company to service the debt. Is this considered a valuation engagement subject to the statement?

32. *Conclusion.* This is not a valuation engagement covered by the statement because it is not the valuation of a subject interest (SSVS paragraph 1). This example is a debt service analysis.

33. *Illustration 12b.* There are compliance filings that require an estimate of the value of a company. For example, the “market value” of “intangible personal property,” as defined by a state’s taxing authority may need to be reported annually on an intangible personal property tax return. A client has a subject interest that is considered intangible personal property for purposes of the return. The member has been engaged to prepare the tax return. Is this a valuation engagement subject to the statement?

34. *Conclusion.* It depends. If the state requires an estimation of the value of a subject interest, and the estimation of value requires the application of valuation approaches and methods and the use of professional judgment (SSVS paragraphs 1 and 4), the statement applies. If, however, the client or a third-party appraiser provides the value of the subject interest to the member, the statement does not apply (SSVS paragraphs 1 and 6). In addition, the exception under SSVS paragraph 9(b), where it is not practical or reasonable to obtain or use relevant information, could apply (*Illustration 13e*). Alternatively, if the state follows more informal rules where the application of valuation approaches or valuation methods are not necessary, the statement does not apply (SSVS paragraph 4).

#### Author's Note

I told you so! Get the value from the client, and you can skate!

35. *Illustration 12c.* There are times when a member must allocate value among various assets. For example, IRC sections 1060 and 338 require the allocation to assets, based on relative values, of consideration paid. In partnership taxation, there may be allocations under IRC sections 754, 743, and 734 and special tax basis adjustments for partnerships (sales or exchanges and transfers at or upon death) may require an allocation of value among various partnership assets. Are these types of allocations engagements to estimate value subject to the statement?

36. *Conclusion.* It depends. If one or more of the assets to which value is to be allocated is a subject interest (that is, a business, business ownership interest, security, or intangible asset), and the client or a third party did not provide the member with a value for those assets, then the member performing the allocation would be subject to the statement, and the member is required to apply valuation approaches and methods, and use professional judgment to value those assets (SSVS paragraphs 1, 4, and *Illustration 6*), unless an exception applies (SSVS paragraphs 5–10). For example, in an IRC section 1060 allocation, after the allocation of purchase price to cash, receivables, inventory, and depreciable tangible assets, there is a residual amount of value allocable to goodwill or going concern. The mechanical assignment of the residual amount to goodwill or going concern is not subject to the statement. However, if the member allocates this residual amount to specific intangible assets (such as to various customer based and supplier based intangibles), such allocation is based on the assets’ relative values. Because the member applies valuation approaches and methods and uses professional judgment to value those specific intangible assets, the statement applies.

37. *Illustration 12d.* If the member does not apply any discount and simply computes the fair market value of an interest in a family limited partnership (FLP) for tax purposes, is this a valuation engagement subject to the statement?

38. *Conclusion.* Yes, the statement applies if the member determines the value of the FLP or an interest in an FLP. The application of valuation approaches and methods, and the use of professional judgment are required, unless an

exception applies (SSVS paragraphs 5–10). The fact that the member does not apply a discount does not exempt the engagement from the Statement (SSVS paragraphs 1–4 and 9(a)).

39. *Illustration 12e.* Would the statement apply to the computation of the fair market value of assets in, or the computation of the required distribution of, a charitable remainder trust (CRT)?

40. *Conclusion.* It depends on the underlying assets held by the CRT. The statement would apply only if the member determines the value of a business, business ownership interest, security, or intangible asset (SSVS paragraph 1). To the extent that the CRT holds assets that, to be valued, require the application of valuation approaches and methods, and the use of professional judgment, such as an interest in a limited liability corporation (LLC), the statement would apply. However, if the CRT only holds publicly traded stock with a readily ascertainable value, the Statement would not apply because valuation approaches and methods and professional judgment would not be needed in the computation (SSVS paragraphs 1 and 4, and *Illustration 6*).

41. *Illustration 12f.* In circumstances in which the value of assets contributed by partners to a partnership differ from their cost basis, each difference must be tracked for tax purposes under IRC section 704(c) so that amounts of gain or loss can be properly assigned to the contributing partners. Are these types of asset value assignments valuation engagements subject to the statement?

42. *Conclusion.* It depends. If one or more of the assets for which value is relevant under IRC section 704(c) is a subject interest that is, a business, business ownership interest, security, or intangible asset, and the client or a third party does not provide the valuation, and the member applies valuation approaches and methods and uses professional judgment to value these assets for IRC section 704(c) tax purposes, then the statement applies (SSVS paragraphs 1 and 6, and *Illustration 6*).

43. *Illustration 12g.* A member has been engaged to perform a cost segregation study. The study involves an analysis of the costs of building a structure and the allocation of such costs to the real and personal property components of the structure so that depreciation of those components may be properly computed. Is this a valuation engagement subject to the statement?

44. *Conclusion.* No, none of the assets constitutes a subject interest (SSVS paragraph 1).

45. *Illustration 12h.* A member has been engaged to provide advice to a company regarding the tax planning for income from discharge of indebtedness under IRC section 108. The company has advised the member that the company will be able to negotiate a settlement in complete satisfaction of an obligation at 30 cents on the dollar. Is this a valuation engagement subject to the statement?

46. *Conclusion.* It depends. Under IRC section 108(a), gross income of the company excludes income from discharge of indebtedness only under certain circumstances. One of those circumstances is the insolvency of the company. Under IRC section 108(d) (3), insolvency results from an excess of liabilities over the fair market value of assets. If (a) the company must rely on the insolvency provisions of IRC section 108; (b) one or more of the assets for which value is relevant under IRC section 108 is a subject interest (that is, a business, business ownership interest, security, or intangible asset); (c) the company or a third party does not provide the valuation; and (d) the member applies valuation approaches and methods, and uses professional judgment to value the subject interest(s) for purposes of the IRC section 108(d)(3) insolvency determination, the statement applies.

47. *Illustration 13.* An executor has engaged a member to prepare an estate tax return, which requires determining values for the following estate assets: (a) shares in a publicly traded company, “TI Corporation,” whose shares are infrequently traded; (b) a large block of stock in “LB Corporation,” a publicly traded company; (c) a brokerage account consisting of shares in various publicly traded companies; (d) “CHB Corporation,” a closely held business owned by the decedent and the decedent’s family; and (e) a 5 percent interest in “RP,” a privately held rental real estate partnership. Does the statement apply to any of the following assets owned by the estate? (See *Illustration 10* at paragraph 27 of this interpretation regarding the valuation of a security.)

48. *Illustration 13a.* Does the statement apply to shares in a publicly traded company, “TI Corporation,” whose shares are traded infrequently?

49. *Conclusion.* It depends; although the price of a share of publicly traded stock is ascertainable from published sources, there are no definitive criteria that would indicate when the statement applies to shares that are infrequently



 **Author's Note**

By now, you should realize that this standard does not apply where the value of a security is readily ascertainable, a valuation analyst does not need to apply valuation approaches and methods and use professional judgment. Accordingly, the valuation of such an interest would not be subject to the statement (SSVS paragraphs 1 and 9(a)). An interest in a nonpublicly traded partnership, such as a family limited partnership, whether considered a security or not, is a business ownership interest. The valuation of such nonpublicly traded interest requires the application of valuation approaches and methods and the use of professional judgment in the application of valuation approaches and methods and, accordingly, would be subject to the statement (SSVS paragraphs 1, 4, and Illustration 6), unless the exception under SSVS paragraph 9(b) applies (Illustration 13e). This does not apply to professional judgment in, for example, applying the tax law. If the engagement requires the valuation analyst to consider and apply adjustments, for example, valuation discounts or premiums, then the engagement would be subject to the statement. Don't bother to look back at paragraph 27—I just gave it to you.

traded. A key consideration is the average daily trading volume of TI Corporation stock on or around the valuation date. The concept of fair market value incorporates the notions that (1) cash could have been received for the stock at the valuation date, and (2) the share price of an infrequently traded stock could decrease if a relatively large block of the stock were to be put on the market on that date. If the subject shares held by the estate do not represent a significant percentage of the daily trading volume of TI stock on or around the valuation date, and the price of a share of the stock is readily ascertainable on the valuation date, then the resulting value (the quoted share price times the number of shares owned) represents a cash price that could have been received at the valuation date for the block, and the statement does not apply because the calculation of value is mechanical (SSVS paragraph 9(a)). If, however, the subject shares held by the estate represent a large percentage of the average daily trading volume of the stock, the quoted market price for a share may not be adequate for purposes of determining the fair market value of the block of shares on the valuation date. In that case, the statement applies because valuation approaches and methods need to be applied, and professional judgment needs to be used in determining the value of the block (SSVS paragraphs 1 and 4) (See *Illustration 10* at paragraph 27 of this interpretation regarding the valuation of a security.)

 **Author's Note**

What is actually being said here is that if the public company stock is thinly traded, the market price of the stock may not be reflective of its fair market value. If you have to determine a different value, you would be subject to this standard. I just said it in a lot less words!

50. *Illustration 13b*. Does the statement apply to a large block of stock in “LB Corporation,” a publicly traded company?

51. *Conclusion*. The answer depends on the amount of shares to be valued in relation to the average daily trading volume in LB Corporation on or around the valuation date. There are no definitive criteria that would indicate when the statement applies to the valuation of a large block of publicly traded stock. The concept of fair market value incorporates the notion that cash could have been received from a sale of the block on the valuation date. A large block could decrease the share price if sold on the valuation date. The statement would typically not apply to the valuation of a large block (for example, 200,000 shares) of a large and actively traded public company. Even though the value of the estate's stock may be large in absolute terms, the daily trading volume in such stock on the valuation date may be sufficiently high that a sale of the block on the valuation date would not affect the market price of a company's shares. In such a case, the quoted market price of a share times the number of shares held by the estate may be considered to reflect the fair market value of the subject block of stock, and because it would not be the case that valuation approaches and methods would need to be applied and professional judgment used, the statement would not apply. If, however, the large block of publicly traded shares represents a significant percentage of the daily trading volume, the statement would apply because valuation approaches and methods would need to be applied and professional judgment used to determine the value (SSVS paragraphs 1 and 4).



 **Author's Note**

That is a lot of words to say: because a blockage discount may need to be applied, you would be subject to the standard. Blockage is discussed in chapter 12.

52. *Illustration 13c.* Does the statement apply to a brokerage account consisting of shares in various publicly traded companies?

53. *Conclusion.* The statement would not apply to the determination of the value of a brokerage account consisting of publicly traded securities, except as discussed in paragraphs 49 and 51 of this interpretation. Absent certain scenarios involving infrequently traded securities or large blocks of stock, the application of valuation approaches and methods and the use of professional judgment are not necessary in that determination (SSVS paragraphs 1 and 4).

54. *Illustration 13d.* Does the statement apply to “CHB Corporation,” a closely held business owned by the decedent and the decedent’s family?

55. *Conclusion.* The statement would apply to the determination of value of CHB Corporation because valuation approaches and methods need to be applied, and professional judgment needs to be used to determine the fair market value of the ownership interest in CHB (SSVS paragraphs 1 and 4).

56. *Illustration 13e.* Does the statement apply to a 5 percent interest in a privately held rental real estate partnership (RP)?

57. *Conclusion.* The statement would apply to the determination of value of the 5 percent interest in rental real estate partnership (RP) because valuation approaches and methods need to be applied and professional judgment needs to be used to determine the fair market value of the ownership of a fractional interest in a privately held partnership (SSVS paragraphs 1 and 4). However, where it is not practical or not reasonable to obtain or use relevant information and, therefore, the member is unable to apply valuation approaches and methods, the statement would not apply. For example, the member has requested from RP’s general partner financial information the member needs in order to apply valuation approaches and methods. The general partner is not responsive to the member’s requests, and the due date for filing the estate tax return is near. Given the small ownership interest, and given that RP is likely a relatively small percent of the total estate, unless prohibited by statute or by rule, the member may then use the taxpayer’s estimates if the member determines that the estimates are reasonable (based on the facts and circumstances known to the member) (SSVS paragraph 9(b)).

 **Author's Note**

This is an interesting example. Very often, we are asked to value things that probably have little to no value, but we cannot get the cooperation that we need to do our jobs. For an estate tax return, I agree with the notion that if the client provides something that is reasonable, and the effect is relatively minor (remember materiality?), then we can go ahead and perform the job and not be concerned with this standard. However, be careful if this is your problem in a litigation assignment. If you are impeached on a small item, the judge may start to doubt you on the larger ones. Keep this interpretation in perspective for the tax practitioners that it is intended for.

58. *Illustration 14.* Would the answers to *Illustration 13* change if the values were provided by the client or a client engaged third party?

59. *Conclusion.* The statement would not apply if the values were provided by the client or by a client engaged third party because the member is not applying valuation approaches and methods and using professional judgment to determine value (SSVS paragraphs 1 and 4). However, the member would be subject to Statement on Standards for Tax Services No. 3, *Certain Procedural Aspects of Preparing Returns*, in providing appropriate due diligence with respect to the values provided to the member (see AICPA, *Professional Standards*, vol. 2, TS sec. 300). It is also recommended that the understanding between member and client in these circumstances include documentation of the fact that the member is not determining but rather is being provided with the value of the subject interest.

60. *Illustration 15.* Would the answers to *Illustration 13* change if the values were provided by an outside third-party specialist hired by the member?

61. *Conclusion.* If the member engages an outside third-party specialist to assist with the member's work, and it is the member expressing a conclusion or calculated value, the member will be applying valuation approaches and methods and using professional judgment; thus, the statement would apply (SSVS paragraphs 1 and 4; SSVS paragraphs 20, "Using the Work of Specialists in the Valuation Engagement"). If, however, the third-party specialist is determining the value in his or her own name and providing that value to the client, and the member will not be applying valuation approaches and methods or using professional judgment (SSVS paragraphs 1 and 4, and *Illustration 6*), the statement would not apply, but the member would be subject to Statement on Standards for Tax Services No. 3, *Certain Procedural Aspects of Preparing Returns*, in providing appropriate due diligence with respect to the values provided (AICPA, *Professional Standards*, vol. 2, TS sec. 300).

62. *Illustration 16.* The client and the member agree that the member will value a partnership interest and then apply an "average" discount that the member is to determine (based on the results of various studies and case law). Does the statement apply? If so, is this a valuation engagement or a calculation engagement?

63. *Conclusion.* Yes, the statement applies because the member determined the value of the partnership interest by applying valuation approaches and valuation methods and using professional judgment. This would be considered a calculation engagement because the member and the client have agreed on the specific valuation approaches or valuation methods the valuation analyst will use and the extent of valuation procedures the valuation analyst will perform (SSVS paragraph 21(b) and *Illustration 6*).

#### Author's Note

A calculation engagement is conceptually similar to an agreed upon procedures engagement in the AICPA's attest standards, where the valuation analyst and the client agree that certain procedures will be applied. Anything less than an engagement that allows the valuation analyst complete discretion over the methods and procedures to be applied is considered to be a calculation engagement.

64. *Illustration 17.* Would the statement apply if a member has an informal conversation or communicates in writing with a client regarding the alternative tax consequences of gifting versus selling a business using a presumption of a specific value of the business?

65. *Conclusion.* No, the statement would not apply. The member is providing tax advice using an assumed or hypothetical value of a business and is not determining value, applying valuation approaches and methods, and using professional judgment to value a business (SSVS paragraphs 1 and 4, and *Illustration 6*).

66. *Illustration 18.* Would the statement apply to a transfer pricing study (IRC section 482) that involves the use of specific methodologies, data, terminology, and documentation requirements that are provided in the IRS regulations and procedures, and whose methodologies and documentation requirements differ from those contained in the statement?

67. *Conclusion.* No. To the extent that the transfer pricing study applies, for example, to the valuation of inventory or services, the statement would not apply (see SSVS paragraph 1 and *Illustration 6*). To the extent that the transfer pricing study applies to the valuation of intangible assets, the statement would normally apply. However, because the IRS regulations require that the taxpayer reasonably calculate an arm's-length price according to the best method that is determined using third-party comparable data under explicit IRS rules and documentation procedures, and to the extent these IRS rules and procedures differ from the statement, the jurisdictional exception (SSVS paragraph 10) would exempt the valuation of the intangible assets from the developmental provisions of the statement (SSVS paragraphs 25–48). In addition, to the extent that the IRS regulations (such as IRS regulation section 1.6662-6(d) (2) (iii)) and procedures provide specific documentation requirements for avoiding potential penalties, and if a transfer pricing report is provided to a client according to such IRS documentation requirements, the jurisdictional exception would apply to the reporting provisions of the statement (SSVS paragraphs 50–78) and thus a valuation report would not be necessary.

 **Author's Note**

My sincere apologies to the non-CPAs reading this part of the book. I would not have started with IRS regulation section numbers, but the accountant-types put it in the interpretation. Boy, I forgot how ugly code and regulation sections are! The bottom line is that if the IRS Regulations tell us what to do and how to do it, as well as how to report it, the jurisdictional exception applies, and the standard does not.

68. *Illustration 19.* In a situation where the statement applies to members who determine value as part of tax engagements, would the member also be required to be in compliance with the Statements on Standards for Tax Services (SSTSs)?

69. *Conclusion.* Yes, the statement would apply only to the valuation determination and reporting aspects of the engagement, but the SSTSs would apply to all aspects of the engagement. For example, even though the statement would govern the determination of value of an applicable asset reported on a tax return, the member would also have to be in compliance with SSTS No. 1, *Tax Return Positions*, for that valuation.

70. *Illustration 20.* Do settlements or negotiations of value in offers-in-compromise or tax disputes fall under the statement? [Appears as *Illustration 21* in original publication]

71. *Conclusion.* No, settlements or negotiations of value in offers-in-compromise or tax disputes are part of a tax process. However, if a member prepares a valuation in preparation for a settlement or negotiation of value, and the valuation involves the application of valuation approaches and methods and the use of professional judgment, the valuation would fall under the developmental aspects of the statement. The settlement or negotiation process itself is not a valuation and would not fall under the statement. In addition, the statement's reporting exemption for certain controversy proceedings would apply as the valuation was performed specifically for the administrative matter (SSVS paragraph 50).

## ILLUSTRATIONS RELATING TO OTHER ENGAGEMENTS

72. *Illustration 21.* Does determining the value of accounts receivable fall under the statement? [Appears as *Illustration 20* in original publication]

73. *Conclusion.* No, accounts receivable constitute **tangible assets** under the statement (SSVS appendix B), and do not constitute a subject interest (SSVS paragraph 1).

74. *Illustration 22.* In the course of performing a valuation under the statement, if a valuation analyst prepares prospective financial information (for example, as part of a discounted cash flow or discounted earnings analysis within the income approach), does this require the valuation analyst to examine or compile such information in accordance with the Statements on Standards for Attestation Engagements (SSAEs)?

75. *Conclusion.* No, chapter 1, "Attest Engagements," of SSAE No. 10, *Attestation Standards: Revision and Recodification* (AICPA, *Professional Standards*, vol. 1, AT sec. 101), as amended (AT sec. 101.01) states that the attestation standards apply when a practitioner is "engaged to issue or does issue an examination, a review, or an agreed-upon procedures report on subject matter, or an assertion about the subject matter... , that is the responsibility of another party." If the valuation analyst has not been engaged to examine, compile, assemble, review, or apply agreed upon procedures to prospective financial information, and does not issue an examination, compilation, assembly, or agreed upon report on prospective financial information, the SSAEs do not apply (SSARS 14).

 **Author's Note**

Notice that the wording in this illustration states "if a valuation analyst prepares prospective financial information..." This means that the valuation analyst can prepare prospective information. I will discuss this later in Chapter 10 under the discounted future benefits method. Many accountants (and some valuation analysts) try to hide behind the fact that if management does not give them prospective financial statements, they cannot use this method. That is a bunch of nonsense!

76. *Illustration 23.* Under a valuation engagement, a valuation analyst is free to select any and all valuation approaches and methods the valuation analyst deems appropriate in the circumstances. Under a calculation engagement, the valuation analyst and the client agree to the specific approaches or methods the valuation analyst will use or the extent of calculation procedures the valuation analyst will perform. (SSVS paragraph 21.) Under SSVS paragraph 18, a restriction or limitation on the scope of the valuation analyst's work, or the data available for analysis may be present and known to the valuation analyst at the outset of the engagement, or may arise during the course of an engagement (and such restriction or limitation should be disclosed in the report). Is it possible to have a restriction or limitation that is of such a degree that a valuation analyst engaged to perform a valuation engagement should propose altering the engagement to be a calculation engagement?

77. *Conclusion.* Although the two engagements represent two different types of service performed by valuation analysts, the possibility exists. If, in the course of a valuation engagement, restrictions, or limitations on the scope of the valuation analyst's work or the data available for analysis are so significant that the valuation analyst believes that he or she cannot, even with disclosure in the valuation report of the restrictions or limitations, adequately perform a valuation engagement leading to a conclusion of value, the valuation analyst should determine whether he or she has the ability to adequately complete the engagement as a calculation engagement or should consider resigning from the engagement.

78. *Illustration 24.* If a member employed in industry, government, or education "moonlights" doing engagements to estimate value, do the standards apply?

79. *Conclusion.* Yes, the standard applies. By moonlighting, the member is holding him or herself out as a certified public accountant and as being in public practice. The standard would apply just as it would to any other member in public practice unless one of the exceptions applies.

80. *Illustration 25.* Does the statement apply to an assignment from an employer to an employee member not in public practice to prepare a valuation for internal financial reporting purposes?

81. *Conclusion.* No, paragraph 7 exempts internal use assignments from an employer to an employee member not in the practice of public accounting. However, if the valuation is to be used for financial reporting purposes, the employer and the employee may wish to consider whether the work will be accepted by the employer's outside auditors if the statement is not followed.

## ILLUSTRATIONS FOR PFP-SPECIFIC ENGAGEMENTS

*These illustrations assume the member has not been engaged to perform a business valuation.*

82. *Illustration 26.* When does the statement apply to members who determine values related to personal financial planning engagements?

83. *Conclusion.* The statement applies to personal financial planning engagements when the member determines the value of a business, business ownership interest, security, or intangible asset (SSVS paragraph 1) and in the process of determining the value applies valuation approaches and methods and uses professional judgment (SSVS paragraph 4) unless an exception applies (SSVS paragraphs 5–10).

### Author's Note

Gee. What a surprise! If this standard is going to apply to tax practitioners, moonlighting professionals, and business valuers, why wouldn't it apply to personal financial planners as well? Bottom line—when ANY AICPA member determines the value of a business, business ownership interest, security, or intangible asset and in the process of determining the value applies valuation approaches and methods and uses professional judgment, this standard applies unless an exception applies.

84. *Illustration 27.* If a member is engaged to provide personal financial planning services to a client and, in the course of the engagement, estimates the proceeds from a hypothetical future sale of the client's business interest, does the statement apply?

85. *Conclusion.* No. The statement does not apply because estimate of future sales proceeds does not in itself constitute a valuation engagement (SSVS paragraphs 1 and 4).

86. *Illustration 28.* A member is engaged to provide personal financial planning services to a client and, in the course of the engagement, estimates the proceeds from a hypothetical future sale of the client's business interest. As part of that engagement, the member shares general industry knowledge to assist the client in estimating the current value of the business interest. Does the statement apply?

87. *Conclusion:*

- (a) If, in the process of determining the current value from which the member estimates future sales proceeds, the member applies valuation approaches and methods and uses professional judgment, the statement applies to the determination of the current value (SSVS paragraph 4). However, the statement does not apply when the member shares general industry knowledge with the client instead of applying professional judgment.
- (b) If the client or another party provides the current value, and the member does not apply valuation approaches and methods, the statement does not apply (SSVS paragraphs 4 and 6).
- (c) If the member uses a hypothetical or assumed value as the starting point for the calculation of future sales proceeds and does not apply valuation approaches and methods, the statement does not apply (SSVS paragraphs 1 and 4). The statement does not apply to a general discussion with the client of valuation concepts or industry price multiples based on the member's industry knowledge, which assists the client in determining a hypothetical or assumed value (SSVS paragraphs 4 and 6).

88. *Illustration 29.* The client has asked the member to prepare a personal financial plan that includes an estimate of future proceeds from a sale of the business interest at retirement. The member estimates the future proceeds based on an estimate of the business' current value by applying a rule of thumb for the business' industry, but the member does not consider the risk factors of the subject interest or exercise other professional judgment in applying the multiple. Does the statement apply?

89. *Conclusion.* No, the statement does not apply because the member did not use professional judgment (SSVS paragraph 4). If the member considers specific risk factors of the business interest in applying the price multiple, the statement applies.

#### Author's Note

By now, you are probably sick of standards. However, we only have a little bit more to go. Please hang in there, and we will be finished shortly. The good news is that we are done with the most important standard in this book (particularly if you are a member of the AICPA). For the rest of this chapter, I am going to minimize these boxes around what I have to say. You will know if I am quoting the other standards.

## AICPA STATEMENT ON STANDARDS FOR CONSULTING SERVICES NO. 1

The AICPA promulgated the Statement on Standards for Consulting Services No. 1, *Consulting Services: Definitions and Standards* (AICPA, *Professional Standards*, vol. 2, CS section 100), to cover a broad range of consulting services that its members provide, not just business valuations. This standard is, therefore, extremely general and deals with a wide variety of issues such as due care and proper staffing for consulting engagements. This standard follows the format of other accounting oriented standards but cannot be used to provide guidance or direction, other than on a superficial level. This standard is reproduced in appendix 1.

Besides these standards, there are other standards that should guide AICPA members to perform these assignments properly. While not all inclusive, some of the more important standards include the following:

### AICPA CODE OF PROFESSIONAL CONDUCT—RULE 102

CPAs are required to follow the Code of Professional Conduct when performing any service for a client, including business valuations. It covers ethical considerations (integrity and objectivity). This rule requires that in the per-

formance of any professional service, a member shall maintain objectivity and integrity, shall be free of conflicts of interest, and shall not knowingly misrepresent facts or subordinate his or her judgment to others. This is an important rule because business valuers should understand the differences between the responsibility of the attorney and the accountant related to conflicts of interest—the attorney is an advocate for the client, while the business valuer (accountant) is only an advocate for his or her opinion.

## PROFESSIONAL COMPETENCE

As stated in the AICPA Consulting Services Practice Aid 93-3, *Conducting a Valuation of a Closely Held Business* (written by yours truly, but unfortunately no longer in print, although I still have some copies in my library):

13/115.01—In performing business valuation engagements, practitioners are advised to determine whether the competency provisions of Rule 201, *General Standards of the AICPA Code of Professional Conduct*, are met. Although accountants have a thorough understanding of financial statements and related matters, they also need to be proficient in the area of appraisals to competently complete an engagement. Usually, being proficient requires an in-depth knowledge of finance, economics, and security analysis and an understanding of appraisal principles and methods.

13/115.02—In order for the practitioner to obtain competency required to accept a business valuation engagement, appropriate education is required.

Professional competence is now also covered in the new business valuation standard. About 14 years later, and competence is still important!

## DUE PROFESSIONAL CARE

As stated in the AICPA Consulting Services Special Report 93-1, *Application of Professional Standards in the Performance of Litigation Services*:

A practitioner exercises due professional care in the performance of an engagement. Due care requires diligence and critical analysis of all work performed. It also requires that all work be completed in accordance with the provisions of the applicable professional standards of the AICPA, including the Code of Professional Conduct. A practitioner engaged to attest to the results of the services rendered must perform in accordance with the SSAEs (Statement on Standards for Attestation Engagements).

## PLANNING AND SUPERVISION

As stated in the AICPA Consulting Services Special Report 93-1, *Application of Professional Standards in the Performance of Litigation Services*:

A practitioner adequately plans and supervises the performance of professional services. Planning is essential in a litigation engagement both to control costs and to focus the practitioner's work product on the engagement requirements. Planning consists of developing engagement objectives and translating them into the activities necessary for the CPA to form an opinion within the constraints of cost, time, and available information. Planning guides the conduct, supervision, control, and completion of the engagement. As with any professional services, the supervision of assistants helps to ensure quality performance. The extent of the supervision will vary according to the number of assistants, their experience, and the complexity of the engagement. The practitioner, as the potential expert witness or consultant, is responsible for the results of the engagement.

## SUFFICIENT RELEVANT DATA

As stated in the AICPA Consulting Services Special Report 93-1, *Application of Professional Standards in the Performance of Litigation Services*:

A practitioner attempts to obtain relevant data that is sufficient to provide a reasonable basis for conclusions or recommendations for professional services performed. The data gathering process may include a review of relevant documents, research and analysis, and interview. The nature and extent of the data will vary with each valuation engagement and may include the practitioner's computations and analysis and other information supporting conclusions.



Other portions of the AICPA standards relate to client interest, understanding with the client, and communications with the client. These sections tell us to do the following.

## CLIENT INTEREST

Serve the client interest by seeking to accomplish the objectives established by the understanding with the client while maintaining integrity and objectivity.

## UNDERSTANDING WITH THE CLIENT

Establish with the client a written or oral understanding about the responsibilities of the parties and the nature, scope, and limitations of services to be performed, and modify the understanding if circumstances require significant change during the engagement.

### Author's Note

If the client is an attest client, the understanding must be in writing pursuant to Ethics Interpretation 101-3. While we are here, let's discuss this ethics interpretation. According to this document,<sup>7</sup> the following applies:

**Appraisal, Valuation, and Actuarial Services.** Independence would be impaired if a member performs an appraisal, valuation, or actuarial service for an attest client where the results of the service, individually or in the aggregate, would be material to the financial statements and the appraisal, valuation, or actuarial service involves a significant degree of subjectivity.

Valuations performed in connection with, for example, employee stock ownership plans, business combinations, or appraisals of assets or liabilities generally involve a significant degree of subjectivity. Accordingly, if these services produce results that are material to the financial statements, independence would be impaired.

An actuarial valuation of a client's pension or postemployment benefit liabilities generally produces reasonably consistent results because the valuation does not require a significant degree of subjectivity. Therefore, such services would not impair independence. In addition, appraisal, valuation, and actuarial services performed for nonfinancial statement purposes would not impair independence.\* However, in performing such services, all other requirements of this interpretation should be met, including that all significant assumptions and matters of judgment are determined or approved by the client and the client is in a position to have an informed judgment on, and accepts responsibility for, the results of the service.

\* Examples of such services may include appraisal, valuation, and actuarial services performed for tax planning or tax compliance, estate and gift taxation, and divorce proceedings. [Appears as reference 10 in original publication]

Bottom line—if your firm provides attest services for a client, you do not want to be providing business valuation services if the result is deemed to be material to the financial statements. But what does material mean? That is a discussion that is too much like accounting for me to go there. You figure it out for yourself. Note the interesting footnote to the above quote. Independence will not be impaired if the business valuation services are performed for nonfinancial purposes.

## COMMUNICATION WITH THE CLIENT

Inform the client of (1) conflicts of interest that may occur pursuant to interpretations of Rule 102 of the Code of Professional Conduct; (2) significant reservations concerning the scope of benefits of the engagement; and (3) significant engagement findings or events.

## IBA STANDARDS

The IBA Standards, which are reproduced in appendix 2, are a comprehensive set of standards for business appraisals. These standards offer guidance and have been written by a committee consisting of full time appraisers,

<sup>7</sup> AICPA Ethics Interpretation Rule 101-3, *Independence and Non-Attest Services*



CPAs, and business brokers. All members of IBA must adhere to the IBA standards. While the IBA standards appear to be different than the new AICPA standards, the spirit is the same. The one main difference in these standards is that a site visit is required to be done, and disclosure is mandatory if not done.

## **ASA STANDARDS**

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The ASA Standards, which are reproduced in appendix 3, are a well thought out set of standards that must be followed by members of ASA. These standards do not provide the same level of guidance that is included in the AICPA or IBA standards, but they are essentially the same. A similar group of individuals, appraisers, CPAs, and brokers strongly influenced the creation of these standards. ASA also has one other requirement imposed on its members that the AICPA and IBA does not have. Because ASA is a sponsoring member of the Appraisal Foundation, all of its members must comply with the USPAP in all appraisals. Fortunately, the USPAP and the ASA standards do not contradict each other. All ASA members must take a comprehensive, 15-hour USPAP course and pass a USPAP examination.

## **UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE**

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The 2008 USPAP publication is approximately 208 pages long, and it is combined with a separate book on frequently asked questions that contains another 108 pages. This entire publication used to be under 150 pages. The price at the time this book was published was \$50. If you wish to obtain a copy (and every valuation analyst should), this amount should be sent to:

The Appraisal Foundation  
Distribution Center  
P.O. Box 381  
Annapolis Junction, Maryland 20701-0381

Don't forget to tell them what you want! If you want to order it online, go to [www.appraisalfoundation.org](http://www.appraisalfoundation.org). In my opinion, if you are considering business valuation assignments, you should not only be familiar with the USPAP, but you should also attempt to follow these standards in all your assignments. By following the other sets of standards, you will also be complying with the USPAP.

Standards 9 and 10, as well as Standard 3 and all of the prefatory materials, pertain to business valuations. Various other sections of the USPAP also apply. The essence of Standards 9 and 10 is to do your job in a competent manner and communicate it properly. Several government agencies have adopted provisions requiring the USPAP to be followed for all appraisals performed for their agencies. More and more courts are also becoming familiar with the USPAP. Also, the IRS has specifically mentioned the USPAP in Notice 2006-96, which was issued as a result of the *Pension Protection Act of 2006* to provide guidance regarding the definition of a qualified appraiser and a qualified appraisal. As a result, business appraisers are advised to follow these standards.

## **NACVA STANDARDS**

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NACVA has its own set of standards, which have been greatly expanded over the years. Most of these standards come from the AICPA and are the very standards that I referred to previously. Take the time to read them. In appendix 4, the NACVA standards are reproduced.

## **GLOSSARY OF BUSINESS VALUATION TERMS**

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In an attempt to assist users of valuation services at being better able to understand the terminology used by our profession, various organizations came together to form a committee whose purpose was to establish a single set of

terminology that is recommended to be used by its members. These organizations include the AICPA, IBA, ASA, NACVA, and the Canadian Institute of Chartered Business Valuators. The glossary is reproduced as appendix 5. This is the appendix that was part of the AICPA standards.

## CONCLUSION

By now you are probably at your wit's end. Imagine, this is only chapter 2. Standards make our profession better, and if you have not figured it out yet, standards will also provide you with the necessary guidance to make sure that you do a good job and stay out of trouble. Obviously, I have spent a great deal of time on the AICPA standards. What did you expect? The AICPA is the publisher of this book. Truthfully, my hat comes off to the various individuals who drafted this standard and put it in its final form. This is one heck of a document, and I believe that it adds a tremendous amount to the standards in our field. While certain sections clearly apply only to accountants, I believe that anyone that performs business valuation assignments will benefit by following the guidance provided in this document. Time to get off my soapbox and move on.



# CHAPTER 3

## *Getting Started*

### CHAPTER GOALS

In this chapter, I will attempt to explain the following:

- Learning about the engagement
- Deciding whether to accept the engagement
- Defining the engagement
- Engagement letters
- The initial document request

### INTRODUCTION

Before we can get to the good stuff, it is important to get some of the preliminary items out of the way. Let's start off with some items that should be addressed at the beginning of this process.

### LEARNING ABOUT THE ENGAGEMENT

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After the telephone rings, and after the caller tells you that he or she needs the services of a good valuation analyst, what should you do? Should you find out more about the assignment, automatically accept it, or recommend a good valuation analyst? Believe it or not, these are serious considerations that you must think about. The beginning of the assignment, or should I say the pre-beginning of the assignment, is the most important part of the valuation process for several reasons.

First and foremost, you need to properly understand the nature of the assignment to determine if you are competent to perform it. Take a step back and ask yourself if you are competent to do the job. We all like to think that we are competent to do every assignment that comes in the door, but, truthfully, we are not. You cannot possibly be competent to take on every assignment that comes your way. If the proper level of competence can be obtained, you can accept the assignment. All the appraisal organizations (and especially the AICPA) have competency standards for their members.

Furthermore, the Uniform Standards of Professional Appraisal Practice (USPAP) requires the valuation analyst to disclose any deficiencies to the client in his or her level of competence, as well as what he or she will do to compensate for it. Imagine telling the client, "Although I am incompetent, I really want to do this job for you." If they hire you, they deserve what they get. However, full disclosure to the client is essential. At that point, it is up to the client to decide if he or she is comfortable with you handling the assignment.

After the client has decided to go forward with you as the valuation analyst, and assuming that you do a good job, there should be no reason for the client to have the opportunity at a later date to question why you didn't tell him or her something. Can you imagine the client, sitting in a courtroom on the witness stand, stating that "the valuation analyst never told me that this was the first appraisal he had ever done?" Do not feel intimidated because of your inexperience. We all have to start somewhere. Unfortunately, we are in a more litigious society than we were in when I got started, and as a result, we have to be especially careful not to find ourselves a party to a litigation. I prefer to be the expert in a litigation rather than the defendant.

If the client is not comfortable with you or your experience level at the start, do not try to oversell yourself to get the assignment. If anything can go wrong, it probably will, and as a result, you are staring a malpractice suit in

the eyes. The worst thing you can do is to try to boost your level of experience to impress a potential client. There are serious ethical considerations that go far beyond just the appraisal.

## DECIDING WHETHER TO ACCEPT THE ENGAGEMENT

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Before you accept an assignment, considerations include, but should not be limited to, the following:

- The possibility of a conflict of interest or the appearance of a conflict of interest
- The purpose and function of the engagement
- The amount of time required to do the job
- The scope of the assignment, including the possibility of giving expert testimony
- The type of report to be issued

These items will be addressed over and over again throughout this book, and they must be understood at the start of the assignment, especially because many of these issues will affect your ability to accept the engagement. You can tell from the last chapter that many of these items are discussed in the standards. Clearly, they are important!

## CONFLICTS OF INTEREST

The telephone rings and you are asked to do a business valuation for a litigation that is pending. The attorney asks if you know any of the parties. You say no. The operative word is “you.” Does “you” mean you, or does “you” mean someone in your firm, your staff, your partners, your cousin, or your great uncle? You better check for conflicts! Conflicts are a great way to be sued. Sometimes the conflict is immediately apparent. Other times, conflicts are well hidden. The first step in avoiding a problem is to make certain that your firm employs some form of conflict of interest verification form for use in all assignments. Trugman Valuation Associates’ form is reproduced as figure 3.1.

First of all, let me give attribution where it belongs. Our forms (and many of the other forms that you may see in this book) have been adapted using the aids from Thomson PPC’s *Guide to Business Valuations*.<sup>1</sup> There is no reason to start from scratch when we have good tools that we can use as a jumping-off point. Customize them for your firm!

In addition to checking with all professional staff, it is a good idea to make certain that nonprofessional staff do not present a problem. What if one of the parties is your secretary’s next door neighbor? Or what if it is your assistant’s child’s godfather?

Let’s stick with conflicts of interest for a little longer. Checking all staff becomes critically important, especially when you have multiple offices. Imagine your staff in New York being hired against your staff in Chicago. Or what happens when you are asked to represent an existing client?

The appearance of impropriety is almost as bad as the act itself. Litigation services are an area that the SEC has suggested may impair an auditor’s independence. Think about the cross-examining attorney who is in front of you, almost salivating, asking you some of the following questions:

- You receive current income from this client for accounting services, don’t you?
- This company has been your firm’s client for the last 10 years?
- Isn’t it true that they paid you about \$30,000 in fees last year?
- Do you consider them a good client?
- You wouldn’t want to lose this client, would you?
- Do you expect this jury to believe that you can sit on this witness stand and be objective with respect to this client when your opinion in this matter may hurt your client?

Even if you can be objective, you’re dead in the water. No juror will believe that you are not acting as an advocate for the client. It is often difficult to prove that, as a paid expert, we are objective even when we are truly independent from the client. The burden becomes that much more difficult when you are the client’s accountant.

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<sup>1</sup> Fishman, J and Pratt, S.: *Guide to Business Valuations*. Fort Worth: Thomson Practitioner’s Publishing Co., 2007.

**FIGURE 3.1**  
**TRUGMAN VALUATION ASSOCIATES, INC.**  
**BUSINESS VALUATION ENGAGEMENT ACCEPTANCE FORM:**  
**CONFLICT OF INTEREST VERIFICATION**

**INSTRUCTIONS:** This form should be completed for a prospective new client and sent to ALL staff for confirmation that there are no conflicts of interest with any of the parties or entities involved in this matter. If the referral source, attorneys, CPAs or others associated with these individuals/entities are known, list them also for conflict verification. ALL staff must immediately respond via e-mail to the sender of the original e-mail.

TRUGMAN VALUATION ASSOCIATES, INC. has been requested to perform services with respect to the following individuals and/or entities:


	Yes	No
1. Do you know any of these individuals/entities?		
2. Do you have any personal knowledge about these individuals/entities that would cause our firm to have information that another firm would not readily have?		
3. Are we doing any work for any of these individuals/entities currently?		
4. Have we done any work for them in the past?		
5. Have we been approached by any of these individuals/entities to do work for them in the past?		
6. Do you know of any reason that we should not do this assignment?		

If you answered yes to any of these questions, please explain and give details.

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Even in nonlitigation jobs (for example, estate tax valuation), a perceived conflict can arise. Imagine being the tax return preparer taking a deduction on a return for officer's compensation of \$1 million and then adjusting it in the valuation to reflect reasonable compensation of \$250,000. We all know that the standard for deductible compensation for income tax purposes is very different from the concept of a replacement salary on a prospective basis, but think about the reader of the report who does not know better. If you think that you will educate the reader, think again.

Let's discuss one more conflict that is sure to get you in trouble. As chairman of the ethics committee of one of the appraisal organizations, I see this example more often than you can imagine. An accountant's business client is going through a divorce. The accounting firm prepares the corporate tax returns. The accounting firm also prepares the personal tax returns for the stockholders. The accounting firm has been preparing joint income tax returns for the clients, who are about to get divorced. The business client turns to the partner in the firm who handles this account, the trusted business advisor, to perform various divorce related services, perhaps even a business valuation. Because the partner expects the firm to remain the company's accountants, and because the owner is a good client, the partner says, "Sure, we'll do it." Guess what? What about the spouse? The accounting firm has been the spouse's accountant also, because the couple has been preparing joint income tax returns. The accounting firm cannot suddenly say, "Sorry, but we are no longer going to be your accountant, so that we can represent your soon-to-be ex-spouse against you in the divorce."

There is no easy way to avoid appearances of conflict other than to stick with my motto, "perception is reality." If it can in any way be perceived to be a conflict, you probably want to protect yourself. Protection can come in many different forms. First, stay away from the engagement. Second, have the client(s) sign a waiver acknowledging that there may be a conflict and that they have been made aware of it, and despite that, they still want you to proceed.

Let me give you a real example of how to protect yourself. We were retained by a former accounting client to assist him as his expert in a litigation where he was being accused of fraud relating to the sale of a laundromat (a cash business—imagine that!). I was afraid not only of the appearance of conflict of interest, but also that I could be asked on the witness stand why his tax returns had different amounts than the current information sheet he had put together for prospective purchasers (like many clients, he got honest when he went about selling the business). In our retainer agreement (and we will discuss these agreements in much more detail soon), we put in the following language:

The client also acknowledges that a discussion took place between himself and Gary Trugman regarding the possible appearance of a conflict of interest. The client, by signing this agreement, acknowledges that Gary Trugman has expressed his concern about the appearance of conflict of interest, and despite this, the client has expressed his desire to have Trugman Valuation Associates, Inc. perform services in this matter. The client agrees to completely indemnify Trugman Valuation Associates, Inc., its officers, its directors, and its shareholders, as well as Trugman & Company CPAs (a partnership) and its partners, Gary and Linda Trugman, from any liability that may arise out of the client's request to these parties or firms involved as a result of this litigation engagement.

Fortunately, the case settled before we had to go to court. But do not expect to be so lucky—protect yourself.

Sometimes, something as simple as an engagement letter signed by two parties will help. We are often hired as a mutual valuation analyst by both sides of a litigation. We use the retainer agreement (engagement letter) in exhibit 3.1 on the following page, which we have each party sign individually.

The same retainer agreement is sent to both parties, replacing each other's names. This way, each party is retaining us to do the work while acknowledging that he or she is aware that the other party is also retaining us. It would be really great if we could get both parties to sign one document, but circulating the document between lawyers and clients becomes so problematic that we have found it to be easier and much more expeditious to use two separate documents.

Let me share one more conflict that actually happened to me recently. I am based out of Florida, but had an assignment in Pennsylvania. I was allowed to interview the management of the company at their attorney's office in Philadelphia. I was representing a shareholder who sued the company to be bought out. I was conducting the management interview and we took a quick break. While we were waiting for the other side's attorney to come back into the room, I was chatting with the father and son management team that I was interviewing. We were not talking about anything that would require the attorney to be in the room.



**EXHIBIT 3.1****MUTUALLY RETAINED BUSINESS VALUATION RETAINER AGREEMENT**

The undersigned acknowledges this engagement of Trugman Valuation Associates, Inc., who is mutually retained by the undersigned and Mary Smith, to perform a business valuation of 100 percent of the outstanding common stock of Jack's Automotive, Inc. as of December 31, 2006. Our conclusion of value will be communicated to you in a detailed report.

The purpose of this business valuation is to determine the fair market value of the subject property. Said fair market value is defined to be a value at which a willing seller and willing buyer, both being informed of the relevant facts about the business, could reasonably conduct a transaction, neither party acting under any compulsion to do so.

It is understood that Trugman Valuation Associates, Inc. is not being engaged to perform an audit as defined by the American Institute of Certified Public Accountants, but rather the necessary tests of the accounting records that will be performed for the purpose of issuing a valuation report, and not a statement regarding the fairness of presentation of the financial statements of the above business.

Certain values, derived from reports of others, and which are so designated, will be included in our report. We take no responsibility for those items. Nor do we take responsibility to update the report or disclose any events or circumstances occurring after the date of the report.

In the event sufficient records or documentation, or both, cannot be supplied to Trugman Valuation Associates, Inc., no such valuation report will be issued.

This appraisal will be subject to, at least, the following contingent and limiting conditions, which will be included in the report as an appendix:

1. The conclusion of value arrived at herein is valid only for the stated purpose as of the date of the valuation.
2. Financial statements and other related information provided by the business or its representatives, in the course of this engagement, have been accepted without any verification as fully and correctly reflecting the enterprise's business conditions and operating results for the respective periods, except as specifically noted herein. Trugman Valuation Associates, Inc. has not audited, reviewed, or compiled the financial information provided to us and, accordingly, we express no audit opinion or any other form of assurance on this information.
3. Public information and industry and statistical information have been obtained from sources we believe to be reliable. However, we make no representation as to the accuracy or completeness of such information and have performed no procedures to corroborate the information.
4. We do not provide assurance on the achievability of the results forecasted by or for the subject company because events and circumstances frequently do not occur as expected; differences between actual and expected results may be material; and achievement of the forecasted results is dependent on actions, plans, and assumptions of management.
5. The conclusion of value arrived at herein is based on the assumption that the current level of management expertise and effectiveness would continue to be maintained, and that the character and integrity of the enterprise through any sale, reorganization, exchange, or diminution of the owners' participation would not be materially or significantly changed.
6. This report and the conclusion of value arrived at herein are for the exclusive use of our client for the sole and specific purposes as noted herein. They may not be used for any other purpose or by any other party for any purpose. Furthermore the report and conclusion of value are not intended by the author and should not be construed by the reader to be investment advice in any manner whatsoever. The conclusion of value represents the considered opinion of Trugman Valuation Associates, Inc., based on information furnished to them by the subject company and other sources.
7. Neither all nor any part of the contents of this report (especially the conclusion of value, the identity of any valuation specialist(s), or the firm with which such valuation specialists are connected or any reference to any of their professional designations) should be disseminated to the public through advertising media, public relations, news media, sales media, mail, direct transmittal, or any other means of communication without the prior written consent and approval of Trugman Valuation Associates, Inc.

*(Continued)*

**EXHIBIT 3.1** *(Continued)*

8. Future services regarding the subject matter of this report, including, but not limited to testimony or attendance in court, shall not be required of Trugman Valuation Associates, Inc., unless previous arrangements have been made in writing.
9. Trugman Valuation Associates, Inc. is not an environmental consultant or auditor, and it takes no responsibility for any actual or potential environmental liabilities. Any person entitled to rely on this report, wishing to know whether such liabilities exist, or the scope and their effect on the value of the property, is encouraged to obtain a professional environmental assessment. Trugman Valuation Associates, Inc. does not conduct or provide environmental assessments and has not performed one for the subject property.
10. Trugman Valuation Associates, Inc. has not determined independently whether the subject company is subject to any present or future liability relating to environmental matters (including, but not limited to CERCLA or Superfund liability) nor the scope of any such liabilities. Trugman Valuation Associates, Inc.'s valuation takes no such liabilities into account, except as they have been reported to Trugman Valuation Associates, Inc. by the subject company or by an environmental consultant working for the subject company, and then only to the extent that the liability was reported to us in an actual or estimated dollar amount. Such matters, if any, are noted in the report. To the extent such information has been reported to us, Trugman Valuation Associates, Inc. has relied on it without verification and offers no warranty or representation as to its accuracy or completeness.
11. Trugman Valuation Associates, Inc. has not made a specific compliance survey or analysis of the subject property to determine whether it is subject to, or in compliance with, the American Disabilities Act of 1990, and this valuation does not consider the effect, if any, of noncompliance.
12. No change of any item in this appraisal report shall be made by anyone other than Trugman Valuation Associates, Inc., and we shall have no responsibility for any such unauthorized change.
13. Unless otherwise stated, no effort has been made to determine the possible effect, if any, on the subject business due to future Federal, state, or local legislation, including any environmental or ecological matters or interpretations thereof.
14. We have conducted interviews with the current management of the subject company concerning the past, present, and prospective operating results of the company. Except as noted, we have relied on the representations of these individuals.
15. Except as noted, we have relied on the representations of the owners, management, and other third parties concerning the value and useful condition of all equipment, real estate, investments used in the business, and any other assets or liabilities, except as specifically stated to the contrary in this report. We have not attempted to confirm whether or not all assets of the business are free and clear of liens and encumbrances or that the entity has good title to all assets.
16. All facts and data set forth in the report are true and accurate to the best of the appraiser's knowledge and belief. We have not knowingly withheld or omitted anything from our report affecting our value estimate.
17. Possession of this report, or a copy thereof, does not carry with it the right of publication of all or part of it, nor may it be used for any purpose without the previous written consent of the appraiser, and in any event only with proper authorization. Authorized copies of this report will be signed in blue ink by a director of Trugman Valuation Associates, Inc. Unsigned copies, or copies not signed in blue ink, should be considered to be incomplete.
18. Unless otherwise provided for in writing and agreed to by both parties in advance, the extent of the liability for the completeness or accuracy of the data, opinions, comments, recommendations, or conclusions, or all, shall not exceed the amount paid to the appraisers for professional fees and, then, only to the party(s) for whom this report was originally prepared.
19. The conclusion reached in this report is based on the standard of value as stated and defined in the body of the report. An actual transaction in the business or business interest may be concluded at a higher value or lower value, depending on the circumstances surrounding the company, the appraised business interest or the motivations and knowledge, or all, of both the buyers and sellers at that time. Trugman Valuation Associates, Inc. makes no guarantees as to what values individual buyers and sellers may reach in an actual transaction.

### EXHIBIT 3.1

20. No opinion is intended to be expressed for matters that require legal or other specialized expertise, investigation or knowledge beyond that customarily employed by appraisers valuing businesses.

It is possible that additional contingent and limiting conditions will be required, and the client agrees that all conditions disclosed by the appraiser will be accepted as incorporated into the appraiser's report.

It is our intention to perform this engagement as quickly and affordably as possible, but these services take a reasonable amount of time to render. We will make certain that the appropriate personnel in our firm render those services that will comply with the level of expertise required by this engagement. In that regard, hourly rates will be charged based on the billing rates in effect at the time that the services are rendered. Currently, those hourly rates range from \$xxx to \$xxx per hour depending on staff performing the assignment.

Hourly rates are charged portal to portal from our Plantation office. In addition to these hourly rates, the following charges may be applicable:

- a) Any out of pocket expenses relating to this valuation. It is expected that we will perform research through computer databases, and that we may be required to purchase research materials relating to this engagement. These and other such costs will be billed to you at our cost.

Payment terms shall be as follows:

\$x,xxx due in advance as a retainer. This retainer shall be allocated against the final payment that will be due to Trugman Valuation Associates, Inc. All amounts shall be billed regularly. Trugman Valuation Associates, Inc. reserves the right to request additional retainers pertaining to this assignment at any time, particularly if the client does not pay our invoices in accordance with the terms of this agreement.

Since it is considered unethical for us to perform these services on a contingency basis, it is important to us that our fees are paid promptly. The appearance of independence is of considerable importance for our firm to maintain our credibility, and therefore, we reserve the right to stop providing services at any time that there is a balance due our firm. In the event that we continue to provide services, we do not waive our right to stop at a later date. Any unused retainer will be refunded to the client once our involvement has been considered to be finished.

**Trugman Valuation Associates, Inc. requires that all fees be paid before we release our report.** This is our regular practice and we request that our clients understand this practice before we are retained. This is not a personal reflection of this client, but it is a practice that avoids a discriminatory collection practice. Chasing clients for fees is not our intention, and we believe that this practice assists us in providing our services in a manner that prevents concern about our ability to remain independent due to unpaid fees.

The client must understand that professional business valuation services are not inexpensive and unless other arrangements are made, in writing, with our firm, services rendered by our firm will be invoiced regularly and are due upon presentation of our invoice to you. Balances outstanding beyond 30 days will have a service charge added at the rate of one and a half percent per month or part thereof.

In the event that Trugman Valuation Associates, Inc. must turn collection of fees over to an attorney, the undersigned will be responsible for all reasonable costs and fees associated with the collection action. Reasonable fees will be deemed to be up to 33.33 percent of the amount collected. Any collection action that is required due to nonpayment of fees shall be venued in Broward County, Florida.

The undersigned client agrees to indemnify Trugman Valuation Associates, Inc. from any legal expenses incurred as a result of this engagement, other than those relating to the conduct of this assignment. This would include, but not be limited to any legal expenses required to protect the confidentiality of this or any other client who becomes an issue in this matter.

The final report is copyrighted by Trugman Valuation Associates, Inc. It shall remain the property of Trugman Valuation Associates, Inc. and no copies or reproductions shall be allowed without the written consent of Trugman Valuation Associates, Inc. until such time as any outstanding balance is paid.

Trugman Valuation Associates, Inc. reserves the right to withdraw from this engagement at any time. It is not our intention to withdraw. All working papers created by Trugman Valuation Associates, Inc. will remain in the possession of Trugman Valuation Associates, Inc. In the event of a withdrawal, we would only be liable to return those materials and documents supplied by the client and the unused portion of the retainer.

*(Continued)*

**EXHIBIT 3.1** *(Continued)*

The undersigned gives Trugman Valuation Associates, Inc. the right to discuss this matter with the client's attorney, accountant, other individuals so designated by the client and any professional colleagues of the appraiser from whom professional information is sought.

If this is acceptable, please sign the acknowledgment below and return a signed copy of this retainer agreement with your check in the amount of \$x,xxx to our office.

TRUGMAN VALUATION ASSOCIATES, INC.

\_\_\_\_\_  
Principal

**ACKNOWLEDGMENT:**

The undersigned accepts the terms of this retainer agreement and guarantees full payment of the fees with respect to this engagement. It is also acknowledged that Mary Smith will be signing a similar retainer agreement with respect to this agreement.

\_\_\_\_\_  
Jack Smith

\_\_\_\_\_  
Date

**THIS BUSINESS VALUATION RETAINER AGREEMENT CONSISTS OF SIX PAGES INCLUDING THIS ONE. ALL SIX PAGES MUST BE RETURNED TO TRUGMAN VALUATION ASSOCIATES, INC. AFTER EXECUTION OF THIS DOCUMENT WITH THE REQUESTED RETAINER IN ORDER TO RETAIN OUR FIRM. IF THIS DOCUMENT IS NOT RECEIVED BY TRUGMAN VALUATION ASSOCIATES, INC. FULLY EXECUTED BY THE CLIENT WITH THE REQUESTED RETAINER BY MARCH 21, 2008, THE TERMS OF THIS AGREEMENT AND THE OFFER TO PERFORM BUSINESS VALUATION SERVICES PURSUANT TO THIS AGREEMENT WILL BE DEEMED NULL AND VOID BY TRUGMAN VALUATION ASSOCIATES, INC.**

During the conversation, the father says to me "I have a son, who is an attorney in Miami. Maybe you know him? His name is John Smith." Two things immediately went through my head. First, one of the defendants in this lawsuit was a trust for the benefit of John Smith (the son). Second, I was currently working with John Smith on a case in Florida where John Smith retained me as the expert to maintain the work-product privilege of a client and attorney. At that point, realizing that John Smith was a client of mine and a small defendant in the pending matter, I stopped the interview. I immediately disclosed to the parties at the interview that I had a conflict and I would have to resign from the assignment. I told my client that I would refund, in full, all fees paid to our firm and I would assist him in getting a new expert.

The next day, when I was back in Florida, I called John Smith to disclose what had happened. Ironically, he had already spoken with his father and knew about it. Both attorneys talked, and it was agreed that both sides felt that it was in the best interest of the case to ignore the conflict of interest and for me to continue the job. My client was comfortable with the fact that I could continue to do my job without any bias attributable to my other assignment where John Smith was my client. The other side was actually convinced by John Smith that they were better off with me as the expert for the defendant's side because John knew that I would be impartial and call it the way that I saw it. Everybody signed (both sides and John Smith) a conflict waiver that I had my attorney prepare. The case settled with a happy ending for all.

This is just one more situation where a conflict can come up. Who would have put together an attorney in Miami, who has a trust for the benefit of a child relating to a business in Pennsylvania? The moral of this story is: just be careful.

## PURPOSE AND FUNCTION OF THE ENGAGEMENT

When you are first approached about an appraisal assignment, it is important to gain a clear understanding of the purpose and function of the engagement. In simple terms, what are you going to be doing and how will it be used? This also raises the question, what is going to be valued? Very often, an entire company will be valued; this is frequently referred to as the *equity* of the company. There are other times when you may be asked to value the entire capital structure of the business; this is referred to as the *invested capital* of the company (this will be discussed in more detail later).

There will also be times when only a portion of the equity will be valued. This may involve valuing a fractional interest in the company (less than 100 percent) or valuing only certain assets and liabilities. For example, you may be approached to value a 40 percent interest in the company. This is not as simple as taking 40 percent of the value of the entire company. A minority interest may be worth less than a pro rata share of the entire company. This will also be discussed later.

Another alternative might be that you are asked to value the company for a sale in which the owner will be keeping certain assets, such as the company car or cash in the bank. Many, if not most, small businesses are sold as asset sales as opposed to stock sales. This means that the purchaser will generally transfer the assets—and possibly liabilities—that were part of the deal to a new entity. There are several reasons why this is done, but this book is not the forum for that discussion. A proper understanding of the appraisal subject is essential if you are going to do a good job.

Another important consideration is the intended use of your appraisal. The intended use can affect the manner in which the job is performed. For example, if the appraisal assignment is for a divorce litigation in a jurisdiction that does not recognize goodwill, you will have to conduct your valuation in a manner that would meet the requirements of that jurisdiction. However, if the same company is being appraised for a sale, the methodologies employed in the appraisal will most likely be different. Because goodwill is part of the sales price of the company, the valuation result would have to be different. After all, one has goodwill and the other does not.

The intended use is also important to know so that the valuation analyst can perform the appropriate assignment. For example, I would not perform a calculation engagement for a litigation. I believe that a valuation engagement is more appropriate.

## AMOUNT OF TIME REQUIRED TO DO THE JOB

Knowing how much time is required to do the job properly is an important part of the planning stage for the assignment. Understanding the assignment will provide the valuation analyst with the ability to budget staff time and meet any deadlines that are imposed on the assignment. The client will also want to know how much the appraisal will cost. Unfortunately, an answer such as “How high is up?” is generally unacceptable. Budgeting time is probably more difficult than the appraisal itself at times, because you never know what type of research problems or document production problems you may run into. In chapter 5, I will discuss data gathering and will expand on the research portion of the assignment.

## THE SCOPE OF THE ASSIGNMENT

Understanding the scope of the assignment, including the possibility of giving expert testimony, will help you determine whether you can accept it. If a client tells you at the beginning that you will have severe scope restrictions but are expected to testify in court, you may want to think twice about taking the assignment. You may end up on the short end of the stick if you allow the client to limit the scope. Clients frequently look to save money and will often ask the valuation analyst to streamline the process. If expert testimony is anticipated, the judge or jury will remember only that the valuation analyst did not do a complete job. Regardless of whether you qualify your opinion because of your client’s scope restrictions, the valuation analyst’s reputation will be the most damaged element in the litigation. Be selective when you allow scope limitations.

Figure 3.2 contains another form that may make your life a whole lot easier. It is a business valuation engagement acceptance form.

**FIGURE 3.2**  
**TRUGMAN VALUATION ASSOCIATES, INC.**  
**BUSINESS VALUATION ENGAGEMENT ACCEPTANCE FORM**

Prospective Client: \_\_\_\_\_

Completed by: \_\_\_\_\_ Date: \_\_\_\_\_

INSTRUCTIONS: This form should be completed for a prospective new client or a prospective engagement for an existing client. The person completing this checklist need only complete those parts of the form that apply to the proposed engagement.

**I. PROSPECTIVE CLIENT DATA**

[The following data should be obtained for the prospective client (the person or company that will be engaging our firm). That client may not be the actual entity being valued. Accordingly, a separate section of the form is designed for documenting information about the entity being valued.]

Prospective Client's Name: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Fax No.: \_\_\_\_\_

Business Address: \_\_\_\_\_

\_\_\_\_\_

Referral Source: \_\_\_\_\_

\_\_\_\_\_

Is the prospective client the same entity that is to be valued?

\_\_\_\_\_ Yes      Proceed to Section II of this form (Entity To Be Valued). The remaining portion of Section I does not need to be completed.

\_\_\_\_\_ No      Complete the remaining portion of Section I before proceeding to Section II.

Briefly explain the prospective client's relationship to the entity to be valued (for example, the client's ownership interest in the entity, if any; whether the entity is a proposed acquisition candidate of the entity, among others).

**II. ENTITY TO BE VALUED**

(If the prospective client and the entity to be valued are the same, it is not necessary to repeat the data obtained in the preceding section of this form.)

Name of Entity To Be Valued: \_\_\_\_\_

Type of Legal Entity (Corp., S Corp., Partnership, or Proprietorship): \_\_\_\_\_

Business Address: \_\_\_\_\_

Phone No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

Contacts at the entity with whom we would work (state name and title): \_\_\_\_\_

\_\_\_\_\_

Brief description of the entity's business: \_\_\_\_\_

\_\_\_\_\_

**FIGURE 3.2**

Entity's Accounting Firm: \_\_\_\_\_ Address: \_\_\_\_\_  
 Phone No: \_\_\_\_\_ Contact: \_\_\_\_\_  
 Entity's Primary Attorney: \_\_\_\_\_ Address: \_\_\_\_\_  
 Phone No: \_\_\_\_\_ Contact: \_\_\_\_\_  
 Other Contact: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone No: \_\_\_\_\_

**III. SCOPE OF THE ENGAGEMENT**

Briefly describe the purpose of the engagement (for example, determination of a party's interest in a divorce proceeding, valuation of a company for a proposed sale or acquisition, or determination of a value for an estate tax return).

Describe the interest to be valued (that is, the ownership percentage being valued and whether it is a controlling or minority interest).

Valuation Date(s): \_\_\_\_\_ Proposed Deadline: \_\_\_\_\_

Describe any obvious difficulties that may be associated with the valuation date (for example, the date may be at an interim period when no financials are available). \_\_\_\_\_

Do there appear to be enough historical financial statements and tax returns to assess the financial background and trend of the company? Yes \_\_\_\_\_ No \_\_\_\_\_

If the answer to the preceding question is "No," explain how this absence will affect the scope of the engagement. \_\_\_\_\_

How are the valuation conclusions to be communicated? (Check one.)

\_\_\_\_\_ oral report \_\_\_\_\_ detail report \_\_\_\_\_ summary report

What is the intended distribution of a written report? (Check one.)

\_\_\_\_\_ It will be restricted to internal use or to use solely by a court of law.

\_\_\_\_\_ It will be distributed to third parties.

Based on your knowledge of the company to be valued, what valuation methods appear to be appropriate for the engagement? \_\_\_\_\_

Will an asset appraiser be needed? Yes \_\_\_\_\_ No \_\_\_\_\_

Is it likely that we will be asked to provide expert witness testimony? Yes \_\_\_\_\_ No \_\_\_\_\_

What will our role be on this proposed engagement? (Check one.)

\_\_\_\_\_ We will be objective, third-party appraisers.

\_\_\_\_\_ We will be client advisors and, accordingly, will not be able to render an independent valuation conclusion or act as expert witnesses.

**IV. ACCEPTANCE CONSIDERATIONS**

1. Are we aware of any independence problems or conflicts of interest?

Yes

No

\_\_\_\_\_

\_\_\_\_\_

2. Are we aware of any potential fee collection problems?

\_\_\_\_\_

\_\_\_\_\_

*(Continued)*



FIGURE 3.2 (Continued)

## IV. ACCEPTANCE CONSIDERATIONS (Continued)

	Yes	No
3. Is the professional competence (expertise) necessary to perform the engagement beyond our capabilities?	_____	_____
4. Is the staffing commitment required by the engagement beyond our capabilities?	_____	_____
5. Do the terms of the proposed engagement, including fee arrangements, violate applicable professional standards?	_____	_____
6. Is the fee arrangement unacceptable given the scope of the engagement?	_____	_____
7. Is there anything about the engagement that subjects us to undue legal risk or causes us to be uncomfortable about being associated with the engagement?	_____	_____

**COMMENTS**—A “Yes” answer does not necessarily indicate that the prospective engagement should be rejected. However, for any “Yes” answer, explain the steps that we plan to take to mitigate the situation (for example, closer supervision, a substantial fee deposit before work can start, renegotiation of the fee, or use of specialists).

## V. CONCLUSION

We should accept \_\_\_\_\_ not accept \_\_\_\_\_ the engagement.

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

**Note: If yes was answered to any question in Part IV, an officer other than the original contact must approve acceptance.**

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## THE TYPE OF REPORT TO BE ISSUED

Knowing the type of report that is expected to be issued is important for several reasons. First, long narrative reports take a considerable amount of time to write. This affects not only the fee to be charged, but also your time budget for meeting deadlines. In chapter 14, I will discuss different types of reports (including the suggested content of each type), as well as their applicability to various types of assignments. The standards in the previous chapter should have already whet your appetite.

## ENGAGEMENT LETTERS

Always—and I mean *always*—have your client sign an engagement letter (sometimes called a *retainer agreement*) in order to avoid any potential misunderstanding between you and your client. I cannot emphasize strongly enough the need for a good engagement letter. Exhibits 3.2 and 3.3 contain sample engagement letters for use in valuation and calculation engagements. These can be changed to meet the specific needs of each business valuation engagement. A well-constructed engagement letter should be perceived to be the contract that it is. Any modifications to the agreement should be in writing and agreed to by both parties. It may also prove to be a good idea to have an attorney review the engagement letter that you plan to use, so that you are protected legally in your jurisdiction.

Our standard engagement letter is six pages long. If you think that it is long, you’re right. We had an attorney draft it for us, and he charged us by the word! An engagement letter is a written contract between you and the client. As with any legal contract, you should take it seriously. You should be clear on what you will be doing for the client, and in some cases, what the client is expected to do for you. When we have a very tight deadline, we generally will include language that outlines that the client is responsible for getting us the requested information by a certain date, or we cannot be held responsible for a missed deadline. Missed deadlines can have your report excluded from a litigation; they can cause an estate tax return to be filed late, generating penalty and interest; and they can get you sued.

## EXHIBIT 3.2

### BUSINESS VALUATION RETAINER AGREEMENT

The undersigned acknowledges this engagement of Trugman Valuation Associates, Inc. to perform a business valuation of <<DEFINE THE PROPERTY TO BE APPRAISED>> as of <<VALUATION DATE(S)>> to be used <<PURPOSE OF VALUATION>>. Our conclusion of value will be communicated to you in a <<DETAILED OR SUMMARY OR REPORT THAT FALLS INTO THE AREA OF PARAGRAPH 50 OF SSVS NO. 1 CONTROVERSY PROCEEDINGS>> report.

The purpose of this business valuation is to determine the fair market value of the subject property. Said fair market value is defined to be a value at which a willing seller and willing buyer, both being informed of the relevant facts about the business, could reasonably conduct a transaction, neither party acting under any compulsion to do so.

It is understood that Trugman Valuation Associates, Inc. is not being engaged to perform an audit as defined by the American Institute of Certified Public Accountants, but rather the necessary tests of the accounting records that will be performed for the purpose of issuing a valuation report, and not a statement regarding the fairness of presentation of the financial statements of the above business.

Certain values, derived from reports of others, and which are so designated, will be included in our report. We take no responsibility for those items. Nor do we take responsibility to update the report or disclose any events or circumstances occurring after the date of the report.

In the event sufficient records or documentation, or both, cannot be supplied to Trugman Valuation Associates, Inc., no such valuation report will be issued.

This appraisal will be subject to, at least, the following contingent and limiting conditions, which will be included in the report as an appendix:

1. The conclusion of value arrived at herein is valid only for the stated purpose as of the date of the valuation.
2. Financial statements and other related information provided by the business or its representatives, in the course of this engagement, have been accepted without any verification as fully and correctly reflecting the enterprise's business conditions and operating results for the respective periods, except as specifically noted herein. Trugman Valuation Associates, Inc. has not audited, reviewed, or compiled the financial information provided to us, and, accordingly, we express no audit opinion or any other form of assurance on this information.
3. Public information and industry and statistical information have been obtained from sources we believe to be reliable. However, we make no representation as to the accuracy or completeness of such information and have performed no procedures to corroborate the information.
4. We do not provide assurance on the achievability of the results forecasted by or for the subject company because events and circumstances frequently do not occur as expected; differences between actual and expected results may be material; and achievement of the forecasted results is dependent on actions, plans, and assumptions of management.
5. The conclusion of value arrived at herein is based on the assumption that the current level of management expertise and effectiveness would continue to be maintained, and that the character and integrity of the enterprise through any sale, reorganization, exchange, or diminution of the owners' participation would not be materially or significantly changed.
6. This report and the conclusion of value arrived at herein are for the exclusive use of our client for the sole and specific purposes as noted herein. They may not be used for any other purpose or by any other party for any purpose. Furthermore, the report and conclusion of value are not intended by the author and should not be construed by the reader to be investment advice in any manner whatsoever. The conclusion of value represents the considered opinion of Trugman Valuation Associates, Inc. based on information furnished to them by the subject company and other sources.
7. Neither all nor any part of the contents of this report (especially the conclusion of value, the identity of any valuation specialist(s), or the firm with which such valuation specialists are connected or any reference to any of their professional designations) should be disseminated to the public through advertising media, public relations, news media, sales media, mail, direct transmittal, or any other means of communication without the prior written consent and approval of Trugman Valuation Associates, Inc.
8. Future services regarding the subject matter of this report, including, but not limited to testimony or attendance in court, shall not be required of Trugman Valuation Associates, Inc. unless previous arrangements have been made in writing.

*(Continued)*

**EXHIBIT 3.2** *(Continued)*

9. Trugman Valuation Associates, Inc. is not an environmental consultant or auditor, and it takes no responsibility for any actual or potential environmental liabilities. Any person entitled to rely on this report, wishing to know whether such liabilities exist, or the scope and their effect on the value of the property, is encouraged to obtain a professional environmental assessment. Trugman Valuation Associates, Inc. does not conduct or provide environmental assessments and has not performed one for the subject property.
10. Trugman Valuation Associates, Inc. has not determined independently whether the subject company is subject to any present or future liability relating to environmental matters (including, but not limited to CERCLA or Superfund liability) nor the scope of any such liabilities. Trugman Valuation Associates, Inc.'s valuation takes no such liabilities into account, except as they have been reported to Trugman Valuation Associates, Inc. by the subject company or by an environmental consultant working for the subject company, and then only to the extent that the liability was reported to us in an actual or estimated dollar amount. Such matters, if any, are noted in the report. To the extent such information has been reported to us, Trugman Valuation Associates, Inc. has relied on it without verification and offers no warranty or representation as to its accuracy or completeness.
11. Trugman Valuation Associates, Inc. has not made a specific compliance survey or analysis of the subject property to determine whether it is subject to, or in compliance with, the American Disabilities Act of 1990, and this valuation does not consider the effect, if any, of noncompliance.
12. No change of any item in this appraisal report shall be made by anyone other than Trugman Valuation Associates, Inc., and we shall have no responsibility for any such unauthorized change.
13. Unless otherwise stated, no effort has been made to determine the possible effect, if any, on the subject business due to future Federal, state, or local legislation, including any environmental or ecological matters or interpretations thereof.
14. We have conducted interviews with the current management of the subject company concerning the past, present, and prospective operating results of the company. Except as noted, we have relied on the representations of these individuals.
15. Except as noted, we have relied on the representations of the owners, management, and other third parties concerning the value and useful condition of all equipment, real estate, investments used in the business, and any other assets or liabilities, except as specifically stated to the contrary in this report. We have not attempted to confirm whether or not all assets of the business are free and clear of liens and encumbrances or that the entity has good title to all assets.
16. All facts and data set forth in the report are true and accurate to the best of the appraiser's knowledge and belief. We have not knowingly withheld or omitted anything from our report affecting our value estimate.
17. Possession of this report, or a copy thereof, does not carry with it the right of publication of all or part of it, nor may it be used for any purpose without the previous written consent of the appraiser, and in any event only with proper authorization. Authorized copies of this report will be signed in blue ink by a director of Trugman Valuation Associates, Inc. Unsigned copies, or copies not signed in blue ink, should be considered to be incomplete.
18. Unless otherwise provided for in writing and agreed to by both parties in advance, the extent of the liability for the completeness or accuracy of the data, opinions, comments, recommendations or conclusions, or all, shall not exceed the amount paid to the appraisers for professional fees and, then, only to the party(s) for whom this report was originally prepared.
19. The conclusion reached in this report is based on the standard of value as stated and defined in the body of the report. An actual transaction in the business or business interest may be concluded at a higher value or lower value, depending on the circumstances surrounding the company, the appraised business interest or the motivations and knowledge, or all, of both the buyers and sellers at that time. Trugman Valuation Associates, Inc. makes no guarantees as to what values individual buyers and sellers may reach in an actual transaction.
20. No opinion is intended to be expressed for matters that require legal or other specialized expertise, investigation or knowledge beyond that customarily employed by appraisers valuing businesses.

It is possible that additional contingent and limiting conditions will be required, and the client agrees that all conditions disclosed by the valuation analyst will be accepted as incorporated into the analyst's report.

### EXHIBIT 3.2

It is our intention to perform this engagement as quickly and affordably as possible, but these services take a reasonable amount of time to render. We will make certain that the appropriate personnel in our firm render those services that will comply with the level of expertise required by this engagement. In that regard, hourly rates will be charged based on the billing rates in effect at the time that the services are rendered. Currently those hourly rates range from \$xxx to \$xxx per hour depending on staff performing the assignment.

Hourly rates are charged portal to portal from our Plantation office. In addition to these hourly rates, the following charges may be applicable:

- a) Fees for appearance at depositions or trial testimony, or both, based on our standard billing rates. Although payment for deposition testimony is usually the responsibility of the adverse party in a litigation, the undersigned client guarantees payment of the same to Trugman Valuation Associates, Inc.
- b) Any out of pocket expenses relating to this valuation. It is expected that we will perform research through computer databases, and that we may be required to purchase research materials relating to this engagement. These and other such costs will be billed to you at our cost.

Payment terms shall be as follows:

\$x,xxx due in advance as a retainer. **This retainer shall be allocated against the final payment** that will be due to Trugman Valuation Associates, Inc. All amounts shall be billed regularly. Trugman Valuation Associates, Inc. reserves the right to request additional retainers pertaining to this assignment at any time, particularly if the client does not pay our invoices in accordance with the terms of this agreement.

Since it is considered unethical for us to perform these services on a contingency basis, it is important to us that our fees are paid promptly. The appearance of independence is of considerable importance for our firm to maintain our credibility, and therefore, we reserve the right to stop providing services at any time that there is a balance due our firm. In the event that we continue to provide services, we do not waive our right to stop at a later date. Furthermore, in order to ensure that our fees are not misconstrued to be on a contingent basis, **we will require all fees that are outstanding at the time of trial to be paid before we testify. We will also require a sufficient retainer to cover all anticipated time and expenses relating to a trial so that all fees are paid prior to our testifying.** Any unused retainer will be refunded to the client once our involvement has been considered to be finished.

**Trugman Valuation Associates, Inc. requires that all fees be paid before we release our report.** This is our regular practice and we request that our clients understand this practice before we are retained. This is not a personal reflection of this client, but it is a practice that avoids a discriminatory collection practice. Chasing clients for fees is not our intention, and we believe that this practice assists us in providing our services in a manner that prevents concern about our ability to remain independent due to unpaid fees.

The client must understand that professional business valuation services are not inexpensive and unless other arrangements are made, in writing, with our firm, services rendered by our firm will be invoiced regularly, and are due upon presentation of our invoice to you. Balances outstanding beyond 30 days will have a service charge added at the rate of one and a half percent per month or part thereof.

In the event that Trugman Valuation Associates, Inc. must turn collection of fees over to an attorney, the undersigned will be responsible for all reasonable costs and fees associated with the collection action. Reasonable fees will be deemed to be up to 33.33 percent of the amount collected. Any collection action that is required due to nonpayment of fees shall be venued in Broward County, Florida.

The undersigned client agrees to indemnify Trugman Valuation Associates, Inc. from any legal expenses incurred as a result of this engagement, other than those relating to the conduct of this assignment. This would include, but not be limited to any legal expenses required to protect the confidentiality of this or any other client who becomes an issue in this matter.

The final report is copyrighted by Trugman Valuation Associates, Inc. It shall remain the property of Trugman Valuation Associates, Inc. and no copies or reproductions shall be allowed without the written consent of Trugman Valuation Associates, Inc. until such time as any outstanding balance is paid.

Trugman Valuation Associates, Inc. reserves the right to withdraw from this engagement at any time. It is not our intention to withdraw. All working papers created by Trugman Valuation Associates, Inc. will remain in the possession of Trugman Valuation Associates, Inc. In the event of a withdrawal, we would only be liable to return those materials and documents supplied by the client and the unused portion of the retainer.

*(Continued)*

**EXHIBIT 3.2** *(Continued)*

The undersigned gives Trugman Valuation Associates, Inc. the right to discuss this matter with the client's attorney, accountant, other individuals so designated by the client and any professional colleagues of the appraiser from whom professional information is sought.

If this is acceptable, please sign the acknowledgment below and return a signed copy of this retainer agreement with your check in the amount of \$x,xxx to our office.

TRUGMAN VALUATION ASSOCIATES, INC.

\_\_\_\_\_  
Principal

**ACKNOWLEDGMENT:**

The undersigned accepts the terms of this retainer agreement and guarantees full payment of the fees with respect to this engagement.

\_\_\_\_\_  
<CLIENT NAME>

\_\_\_\_\_  
Date

\_\_\_\_\_  
Address and phone number

\_\_\_\_\_  
Social security number

\_\_\_\_\_  
Driver's license number

**THIS BUSINESS VALUATION RETAINER AGREEMENT CONSISTS OF SIX PAGES INCLUDING THIS ONE. ALL SIX PAGES MUST BE RETURNED TO TRUGMAN VALUATION ASSOCIATES, INC. AFTER EXECUTION OF THIS DOCUMENT WITH THE REQUESTED RETAINER IN ORDER TO RETAIN OUR FIRM. IF THIS DOCUMENT IS NOT RECEIVED BY TRUGMAN VALUATION ASSOCIATES, INC. FULLY EXECUTED BY THE CLIENT WITH THE REQUESTED RETAINER BY <<DATE>>, TRUGMAN VALUATION ASSOCIATES, INC. RESERVES THE RIGHT TO DEEM THE TERMS OF THIS AGREEMENT AND THE OFFER TO PERFORM BUSINESS VALUATION SERVICES NULL AND VOID.**

**EXHIBIT 3.3****BUSINESS VALUATION CALCULATION AGREEMENT**

The undersigned acknowledges this engagement of Trugman Valuation Associates, Inc. to perform limited business valuation services for <<DEFINE THE PROPERTY TO BE APPRAISED>> as of <<VALUATION DATE(S)>> to be used <<PURPOSE OF CALCULATION>>. These services fall under the *Statement on Standards for Valuation Services No. 1*, as promulgated by The American Institute of Certified Public Accountants. This type of service is explained in this standard as follows:

*Calculation Engagement*—A valuation analyst performs a calculation engagement when (1) the valuation analyst and the client agree on the valuation approaches and methods the valuation analyst will use and the extent of procedures the valuation analyst will perform in the process of calculating the value of a subject interest (these procedures will be more limited than those of a valuation engagement) and (2) the valuation analyst calculates the value in compliance with the agreement. The valuation analyst expresses the results of these procedures as a calculated value. The calculated value is expressed as a range or as a single amount. A calculation engagement does not include all of the procedures required for a valuation engagement.

### EXHIBIT 3.3

Our calculation of value will be communicated to you in a *calculation report*. A calculation report will contain less information than would be included in a detailed report under a *valuation engagement*. Our standards do not permit a detailed report to be used for this type of engagement, and therefore, this report is only appropriate for the client's review. This limited report may be misunderstood by those that are not familiar with all of the facts surrounding this engagement.

Unless otherwise noted in this agreement, this calculation engagement is expected to be performed by Trugman Valuation Associates, Inc. considering an income approach methodology and a market approach methodology, if sufficient relevant data can be located using the transaction databases that we subscribe to. We will not be performing a site visit, nor will we be performing independent research regarding the industry of the subject company. We will utilize our knowledge of the subject company's industry without gathering additional data beyond our current level of it.

Although the purpose of this calculation engagement is to determine the reasonable value of the subject property, the client has requested only limited analyses to be performed. Based on these limitations, Trugman Valuation Associates, Inc. will also not be rendering an opinion of value based on the standards established by the *Uniform Standards of Appraisal Practice*, the American Society of Appraisers, or The Institute of Business Appraisers.

Trugman Valuation Associates, Inc. will perform limited analyses to estimate the negotiable price that can be used by the client in lieu of the more definitive estimate of fair market value of the subject property. Said fair market value is defined to be a value at which a willing seller and willing buyer, both being informed of the relevant facts about the business, could reasonably conduct a transaction, neither party acting under any compulsion to do so.

**It is understood that as a result of this assignment, no expert testimony shall be provided. Any required expert testimony shall be the subject of a different retainer agreement.**

It is also understood that Trugman Valuation Associates, Inc. is not being engaged to perform an audit as defined by the American Institute of Certified Public Accountants, but rather the necessary analysis of only those records deemed necessary to perform this calculation engagement.

In the event sufficient records and/or documentation cannot be supplied to Trugman Valuation Associates, Inc., no such calculation report will be issued.

Certain values, derived from reports of others, and which are so designated, will be included in our report. We take no responsibility for those items. Nor do we take responsibility to update the report or disclose any events or circumstances occurring after the date of the report.

This calculation engagement will be subject to, at least, the following contingent and limiting conditions, which will be included in the report as an appendix:

1. The calculation of value arrived at herein is valid only for the stated purpose as of the effective date of the calculations.
2. Financial statements and other related information provided by the business or its representatives, in the course of this engagement, have been accepted without any verification as fully and correctly reflecting the enterprise's business conditions and operating results for the respective periods, except as specifically noted herein. Trugman Valuation Associates, Inc. has not audited, reviewed, or compiled the financial information provided to us and, accordingly, we express no audit opinion or any other form of assurance on this information.
3. Public information and industry and statistical information have been obtained from sources we believe to be reliable. However, we make no representation as to the accuracy or completeness of such information and have performed no procedures to corroborate the information.
4. We do not provide assurance on the achievability of the results forecasted by or for the subject company because events and circumstances frequently do not occur as expected; differences between actual and expected results may be material; and achievement of the forecasted results is dependent on actions, plans, and assumptions of management.

(Continued)



**EXHIBIT 3.3** *(Continued)*

5. The calculation of value arrived at herein is based on the assumption that the current level of management expertise and effectiveness would continue to be maintained, and that the character and integrity of the enterprise through any sale, reorganization, exchange, or diminution of the owners' participation would not be materially or significantly changed.
6. This report and the calculation of value arrived at herein are for the exclusive use of our client for the sole and specific purposes as noted herein. They may not be used for any other purpose or by any other party for any purpose. Furthermore, the report and calculation of value are not intended by the author and should not be construed by the reader to be investment advice in any manner whatsoever. The calculation of value represents the considered opinion of Trugman Valuation Associates, Inc., based on limited information furnished to them by the subject company and other sources.
7. Neither all nor any part of the contents of this report (especially the calculation of value, the identity of any valuation specialist(s), or the firm with which such valuation specialists are connected or any reference to any of their professional designations) should be disseminated to the public through advertising media, public relations, news media, sales media, mail, direct transmittal, or any other means of communication without the prior written consent and approval of Trugman Valuation Associates, Inc.
8. Future services regarding the subject matter of this report, including, but not limited to testimony or attendance in court, shall not be required of Trugman Valuation Associates, Inc. as a result of this engagement.
9. Trugman Valuation Associates, Inc. is not an environmental consultant or auditor, and it takes no responsibility for any actual or potential environmental liabilities. Any person entitled to rely on this report, wishing to know whether such liabilities exist, or the scope and their effect on the value of the property, is encouraged to obtain a professional environmental assessment. Trugman Valuation Associates, Inc. does not conduct or provide environmental assessments and has not performed one for the subject property.
10. Trugman Valuation Associates, Inc. has not determined independently whether the subject company is subject to any present or future liability relating to environmental matters (including, but not limited to CERCLA or Superfund liability) nor the scope of any such liabilities. Trugman Valuation Associates, Inc.'s valuation takes no such liabilities into account, except as they have been reported to Trugman Valuation Associates, Inc. by the subject company or by an environmental consultant working for the subject company, and then only to the extent that the liability was reported to us in an actual or estimated dollar amount. Such matters, if any, are noted in the report. To the extent such information has been reported to us, Trugman Valuation Associates, Inc. has relied on it without verification and offers no warranty or representation as to its accuracy or completeness.
11. Trugman Valuation Associates, Inc. has not made a specific compliance survey or analysis of the subject property to determine whether it is subject to, or in compliance with, the American Disabilities Act of 1990, and this valuation does not consider the effect, if any, of noncompliance.
12. No change of any item in this calculation report shall be made by anyone other than Trugman Valuation Associates, Inc., and we shall have no responsibility for any such unauthorized change.
13. Unless otherwise stated, no effort has been made to determine the possible effect, if any, on the subject business due to future Federal, state, or local legislation, including any environmental or ecological matters or interpretations thereof.
14. We have conducted limited interviews by telephone with the current management of the subject company concerning the past, present, and prospective operating results of the company. Except as noted, we have relied on the representations of these individuals.
15. Except as noted, we have relied on the representations of the owners, management, and other third parties concerning the value and useful condition of all equipment, real estate, investments used in the business, and any other assets or liabilities, except as specifically stated to the contrary in this report. We have not attempted to confirm whether or not all assets of the business are free and clear of liens and encumbrances or that the entity has good title to all assets.



### EXHIBIT 3.3

16. Possession of this report, or a copy thereof, does not carry with it the right of publication of all or part of it, nor may it be used for any purpose without the previous written consent of the appraiser, and in any event only with proper authorization. Authorized copies of this report will be signed in blue ink by a director of Trugman Valuation Associates, Inc. Unsigned copies, or copies not signed in blue ink, should be considered to be incomplete.

It is possible that additional contingent and limiting conditions will be required, and the client agrees that all conditions disclosed by the valuation analyst will be accepted as incorporated into the analyst's report.

It is our intention to perform this engagement as quickly and affordably as possible, but these services take a reasonable amount of time to render. We will make certain that the appropriate personnel in our firm render those services that will comply with the level of expertise required by this engagement. In that regard, hourly rates will be charged based on the billing rates in effect at the time that the services are rendered. Currently those hourly rates range from \$xxx to \$xxx per hour depending on staff performing the assignment.

In addition to these hourly rates, any out of pocket expenses relating to this assignment will be billed to you at our cost. It is expected that we will perform some research through computer databases, and that we may be required to purchase research materials relating to this engagement. We will do everything possible to minimize these expenses but the client is advised that they most likely will exist.

Payment terms shall be as follows:

\$x,xxx due in advance as a retainer. **This retainer shall be allocated against the final payment that will be due to Trugman Valuation Associates, Inc.** All amounts shall be billed regularly. Since it is considered unethical for us to perform these services on a contingency basis, it is important to us that our fees are paid promptly. The appearance of independence is of considerable importance for our firm to maintain our credibility, and therefore, we reserve the right to stop providing services at any time that there is a balance due our firm. In the event that we continue to provide services, we do not waive our right to stop at a later date.

The client must understand that professional services are not inexpensive and unless other arrangements are made, in writing, with our firm, services rendered by our firm will be invoiced regularly, and are due upon presentation of our invoice to you. Balances outstanding beyond 30 days will have a service charge added at the rate of one and a half percent per month or part thereof.

**Trugman Valuation Associates, Inc. requires that all fees be paid before we release our report.** This is our regular practice and we request that our clients understand this practice before we are retained. This is not a personal reflection of this client, but it is a practice that avoids a discriminatory collection practice. Chasing clients for fees is not our intention, and we believe that this practice assists us in providing our services in a manner that prevents concern about our ability to remain independent due to unpaid fees.

In the event that Trugman Valuation Associates, Inc. must turn collection of fees over to an attorney, the undersigned will be responsible for all reasonable costs and fees associated with the collection action. Reasonable fees will be deemed to be up to 33.33 percent of the amount collected. Any collection action that is required due to nonpayment of fees shall be venued in Broward County, Florida.

The undersigned client agrees to indemnify Trugman Valuation Associates, Inc. from any legal expenses incurred as a result of this engagement, other than those relating to the conduct of this assignment. This would include, but not be limited to any legal expenses required to protect the confidentiality of this or any other client who becomes an issue in this matter.

Trugman Valuation Associates, Inc. has estimated the cost of this assignment to approximate \$x,xxx to \$x,xxx plus out of pocket costs. Although we cannot guarantee the exact fee, we will do everything reasonably possible to minimize this expense without jeopardizing the quality of the services rendered. In the event that it appears that the fee will deviate upwards by more than 20 percent, we will call it to your attention as soon as we become aware of the extra time required to complete the assignment.

Trugman Valuation Associates, Inc. reserves the right to withdraw from this engagement at any time. It is not our intention to withdraw. All working papers created by Trugman Valuation Associates, Inc. will remain in the possession of Trugman Valuation Associates, Inc. In the event of a withdrawal, we would only be liable to return those materials and documents supplied by the client and the unused portion of the retainer.

*(Continued)*

**EXHIBIT 3.3** *(Continued)*

The undersigned gives Trugman Valuation Associates, Inc. the right to discuss this matter with the client's attorney, accountant, other individuals so designated by the client and any professional colleagues of the appraiser from whom professional information is sought.

If this is acceptable, please sign the acknowledgment below and return a signed copy of this retainer agreement with your check in the amount of \$x,xxx to our office.

TRUGMAN VALUATION ASSOCIATES, INC.

\_\_\_\_\_  
Principal

**ACKNOWLEDGMENT:**

The undersigned accepts the terms of this retainer agreement and guarantees full payment of the fees with respect to this engagement.

\_\_\_\_\_  
<CLIENT NAME>

\_\_\_\_\_  
Date

\_\_\_\_\_  
Address and phone number

\_\_\_\_\_  
Social security number

\_\_\_\_\_  
Driver's license number

**THIS BUSINESS VALUATION RETAINER AGREEMENT CONSISTS OF FIVE PAGES INCLUDING THIS ONE. ALL FIVE PAGES MUST BE RETURNED TO TRUGMAN VALUATION ASSOCIATES, INC. AFTER EXECUTION OF THIS DOCUMENT WITH THE REQUESTED RETAINER IN ORDER TO RETAIN OUR FIRM. IF THIS DOCUMENT IS NOT RECEIVED BY TRUGMAN VALUATION ASSOCIATES, INC. FULLY EXECUTED BY THE CLIENT WITH THE REQUESTED RETAINER BY <<DATE>>, TRUGMAN VALUATION ASSOCIATES, INC. RESERVES THE RIGHT TO DEEM THE TERMS OF THIS AGREEMENT, AND THE OFFER TO PERFORM BUSINESS VALUATION SERVICES NULL AND VOID.**

If your engagement is to include forensic accounting work, this should be properly explained in your engagement letter. If the assignment does not include forensics, make sure that it is clear that you will be relying on the information that you are provided with. The assumptions and limiting conditions in the report should be clear as to what you did or did not do.

This is probably a good time to discuss assumptions and limiting conditions. Exhibits 3.2 and 3.3 contain the limiting conditions included in the AICPA business valuation standard (appendix A). There are a few modifications that we made as well. If you want to follow the AICPA's recommended list from the standard, see exhibit 3.4 for the contents.

The assumptions and limiting conditions listed above may not be applicable to every engagement. Our assumption and limiting conditions include a few other items that are not included above.

It is generally advisable to have the assumptions and limiting conditions included in your engagement letter. There are certain items that will be standard for all assignments. That can become part of your boilerplate. We include a statement in our engagement letter that states "It is possible that additional contingent and limiting conditions will be required, and the client agrees that all conditions disclosed by the valuation analyst will be accepted as incorporated into the valuation analyst's report." This will allow you to add any additional items that may become necessary as the engagement proceeds.

**EXHIBIT 3.4****STATEMENT ON STANDARDS FOR VALUATION SERVICES #1—APPENDIX A**

The valuation report or calculation report should include a list of assumptions and limiting conditions under which the engagement was performed. This appendix includes an illustrative list of assumptions and limiting conditions that may apply to a business valuation.

**ILLUSTRATIVE LIST OF ASSUMPTIONS AND LIMITING CONDITIONS**

1. The conclusion of value arrived at herein is valid only for the stated purpose as of the date of the valuation.
2. Financial statements and other related information provided by *[ABC Company]* or its representatives, in the course of this engagement, have been accepted without any verification as fully and correctly reflecting the enterprise's business conditions and operating results for the respective periods, except as specifically noted herein. *[Valuation Firm]* has not audited, reviewed, or compiled the financial information provided to us, and, accordingly, we express no audit opinion or any other form of assurance on this information.
3. Public information and industry and statistical information have been obtained from sources we believe to be reliable. However, we make no representation as to the accuracy or completeness of such information and have performed no procedures to corroborate the information.
4. We do not provide assurance on the achievability of the results forecasted by *[ABC Company]*, because events and circumstances frequently do not occur as expected; differences between actual and expected results may be material; and achievement of the forecasted results is dependent on actions, plans, and assumptions of management.
5. The conclusion of value arrived at herein is based on the assumption that the current level of management expertise and effectiveness would continue to be maintained, and that the character and integrity of the enterprise through any sale, reorganization, exchange, or diminution of the owners' participation would not be materially or significantly changed.
6. This report and the conclusion of value arrived at herein are for the exclusive use of our client for the sole and specific purposes as noted herein. They may not be used for any other purpose or by any other party for any purpose. Furthermore, the report and conclusion of value are not intended by the author and should not be construed by the reader to be investment advice in any manner whatsoever. The conclusion of value represents the considered opinion of *[Valuation Firm]*, based on information furnished to them by *[ABC Company]* and other sources.
7. Neither all nor any part of the contents of this report (especially the conclusion of value, the identity of any valuation specialist(s), or the firm with which such valuation specialists are connected or any reference to any of their professional designations) should be disseminated to the public through advertising media, public relations, news media, sales media, mail, direct transmittal, or any other means of communication without the prior written consent and approval of *[Valuation Firm]*.
8. Future services regarding the subject matter of this report, including, but not limited to testimony or attendance in court, shall not be required of *[Valuation Firm]* unless previous arrangements have been made in writing.
9. *[Valuation Firm]* is not an environmental consultant or auditor, and it takes no responsibility for any actual or potential environmental liabilities. Any person entitled to rely on this report, wishing to know whether such liabilities exist, or the scope and their effect on the value of the property, is encouraged to obtain a professional environmental assessment. *[Valuation Firm]* does not conduct or provide environmental assessments and has not performed one for the subject property.
10. *[Valuation Firm]* has not determined independently whether *[ABC Company]* is subject to any present or future liability relating to environmental matters (including, but not limited to CERCLA or Superfund liability) nor the scope of any such liabilities. *[Valuation Firm]*'s valuation takes no such liabilities into account, except as they have been reported to *[Valuation Firm]* by *[ABC Company]* or by an environmental consultant working for *[ABC Company]*, and then only to the extent that the liability was reported to us in an actual or estimated dollar amount. Such matters, if any, are noted in the report. To the extent such information has been reported to us, *[Valuation Firm]* has relied on it without verification and offers no warranty or representation as to its accuracy or completeness.

*(Continued)*

**EXHIBIT 3.4** *(Continued)*

11. [*Valuation Firm*] has not made a specific compliance survey or analysis of the subject property to determine whether it is subject to, or in compliance with, the American Disabilities Act of 1990, and this valuation does not consider the effect, if any, of noncompliance.
12. [Sample wording for use if the jurisdictional exception is invoked.] The conclusion of value (or the calculated value) in this report deviates from the *Statement on Standards for Valuation Services* as a result of published governmental, judicial, or accounting authority.
13. No change of any item in this appraisal report shall be made by anyone other than [*Valuation Firm*], and we shall have no responsibility for any such unauthorized change.
14. Unless otherwise stated, no effort has been made to determine the possible effect, if any, on the subject business due to future Federal, state, or local legislation, including any environmental or ecological matters or interpretations thereof.
15. If prospective financial information approved by management has been used in our work, we have not examined or compiled the prospective financial information and therefore, do not express an audit opinion or any other form of assurance on the prospective financial information or the related assumptions. Events and circumstances frequently do not occur as expected and there will usually be differences between prospective financial information and actual results, and those differences may be material.
16. We have conducted interviews with the current management of [*ABC Company*] concerning the past, present, and prospective operating results of the company.
17. Except as noted, we have relied on the representations of the owners, management, and other third parties concerning the value and useful condition of all equipment, real estate, investments used in the business, and any other assets or liabilities, except as specifically stated to the contrary in this report. We have not attempted to confirm whether or not all assets of the business are free and clear of liens and encumbrances or that the entity has good title to all assets.

Accepting the financial information without independent verification does not mean that we will not perform the necessary due diligence required as a valuation analyst to look for the items that may require valuation adjustments, but we certainly are not going to try to find the unreported income as part of this assignment unless it is spelled out. Be careful here also, because if you are mutually retained by both parties, trying to find unreported income may cause you to be working more as an advocate for one of the clients, because any finding may assist the other client in furthering his or her position.

The easiest trap to fall into in a valuation engagement is when the attorney asks you for a ballpark. Next thing you know, the ballpark becomes your expert report without you even realizing that it has been submitted to the other side in a litigation. If your engagement letter and report are not crystal clear as to what you will and will not do and as to what restrictions are placed on the use of the report, you are looking for trouble. Your reputation will be the most impaired part of the litigation. When you find yourself in court trying to explain that this report was not intended to be used for the litigation, the only thing that everyone will remember is that the expert did a poor job. With the AICPA business valuation standard, you do not want to find yourself doing a calculation engagement when a valuation engagement is called for. Who needs the grief?

Your engagement letter should also include the “as of” date for the valuation. You do not want to start doing your research and analysis as of a certain date, have your client’s attorney tell you that you should be using a different date, and then not be able to collect fees from the client because you did your work twice. In some states, valuations for certain types of litigation can be a moving target. For example, in Connecticut, a divorce valuation starts out at the current date but will frequently be updated at the time of the trial. This can cause several valuations to be done as part of the same engagement. Your engagement letter should clearly spell out that the valuation assignment may require additional dates to be used and that the client acknowledges and gives you his or her permission to do whatever needs to be done.

Another way to fall into a trap is the engagement to critique the other side's report without being hired to give your own opinion of value, because the client does not want to spend the money to have you do a full appraisal. Besides having your assignment spelled out in the engagement letter—for example, “we are being retained only to critique the report of XYZ Appraisal Firm, and we are not being hired to provide a conclusion of value of the company”—some of the language that goes into our report may look like this:

Dear Ms. Smith:

Pursuant to your request, I have reviewed the valuation report of Roberts, Green & Co., CPAs regarding your interest in Smith Jones & Associates, P.A. The purpose of my review was to determine if I could find any glaring errors in the valuation report. I have not performed an appraisal of your interest, and accordingly, I am not offering an opinion of value in this critique.

Other items that should be spelled out in the engagement letter include the standard of value, payment terms, dispute resolution, and indemnification provisions. The standard of value is as important as the date of the valuation. Are you being hired to determine fair market value or fair value? This stuff is discussed in chapter 4. You need the client's attorney to tell you which standard of value you should be using for the valuation. Though we all want to be helpful, some of these items require legal decisions. As an accountant or valuation analyst, one is generally not qualified (by education and training) to provide legal determinations about standards of value. Though we know that fair market value will be used for estate tax issues, different states have different standards of value for shareholder disputes. Sometimes even within the same standard of value, there can be many different jurisdictional interpretations. This is the kind of stuff that can get you in trouble if you use the wrong one. Imagine the judge knocking out your report because you used the wrong standard of value. Hello lawsuit!

Do not forget to put payment terms in the engagement letter, unless you like to work for free. I like to choose what pro bono work our firm does. I try not to let the client decide that we should work for free. Get a retainer. In fact, it is becoming more common to consider the retainer as a *back end retainer*. This means that it is applied at the end of the job, rather than at the beginning. If you notice, our retainer agreements also contain a provision that says, “An additional invoice will be rendered once the valuation analyst has completed the appraisal report. Payment in full is due prior to the release of said report to the client.” This means we get paid before we release the report. I do not like to chase fees. In fact, my insurance carrier would probably prefer that I do not chase fees. They say that one of the biggest reasons that clients sue their accountants for malpractice is that the clients are counter-suing because of a collection dispute. Get paid before they sue you!

Let me point out some other important stuff about the engagement letter. In the first paragraph, the name of the appraisal firm—not the valuation analyst—should appear, because it is the firm and not the individual being engaged. This will allow the staffing to be determined by the firm. This will also allow someone else in your firm to step into the assignment if you are unable to complete it. In addition, a good engagement letter at a minimum should include:

- A description of the scope of the assignment
- A detailed description of the appraisal subject
- The standard of value that will be used, including the definition of that standard
- The effective date(s) of the valuation
- The type of report that will be issued to communicate the value estimate
- The responsibilities of the client, in particular, to provide requested documentation on a timely basis

## DESCRIPTION OF THE SCOPE OF THE ASSIGNMENT

This section of the engagement letter describes the purpose and function of the appraisal assignment. The best way to differentiate between the purpose and function of the appraisal is as follows:

Purpose = Type of value (standard of value)

Function = How the appraisal will be used

This is probably a good time to introduce another concept that fits into this section. It is called the *highest and best use* of the business. We also call this the *premise of value*. Whenever you pick up a real estate appraisal, the valuation analyst discusses the concept of highest and best use:

The reasonable probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and results in the highest value.<sup>2</sup>

The concept is to value the property in the manner in which it would generate the greatest return to the owner of the property. Logically, if a land purchaser wanted to maximize the return on his or her investment in a vacant lot, the maximum return would be to build an office building, rather than a single family house, assuming that the zoning (what is legally permissible) allows it to be built. The land becomes worth more because of its allowed usage.

The business valuation analyst should determine the highest and best use of the business enterprise in a manner similar to how the concept is used in real estate appraisal. This is not to say that a hardware store should become a manufacturer of plastics, but rather to pose the question, “Is the business to be valued as a going concern or as if in liquidation?” Some businesses are clearly worth more dead than alive and, therefore, should be valued based on their highest and best use in order to provide the maximum return to the investors. For example, if a business is losing money each year and there is no turnaround in sight, the owner of the business would maximize his or her return by liquidating the company, rather than losing equity each year by going forward. This assumes, however, that the interest being appraised has the ability to control the direction of the business. A minority interest usually cannot.

The scope section of the engagement letter should also describe the level of service, as well as (in some instances) whatever you will not be doing. In most instances, you will be performing a valuation or a calculation engagement. The nonaccountants may be doing an appraisal, a limited appraisal, or a calculation, which will soon be defined. For accountant and valuation analysts, language relating to financial statement opinions should be included pursuant to the AICPA business valuation (BV) standard. Non-CPAs who are reading this book do not need to include the section that discusses audits and the AICPA in their engagement letter. Yours truly has those CPA letters after my name, so I worry a little bit more than the typical valuation analyst that my work is not being misconstrued as an accounting type of service. For CPAs, better to be safe than sorry!

There will be times when you will be requested to do less than a valuation engagement. Considering the fact that we need to make a living, and that the spirit of the standards is to allow us to do less than valuation engagements under certain circumstances, it seems acceptable to do less than valuation engagements when applicable. What does that mean? You should never do less than a valuation engagement if the end result will be misleading or prone to error.

The AICPA BV standards distinguished between a valuation engagement and a calculation engagement. They considered another category called a *limited engagement*, but there was more confusion about this than it was worth. Nobody could answer the question that was raised as to what the difference was between a limited engagement and a *calculation engagement*. Think about it—how much less does the scope of work have to be for each of these categories? It was decided to stick with either the whole enchilada or not-the-whole enchilada.

For the nonaccountants, a distinction made between the various types of appraisal services that you might be asked to render was created by the Business Valuation Committee of the American Society of Appraisers, which explains these different levels of service as follows:

The nature and scope of the assignment must be adequately defined. Acceptable scopes of work would generally be of three types as delineated below. Other scopes of work should be explained and described.

1. Appraisal

- (a) The objective of an appraisal is to express an unambiguous opinion as to the value of the business, business ownership interest, or security, which is supported by all procedures that the appraiser deems to be relevant to the valuation.
- (b) An appraisal has the following qualities:
  - (1) It is expressed as a single dollar amount or as a range.
  - (2) It considers all relevant information as of the appraisal date available to the appraiser at the time of performance of the valuation.
  - (3) The appraiser conducts appropriate procedures to collect and analyze all information expected to be relevant to the valuation.

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<sup>2</sup> Appraisal Institute: *The Appraisal of Real Estate*. 9th ed. (Chicago: American Institute of Real Estate Appraisers, 1987), 42.



- (4) The valuation is based upon consideration of all conceptual approaches deemed to be relevant by the appraiser.
2. Limited Appraisal
  - (a) The objective of a limited appraisal is to express an estimate as to the value of a business, business ownership interest, or security, which lacks the performance of additional procedures that are required in an appraisal.
  - (b) A limited appraisal has the following qualities:
    - (1) It is expressed as a single dollar amount or as a range.
    - (2) It is based upon consideration of limited relevant information.
    - (3) The appraiser conducts only limited procedures to collect and analyze the information, which such an appraiser considers necessary to support the conclusion presented.
    - (4) The valuation is based upon the conceptual approach(es) deemed by the appraiser to be most appropriate.
3. Calculations
  - (a) The objective of calculations is to provide an approximate indication of value based upon the performance of limited procedures agreed upon by the appraiser and the client.
  - (b) Calculations have the following qualities:
    - (1) They may be expressed as a single dollar amount or as a range.
    - (2) They may be based upon consideration of only limited relevant information.
    - (3) The appraiser performs limited information collection and analysis procedures.
    - (4) The calculations may be based upon conceptual approaches as agreed upon with the client.<sup>3</sup>

This information should be clearly spelled out in an engagement letter with the client. For the accountants, remember that there is no such thing as a limited engagement in the AICPA standard. Rather, it is a calculation engagement.

## DETAILED DESCRIPTION OF THE APPRAISAL SUBJECT

To avoid confusion, a detailed description of the appraisal subject should be included in your engagement letter whenever possible. Stating that you are valuing XYZ Corporation is very ambiguous. Are you valuing the common stock of the company? Maybe you are valuing only those assets that will be sold as part of an asset sale. Maybe certain liabilities are supposed to be transferred as well. As you can see, a good description is essential for the reader to understand the appraisal report. Putting the description in your engagement letter not only requires you to get a proper understanding of your assignment early in the process, but also prevents the client or the client's attorney from changing the nature of the assignment on you, which changes the amount of time for which you will have to bill.

Defining the property to be appraised includes being very specific about the appraisal subject. If the entity being valued (in whole or in part) is a corporation, you must be precise as to what the appraisal subject is. Is it the common stock, preferred stock, specific assets, specific liabilities, or the invested capital? You must also know if 100 percent of the stock or a fractional interest is being valued. The valuation process will depend on the property being appraised. For partnerships and proprietorships, you will need to know whether you are valuing total capital, specific assets, specific liabilities, or a combination of these.

Good guidance can be obtained from the appraisal standards. These standards tell us what we should consider and what should be included in a valuation report.

## STANDARD OF VALUE THAT WILL BE USED, INCLUDING THE DEFINITION OF THAT STANDARD

One of the advantages of being the author of this book is that I get to choose when we cover each topic. Because I do not want to cover the standard of value until chapter 4, all I will say at this point is that you need to determine the appropriate standard of value as part of defining the assignment. This standard, as well as its definition, should be spelled out in the engagement letter. Be patient! We will discuss everything in due time.

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<sup>3</sup> American Society of Appraiser Standards. "BVS-I, General Requirements for Developing a Business Valuation," in *Business Valuation Standards*, (Herndon, VA: American Society of Appraisers, 2002), Sec. II.B.



## EFFECTIVE DATE(S) OF THE VALUATION

Appraisals are similar to balance sheets in that they are as of a specific point in time. Both internal and external factors affect the value of a company, and therefore, the valuation date is a critical component of the appraisal process. Changing values are easily illustrated in the public stock market. The constant movement of the price of a share of stock illustrates the potential volatility of the value of the stock. Think about what happened to the stock market on September 11, 2001. What a difference a day makes!

## TYPE OF REPORT THAT WILL BE ISSUED TO COMMUNICATE THE VALUE ESTIMATE

The engagement letter should also include what type of report the valuation analyst is expected to issue. Our firm's policy is to issue a detailed report as part of our standard engagement letter. If something less is requested by the client, we will include the lower level of reporting in our engagement letter. We are particularly concerned when a client wants a lower level of service to save money, but the end result may be less than what is required for those circumstances.

## CLIENT RESPONSIBILITIES

There is nothing worse than a client who does not cooperate with his or her own valuation analyst in providing the requested documentation on a timely basis. The attorney calls you and tells you that your report is due in two weeks. You ask your client for the information, and it is delivered to your office at 5 p.m. on the thirteenth day. To prevent this from happening, you may need to put some language in the engagement letter requiring your client to respond to your information requests by a certain date, especially when the turnaround is short.

In a litigation engagement, your problem may be getting the other side to provide you with vital information for you to do your job properly. Although this problem can take up a book by itself, we are not going to discuss it in any great detail. Make sure your engagement letter includes language stating that if you do not get the information requested, you will not be obligated to issue a report.

## METHOD OF DETERMINING FEES AND THE TERMS OF PAYMENT

Don't forget this stuff. We are not charitable organizations. The manner in which you will be billing the client should be clearly spelled out in your engagement letter. Some of the alternatives that I have seen include the following:

- Straight hourly rates
- Flat fees
- Hourly rates with a ceiling
- Hourly rates with a floor

Regardless of the manner in which the billing takes place, it is customary for out-of-pocket costs to be added to these rates. Furthermore, requesting a retainer of approximately 50 percent of the estimated fee is quite normal. This way, your out-of-pocket costs, and then some, are in the bank. For many litigation assignments, you may want to keep a replenishing retainer, so that the client does not end up behind in paying fees. A smarter alternative is to have a back end retainer.

## FIVE STEPS OF AN APPRAISAL ASSIGNMENT

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As you can tell from our engagement letter, the initial part of the valuation process is not to be taken lightly. In the introduction, we outlined the five steps of an appraisal assignment. Many of the items for defining the appraisal assignment are required before you begin the job so that you can include this important stuff in your engagement letter.

## ENGAGEMENT LETTER CONSIDERATIONS FOR LITIGATION REPORTS

The previous discussion addressed engagement letters for any type of engagement. Those readers who are CPAs are probably more familiar with engagement letters than any other professional group. In a business valuation litigation engagement, it is important that your engagement letter clearly defines the type of report that will be expected from you. The different types of reports are discussed in chapter 14. A detailed report is a very time consuming document to create, and consequently, the client should acknowledge the fact that you are being engaged to render these services.

Many times, a client does not want to spend the money to have you render a long report, and you may be asked to provide a summary report. These types of reports are not always appropriate. A summary report that is used in Tax Court may be tossed out by the judge for not complying with the *Federal Rules of Civil Procedure*.<sup>4</sup> If this is the case, you can count on having a very unhappy client. The client may even sue you for malpractice! To protect yourself, use your engagement letter to avoid this problem.

In our practice, we may render a summary report but restrict its use. Our engagement letter will expressly prohibit the client from using the summary report as an expert report. When the valuation analyst steps into the courtroom, the only thing that the judge will remember is a poor report. You will not be given time to explain that your client was too cheap to allow you to do your job the right way. Our engagement letter will advise the client that in the event of a litigation, we will have to expand our report so that it will qualify with the appropriate standards. This is generally a good compromise for the client, because he or she does not have to pay for the detailed report if it is not needed.

## THE INITIAL DOCUMENT REQUEST

Once the valuation analyst has been retained, the next step is to request information from the client. There are several schools of thought regarding the document request. Many valuation analysts send out a general request for information, such as the one that appears in exhibit 3.5. They also might include a document such as the one that appears in exhibit 3.6. Other valuation analysts make the initial request much smaller. Depending on the facts of the situation, all of these methodologies make sense.

### EXHIBIT 3.5

#### GENERAL DOCUMENT REQUEST

*ABC Manufacturing Company Business Valuation*

*Valuation Date: November 30, 2007*

In order for Trugman Valuation Associates, Inc. to render a meaningful opinion relating to the estimate of value of ABC Manufacturing Company, it is important that as much of the following information be supplied as may be available. In the event certain information is not available as of the valuation date, please provide this information for the time period as close to the valuation date as possible.

#### FINANCIAL STATEMENTS

1. Annual financial statements for the years ended December 31, 2002–2006.
2. Interim financial statements for the most recent and the previous 12 months.
3. A balance sheet as of November 30, 2007 (if not available, as close as possible).
4. Federal income tax returns for the years ended December 31, 2002–2006. State income tax returns, if applicable.
5. Copies of any forecasts or projections prepared by or for the company within the last three years, and in particular, a forecast or projection for the five year period beginning at the valuation date.
6. List of subsidiaries or other businesses in which the subject company has an ownership interest, together with their financial statements.

#### OTHER FINANCIAL DATA

7. Accounts receivable listing as of the valuation date, preferably aged.
8. List of items comprising inventory (quantity, description, and cost) and information on inventory accounting policies as of the valuation date.
9. Fixed asset register or depreciation schedule, or both, including real estate and equipment lists, date of acquisition, cost, depreciation method, useful life, and accumulated depreciation that corresponds to the financial statements and tax returns requested above.

*(Continued)*

<sup>4</sup> The Committee on the Judiciary House of Representatives. *Federal Rules of Civil Procedure*. Washington, D.C.: U.S. Government Printing Office, 2006.

**EXHIBIT 3.5** *(Continued)***OTHER FINANCIAL DATA** *(continued)*

10. List of items comprising significant other asset balances as of the valuation date.
11. Accounts payable listing as of the valuation date, preferably aged.
12. Analyses of significant accrued liabilities as of the valuation date.
13. List of notes payable and other interest-bearing debt as of the valuation date.
14. List of items comprising significant other liability balances as of the valuation date.
15. Copies of sales, capital or operating budgets for at least the next fiscal year.
16. Copies of any business plans prepared within the last five years that may continue to be applicable at the valuation date.
17. Schedule of officers' or owners' compensation, or both, corresponding to the financial statements and tax returns requested previously.
18. Schedule of key man life insurance.
19. Reports of other professionals:
  - a. Appraisals on specific assets, and
  - b. Reports of other consultants.

**OTHER OPERATING DATA**

20. Brochures, price lists, catalogs, or other product information.
21. List of shareholders showing the number of shares owned by each person.
22. Organization chart for the company at the valuation date.
23. List of five largest customers over the past three years and the total amount of sales to that customer in each year.
24. List of five largest suppliers over the past three years and the total amount purchased from that supplier in each year.
25. Details of transactions with related parties.

**LEGAL DOCUMENTS**

26. Copies of significant leases or loans, including notes receivable and notes payable.
27. Copies of shareholder agreements.
28. Minutes of board of directors meetings.
29. Copies of any buy-sell agreements or written offers, or both, to purchase the entire company or any portion thereof.
30. Copies of key managers' employment contracts.
31. Copies of any major sale or purchase contracts.
32. Details of any litigation, including pending or threatened lawsuits.
33. Details of any employee benefit plans, including pension plans, profit sharing plans, and employee stock option plans.
34. Collective bargaining agreement.
35. Reports of examination issued by government agencies such as the EPA, OSHA, IRS, and EEOC.

**OTHER COMPANY DATA**

36. List of any of the following: patents, copyrights, trademarks, or other similar intangibles.
37. Details of any contingent liabilities (such as guarantees or warranties) or off-balance-sheet financing (such as letters of credit) as of the valuation date.
38. Resumes or a summary of the background and experience of all key personnel.
39. Copies of other value indicators, such as property tax appraisals.

**INDUSTRY DATA**

40. List of trade associations.
41. List of trade publications.

**EXHIBIT 3.5****INDUSTRY DATA** *(continued)*

- 42. Standard industrial classification code or North American industry classification code.
- 43. Copies of any surveys received as part of a membership in a trade association.

**MISCELLANEOUS**

- 44. Any other information that is deemed to be pertinent in order for us to fairly express our opinion of value.

There may be additional information requested during the appraisal process. In addition to the information above, we will want access to all books of original entry, including but not limited to, cash receipts journals, cash disbursements journals, payroll journals, sales journals, general journals, general ledgers, bank statements, cancelled checks, deposit tickets, and other records that may exist.

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**EXHIBIT 3.6****BUSINESS HISTORY CHECKLIST**

- I. Background
  - a. Brief description of the business' purpose.
  - b. Discuss significant events from inception to the valuation date.
- II. Products and Services
  - a. Listing of products and services with a brief discussion of each.
  - b. Breakdown of sales by product line.
  - c. Proprietary products (for example, distribution rights, patents, and trademarks).
  - d. Discuss product seasonality or cyclicalilty.
  - e. Are sales dependent on any specific economic factors?
- III. Customers
  - a. Describe the target market and how the business fits in the market (for example, size or market share).
  - b. Is the business in a niche market?
  - c. Is the market growing or shrinking?
  - d. List the business' five largest customers and discuss the evolution of each customer including relationship and primary contact, among others.
  - e. Discuss dependence on key customers (would the loss of any customer dramatically affect continuing operations?).
- IV. Competition
  - a. Discuss the business' direct and indirect competition.
  - b. List the business' largest competitors with a description including location, products, and services.
  - c. Discuss barriers to entry into this market.
- V. Marketing
  - a. How are products and services sold?
  - b. Discuss the business' marketing activities (for example, advertising, word of mouth, and direct sales).
- VI. Suppliers
  - a. What does the business need to supply its services?
  - b. Have there been any problems obtaining the products and services that the business needs?
  - c. How much does price volatility of inputs affect sales and profit margins?

*(Continued)*

**EXHIBIT 3.6** *(Continued)*

- VII. Facilities
- List office location, including intended use and square footage.
  - Are there any planned capital expenditures?
  - Discuss the condition of the existing facilities.
  - Is there sufficient capacity at the existing facilities to support continuing operations?
- VIII. Personnel
- Discuss the business' personnel (for example, unskilled, skilled, or union).
  - List number of employees.
  - Provide organizational chart.
  - Discuss depth and competence of management.
  - Are there employment contracts with any personnel?
  - Are there any key employees (loss of a key employee would have a material effect on operations)?
  - Has the business had any difficulty hiring and retaining personnel?
- IX. Financial Information
- Discuss the capital structure of the business (debt and equity or ownership structure).
  - List all types of securities issued by the business (for example, debt, preferred stock, and common stock).
  - Discuss the business' dividend paying history.
  - Discuss any historic stock sales or offers to purchase the business' stock.
- X. Related Parties
- Discuss any related parties including subsidiaries, affiliates, business partners, or family members.
  - What effect do these related parties have on operations?
- XI. Strengths and Weaknesses
- List and discuss the business' strengths and weaknesses. This should include specific items that differentiate the business from its competition (for example, strength—the business has proprietary processes that allow it to make its products less expensively than its competition; weakness—the business has not been able to retain skilled employees).
- XII. Other
- Describe any other important issues that may affect the valuation of this business (for example, technology, research and design, contingent litigation, non-recurring events, accounting changes, acquisitions, credit problems, expected changes in the business' market or changes in federal, state, or municipal legislation that may affect sales).
- As previously discussed, these examples are illustrative and are not exhaustive. Please include any topics that may be important to the valuation.
- XIII. Conclusion
- Summarize the business history including forward looking statements indicating the expected performance of the business.

## USING A STANDARD CHECKLIST

Using a standard checklist is an easy way to request all of the things that you might need to do a business valuation. However, several problems are associated with standard checklists. The valuation analyst frequently does not know much about the company that is being valued. Sending out a standard checklist may demonstrate a lack of interest on the part of the valuation analyst if he or she asks for many items that are totally irrelevant to the assignment. Think about how the client might feel if you ask for stockholder agreements when you were told that the business is a partnership or sole proprietorship.

Using this type of document in a litigation may also prove to be dangerous. I learned the hard way when an attorney went down my checklist and asked me whether I had received each item of information. This particular assignment was so small that much of the information either did not exist or did not matter. After I said that I had not received about 70 percent of the items on my checklist, he had to ask me only two questions to embarrass me while I was on the witness stand. This is what happened:

*Attorney:* Mr. Trugman, you must think these items are important in performing a valuation engagement if you ask for them as a general rule, do you not?

*Trugman:* Yes, sir, I do.

*Attorney:* Well then, Mr. Trugman, if you consider these items important to your valuation, and you did not receive them from my client, how can you expect this court to believe that you did a credible job when you were missing about 70 percent of what you asked for?

*Trugman:* Gulp!

We all make mistakes. The idea is to learn from them. In fact, if I learned from all of my mistakes, I would now be a genius! As you can see, asking for too much information can prove to be as dangerous as not asking for enough. It is important to analyze each situation and act accordingly for that assignment. If you try to standardize this process too much, you are doomed.

As an alternative to sending out a massive document request at the beginning of the assignment, some valuation analysts prefer to send out an initial request for tax returns and financial statements only. This allows the valuation analyst to review these documents and get a feel for the financial side of the company. If the company's revenues are \$80,000, a massive document request may be overkill. However, do not let the small valuations fool you. Sometimes, as much work goes into these types of assignments as the big ones.

After you have a feel for the company, a second document request might make sense. Before you send out this request, however, you may want to perform a site inspection and interview the management (these steps are discussed further in chapter 6). Either your fieldwork may streamline your document request, or you may find that additional documentation is required because something came to your attention during the interview.

## SETTING UP MULTIPLE CHECKLISTS

As long as you remember to customize each checklist for the particular assignment, you may find it to be a time-saver to have multiple checklists set up on your word processor for those types of jobs that you do over and over again. Exhibits 3.7, 3.8, and 3.9 provide document checklists for a medical practice, a law practice, and an accounting practice, respectively. These particular checklists are intended for use if the entity being valued is a professional corporation. Our firm has other checklists for sole proprietorships and partnerships. By the way, chapter 18 includes a discussion of the valuation of professional practices.

You will notice that in the exhibits, the sections that are different are in italics for your convenience. Rather than having to constantly make changes, we find it easier to have a master checklist set up for each of these professional practices because we value many of them.

### EXHIBIT 3.7

#### DOCUMENT CHECKLIST—MEDICAL PRACTICE

*Dr. Smith, P.C.*

*Business Valuation—Medical Practice*

*Valuation Date: December 15, 2007*

For Trugman Valuation Associates, Inc. to render a meaningful opinion relating to the estimate of value of Dr. Smith, P.C. it is important that as much of the following information be supplied as may be available. In the event certain information is not available as of the valuation date, please provide this information for the time period as close to the valuation date as possible.

#### FINANCIAL STATEMENTS

1. Annual financial statements for the years ended December 31, 2000–2006.
2. Interim financial statements for the twelve months ended November 30, 2007, and November 30, 2006.
3. A balance sheet as of December 15, 2007 (use this only if the appraisal date is different from the date of the financial statements above).

*(Continued)*

**EXHIBIT 3.7** *(Continued)***FINANCIAL STATEMENTS** *(continued)*

4. Federal income tax returns for the years ended December 31, 2000–2006; state income tax returns, if applicable.
5. List of subsidiaries or other businesses in which the subject company has an ownership interest, together with their financial statements.

**OTHER FINANCIAL DATA**

6. List of cash accounts and any significant cash investments.
7. Accounts receivable listing as of December 15, 2007, preferably aged.
8. *List of items comprising medical supplies inventory (quantity, description, and cost) as of December 15, 2007.*
9. Fixed-asset register, depreciation schedule, or both, including real estate and equipment lists, date of acquisition, cost, depreciation method, useful life, and accumulated depreciation.
10. List of items comprising significant other asset balances as of December 15, 2007.
11. Accounts payable listing as of December 31, 2000, preferably aged.
12. Analyses of significant accrued liabilities as of December 15, 2007.
13. List of notes payable and other interest-bearing debt as of December 15, 2007.
14. List of items comprising significant other liability balances as of December 15, 2007.
15. Schedule of officers' compensation, owners' compensation, or both.
16. Schedule of key-man life insurance.
17. Reports of other professionals:
  - a. Appraisals on specific assets, and
  - b. Reports of other consultants.

**OTHER OPERATING DATA**

18. List of stockholders, showing the amount of stock owned by each person.
19. Details of transactions with related parties.
20. *Information relating to accounts receivable submitted to a collection agency or law firm.*
21. Copies of significant leases or loans, including notes receivable and notes payable.
22. Copies of stockholder agreements.
23. Minutes of board of directors' meeting.
24. *Copies of any buy-sell agreements, written offers to purchase the entire practice or any portion thereof or both.*
25. Copies of associates' or stockholders' employment contracts.
26. Details of any litigation, including pending or threatened lawsuits.
27. Detail of any employee benefit plans, including pension plans, profit-sharing plans, and employee stock option plans.
28. Invoices for all legal fees paid during the last five years.

**OTHER COMPANY DATA**

29. Details of any contingent liabilities (such as guarantees or warranties) or off-balance-sheet financing (such as letters of credit) as of December 31, 2000.
30. *List of all personnel broken down by status with the firm and department, among others. For professionals, please indicate specialization, board certifications, and medical school, where internship and residency were performed and fellowships were received.*
31. Copies of other value indicators, such as property tax appraisals.
32. *Appointment books for the past three years.*
32. *Appointment books for the past three years.*
33. *List of all hospital affiliations.*
34. *List of all specialties or subspecialties, or both.*



**EXHIBIT 3.7****LEGAL DOCUMENTS**

35. Copies of significant leases or loans, including notes receivable and notes payable.
36. Copies of stockholder agreements.
37. Minutes of board of directors' meetings.
38. Copies of any buy-sell agreements, any transactions relating to the stock interests in the firm, or both.
37. Minutes of board of directors' meetings.
38. Copies of any buy-sell agreements, any transactions relating to the stock interests in the firm, or both.
39. Copies of associates' or stockholders' employment contracts.
40. Details of any litigation, including pending or threatened lawsuits
41. Details of any employee benefit plans, including pension plans, profit-sharing plans, and employee stock option plans.

**MISCELLANEOUS**

42. Any other information that is deemed to be pertinent for us to express fairly our opinion of value.

Additional information may be requested during the appraisal process. In addition to the information above, there may be some instances in which we will request general ledgers, accounting journals, payroll tax returns, sales tax returns, bank statements, canceled checks, and other such documentation.

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**EXHIBIT 3.8****DOCUMENT CHECKLIST—LAW PRACTICE**

*I. Sueyou, P.C.*

*Business Valuation—Law Practice*

*Valuation Date: December 31, 2007*

For Trugman Valuation Associates, Inc. to render a meaningful opinion relating to the estimate of value of I. Sueyou, P.C. it is important that as much of the following information be supplied as may be available. In the event certain information is not available as of the valuation date, please provide this information for the time period as close to the valuation date as possible.

**FINANCIAL STATEMENTS**

1. Annual financial statements for the years ended December 31, 2001–007.
2. Federal income tax returns for the years ended December 31, 2001–2007; state income tax returns, if applicable.
3. List of subsidiaries or other businesses in which the subject company has an ownership interest, together with their financial statements.

**OTHER FINANCIAL DATA**

4. List of cash accounts and any significant cash investments.
5. Accounts receivable listing as of December 31, 2000, preferably aged.
6. *List of all unbilled work in process as of December 31, 2000.*
7. Fixed asset register, depreciation schedule, or both, including real estate and equipment lists, date of acquisition, cost, depreciation method, useful life, and accumulated depreciation.
8. *Detailed lists of books and services in the law library.*
9. List of item comprising significant other asset balances as of December 31, 2000.

*(Continued)*

**EXHIBIT 3.8** *(Continued)***OTHER FINANCIAL DATA** *(continued)*

10. Accounts payable listing as of December 31, 2000, preferably aged.
11. Analyses of significant accrued liabilities as of December 31, 2000.
12. List of notes payable and other interest-bearing debt as of December 31, 2000.
13. List of items comprising significant other liability balances as of December 31, 2000.
14. Schedule of officer's compensation, owner's compensation, or both.
15. Schedule of key-man life insurance.
16. Reports of other professionals:
  - a. Appraisals on specific assets, and
  - b. Reports of other consultants.

**OTHER OPERATING DATA**

17. List of stockholders, showing the amount of stock owned by each person.
18. *List of ten largest clients over the past three years and the total amount billed and collected from each client in each year.*
19. *Schedule of fees billed and collected, broken down by specialty (for example, criminal, municipal, real estate, and matrimonial) for the past three years.*
20. Details of transactions with related parties.
21. *A schedule of all contingent fees received since December 31, 2000, for all matters started prior to that date.*
22. *A list of all contingent matters that have not been finalized and that were started on or prior to December 31, 2000.*
23. *A schedule of all contingent litigation matters for the past three years, indicating fees received, professional hours billed, and costs associated with each suit.*
24. *A schedule of all attorney time written off over the past three years.*
25. Payroll records for the last three years including, but not limited to, W-2 forms.

**LEGAL DOCUMENTS**

26. Copies of significant leases or loans, including notes receivable and notes payable.
27. Copies of stockholder agreements.
28. Minutes of board of directors' meetings.
29. Copies of any buy-sell agreements, any transactions relating to the stock interests in the firm, or both.
30. Copies of associates' or stockholders' employment contracts.
31. Details of any litigation, including pending or threatened lawsuits.
32. Details of any employee benefit plans, including pension plans, profit-sharing plans, and employee stock option plans.

**OTHER COMPANY DATA**

33. Details of any contingent liabilities (such as guarantees or warranties) or off-balance-sheet financing (such as letters of credit) as of December 31, 2000.
34. *List of all personnel, broken down by status within the firm and department, among others. For professionals, please indicate specialization and the year they were admitted to the bar.*
35. Copies of other value indicators, such as property tax appraisals.

**MISCELLANEOUS**

36. Any other information that is deemed to be pertinent for us to express fairly our opinion of value.

Additional information may be requested during the appraisal process. In addition to the information above, there may be some instances in which we will request general ledgers, accounting journals, bank statements, canceled checks, and other such documentation.

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**EXHIBIT 3.9****DOCUMENT CHECKLIST—ACCOUNTING PRACTICE**

*We Do Numbers, CPAs, P.C.*

*Valuation Date: December 31, 2007*

In order for Trugman Valuation Associates, Inc. to render a meaningful opinion relating to the estimate of value of We Do Numbers, CPAs, P.C., it is important that as much of the following information be supplied as may be available. In the event certain information is not available as of the valuation date, please provide this information for the time period as close to the valuation date as possible.

**FINANCIAL STATEMENTS**

1. Annual financial statements for the years December 31, 2001–2007.
2. Federal income tax returns for the years December 31, 2001–2007. State income tax returns, if applicable.
3. Copies of any forecasts or projections.
4. List of subsidiaries or other businesses in which the subject company has an ownership interest, together with their financial statements.

**OTHER FINANCIAL DATA**

5. List of cash accounts and any significant cash investments.
6. Aged accounts receivable listing as of December 31, 2007.
7. *Schedule of unbilled work in process as of December 31, 2007.*
8. Fixed asset register or depreciation schedule, or both, including real estate and equipment lists, date of acquisition, cost, depreciation method, useful life, and accumulated depreciation.
9. List of items comprising significant other asset balances as of December 31, 2007.
10. Accounts payable listing as of December 31, 2007, preferably aged.
11. Analyses of significant accrued liabilities as of December 31, 2007.
12. List of notes payable and other interest-bearing debt as of December 31, 2007.
13. List of items comprising significant other liability balances as of December 31, 2007.
14. Copies of operating budgets.
15. Schedule of officers' or owners' compensation, or both.
16. Schedule of key man life insurance.
17. Reports of other professionals:
  - a. Appraisals on specific assets, and
  - b. Reports of other consultant.

**OTHER OPERATING DATA**

18. List of stockholders showing the amount of stock owned by each person.
19. *List of five largest clients over the past three years and the total amount of fees charged to each client in each year.*
20. *Breakdown of fees billed and collected over the past three years between audit, tax, compilation and review, management advisory services, and all others.*
21. Details of transactions with related parties.

**LEGAL DOCUMENTS**

22. Copies of significant leases or loans, including notes receivable and notes payable.
23. Copies of stockholder agreements.
24. Minutes of Board of Directors' meetings.
25. Copies of any buy-sell agreements or written offers, or both, to purchase the entire practice or any portion thereof.
26. Copies of key managers' employment contracts.

*(Continued)*

**EXHIBIT 3.9** *(Continued)***LEGAL DOCUMENTS** *(continued)*

27. Details of any litigation, including pending or threatened lawsuits.
28. Details of any employee benefit plans, including pension plans, profit sharing plans, and employee stock option plans.

**OTHER COMPANY DATA**

29. Details of any contingent liabilities (such as guarantees or warranties) or off balance sheet financing (such as letters of credit) as of December 31, 2007.
30. Resumes or a summary of the background and experience of all key personnel.
31. Copies of other value indicators, such as property tax appraisals.

**MISCELLANEOUS**

32. Any other information that is deemed to be pertinent in order for us to fairly express our opinion of value.

There may be additional information requested during the appraisal process. In addition to the information above, we will want access to all books of original entry, including but not limited to, cash receipts journals, cash disbursements journals, payroll journals, sales journals, general journals, general ledgers, bank statements, cancelled checks, deposit tickets, and other records that may exist.

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**CONCLUSION**

By now, you should have more of an idea about how to get the job started. Please do not underestimate the importance of the contents of an engagement letter. It is more important to the valuation analyst than the valuation report! You should also have an idea of the type of information to request in the initial stages of the valuation assignment.

## CHAPTER 4

# Appraisal Principles and Theory

### CHAPTER GOALS

In this chapter, I will attempt to do the following:

- Explain the principles of appraisal
- Explain various standards of value
- Explain how the purpose of the valuation influences the standard of value
- Discuss the IRS's influence on appraisals and expose the reader to many of the key revenue rulings

### PRINCIPLES OF APPRAISAL

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Three main appraisal principles constitute the foundation of valuation theory. Each of these principles is as important to valuation as the law of supply and demand is to economics. These very important principles are (1) the principle of alternatives, (2) the principle of substitution, and (3) the principle of future benefits.

#### PRINCIPLE OF ALTERNATIVES

The principle of alternatives states that in any contemplated transaction, each party has alternatives to consummating the transaction.<sup>1</sup> This indicates that there are generally alternatives to the investment. This concept is relatively simple and does not need to be belabored. Assume that I want to sell my boat. I have alternatives for whether I sell the boat, how much I sell it for, and to whom I sell it. In *Basic Business Appraisal*, Miles points out:

Because it is one of the fundamental principles that form the basis of almost all appraisals, including those under circumstances that do not actually involve a contemplated sale or other transaction, the appraiser needs to be aware of its existence.<sup>2</sup>

#### PRINCIPLE OF SUBSTITUTION

The principle of substitution is a presupposition of appraisal practice, expressing a generalized prediction concerned with behavior related to an event involving economic choices and values. It predicts how people will normally choose among comparable properties when prices vary.<sup>3</sup> In English, prudent individuals will not pay more for something than they would pay for an equally desirable substitute. To illustrate how the principle of substitution operates to determine value, assume that an individual wants to purchase a hardware store. That person begins looking at various stores that are for sale and narrows down the choice to two of these stores. Both have good inventory, geographic location, and profits and are equally acceptable as purchase alternatives. One is listed for sale

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<sup>1</sup> Raymond C. Miles, *Basic Business Appraisal* (Boynton Beach, Fla.: Institute of Business Appraisers, 1989).

<sup>2</sup> *Ibid.*, 22.

<sup>3</sup> Richard Rickert, *Appraisal and Valuation: An Interdisciplinary Approach* (unpublished textbook from my graduate school days at Lindenwood College, St. Charles, Missouri).

for \$250,000 and the other is listed for \$300,000. Which one do you think that person will most likely buy? This stuff is not rocket science!

The principle of substitution, in essence, states that nobody will pay more for something than he or she would pay for an equally desirable substitute. Logically, if two items are identical except for the price, a willing buyer will gravitate to the item with the lower price.

This is also illustrated in the investment field. If two investments have equal risk, an investor will invest in the item that will provide the greatest return on investment. Try to remember this stuff. It will be really important in chapter 11.

## Application of the Principle of Substitution

There are three approaches that should be considered when one performs a business valuation. These were discussed in the standards. Each of these approaches, when applied, illustrates the principle of substitution.

The market approach estimates the value of the business being appraised from information derived from the market about prices actually paid for other similar businesses. The asset-based approach simulates the starting of an equivalent business from scratch. In this approach, the value of the business being appraised is determined from the estimated cost of replacing (duplicating) the business asset by asset, liability by liability.

The income approach looks to financial equivalents (not necessarily a business) to estimate the value of the appraisal subject. The value of the business being appraised is estimated by either capitalizing a single-period benefit stream or discounting a multiperiod benefit stream. The rates used to capitalize or discount the benefit stream are determined from alternative investments based on the risk factors attributable to the stream being capitalized or discounted. This will begin to make more sense in a little while.

## PRINCIPLE OF FUTURE BENEFITS

The principle of future benefits is the third appraisal principle that is fundamental to the valuation process. This principle states that “economic value reflects anticipated future benefits.”<sup>4</sup> This appraisal principle can best be illustrated by assuming that you want to buy a particular business. Would historic earnings be as important as prospective earnings in determining value? Probably not. You would not care what the business did for the prior owner as much as what it can do for you, the purchaser.

There are only three economic reasons that investors will invest in a certain stock: (1) dividends (future cash flows to the investor), (2) capital appreciation (future cash flows to the investor upon sale), or (3) a combination of the two (future cash flows). It should always be remembered that valuation is based on the future outlook of the business.

If you really stop to think about it, this is the foundation for making a financial investment. I will soon discuss standards of value and the approaches to value, but the bottom line is that regardless of how you go about it, economic value should be determined based on the anticipated future cash flow that is expected from an investment. This means that the discounted cash flow methodology that I will discuss in chapter 10 is theoretically the most sound method, because it measures the present value of the future cash flows to the investor. Unfortunately, you will also see that it is really easy to make a mistake in the application of this method, if you are not careful.

## STANDARDS OF VALUE

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A good place to start in any book on appraisal is to define what is meant by an appraisal. An appraisal is a supportable opinion about the worth of something. In this book and in much of the appraisal literature that you will read, the term appraisal is used synonymously with the term valuation. Therefore, a business appraisal is the same as a business valuation.

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<sup>4</sup> Miles, *Basic Business Appraisal*, 27.

It is not enough to state that the appraisal will determine the *value* of what is being appraised. The term *value* has many different meanings in the valuation field. One of the first lessons to be learned relates to what are called *standards of value*. These are also called *definitions of value*. Before an assignment can be started, it is imperative that the standard of value that will be used in the assignment be clearly defined. In chapter 3, I recommended that the standard of value, including a definition, be included in your engagement letter. In addition to discussing standards of value, a valuation analyst must also consider the ownership characteristics of the appraisal subject and the premise of value that will be used.

The ownership characteristics refer to whether the appraisal will be conducted using the actual buyer and seller, versus some hypothetical buyer and seller. Believe it or not, this makes a really big difference. There have been many court battles over this stuff. Using real or hypothetical individuals changes the standard of value.

The premise of value relates to the concept of highest and best use, which I mentioned earlier. Will we be valuing the company as a going concern or as if in liquidation? This, too, is an important concept because there are instances when a business that can be sold for its parts may be worth more than a business that is up and running. Let me give you a quick example. Assume that you have a client that delivers home heating oil. The company has been losing money for the last seven years with no turnaround in sight. The industry has changed, and small independent dealers are struggling because they have these really big trucks that they are sending out to customers half full, due to the lack of volume. The big players in the industry are purchasing the customer lists for substantial multiples of revenue because they feel that they can fill up their trucks and have their drivers stop at a few more customers on the route, and the incremental sales will only cost them the price of the fuel oil. If your client sells the customer list (and everything else, because it will put him or her out of business), the money from the sale could be invested at a profit. This would provide a greater return than running the business at a loss each year. This is the concept of highest and best use.

According to Merriam-Webster's Dictionary, the definition of value is "a fair return or equivalent in goods, services, or money for something exchanged." In business valuation, the following standards of value are the most frequently used:

- Fair market value
- Fair value
- Investment value
- Intrinsic value

If you do not think that this stuff is important, you will not be successful in this field. Since the last edition of my book was published, the appraisal literature gained a book entitled *Standards of Value: Theory and Applications*.<sup>5</sup> This entire book covers standards of value. Now do you believe that this is important?

## FAIR MARKET VALUE

Probably the most commonly used standard of value is fair market value. Revenue Ruling 59-60 defines fair market value as the following:

The amount at which the property would change hands between a willing buyer and a willing seller, when the former is not under any compulsion to buy, and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts.

This definition implies that the value is the most probable price in cash or cash equivalent that would be paid if the property were placed on the open market for a reasonable period and, in all likelihood, assumes the existence of a covenant not to compete. If it did not assume a covenant not to compete, why would a buyer pay anything for the business above the value of the tangible assets? Usually the price is allocated for income tax purposes after the negotiated figure has been agreed to by each party to the transaction. In certain jurisdictions, and for certain types

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<sup>5</sup> Jay E. Fishman, Shannon P. Pratt, and William J. Morrison, *Standards of Value: Theory and Applications* (Hoboken: John Wiley & Sons, Inc., 2007).



of appraisals, this definition assumes the highest price rather than the most probable price. The valuation analyst needs to make sure that the correct definition is used.

The concept of fair market value is frequently misunderstood, and therefore, many errors are committed by the inexperienced valuation analyst trying to estimate the fair market value of the appraisal subject. To illustrate the concept of fair market value, a real-life example can be used. A number of years ago, I was engaged in a matrimonial matter to determine to what extent an offer to purchase a business, made during the course of negotiating a settlement, was to be considered the fair market value of the business. What rendered this situation especially interesting and unusual was that the offer was made by the wife.

The court had appointed an accountant to value the husband's car wash business. After the accountant arrived at a value, the wife put together a group of potential investors and, during the negotiations, offered the husband \$200,000 more than what was, in the court-appointed accountant's opinion, the fair market value of the car wash. The question was whether this offer should have been considered bona fide and representative of the fair market value of the business.

The answers to these questions lay in the definition of fair market value. In the specific facts and context of this case, I concluded that fair market value would probably not be represented by the wife's offer. I say "probably" because I was not asked to determine the fair market value of the car wash per se, only whether the wife's offer could constitute fair market value.

Working from expert reports, courts frequently use fair market value as the basis for property distribution. The most frequently used definition of fair market value is the one I cited previously. A similar definition can be found in Miles's *Basic Business Appraisal*:

Fair market value is the price, in cash or equivalent, that a buyer could reasonably be expected to pay and a seller could reasonably be expected to accept, if the property were exposed for sale on the open market for a reasonable period of time with buyer and seller being in possession of the pertinent facts, and neither being under any compulsion to act.<sup>6</sup>

Both of these definitions are regularly accepted by the appraisal profession and used interchangeably. These definitions contain the following components: (1) cash or equivalent, (2) exposure for sale on the open market, and (3) neither party under compulsion to act. The concept of fair market value will be understood better through an analysis of these components.

## Cash or Equivalent

The valuation analyst's assignment is to determine the equivalent of cash that would be paid for the item being appraised as of the valuation date. Often, a property may be sold with the seller holding a mortgage at a rate of interest below the market rate, to induce the buyer to enter into the transaction. This situation requires a present-value calculation, because some of the value will not be received until a future date. Appraisal theory is founded on the principle of future benefits, with the value of any property constituted by the sum of the benefits that will be obtained by its owner in the future. No one will buy property if there will be no future benefits, whether in the form of income or the appreciation to be realized upon subsequent resale of the property.

Present-value theory can be illustrated by comparing the sale of two businesses, each for \$100,000—one with a 5 year payout and the other a 7 year payout. The value of these businesses can be determined using the present-value formula:

$$PV = \frac{FV}{(1+k)^n}$$

*PV* = Present value

*FV* = Future value

*k* = Rate of return (sometimes called the discount rate)

*n* = Number of periods into the future for which the compounding is being computed

<sup>6</sup> *Ibid.*, 43.

A discount rate of 10 percent would yield the following present values:

Business 1	Business 2
$PV = \frac{FV}{(1+k)^n}$	$PV = \frac{FV}{(1+k)^n}$
$PV = \frac{\$100,000}{(1+0.10)^5}$	$PV = \frac{\$100,000}{(1+0.10)^7}$
$PV = \$62,092$	$PV = \$51,316$

The example illustrates that the cash equivalent of these two businesses are quite different in today's dollars. This part of the definition of fair market value is frequently overlooked. For a value to be representative of fair market value, it must be reasonable. Simply put, an offer to buy or sell will not represent fair market value if both parties do not feel that the offer is fair. Obviously, a unilateral offer cannot represent the true value of an asset.

The willing buyer and willing seller are hypothetical persons dealing at arm's length, rather than any particular buyer or seller. In other words, a price would not be considered representative of fair market value if influenced by special motivations not characteristic of a typical buyer or seller.<sup>7</sup>

### Exposure for Sale on the Open Market

The concept of *market* is extremely important to the definition of fair market value. In many situations the appraisal subject is not for sale. This is usually the case when property is valued for distribution in a matrimonial case. To estimate fair market value, the valuation analyst must assume that the property has been placed on the open market.

The valuation analyst assumes that a number of similar properties are available in the open market under the principle of substitution. This principle, as previously discussed, is based on the theory that no person will pay more for a property than he or she would have to pay for an equally desirable substitute.

This principle can be illustrated by the following scenario. Let's assume that the wife wants to purchase a car wash. In addition to the one that is owned by the husband, five other car washes are for sale in the general area. All of these car washes have similar revenues, similar locations, and the same overall characteristics. The principle of substitution dictates that the wife would purchase the one that is offered for the lowest price. Let's also assume a number of prospective buyers. The interaction of the buyers with the sellers of these car washes will eventually establish the fair market value for this type of business. However, for the price offered to be representative of fair market value, all of the other attributes of fair market value must be present.

The phrase *open market* must also be explored. The market for a \$30 billion business would be very small, because there would be few buyers who are willing and able to make such a purchase. There would also be very few "equally desirable substitutes." However, the size of the market does not prevent the valuation analyst from assuming an "open market." Although limited, the valuation analyst's environment is the hypothetical market, the price at which the property would change ownership if it actually were offered for sale.

The definition of fair market value also assumes that the subject property would be exposed on the open market for a reasonable amount of time. This means that the property should be made available for a time period long enough for all potential purchasers to be aware of its availability, rather than be offered to a select group of prospective purchasers. The property should remain on the market "for a sufficient length of time to allow the action of market forces to . . . have full effect," according to Miles, who adds that this may even be "in contrast to some actual situations in which the property may be on the market only a short time before it is sold, possibly even being sold to the first potential buyer who makes an offer, at a price that may very well be lower than its actual open market value."<sup>8</sup>

### Neither Party Under Compulsion to Act

If a seller is under compulsion to sell a business, he or she may accept an offer that represents a *distress sale*. Similarly, if, because of overindebtedness, the only way a transaction could occur is if the seller finds a buyer willing

<sup>7</sup> Shannon P Pratt, Robert F. Reilly, and Robert P. Schweihs, *Valuing a Business*, 4th ed. (New York, NY: McGraw Hill, Inc., 2000), 29.

<sup>8</sup> Miles, *Basic Business Appraisal*, 44.

to pay more than fair market value for the business, the buyer may also be “under compulsion to act” if he or she needs to acquire a business to earn a living. Under these circumstances, a buyer may overpay.

Returning to the original car wash example, the wife’s offer cannot be considered fair market value. Although her offer does constitute value, it is what Pratt, Reilly, and Schweihs refer to as investment value or “the specific value of an investment to a particular investor or class of investors based on individual investment requirements; distinguished from market value, which is impersonal and detached.”<sup>9</sup> Her offer would establish a price for this business but would not reflect the value of the business.

The distinction between price and value is crucial. In the real world, businesses are bought and sold for a price. The valuation analyst’s purpose, though, is to estimate value. Compared to the appraisal environment required by the definition of fair market value, the conditions that exist in the real world often influence price without affecting value. According to The Institute of Business Appraisers, “Price is what you pay; value is what you hope to get.”<sup>10</sup>

The determination of fair market value is a process where the valuation analyst is frequently being forced to make a determination of fair market value to whom? An excellent lesson can be learned from court cases dealing with this issue. In chapter 20, I have included a discussion about one of my favorite court cases, *Estate of Samuel B. Newhouse*,<sup>11</sup> which illustrates that fair market value can result in different values to different classes of investors. Take the time to read this one. There is some real good stuff in this case!

## FAIR VALUE

Fair value has several distinct meanings in the valuation field. For financial reporting, the current definition of fair value is the following:

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.<sup>12</sup>

The other arena where we see the term fair value used is in corporate dissolution statutes and shareholder disputes. However, the definition of fair value in this context varies from state to state. The definition has been developed from case law, primarily in dissenting and oppressed stockholder actions. This concept is also used in many corporate dissolution statutes, but here also, the definition is an enigma. The valuation analyst should obtain the definition of value from the client’s legal counsel based on the corporate statutes and case law in the jurisdiction in which the litigation will take place.

The American Law Institute’s concept of fair value as explained in the *Principles of Corporate Governance* (1992), under the “Appraisal Remedy” section, defines fair value as

... the value of the eligible holder’s proportionate interest in the corporation, without any discount for minority status or, absent extraordinary circumstances, lack of marketability. ... fair value should be determined using the customary valuation concepts and techniques generally employed in the relevant securities and financial markets for similar businesses in the context of the transaction giving rise to appraisal.<sup>13</sup>

Now don’t get too excited about seeing this definition. Not all jurisdictions follow it. You really need to check with your client’s legal counsel to make certain that you are using the appropriate definition. What we do know, is that one of the fundamental differences between fair value and fair market value is that in a litigation setting, there is rarely a willing seller in a fair value appraisal. Most courts are concerned with the concept of fairness, and as a result, the valuation is intended to be equitable for the disadvantaged party. Some of the differences between fair value and fair market value are illustrated in box 4.1.

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<sup>9</sup> Pratt, Reilly, and Schweihs, *Valuing a Business*, 30.

<sup>10</sup> “Institute of Business Valuation Appraisers Inc. Newsletter,” January 1986.

<sup>11</sup> *Estate of Samuel I. Newhouse v. IRS Commissioner*, 94 T.C. 193 (1990).

<sup>12</sup> Financial Accounting Standards Board Statement No. 157, *Fair Value Measurements*.

<sup>13</sup> The American Law Institute, *Principles of Corporate Governance: Analysis and Recommendations*, Volumes 1 and 2, (Washington, D.C., May 13, 1992): 315.

**Box 4.1 Differences Between Fair Market Value and Fair Value****Fair Market Value**

1. Willing buyer
2. Willing seller
3. Neither under compulsion
4. Assumes a typical *hypothetical* buyer and seller
5. A price *equitable to both* buyer and seller
6. Assumes buyer and seller have *equal knowledge*
7. Assumes *reasonable knowledge of both* parties
8. Applicable to *controlling interests or minority blocks*
9. Applies to *all federal tax valuations*

**Fair Value**

1. *Not always* a willing buyer
2. *Not* a willing seller
3. Buyer *not always* compelled; seller under compulsion
4. The impact of the proposed transaction not considered; the concept of *fairness to the seller* a possible consideration
5. A concept of *fairness* to the seller, considering the inability to keep the stock
6. No such assumption
7. No such assumption
8. Applicable to *minority blocks*
9. The most common value standard in state dissenting and oppressed *shareholder statutes*

The concept of fair value is driven by case law, and it is ever-evolving. The valuation analyst should never take it upon him- or herself to take the legal positions regarding the interpretation of the standard or the case law. However, the valuation analyst needs to be aware of when not to use a standard of value that is incorrect.

If you are not sure about the standard of value, I cannot emphasize strongly enough the need to get advice from legal counsel. There are times when even qualified valuation analysts are given incorrect marching orders. That is what engagement letters are for. See, here it is again, the need for a good understanding in the engagement letter. Chapter 19 covers additional issues regarding shareholder disputes.

## INVESTMENT VALUE

The investment value of a closely held company is the value to a particular buyer, as compared with the population of willing buyers, as is the case in fair market value. This is one of those instances where the valuation analyst will determine the value to a particular person, instead of the hypothetical person. This value definition would be applicable when an investor has specific investment criteria that must be fulfilled in an acquisition. For example, a purchaser may decide that, as owner-manager, his or her compensation must be at least \$95,000 per year. In addition, the business must have the ability to pay from operating cash flow any indebtedness resulting from the purchase over a period of no longer than five years.

A valuation analyst will frequently use this standard of value when he or she represents a buyer who wants to know, “how much is the business worth to me?” The fact that the buyer is specific about the business value to him or her changes the standard of value to investment value, as opposed to fair market value, which may be the value to everyone else.

Another manner in which to think about this standard of value is to think that every transaction that takes place in the market is specific to the actual buyer and seller with specific criteria that caused each party to the transaction to consummate the deal. If you have many of these transactions taking place at about the same time, you have a market. You need to have quite a bit of activity to get rid of any special motivations of the individual buyers or sellers to reach a normative state that would represent fair market value. The market value would cluster around the same point, at a particular moment on time, creating what we consider to be the fair market value of the property.

Investment value is being examined more closely by many of the family courts as the standard of value that is appropriate in divorce situations. In a divorce, the elements of fair market value are rarely present; the owner is not

a willing seller, nor will there be a sale. We frequently hear the concept of the *value to the owner* used as an alternative to fair market value. Essentially, value to the owner is the investment value to that individual. Make certain that you consult with your client's attorney before using this standard of value. These concepts are discussed in much more detail in chapter 17, addressing valuations for divorces.

## INTRINSIC VALUE

If you have ever heard the expression "Beauty is in the eye of the beholder," you will probably understand the term intrinsic value. This term is frequently used by financial analysts. The intrinsic value of a stock is generally considered to be the value based on all of the facts and circumstances (sometimes considered to be based on a technical analysis) of the business or the investment. Financial analysts in brokerage firms often ignore the fluctuations of the stock market in determining the intrinsic value of a specific stock.

Although I knew what intrinsic value meant, it was not until recently that this definition became more important to a valuation assignment than ever before. The issue was the determination of fair value of a client's interest in a family-owned business. Using the market approach, based on public companies, we estimated the value of the company to be about \$75 million. Using the income approach, we estimated the value of the company at about \$125 million. After spending a considerable amount of time trying to reconcile these values, we realized that the publicly traded companies were selling at very low multiples, despite having solid growth expectations. The market was undervaluing these companies. In fact, the investment banking firms that follow this industry had strong buy recommendations for the public comparables. This means that the intrinsic value of the public companies was greater than the market value. While we were doing a critique of the opposing side's valuation (who only used the market approach to value the business), we reread *Valuing a Business*.

It is truly amazing how much we learn by rereading books that we read on a regular basis. Pratt et al. discuss intrinsic value. On page 31, they explain the following about intrinsic or fundamental value.

### *Intrinsic or Fundamental Value*<sup>14</sup>

*Intrinsic value* (sometimes called *fundamental value*) differs from investment value in that it represents an analytical judgment of value based on the perceived characteristics inherent in the investment, not tempered by characteristics peculiar to any one investor, but rather tempered by how these perceived characteristics are interpreted by one analyst versus another.

In the analysis of stocks, *intrinsic value* is generally considered the appropriate price for a stock according to a security analyst who has completed a *fundamental analysis* of the company's assets, earning power and other factors.

***Intrinsic Value.*** The amount that an investor considers, on the basis of an evaluation of available fact, to be the "true" or "real" worth of an item, usually an *equity security*. The value that will become the market value when other investors reach the same conclusions. The various approaches to determining intrinsic value of the finance literature are based on expectations and discounted cash flows. See *expected value; fundamental analysis; discounted cash flow method*.<sup>15</sup>

***Fundamental Analysis.*** An approach in security analysis which assumes that a security has an "intrinsic value" that can be determined through a rigorous evaluation of relevant variables. Expected earnings is usually the most important variable in this analysis, but many other variables, such as dividends, capital structure, management quality, and so on, may also be studied. An analyst estimates the "intrinsic value" of a security on the basis of those fundamental variables and compares this value with the current market price of this security to arrive at an investment decision.<sup>16</sup>

The purpose of security analysis is to detect differences between the value of a security as determined by the market and a security's "intrinsic value"—that is, the value that the security *ought* to have and will have when other investors have the same insight and knowledge as the analyst.<sup>17</sup>

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<sup>14</sup> Shannon P. Pratt, Robert F. Reilly, and Robert P. Schweihs, *Valuing A Business*, 4th ed. (New York, NY: McGraw-Hill, ©2000). Reprinted with permission of The McGraw-Hill Companies.

<sup>15</sup> W.W. Cooper and Yuri Ijiri, eds., *Kohler's Dictionary for Accountants*, 6th ed. (Englewood Cliffs, N.J.: Prentice Hall, 1983), 85.

<sup>16</sup> *Ibid.*, 228.

<sup>17</sup> *Ibid.*, 228.

If the market value is below what the analyst concludes is the intrinsic value, the analyst considers the stock a “buy.” If the market value is above the assumed intrinsic value, the analyst suggests selling the stock. (Some analysts also factor market expectations into their fundamental analysis.)

It is important to note that the concept of intrinsic value cannot be entirely divorced from the concept of fair market value, since the actions of buyers and sellers based on their specific perceptions of intrinsic value eventually lead to the general consensus market value and to the constant and dynamic changes in market value over time.

Case law often refers to the term *intrinsic value*. However, almost universally such references do not define the term other than by reference to the language in the context in which it appears. Such references to *intrinsic value* can be found both in cases where there is no statutory standard of value and in cases where the statutory standard of value is specified as *fair value* or even *fair market value*. When references to *intrinsic value* appear in the relevant case law, the analyst should heed the notions ascribed to that term as discussed in this section.

As you can see from the above definition, Pratt et al. indicate that “the various approaches to determining intrinsic value in the finance literature are based on expectations and discounted cash flows.” Clearly, expected earnings are of critical importance, but other variables such as dividends, capital structure, management quality, and so on, are also considered in a fundamental analysis. What is striking is that Pratt et al. state, “If the market value is below what the analyst concludes is the intrinsic value, the analyst considers the stock a ‘buy.’” This is exactly what takes place when an investment banking firm gives a strong buy recommendation on a company’s stock. If the market price of these stocks is low enough to warrant this type of recommendation, using multiples (discussed in chapter 7), without proper adjustment, may undervalue the subject company.

## HOW THE PURPOSE OF THE VALUATION INFLUENCES THE STANDARD OF VALUE

There should be little doubt that the purpose and function of an appraisal will have a dramatic influence on the standards of value that may be applicable in a particular assignment. Table 4.1 highlights how the purpose and standard of value relate to each other.

<b>Valuation Purpose</b>		<b>Applicable Standard of Value</b>
Estate and gift taxes	☞	Fair market value
Inheritance taxes	☞	Fair market value
Ad valorem taxes	☞	Fair market value
Employee Stock Ownership Plans (ESOPs)	☞	Fair market value
Financial acquisitions	☞	Fair market value
Stockholder disputes	☞	Fair value (in most states)
Corporate or partnership dissolutions	☞	Fair value (in most states)
Going private	☞	Fair value (in most states)
Strategic acquisitions	☞	Investment value
Buy-sell agreements	☞	Whatever the parties agree to
Marital dissolutions (divorce)	☞	No specific standard in most states; look to case law
Financial reporting	☞	Fair value



 **Author's Note**

Throughout this book, unless otherwise noted, fair market value will be the standard of value applicable to the valuation methodologies discussed.

## IRS INFLUENCE ON APPRAISALS

When most people think about the IRS, they think of April 15. Believe it or not, the IRS does more than just pick our pockets at tax time. Because so many appraisals are performed for tax-related matters, the IRS is actively involved in business valuations. Many appraisals are performed that may ultimately be used to defend a position before the IRS. Valuation analysts need to be familiar with the various IRS promulgations that may also be applicable, by reference, to other types of appraisals.

The following summary of the key IRS revenue rulings and procedures is intentionally brief because the important stuff will be highlighted throughout this book. Many of these rulings and procedures are included in their entirety as appendixes.

### REVENUE RULING 59-60

Revenue Ruling 59-60 is probably the greatest treatise ever issued on valuation. It is almost hard to believe that something this good came out of our government. It's even better than the first two editions of this book! This ruling started out providing guidance on the minimum factors to consider for one to perform a competent valuation for estate and gift tax purposes. Its application was subsequently expanded to other tax matters. After you read this revenue ruling, reread it! After that, I suggest that you get into the habit of rereading it on a regular basis. This ruling not only contains good stuff, but also really emphasizes what the valuation process is all about.

Revenue Ruling 59-60 has so many important factors that you will see references to it throughout this book. One of the most important points made in the ruling is that "valuation is a prophecy as to the future." Even in 1959, the Treasury Department recognized that a willing buyer purchases the future, not the past. This may seem pretty logical, but there are an awful lot of individuals who regularly rely on history to perform appraisals because they feel that forecasting the future is too speculative. If you believe that history is more important than the future in valuing a business or an investment, can I interest you in buying some stock in Enron?

Revenue Ruling 59-60 is also well known in the appraisal field for its discussion of the eight factors to consider, as a minimum, in valuing closely held businesses. Throughout much of this book, I will be discussing the eight factors to consider. If you learn nothing else, you must know and understand these eight factors. Consideration of these factors is required if you are going to perform a competent business valuation. Even though you will see these again and again, let's start the learning process by letting you see these factors for the first time. If you are like me, you need acronyms to help you remember some of this stuff. So, in this book, I am going to give you a few. Let's start here.

When determining the fair market value of a business or business interest, the valuation analyst should consider NEBEDISM (box 4.2). The applicability of NEBEDISM will be discussed in many of the methods of valuation that you will read about. I will point them out as we proceed. When you reread chapter 2, and you should do this, at a minimum, when you get to the end of this book, you will find that the standards require us to consider these factors in the development stage of the process and report on them in a detailed report. Chapter 13 contains an annotation of this important document, which is also reproduced in appendix 7.

### REVENUE RULING 65-192

Revenue Ruling 65-192 modifies Revenue Ruling 59-60 by providing that the theory in Revenue Ruling 59-60 is applicable to income and other taxes, as well as to estate and gift taxes. This revenue ruling also indicates that the formula approach described in Appeals and Review Memorandums (ARMs) 34 and 68 has no valid place in valuing a business or business interest unless the intent is to value the intangibles. The ruling states that even then, the formula approach should not be used if there is a better basis for valuing the intangibles. This revenue ruling was superseded by Revenue Ruling 68-609, which reiterates these points. See appendix 8.



**Box 4.2 NEBEDISM Factors for Determining Fair Market Value**

- (N) The nature of the business and history of the enterprise since its inception
- (E) The economic outlook in general and the condition and outlook of the specific industry in particular
- (B) The book value of the stock and the financial condition of the business
- (E) The earning capacity of the company
- (D) The dividend-paying capacity of the company
- (I) Whether the enterprise has goodwill or other intangible value
- (S) Sales of the stock and the size of the block of stock to be valued
- (M) The market price of stocks of corporations engaged in the same or a similar line of business and having their stocks actively traded in a free and open market, either on an exchange or over the counter\*

\* Revenue Ruling 59-60, 1959-1 C.B. 237, Sec. 4(01).

**REVENUE RULING 65-193**

Revenue Ruling 65-193 modifies Revenue Ruling 59-60 by deleting several statements about the separation of tangible and intangible assets. See appendix 9.

**REVENUE PROCEDURE 66-49**

Revenue Procedure 66-49 is to be used as a guideline by all persons making appraisals of donated property for federal income tax purposes. It also provides additional insight into what is expected to be included in a formal appraisal report that is used to support the values determined by the valuation analyst.

This revenue procedure discusses factors to consider in arriving at the fair market value of the property. It states that “as to the measure of proof in determining the fair market value, all factors bearing on value are relevant including, where pertinent, the cost, or selling price of the item, sales of comparable properties, cost of reproduction, opinion evidence and appraisals. Fair market value depends upon value in the market and not on intrinsic worth.” See appendix 10.

**REVENUE RULING 68-609**

Revenue Ruling 68-609 covers what is known as the *formula approach* or *excess earnings method* of appraisal. This is the successor to ARM 68. For most valuation analysts, this revenue ruling has become our nemesis. It is so frequently misapplied that even the IRS states that this method should not be used if there is a better method to value the intangible assets of the appraisal subject. This is similar to the language found in Revenue Ruling 65-192.

First, how about a little history lesson? I’ll bet you did not expect history in a valuation book. Anyway, ARM 34, the predecessor to ARM 68, was promulgated in 1920. What happened in this year? Prohibition, that’s what. As a result of Prohibition, the Treasury Department needed to provide a methodology to help calculate the lost value attributable to the intangible assets of breweries and distilleries. Actually, because the government employees, like so many of us “normal” folks could not drink, they came up with guidance on valuation. They probably would have been better off being drunk!

The ruling discusses the return on tangible assets and capitalization rates for intangibles. (Please note that the rates provided in Revenue Ruling 68-609 are examples only and are not intended to be the only rates used in the application of this methodology.) A detailed discussion of this revenue ruling appears in the discussion of the excess earnings method in chapter 10. See appendix 11.

**REVENUE PROCEDURE 77-12**

Revenue Procedure 77-12 describes the acceptable methods for allocating a lump-sum purchase price to inventories. This revenue procedure sets forth guidelines for use by taxpayers and IRS personnel “in making fair market value determinations in situations where a corporation purchases the assets of a business containing inventory items for a lump sum, or where a corporation acquires assets including inventory items by the liquidation of a

subsidiary pursuant to the provisions of section 332 of the Internal Revenue Code (IRC) of 1954 and the basis of the inventory received in liquidation is determined under section 334(b)(2).” See appendix 12.

### REVENUE RULING 77-287

Revenue Ruling 77-287 was intended “to provide information and guidance to taxpayers, IRS personnel, and others concerned with the valuation, for Federal tax purposes, of securities that cannot be immediately resold because they are restricted from resale pursuant to Federal security laws.” This revenue ruling covers marketability discounts related to restricted stock. It recognizes the reduced value of closely held stocks as a result of not having an active trading market. Reference is made to “restricted securities” and other types of securities that are issued at a discount from their freely traded counterparts. This reduction in value is known as a *discount for lack of marketability* and is discussed further in chapter 12. See appendix 13.

### REVENUE RULING 83-120

Revenue Ruling 83-120 amplifies Revenue Ruling 59-60 by specifying additional factors that should be considered in valuing the common and preferred stock of a closely held corporation for gift tax and recapitalization purposes. This revenue ruling emphasizes that the value of preferred stock is determined by considering its yield, its dividend coverage, and the protection of its liquidation preference. See appendix 14.

### REVENUE RULING 85-75

Revenue Ruling 85-75 basically provides that the IRS will not be bound to accept values that it accepted for estate tax purposes as the basis for determining depreciation deductions or income taxes on capital gains from a subsequent asset sale. In this particular instance, a taxpayer relied on a valuation of depreciable property that was overstated for estate tax purposes. Because the IRS did not play “gotcha” on the estate tax return, they got their second chance on the beneficiary’s individual return. See appendix 15.

### REVENUE RULING 93-12

Revenue Ruling 93-12, which supersedes Revenue Ruling 81-253, allows appropriate minority discounts to be applied when minority interests of family members in a closely held corporation are valued. Formerly, the IRS looked to family attribution rules as a means to disallow these minority discounts. Revenue Ruling 81-253, which described the IRS’s position on the allowance of minority discounts in valuing a closely held family corporation’s stock that has been transferred to the donor’s children for federal gift tax purposes, was superseded by Revenue Ruling 93-12. Previously, the IRS’s long-standing position was that no minority discount should be allowed when a gift of minority shares was passed between family members. It was not a surprise that the IRS finally acquiesced on this point, because they constantly lost this battle in court.

Fair market value assumes any willing buyer, not the actual recipient of a gift. Therefore, even though a gift may be given to a taxpayer’s child, the block should be valued without regard to the family relationship. Unfortunately, the IRS did not see things this way until 1993, when they issued Revenue Ruling 93-12. Revenue Ruling 93-12 was a long time coming in light of the IRS’s inability to win cases involving Revenue Ruling 81-253. Do not get too comfortable, however, until you read Technical Advice Memorandum 94-36005. See appendix 16.

### TECHNICAL ADVICE MEMORANDUM 94-36005

In 1994, the Treasury Department issued Technical Advice Memorandum 94-36005, which discusses the concept of applying a “swing premium” in a case where a gift of a minority interest among family members creates a swing vote among the stockholders. This was the Treasury Department’s effort to circumvent Revenue Ruling 93-12, in which they finally acquiesced regarding minority discounts among family members. This technical advice memorandum does not have the same weight as a revenue ruling, but it shows that the Treasury Department is looking for ways to circumvent Revenue Ruling 93-12. Nobody really believed that they would give up on Revenue Ruling 81-253 that easily! This memorandum appears in appendix 17.

## CHAPTER 14 OF THE IRC

Readers are advised to become familiar with the chapter 14 requirements of the IRC. Some of the more important provisions are covered in chapter 16 of this book in the discussion of estate and gift tax valuations.

## CONCLUSION

If I did my job, you now have more of an idea about the principles of appraisal, standards of value, and the various promulgations of the IRS. By now, you must realize that the IRS has had a significant impact on the valuation process. Although you are bound to follow the mandates of the IRS only for valuation assignments that involve taxes, some of these revenue rulings make enough sense that it is actually good practice to follow them in most valuations.



# CHAPTER 5

## *Data Gathering*

### CHAPTER GOALS

In this chapter, I will attempt to

- Explain which items have an impact on value.
- Discuss internal information sources for gathering data.
- Discuss external information sources for gathering data.
- Inform you about some print and electronic data sources.

Let me caution you that the information contained in this chapter changes faster than I can write about it. As far as I know, this stuff was current when it was written. I will apologize in advance if you go to look for something and you can no longer find it, or it has significantly changed. That is even beyond my control. With that said, let's get started.

### INTRODUCTION

Chapter 5 includes a discussion of internal and external sources of information that will be gathered by the valuation analyst. Numerous references are provided about where you can locate information. This chapter lists all types of neat sites on the Internet for doing the required research.

### WHAT ITEMS AFFECT VALUE?

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An important part of the valuation assignment is to determine the proper amount of information necessary to do the job competently. The information-gathering part of the assignment will generally require the valuation analyst to demonstrate knowledge about the subject company and the factors affecting its value. Both internal and external factors affect the value of a business or business interest. During the information-gathering step of the appraisal process, a variety of information will be requested by the valuation analyst.

### INTERNAL INFORMATION

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Internal information obtained during the data-gathering process will consist of both nonfinancial and financial information. Each type of information will play an important role in the valuation process. The valuation analyst should consider the nonfinancial information to be as important as, and in some instances more important than, the financial information. Too often, a telephone call comes in from the attorney who states, "I got you five years of tax returns and financial statements. Can you give me the value?" After you stop laughing, the attorney should be told, "Of course I can give you the value, but not until I get the other 47 things that are on my checklist." Although not every job will require 47 other items, there will always be more information needed.

### NONFINANCIAL INFORMATION

Nonfinancial information may be gathered through a document request, a management interview, or independent research by the valuation analyst. Some of the more important information that the valuation analyst should gather includes the following:

- Form of organization and ownership of the business
- Products and services
- Markets and marketing
- Physical facilities
- Equipment
- Personnel
- Other stuff

## Form of Organization and Ownership of the Business

The form of ownership is an important component of the business valuation process because, during the appraisal process, the valuation analyst will have to consider the comparability of information obtained about either other companies (known as *guideline companies* or, previously, *comparables*) or industry composite data. Good comparability must be maintained to ensure the quality of the data that will be used for comparison purposes during the appraisal process.

Another reason to know the form of organization is that the legal rights applicable to the interest being valued must be considered by the valuation analyst for the determination of possible restrictions that apply to the subject company or the owners. For example, a minority owner in a corporation normally does not have the ability to force the liquidation of a corporation. Therefore, that minority interest will most likely be valued using an approach that is not based on the value of the assets. On the other hand, a minority interest in a partnership is controlled by the Uniform Partnership Act, which states that any partner who withdraws from the partnership can cause a winding down and dissolution of the partnership, thus providing him or her with the ability to obtain the proportionate share of the proceeds from the partnership's dissolution.

The ownership of the business is also important, because the valuation analyst will need to assess considerations such as control, minority, or swing vote issues. This can be illustrated by considering the value of a 2 percent interest in a company. If there are 50 owners with a 2 percent interest in the company, each 2 percent interest would probably be worth very little. However, what if the 2 percent interest were to be valued when the other owners each own 49 percent? The 2 percent interest could have swing value, which could be very valuable to one of the other owners because it would give one of them control of the company. This could cause a premium to be associated with the 2 percent interest.

Let me give you another example of a real-life situation where the rights of ownership can affect value. Years ago, I had the occasion to value a 1.6 percent beneficial interest in a trust for the IRS. Well, in that same job, the trust owned a 90 percent interest in a closely held investment holding company that owned, among other things, a 47.3 percent block of a thinly traded public company (*thinly traded* means that there are not too many shares trading on any given day). Since the stock was thinly traded, the valuation analyst who represented the taxpayer deducted a blockage discount (this will be discussed in more detail in chapter 12, but in the meantime, a blockage discount is a reduction in value because it will take a long time to sell). When I first received the assignment, I asked the attorneys for the IRS for a copy of the bylaws of the public corporation so that I could see what rights, if any, were spelled out in this legal document. I was told that they would get the document for me, but until they did, because the company was incorporated in the state of Delaware, I should assume that a simple majority constitutes a controlling interest. By the way, the second largest block of stock (8 percent) was owned by the trustee of the trust that I was valuing an interest in. Got it so far? This is the type of assignment that you either live for or die doing. Anyway, because the 47.3 percent interest in this public company had effective control (all they really had to do was show up to a stockholders meeting and they would carry the vote), and because the trustee owned the next largest block of stock, I took the position that the prudent thing for the board of directors to do was to find someone to purchase the company because it was undervalued according to my intrinsic analysis.

To make a long story short, I added a control premium to the publicly traded value instead of taking a blockage discount. To put things into perspective, the difference in value between my valuation and the other valuation analyst for the publicly traded stock alone was \$150 million. So where am I going with this story? A week before I was getting ready to testify in Tax Court, I received a phone call from the attorney for the IRS. He said, "I finally tracked down those bylaws that you asked me for (three months ago!). Let me read something to you and see if it changes anything that you have done." I knew I was in trouble. The bylaws were from 1896 and had not been

updated. They required an 80 percent supermajority to sell, liquidate, or merge the company. I said, “Settle the case.” The rights of the shareholders made a difference of about \$150 million in this case.

## Products and Services

It is generally a good idea to understand information about the products and services that the appraisal subject sells to its customers. Besides the fact that you need to know this information to select guideline companies, it is also imperative that the valuation analyst understand information about factors that affect these products and services. For example, how do changes in the economy affect the demand for the products? A rise in interest rates would certainly have an impact on an automobile dealership. In fact, rising interest rates will cause new car sales to go down. However, rising interest rates will also cause people to keep their cars for a longer amount of time, thereby requiring more maintenance. That could cause the repair bays to become busier. It is also important to understand what alternative products are available in the marketplace to assess the future success of the products. If you were appraising a company that sold an electronic rolodex and did not have the ability to sell other personal digital assistants (PDAs), for example, BlackBerrys, the likelihood that the company would continue to be successful in the future is slim, because everyone and their mothers now own PDAs.

## Markets and Marketing

Part of the valuation process includes understanding the markets served by the appraisal subject. Geographic diversification frequently does not exist for very small businesses. However, understanding the market for the products or services allows the valuation analyst to assess the degree of risk relevant to the lack of diversification. Understanding the market will also allow the valuation analyst to determine if there are alternative products in the marketplace that will have an effect on the subject company. Keep in mind that even smaller businesses are now able to diversify geographically, particularly with the Internet as a resource.

The marketing efforts of the subject company should also be considered, because a large, visible company in the market will frequently attract more new customers than an obscure company that the public has never heard of.

## Physical Facilities

Factors to be considered in a business valuation assignment include information about the physical plant. This information would pertain to the plant's size and whether it is owned or rented, as well as the amount of room available for expansion. The valuation process requires the use of projections, which must consider whether the facilities are large enough to meet the expected production forecasts. If a plant is at full capacity and management provides the valuation analyst with forecasts that include significant growth, how can that growth be achieved without either expanding the current facilities or relocating to larger quarters? Either way, there will be an additional expense incurred by the company if it is to meet its expansion projections.

## Equipment

It is generally a good idea for a valuation analyst to learn about the equipment that is employed by the business to accomplish its business purposes. Even if an appraisal of the equipment is unnecessary, the valuation analyst should find out information about the type of equipment used, the age of the equipment, its capacity, its maintenance schedules, the availability of parts, and its approximate replacement cost. The valuation analyst should also inquire about whether there is newer technology being used by the competition.

Older equipment usually means higher maintenance costs and a lower level of productive capacity. This could be an essential component of a cash flow forecast, because asset replacement can be costly. Older equipment could mean difficulty in getting parts and service, which could force the replacement of equipment, creating a financial hardship for the company. However, there are many companies that can continue to use older equipment for a long time without a problem. These companies generally have a well-established maintenance schedule, and by examining the equipment you can generally tell whether it is regularly maintained.

The valuation analyst should ask to review insurance policies to get an idea of the amount of coverage the company is carrying so that the valuation analyst can “ballpark” the replacement cost of these assets. The valuation analyst should also make certain that these policies have been kept up to date. Otherwise, the company may be



exposed to an additional risk attributable to the replacement of the equipment in the event of a loss. This should be self-explanatory, but let me give you a true example. I just finished a management interview and discussed with management the fact that they received a \$3.2 million insurance settlement as a result of Hurricane Wilma. Since then, the company's insurance premiums had risen so much that they had to lower the coverage to \$1.0 million. Think about the added exposure that the company has in the event of another hurricane. While the valuation analyst does not necessarily forecast hurricanes, the business is in Florida (home of the hurricanes—and I do not mean the type you drink!).

## Personnel

The valuation analyst should seek information about the personnel requirements of the company. This includes gaining an understanding of the role of key persons in the company. In smaller companies, the owner is frequently the key person. The valuation analyst must determine what it would take to replace that individual with someone who is capable of getting the job done. Sometimes this may take two or more people. Other times, it may take people with different skills from those the owner has.

For example, in appraising an internal medicine practice, the valuation analyst may find that the doctor does not trust anyone in his or her office to do the bookkeeping. Therefore, the doctor performs this function in addition to all of the duties of being a doctor. What if the doctor is turning away new patients due to a lack of time because the bookkeeping is taking up 10 hours per week? The valuation analyst would consider replacing the doctor not only with another doctor but also with a part-time bookkeeper, which would allow the new doctor to spend the additional 10 hours seeing new patients. You are probably asking yourself, "What kind of doctor would do this?" If I had not seen this in reality, I could not have provided you with this example!

## Other Stuff

The valuation analyst should pay particularly close attention to other items that may exist for the appraisal subject. These may include, but should not be limited to, operating data about the company's products, competitors, suppliers, and customers so that you can demonstrate a clear understanding of the appraisal subject. These items will help you make a determination regarding the risk involved in the subject company's business. For example, few products, many competitors, high employee turnover, few sources of supply, and dependence on key customers add up to a lot of risk. This will affect value.

Other stuff can include information about patents, copyrights, proprietary processes, pending litigation, and environmental exposure. These items will either increase or decrease the value of a company, depending on the competitive advantage or disadvantage that may come with these items. Sometimes a valuation analyst will find that the competition holds an important patent in the field, and therefore, breaking into the field may be impossible without different technology. All of these situations should be considered during the valuation process.

If the valuation is for an employee stock ownership plan (ESOP), make sure you get a copy of the plan documents so that you fully understand the terms. This will have an impact on marketability discounts, as well as on other factors affecting your valuation. Since most small and medium-sized businesses do not have ESOPs, I have not included a discussion about them in this book.<sup>1</sup>

Legal documentation (including copies of legal contracts and agreements affecting the company) should also be obtained. This will allow the valuation analyst to determine if there are any restrictions on the operations of the business, any restrictions on the owners, or any commitments that will require the company to perform in a certain manner that can affect operations in the future. You saw what a difference it made in my IRS job. Find out if there are any lawsuits against the company, either pending or threatened. A lawsuit may affect the financial success of the company and should be considered as a risk factor even if it cannot be quantified.

Exhibit 5.1 provides a sample section of a report showing how this information can be used.

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<sup>1</sup> For more information about employee stock ownership plans (ESOPs), you can see Willamette Management Associates, *Guide to ESOP Valuation* (self published); Larry Cook, *Financial Valuation of Employee Stock Ownership Plan Shares* (John Wiley & Sons); The National Center for Employee Ownership, *ESOP Valuation*, 3<sup>rd</sup> ed.; or you can take an excellent ESOP course offered by the American Society of

**EXHIBIT 5.1**  
**HISTORY AND NATURE OF THE BUSINESS**

Mechanical Products Company, Inc. (Mechanical or the company), a New Jersey Corporation, was started by Carl M. Jackson who received his mechanical engineering degree at Rose Polytechnic Institute in Terre Haute, Indiana through the G.I. Bill following WWII. After receiving his BSME, Mr. Jackson worked for Schraeder and Sons, a valve manufacturer located in New York City. While there, he conceived of an alternative way of designing a pneumatic valve, which he shared with management of that company. Their lack of interest is what prompted Mr. Jackson to open Mechanical.

Mr. Jackson convinced his brother-in-law, Karl L. Johanson, a toolmaker and machinist, to join the company. He also convinced Howard Brown, a product tester and Adrian Hall, a draftsman, both from Schraeder and Sons, to join the venture. To help finance the company, Mr. Jackson approached Frank Zeiler, Sr., who also worked for Schraeder and Sons as the sales manager. Mr. Zeiler was intrigued by Mr. Jackson’s idea and agreed to provide \$15,000 to launch the company. The original stockholders were Messrs. Jackson, Johanson and Brown, as well as Mr. Zeiler’s two sons, Frank Jr. and Robert. The five founders were all owners of Mechanical who continued to work for other companies and contributed part of their salaries for materials and equipment.

By 1949, Mr. Jackson had resigned from Schraeder and Sons to devote his full time to the company, which was officially incorporated that year in New York. The other members of the team continued to work outside the company, and worked evenings and weekends to produce the new products for sale. At first, the company was operated out of Mr. Brown’s garage in Queens, NY, but soon moved to a larger facility in Brooklyn. By the mid-1950s, more people joined the company as full time employees including Messrs. Johanson and Brown.

The big break for Mechanical came in the early 1950s when Valvair, an established and respected manufacturer of pneumatic valves, decided to cancel all of its distribution contracts and sell directly to customers. As a result, Mechanical was able to sign on its first seven distributors and secure a way to market.

The challenges of producing the product were paramount. Old and worn equipment was all that could be afforded, making it difficult to successfully and cost-effectively produce the valves. Mr. Johanson was able to negotiate terms for the company’s first sand casting mold and subsequent parts through creative financing. The company’s material acquisition philosophy has always been to purchase the vast majority of components, while utilizing its manufacturing capabilities to introduce new product lines, to produce custom products, and to act as a safeguard when a manufacturer is unable to meet its needs.

By 1960, production outgrew the available space in Brooklyn and Mechanical purchased a 12,500 square foot building in Some City, NJ. The company continued to grow in numbers of employees, distributors, and product line offerings, and by the late 1960s, the building was doubled in size. Growth continued, and in late 1980, Mechanical moved to a 50,000 square foot building located at 123 Main Road in Another City, New Jersey, where it continues to operate today.

On March 18, 1984, the company incorporated in the State of New Jersey. The Certificate of Incorporation authorized 12,000 shares of stock; itemized as follows:

<b>Class</b>	<b># Shares</b>	<b>Par Value Per Share</b>
6% Cumulative Preferred Stock	2,000	\$2,000.00
Class A Common Stock	5,000	1.00
Class B Common Stock	5,000	None

The Certificate of Incorporation lists the preferences, rights, qualifications, limitations, and restrictions of the three classes of stock. On July 19, 1992, the Certificate of Incorporation was amended replacing the third article, which

*(Continued)*

**EXHIBIT 5.1** (Continued)

described the rights and restrictions of the three classes of stock. Some of the terms of the amended certificate are as follows:

- The dividend rate on the preferred stock is \$120 per share per year.
- In the event of any dissolution, liquidation, or winding up of the affairs of the Corporation, voluntarily or involuntarily, the holders of the Cumulative Preferred Stock shall be entitled to receive out of the assets of the Corporation an amount equal to ONE THOUSAND THREE HUNDRED THIRTY-THREE DOLLARS (\$1,333.00) per share, together with the amount of any and all dividends unpaid and accumulated thereon, including interest, before any distribution shall be made to the holders of the Class A Common Stock and Class B Common Stock. The holders of the Cumulative Preferred Stock shall not be entitled to receive any other distributions upon liquidation, dissolution, or winding up of the affairs of the Corporation other than the distributive amount referred to in this paragraph.
- The holders of the Class A Common Stock and the Class B Common Stock shall be entitled to receive a minimum guaranteed annual dividend equal to the greater of the following:
  - (1) The lesser of NINETY THOUSAND DOLLARS (\$90,000.000) or the total of net income after taxes *minus* Preferred Stock Dividends paid by the Corporation.
  - (2) An amount equal to twenty (20%) percent of Adjusted Net Income After Taxes (as hereinafter defined).  
The calculation of Adjusted Net Income After Taxes shall be according to the following formula, namely:

$$X - Y = Z$$

X = Net income before taxes, *plus* profit sharing allotment

Y = Taxes calculated on X, and

Z = Adjusted Net Income After Taxes

- The holders of the Class A Common Stock shall have the exclusive voting power so long as a minimum of One Thousand Eight Hundred Seventy-Five (1,875) shares of Class A Common Stock are outstanding and held by the original owner of same. In that event, each such holder of Class A Common Stock shall have one (1) vote for every share of such stock standing in his name on the books of the Corporation.
- The holders of the Class B Common Stock shall have no voting power so long as at least One Thousand Eight Hundred Seventy-Five (1,875) shares of originally issued (12/31/83) Class A Common Stock are outstanding. From and after the date upon which less than One Thousand Eight Hundred Seventy-Five (1,875) shares of the aforesaid Class A Common Stock shall be outstanding as provided above, the voting power at all meetings of shareholders shall become vested in the original living holders of Class A Common Stock as above described and Class B Common Stock and shall so remain thereafter. Every holder of Class B Common Stock shall have one (1) vote for every share of such stock standing in his name on the books of the Corporation so that Class A and Class B Common Stock shall each have one (1) vote for each share of stock outstanding.

Also on June 11, 1992, a stock purchase agreement was executed by and among Mechanical Products Company, Inc.; Karl L. Johanson; Frank E. Zeiler; and Robert Zeiler. This document replaced an agreement that was executed on November 7, 1980. The agreement states

WHEREAS, the parties have agreed that the sale and disposition of the stock interests of said shareholders in the Corporation should be restricted during their lives and that upon the death of any Shareholder, the Corporation should be obligated to purchase the stock of such deceased Shareholder in accordance with the terms and conditions as hereinafter more particularly set forth;

The agreement provides for sales during both life and death of the shareholder. During life, the stockholder must first offer the shares to the corporation, which has 60 days to decide if it wishes to purchase the stock. If the corporation does not purchase the shares within 60 days, they must be offered to the other shareholders who have a 30 day option. The shareholder then has the ability to offer the shares to a third party at no more favorable price or terms than those offered to the corporation or its shareholders.

## EXHIBIT 5.1

If the corporation or other shareholders purchase the shares, the price per share will be \$1,067 per share or a later value set forth in Schedule C of the agreement. In addition to the terms above, a shareholder is permitted to transfer his Class A common shares to a trust for the benefit of the shareholder, his spouse, or children.

With regard to the preferred stock, it can be transferred to a spouse, children, or a trust. However, if the stock is not transferred to a family member or trust, it must be offered to the corporation for \$1,333 per share and the offer must remain open for 30 days. If the corporation does not purchase the shares, it can be offered to a third party for 180 days. Upon the death of a shareholder, the corporation is obligated to purchase and the estate is obligated to sell the Class A common shares at \$1,067 per share or a value set forth in Schedule C of the agreement.

The beneficiary of the preferred stock has the unilateral option to have the corporation purchase the preferred stock for \$1,333 per share. This option is good for one year from the date of death.

The corporation purchased life insurance policies on the stockholders' lives to help pay for the stock in the event of death.

According to the agreement, there are no restrictions on the sale or transfer of the Class B common stock.

### PRODUCT DEVELOPMENT OVERVIEW

The first valves designed and manufactured by Mechanical were 2, 3, and 4-way brass valves. Side-ported versions came first followed by a manifold mounted design. The original product was manufactured using sand castings, although by the mid 1950s, Mechanical tooled for forgings instead of castings which had a better finish and look.

By 1960, the valves were made in different sizes with many different options from solenoids to pilots to manual actuation. Valves were also being made from aluminum in addition to brass.

In the late 1960s, Mr. Jackson designed a modular, highly configurable product line; an erector set for valves, both pneumatic and low pressure hydraulic. This was a groundbreaking design and helped promote Mechanical's name and reputation in the marketplace.

As the oil and gas crisis of the 1970s arose, the opportunities for servicing that sector of the marketplace surfaced; this began the design of stainless steel valves. Applications for these products included offshore oil platforms as well as other harsh environmental applications in other industries. Mr. Jackson frequently met with customers in this new and emerging market to make sure that Mechanical had the right product for the right application. In the 1990s, oil and gas and process control sales grew to equal amounts in the industrial marketplace.

Product development continues today as Mechanical's "erector set" of products is expanded to meet new market opportunities and technology changes. The company has expanded into development of several solenoid options, lower cost aluminum valves to meet the cost pressures of the market, and additional accessories such as quick exhaust valves and shuttle valves. All products carry a 10-year warranty against defects in material and workmanship.

In the early years, patents were obtained for the anti-extrusion principle developed by Mr. Jackson. Today, Mechanical has trademark protection on certain products, although the patents have expired.

### SALES AND COMPETITION

From the initial distributors gained through Valvair's decision to sell direct, Mechanical developed a network of distributors that now includes approximately 50 separate distributors representing the company's product line worldwide.

In the early years, the company's business opportunities were primarily centered in the industrial marketplace. However, with the introduction of stainless steel product lines, Mechanical migrated into the oil and gas and process control markets. Today, Mechanical's business is approximately 40 percent oil and gas, 30 percent process, and 30 percent industrial.

Mechanical also sells to a broad base of diversified end-users. The largest end-user customer is a turbine manufacturer that accounts for approximately 3 percent of the company's revenues.

*(Continued)*

**EXHIBIT 5.1** *(Continued)*

Today, the company focuses heavily on participation in trade shows to promote its products. Mechanical participates in the Oil Technology Conference, the Offshore Norway show, the Offshore Europe show, ISA, the Chem show, and the Louisiana Gas and Oil Expo. In addition, Mechanical attends shows with its distributors to promote the distributor's services and Mechanical's products.

Most of Mechanical's competitors in the oil and gas market are relatively small niche players who mostly focus on that marketplace (Company 1, Company 2, Company 3, and Company 4). Process control competitors (Company 5, Company 6, Company 7, and Company 8) are also narrowly focused, while the competitors in the industrial market are often very large conglomerates (Company 9, Company 10, and Company 11) with many diversified subsidiaries.

Unlike its competitors, Mechanical is very committed to streamlining its product line with castings and forgings. Management recognizes the initial costs of doing this, but believes this is what differentiates Mechanical within the marketplace and in the long run, best serves its customers by ultimately producing better quality, longer lasting products.

**MECHANICAL B.V.**

In the mid 1960s, Mechanical embarked on a new venture by joining forces with the Jones Company, an import and export business located in Connecticut, to establish a satellite facility in Apeldoorn, The Netherlands. Mechanical owned 75 percent of the operation where its products were manufactured and assembled. Mechanical B.V. owned a building and employed about 20 to 25 people at its peak. It initially serviced all distribution outside of North America. Mechanical purchased the outstanding 25 percent share in Mechanical B.V. from Jones in 2000. Manufacturing at Mechanical B.V. was discontinued in 2002 when the US operation was reorganized and became capable of supporting all production needs for international and North American sales. Today, three employees staff a technical and commercial support center for Mechanical B.V. in Apeldoorn, which provides Mechanical with an international presence while maximizing use of talent in both facilities.

**MANAGEMENT AND OWNERSHIP**

From the early 1950s until 1980, the ownership of Mechanical was divided five ways with Mr. Jackson, Mr. Johanson, and Mr. Brown each owning 25 percent, while Messrs. Frank Zeiler Jr. and Robert Zeiler each owned 12.5 percent. During this entire period, Mr. Jackson served as the president of the company.

Mr. Brown retired from Mechanical in the early 1970s, and Robert Zeiler worked for the company starting in the 1960s. In April 1980, Mr. Johanson retired from Mechanical. Less than six months later, Mr. Jackson decided to retire and asked the shareholders to honor the buy and sell agreement and purchase his 25 percent share in the company at the agreed upon price. The shareholders reluctantly accepted Karl's resignation and redeemed his stock per the agreement.

With no owner present in a management position, Mr. Johanson agreed to come back as the president to run the company. It was a financially difficult time for the company as it owned three buildings, was buying out Mr. Jackson, and there was an economic downturn due to the oil and gas crisis. Mr. Brown passed away in 1986 leaving only three shareholders, Messrs. Johanson, Frank Zeiler Jr., and Robert Zeiler. In addition to Mr. Johanson's role as the president, Robert Zeiler began assisting the company with literature development and advertising, while also fulfilling the role of Secretary/Treasurer.

About this time, in the early 1980s, the remaining Class A shareholders elected to issue a new class of stock consistent with the provisions of the Internal Revenue Code that provided for an estate freeze. Shares were distributed to each Class A shareholder in proportion to his share of the total outstanding Class A stock. There were no restrictions placed upon the Class A shareholders with respect to whom they could distribute the stock. Initially, 3,750 shares of Class B stock were issued. As of the valuation date, 2,975 Class B shares are outstanding; the balance was repurchased by the company as Treasury Stock. The Class B shares are currently nonvoting.

**EXHIBIT 5.1**

As of the valuation date, the shareholders of Mechanical are as follows:

<b>Preferred Shares</b>	<b># Shares</b>	
Karl L. Johanson	500.00	50.00%
Frank Zeiler Revocable Trust	250.00	25.00%
The Robert Zeiler Living Trust	250.00	25.00%
<b>Total Shares</b>	<b>1,000.00</b>	<b>100.00%</b>
<b>A Shares—Common</b>	<b># Shares</b>	
Karl L. Johanson	1,250.00	50.00%
Frank Zeiler Revocable Trust	625.00	25.00%
The Robert Zeiler Living Trust	625.00	25.00%
<b>Total Shares</b>	<b>2,500.00</b>	<b>100.00%</b>
<b>B Shares—Common</b>	<b># Shares</b>	
Wayne Brown	460.50	15.48%
Ward Brown	360.50	12.12%
Edna Brown	197.00	6.62%
Wayne M. Tte for Ashley	44.00	1.48%
Wayne M. Tte for Douglas	44.00	1.48%
Wayne M. Tte for Nicholas	44.00	1.48%
Jan L. Johanson	1,250.00	42.02%
Lyn Vander	50.00	1.68%
Susan Zeiler	100.00	3.36%
Beth George	100.00	3.36%
The Linda B. Living Trust	325.00	10.92%
<b>Total Shares</b>	<b>2,975.00</b>	<b>100.00%</b>

In the mid 1980s, Frank Verona, a long time member of the Mechanical team, became the Chief Operating Officer of the company with responsibility for operations and sales. Mr. Verona, along with the finance department, reported to Mr. Johanson. In late 1988, Jan Johanson joined the company as Director of Special Projects after 10 years in health-care administration. During the next eight years, the people who had created Mechanical's success for 40 years were approaching retirement age and many new faces appeared in senior management roles.

In 1996, Mr. Verona retired and Ms. Johanson became vice president of the company, responsible for all day-to-day activities. In 2000, she became the President of Mechanical. As of the valuation date, Ms. Johanson remains as Chairperson of the Board.

The management team as of the valuation date consists of the following individuals, all of whom report to Ms. Johanson. Quality control and human resources also report directly to Ms. Johanson.

*(Continued)*



**EXHIBIT 5.1** *(Continued)*

**Jan L. Johanson, President:** Ms. Johanson received her B.S. degree from Trinity College in Hartford, CT in 1976 and a Master's degree in Healthcare Administration from Duke University in 1978. She then spent nine years in various management positions at Thomas Jefferson University Hospital and Temple University Hospital in Philadelphia before joining Mechanical.

**August M. Bush, CPA, Controller and Assistant Secretary Treasurer:** Mr. Bush graduated from Baruch College in New York with a B.S. degree in accounting in 1986. Following college, Mr. Bush joined C.A. Peterson & Co., a public accounting firm in New York City as a staff accountant. His main duties were auditing of public and privately held companies, as well as the preparation of corporate and individual tax returns. He received his CPA license in 1995. Mechanical was one of Mr. Bush's client responsibilities from 1986 until he was hired by Mechanical as the controller in 1996.

**Gerald V. Tragon, Sales and Marketing Manager:** Mr. Tragon received his B.S. degree in Mechanical Engineering from New Jersey Institute of Technology in 1981 and then joined Worthington Company, a pump manufacturer, as a project manager. Mr. Tragon joined Mechanical in 1985 as a regional sales manager. Since 1996, he has been the Director of Sales and Marketing for Mechanical, responsible for product development plans and all outside sales activities internationally including selection and management of the company's distributor network. His engineering background is invaluable in helping him to select product development projects that will best meet the needs of Mechanical's customers. He manages the regional sales staff and coordinates all marketing efforts.

**Peter Harper, Inside Sales Manager:** Mr. Harper received his B.A. degree in political science from Kings College in Pennsylvania in 1982. Following graduation, Mr. Harper started at Mechanical as a customer service representative and then moved into a regional sales position with the company. In 1994, he assumed responsibility for the Inside Sales department and is also the key liaison with the company's second largest distributor, Matco, located in Singapore.

**John Noone, IT Manager:** Mr. Noone received his Bachelor of Fine Arts degree from SUNY Purchase in 1981. He then joined a small IT firm where he learned to program in business BASIC and became knowledgeable about database management. Mr. Noone joined Mechanical in 1985; he has led the IT department since then. He is extremely knowledgeable about the range of processes and systems at Mechanical and is able to translate the departments' information needs into workable and efficient solutions. He is both a business analyst for Mechanical, as well as the champion of establishing and executing the framework for the company's IT philosophy and plans.

**Bahram Ahab, Engineering Manager:** Mr. Ahab received his Master's degree in Mechanical Engineering from Stevens Institute of Technology, Hoboken, New Jersey in 1983. Prior to joining Mechanical, Mr. Ahab worked with manufacturing companies producing home appliances in various disciplines. In addition to the design of new products for global markets, his work also involved interaction with other companies for establishing joint ventures and dealing with suppliers worldwide. Mr. Ahab joined Mechanical in 1998 to manage the Design Engineering Department. As of the valuation date, there are nine team members in his department consisting of engineers, a senior designer, Computer Aided Design (CAD) personnel, a lab technician, a data administrator, and one engineer based in Holland. This department is responsible for designing new products along with maintaining existing products. In addition to managing engineering activities, Mr. Ahab also works closely with the materials manager for locating and inspecting new suppliers in Taiwan and Europe as a drive for cost reduction.

**Nancy Harmon, Materials Manager:** Ms. Harmon attended Rutgers University and received a B.A. degree in business. Ms. Harmon came to Mechanical with over 10 years of a diversified background in materials and plant operations. Her previous positions with Hughes Aircraft, Thomson CSF, Rowe International, and Wallace & Tiernan, have given her a broad background in international and domestic procurement as well as operations management.

**Ron Roberts, Manufacturing Manager:** Mr. Roberts attended Newark College of Engineering, for electrical and mechanical engineering at night while serving a machinist apprenticeship at Balo Precision Parts Company. He moved through the company filling various positions from machine shop manager, manufacturing manager, engineering manager, operations manager to vice president of technology. He joined Coining Technologies in 1997 as its process engineering manager with responsibility for growth of manufacturing and the tool room through acquisitions, equipment upgrades, and process improvements. Mr. Roberts joined Mechanical in 2000 as the manufacturing manager with responsibility for assembly, machine shop, industrial engineering, manufacturing engineering, and facilities maintenance.



## EXHIBIT 5.1

### FUTURE OUTLOOK

Quality in product and customer service still remain Mechanical's priorities as it continues its record of on-time deliveries (99 percent) and short lead times (70 percent of orders ship within five days). Product development initiatives and implementation of a new ERP system to streamline operations are top priorities. In addition, efforts to implement lean manufacturing initiatives throughout operations are paramount.

Mechanical is currently benefitting from high oil prices and activity in the oil and gas marketplace, although it is impossible to know how long this trend will continue. The company's profit margins have increased over the past several years due to sales growth and intense focus on improving material costs through changing manufacturing processes (castings versus bar stock), exploration of new market areas for purchasing material (Taiwan and Italy), and use of newer, more sophisticated machinery within Mechanical. However, the rapidly rising rate of metal prices is expected to offset some of these gains.

## FINANCIAL INFORMATION

The financial information requested will include annual financial statements for a relevant period of years. Most often, five years of data is obtained, but the valuation analyst should consider whether to ask for a longer or shorter period of time, if appropriate. This information should be from the most recent years preceding the valuation date. Ideally, you would like to get as many years' financial statements as may be applicable to the subject's business cycle. This way, a more complete picture of the company can be obtained.

You should request tax returns for the same period, so that you can determine if there are any differences between tax and financial reporting that need investigation. Tax returns will also identify any subsidiaries that are part of a consolidated tax return or any other companies that are part of a controlled group of companies, as defined by the Internal Revenue Code. This may make the valuation analyst aware of other companies that may need to be considered during the appraisal process. Even if the appraisal assignment does not include the other companies, there can be transfer-pricing issues, dependence on the other companies, or a splitting of costs that would be discontinued if the appraisal subject was sold.

Interim financial statements should be obtained for the year prior to the valuation date. This provides financial statements that may be closer to the effective date of the valuation, as opposed to the prior year end. Internal financial statements should be more carefully scrutinized, because they may exclude many of the adjustments that the outside accountant makes at the reporting period. External financial statements must also be analyzed to ensure consistency in the reporting between the year-end and interim periods. For example, the interim financial statements may record inventory using the gross profit method, whereas at year end the company takes a physical inventory and values it properly.

Copies of forecasts or projections should be requested for several reasons. First, valuation is a prophecy of the future, and there may be no better indication than management's estimate of what they expect to happen. Second, reviewing prior budgets or projections may provide you with a better understanding of how well management is able to direct the company's activities.

You should request supporting information for the balance sheet items that may require fair market value adjustments. This is more important in valuing a controlling interest than a minority interest, because the minority interest generally does not have the ability to liquidate the assets to realize the fair market value.

The valuation analyst should also request supporting information for income statement items that may require normalization adjustments. We will discuss the normalization process in chapter 6. For now, accept the fact that normalization is the process of removing those items from the financial statements that do not contribute to the economic earnings of the subject company on a prospective basis. This will make more sense in a little while.

## EXTERNAL INFORMATION

During the appraisal process, the valuation analyst will also be required to perform research to obtain information about the environment in which the business operates. This information is known as *external* information. Some of the more important information that should be looked into includes (1) economic data, (2) industry data, (3) general sources data, and (4) publicly traded guideline company data.

Revenue Ruling 59-60 specifically states that one of the factors to be considered in the appraisal of a closely held business is “the economic outlook in general and the condition and outlook of the specific industry in particular.” Economic and industry information are key components of a business valuation assignment. Analysis of these items is discussed in the next chapter.

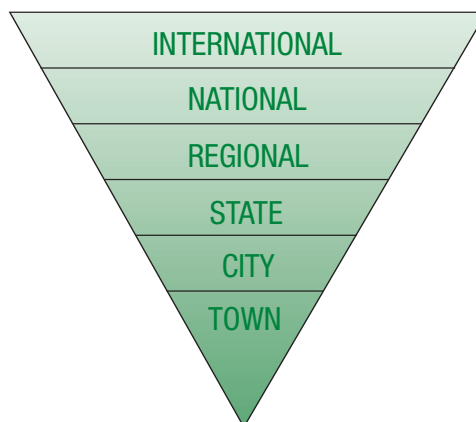
### ECONOMIC DATA

Various economic data should be gathered by the valuation analyst. This data will allow an assessment of how the subject company will be affected by changes in the economy. For example, rising residential mortgage interest rates may adversely affect a construction company that is primarily engaged in building new houses. Changes in consumer confidence can affect a retail business.

An analysis should be performed to see how the subject company has performed in light of past economic cycles, and the past performance may be used to project how the company is expected to do based on economic forecasts. The analysis should consider all aspects of the economy that directly or indirectly affect the appraisal subject. The valuation analyst should also think in terms of the factors that might affect the subject company’s customers or suppliers. Too often, these factors are overlooked.

A global approach to considering economic data is illustrated in figure 5.1. A broad spectrum of information should be considered with respect to the economy. Starting with the big picture, the valuation analyst should consider the international economic factors that may affect either the appraisal subject or its customers or suppliers. The availability of supply, exchange rates, fluctuations in economic conditions abroad, and trade restrictions will all affect a global company.

FIGURE 5.1



After the global aspects of the economy are considered, the national economy should be next. After that, the geographic regions get smaller and smaller, but even the town in which the business operates could be extremely relevant to the appraisal. What if a company depends on a military base for its business and the government announces a base closure? This can have a devastating effect on the company as well as on the community in which the company operates. The same holds true for communities after a layoff is announced by a major employer. However, this could be good news if the appraisal subject has experienced a shortage of qualified labor and people may now become available to them.

The local economy becomes an important component in the appraisal of a small neighborhood business. Some of the factors and key economic indicators that should be considered and reviewed regarding the local

economy can be found in box 5.1. For each of the items in box 5.1, the relevance to the appraisal subject is important. Rarely will all of these factors be included in one appraisal. Do not use a boilerplate discussion of the economy! Clearly, the economic factors that affect a construction company will be substantially different from the economic factors that affect a medical practice. Tough stuff, huh?

There is a tremendous amount of economic data now available on the Internet, but that does not mean you should abandon your local library. Often the local public or business school library is the best place to find items that have not yet made their way on to the Internet or to gain access to otherwise prohibitively expensive databases. Whether you have your own library, rely on the Internet, or you use a public library, box 5.2 includes sources that should be familiar to the valuation analyst.

The items included in box 5.2 should give you some idea of the abundance of information that is available if you look for it. Although most of these resources started out as print publications, many are also available on the Internet.

### **Statistical Abstract of the United States**

This publication provides statistical data on various subjects, including population, education, the labor force, prices, vital statistics, the environment, income, the gross domestic product (GDP), science, transportation, agriculture, construction and housing, trade, business enterprise, and energy. In addition to statistics, each subject contains a brief explanation of the contents of the data.

The statistical data is presented in various ways (graphs, tables, charts, and maps), depending on what is appropriate for the subject being analyzed. The data is also shown historically as percentage changes computed annually and monthly, and in some cases projections are given. The data is also divided into such classifications as age, race, marital status, sex, and religion. This book can be a useful resource tool, because a huge collection of data regarding the nation is compiled into one reference source.

*Statistical Abstract of the United States* is issued by the U.S. Department of Commerce along with the Economics and Statistics Administration and the Bureau of the Census and is made available for distribution by the U.S. Government Printing Office in Washington, D.C. The publication is updated on an annual basis. This excellent publication is also available online at [www.census.gov/prod/www/statistical-abstract.html](http://www.census.gov/prod/www/statistical-abstract.html).

#### **Box 5.1 Key Economic Indicators**

- Foreign trade
- Foreign currency
- Gross domestic product
- Federal deficit
- Inflation—consumer price index
- Unemployment
- Consumer confidence
- Business investment
- Interest rates
- Housing starts
- Building permits
- Demographics
- Health care
- Gross state product
- Labor supply
- Local unemployment
- Disposable income
- Wages
- Availability of materials
- Taxes
- Growth trends

#### **Box 5.2 Sources of Economic Data**

- *Statistical Abstract of the United States*
- *Economic Report of the President*
- *Federal Reserve Bulletin*
- *Survey of Current Business*
- *Annual Metro, City and County Data Book*
- *Business Conditions Digest*
- *Monthly Labor Review*
- *The Wall Street Journal*
- Business magazines
- Trade magazines
- Professional magazines:
  - *Medical Economics*
  - *Electrical World*
- State agency reports:
  - Employment
  - Planning
  - Economic development
  - State Web sites
- Chambers of commerce
- *Blue Chip Economic Indicators*
- *Blue Chip Financial Forecasts*
- *Value Line Investment Survey*
- *Stocks, Bonds, Bills, and Inflation Yearbook*
- *Standard & Poor's Industry Surveys, Trends and Projections*
- *The Complete Economic and Demographic Data Source*

## **Economic Report of the President**

This publication, which includes the *Annual Report of the Council of Economic Advisers*, contains the president's report on the economic condition of the United States to the Speaker of the House of Representatives and the President of the Senate. These reports often focus on interesting topics. For example, the report submitted by President Bush in January 2007 included a comprehensive review on catastrophic risk insurance.

*The Annual Report of the Council of Economic Advisers* is an excellent source of various economic data relating to the nation. In this report, the council provides summarizations and corresponding charts on the various aspects of the U.S. economy for a specific time period, as well as the indicators that affect economic growth. Health care reform, income, inflation, monetary policy, trade policy, taxes, employment, economic trends, and the status of the United States in the global marketplace are discussed.

In addition, the book provides tables, charts, and boxes (highlighted captions that give further explanations and the views of the U.S. administration) pertaining to the economic condition at the time. The data in these tables and charts gives historical, current, and projected figures and is presented on an annual basis; for more current years, it is also presented on either a monthly or quarterly basis. The *Economic Report of the President* is a useful tool in the search for the economic condition of the nation, as well as for its future outlook and data relating to it.

*The Economic Report of the President*, including the *Annual Report of the Council of Economic Advisers*, is distributed by the U.S. Government Printing Office in Washington, D.C. It is available free online at [www.gpoaccess.gov/eop/index.html](http://www.gpoaccess.gov/eop/index.html). I like free!

## **Federal Reserve Bulletin**

The monthly issues of the *Federal Reserve Bulletin* focus on aspects of the U.S. economy that affect monetary policy, such as international transactions, production, income, lending, interest rates, and the conditions of U.S. commercial banks, as well as other economic topics. It discusses such subjects as Treasury and Federal Reserve foreign exchange operations and publishes the Federal Reserve Chairman's *Monetary Policy Report to Congress*.

Other important topics discussed in the *Federal Reserve Bulletin* are employment conditions, prices, the condition of the economy, and forecasts made by the Federal Reserve governors and Federal Reserve Bank presidents. Also presented in the *Federal Reserve Bulletin* are the minutes of the Federal Open Market Committee meetings; new legal developments; announcements relating to new policies, appointments, and so on; and statements made by the chairman of the Board of Governors with regard to current economic conditions.

Each monthly issue has a section entitled "Financial and Business Statistics." In this section, there are helpful tables providing statistical data relating to the U.S. economy and on subjects such as money, stock and bank credit, the GDP, the consumer price index (CPI), unemployment, interest rates, real estate, financial markets, the stock market, securities, production, consumer credit, and income. This data is presented historically, annually, quarterly, monthly, or in combination.

The *Federal Reserve Bulletin* is published by the Board of Governors of the Federal Reserve System in Washington, D.C., and can be obtained from Publications Services, Board of Governors of the Federal Reserve System, Washington, D.C. Sections of this report are available for free (there's that word again!) online on the Federal Reserve Board's Web site. Find it at [www.oecd.org/hoe/0,2987,en\\_2649\\_021185\\_1\\_1\\_1\\_1,00.htm](http://www.oecd.org/hoe/0,2987,en_2649_021185_1_1_1_1,00.htm).

## **Survey of Current Business**

This publication contains information from the National Income and Products Accounts (NIPA), which is used to add up GDP. A regular feature of this monthly publication is a description of the business situation, which is done in summary, tabular, and chart form. Economic growth as measured by the GDP, consumption expenditures, investments, interest rates, housing, imports and exports, the gross state product, involvement of the United States in foreign business, and other data that can be of use in analyzing the nation's economy can also be found in this book. Some issues also include special features that report on topics of significance for the specific time period.

*Survey of Current Business* is issued by the U.S. Department of Commerce, Economics and Statistics Administration, and the Bureau of Economic Analysis (BEA), and is distributed by the Superintendent of Documents,

U.S. Government Printing Office, Washington, D.C. This monthly publication is also available online at no cost on the BEA Web site at [www.bea.gov/scb/index.htm](http://www.bea.gov/scb/index.htm).

### **Stocks, Bonds, Bills, and Inflation Yearbook**

This publication is an annual yearbook that contains historical data about returns in the capital markets since 1926 and through the current year. It supplies useful investment information and features sections reflecting highlights of the current year's market, major events, and highlights from the previous decade, along with corresponding charts and tables for further explanation.

A section of the book is devoted to returns on stocks and bonds of various types, along with statistical data and formulas, returns for different sizes of firms, and cost of capital and discount rate information. I discuss this publication in greater detail in chapter 11.

*Stocks, Bonds, Bills, and Inflation Yearbook* (SBBI Yearbook) is published in two versions annually by Ibbotson Associates (Chicago), a wholly owned subsidiary of Morningstar Inc. One version (the blue book) is a *valuation edition*. More information on SBBI and related Ibbotson publications can be found on the Morningstar Web site at <http://corporate.morningstar.com/ib>.

### **Cost of Capital Quarterly**

This book is published annually by Morningstar, with quarterly updates also available. The purpose of the book is to provide additional data that can be used to estimate the cost of capital. It does this by providing cost of capital information that is broken down by various industries. Within each of these industries, the data is also broken down by company size.

The information provided includes compound annual equity returns, five-year growth in net sales, and operating income and net income, as well as margins, capital structure ratios, equity valuation ratios, and betas.

### **Internet Sources of Economic Information**

The federal government collects vast amounts of economic and demographic data for the United States as a whole, as well as for states, counties, and many cities. Data is also collected on various industries. The information is available in print form, on government-produced CD-ROMs, and electronically on the government's many Web sites. Although the government-produced data may be available through other vendors' online services and print or electronic products, there is little reason to ever pay for this data, unless what you are looking for is very old. And in that case, you might be better off in the public library.

Every department, bureau, and section of the federal government has a Web site. Every state in the United States has a Web site containing a variety of information about the state. Almost every U.S. county and many U.S. cities have Web sites as well. These may contain information of interest only to a tourist or other visitor, but some may also have economic or business information.

This section deals exclusively with electronic data sources located on the Internet. Let's begin with the U.S. federal government and then review private sources of data. Some of these Web sites are free and others are subscription services, which charge either a flat annual fee or a fee per use or article. Many of these Web sites are so rich that inclusion of the addresses of individual pages would become cumbersome. Therefore, I am only giving you the address of the home page and inviting you to visit the sites and explore them by clicking on the links. Do it in your spare time.

The discussion is subdivided into sections as follows:

- International information
- National information
- State and local information
- Market data (stocks and bonds)

#### **International Information**

##### ***International Data***

Many of the Web sites I mentioned earlier include international information, as well as U.S. information. The Federal Reserve Board's Web site includes links to foreign central banks, which may have data on conditions in the countries in which they are located.

**International Trade Administration** (<http://trade.gov>)

This site helps U.S. businesses participate fully in the growing global marketplace. The mission of the International Trade Administration of the Department of Commerce is to strengthen the competitiveness of U.S. industry, promote trade and investment, and ensure fair trade and compliance with trade laws and agreements. A related site, the U.S. Government Export Portal at <http://export.gov>, provides information for those businesses wanting to expand their export markets.

**Organization for Economic Cooperation and Development (OECD)** ([www.oecd.org](http://www.oecd.org))

This Web site has economic surveys for all member countries and some non-member countries. Free summaries are available at [www.oecd.org/home/0,2987,en\\_2649\\_021185\\_1\\_1\\_1\\_1,00.htm/](http://www.oecd.org/home/0,2987,en_2649_021185_1_1_1_1,00.htm/) where you can review information by country and view white papers, conference proceedings, and other resources on global economic issues.

**CIA** (<https://www.cia.gov/library/publications/the-world-factbook/index.html>)

*The World Factbook* is produced by the CIA and gives information on every country on the planet. Topics include geography, the people, government, economy, communications, transportation, military, and transnational issues. Some of the information might be a year or two old, but it will give a good overview of the country. *The World Factbook* is produced annually and can be downloaded from the CIA Web site starting with the 2000 Factbook. Who knows, with this Web site, you may even learn how to become a spy!

**Countries' Embassies**

Every country that has an embassy in the United States has a Web site, and these Web sites have a wealth of good information about the country and, quite often, data on trade with the United States. You can find these using a search engine such as Google.

**National Information****FedStats** ([www.fedstats.gov](http://www.fedstats.gov))

Perhaps the most comprehensive and easy-to-use government Web site, FedStats is a window on the full range of official statistical information available to the public from the federal government. Use the Internet's powerful linking and searching capabilities to track economic and population trends, health care costs, aviation safety, foreign trade, energy use, farm production, and more. Access official statistics collected and published by more than 70 federal agencies without having to know in advance which agency produces them. All of the statistical information available through FedStats is maintained and updated solely by federal agencies on their own Web servers. And it's all free. The FedStats home page begins with easy-to-use links to statistics and links to statistical agencies, which are summarized in box 5.3.

**Box 5.3 Related Resources Accessible Through FedStats**

- *Topic links*—A to Z (direct access to statistical data on topics of your choice—there are 270 of them)
- *MapStats* (statistical profiles of states, counties, congressional districts, and federal judicial districts)
- *Statistics by geography from U.S. agencies* (international, national, state, county, and local comparisons)
- *Statistical reference shelf* (published collections of statistics available online, including the *Statistical Abstract of the United States*)
- *Search* (across agency Web sites)
- *Agencies listed alphabetically* (with descriptions of the statistics they provide and links to their Web sites, contact information, and key statistics)
- *Agencies by subject* (a dropdown menu is available for selection of subject)
- *Press releases* (the latest news and announcements from individual agencies)
- *Kids' pages* (on agency Web sites)
- *Data access tools* (selected agency online databases)



Three principal statistical agencies gather data on economic activity, demographic trends, and industry developments in the United States, nationally and on the state and local levels. These are the following:

**Bureau of Economic Analysis (BEA)** ([www.bea.gov](http://www.bea.gov))

Measures, presents, and interprets gross domestic product, personal income, corporate profits, and related items in the context of the NIPA. The BEA also maintains personal income and related measures for states and localities, the U.S. balance of payments accounts, and the foreign direct investments accounts. Data is released monthly in the *Survey of Current Business* (available both in print and on the Web).

**Bureau of Labor Statistics (BLS)** ([www.bls.gov](http://www.bls.gov))

Produces statistics on employment and unemployment, consumer expenditures, prices and living conditions, wages and employee benefits, productivity and technological changes in U.S. industries, projections of economic growth, the labor force, employment by industry and occupation, and occupational injuries and illnesses.

**Bureau of the Census** ([www.census.gov](http://www.census.gov))

Provides information on the number, geographic distribution, and social and economic characteristics of the nation's population. Conducts several periodic censuses every five years, covering the years ending in 2 and 7. The Economic Censuses include censuses of manufacturing, mineral industries, construction industries, retail and wholesale trade, service industries, and transportation and other businesses. The Census of Governments collects state and local data on public finance, public employment, and governmental organization, powers, and activities.

The Census Bureau operates the *Census Information Center* (CIC) program, which is a cooperative effort between the U.S. Census Bureau and 57 national, regional, and local nonprofit organizations (including universities). These are listed on [www.census.gov/clo/www/cic/members/004701.htm/](http://www.census.gov/clo/www/cic/members/004701.htm/) and can be sources of additional, more specific data. The organizations range from the Arab American Institute to the William C. Velazquez Institute; contact information is available, including e-mail addresses and Web sites.

Twelve other statistical agencies collect data on more specific areas of the economy; for example, the Bureau of Transportation Statistics gathers data on the nation's transportation systems, and the Energy Information Administration collects information on energy reserves, production, consumption, and so on. Each of these agencies' Web sites can be accessed through FedStats. Most recent years' statistics and contact information are available.

**USA.gov** ([www.usa.gov](http://www.usa.gov))

This is an official U.S. government Web site that allows visitors to browse government by topic and lists topics from Agriculture and Food (farms, food, nutrition) to the United States in the World (defense, trade, immigration). These provide links to the agency involved. There are links to the executive, legislative, and judicial branches of the federal government, as well as links to state and local governments. This site is free.

**Stat-USA/Internet** ([www.stat-usa.gov](http://www.stat-usa.gov))

This is a fee-based subscription service of STAT-USA, U.S. Department of Commerce. To access the information, one must purchase a user name and password. This costs \$200 for a year or \$75 quarterly. STAT-USA is an agency in the Economics and Statistics Administration of the U.S. Department of Commerce. They deliver economic, business, and international trade information produced by the U.S. government. There are also business leads available for subscribers; these are requests for bids on government procurement items.

This agency states that "by charging a low cost recovery fee, we can look forward to continuing to offer the best service possible with cutting-edge technology, award-winning software, and knowledgeable, professional customer service." This may be so, but the overwhelming majority of the information available here is also available on the free Web sites just mentioned. Why pay for something that you can have for free? I told you before—I like free!

**Statistical Resources on the Web** ([www.lib.umich.edu/govdocs/](http://www.lib.umich.edu/govdocs/))

This is a University of Michigan Web site with links to many different types of statistical information. The topics range from Agriculture (crops and livestock), Business and Industry (employment and production), to Weather (United States and international). There is a section entitled Comprehensive Subjects (directories and multitopic)



that might have some useful information. Not all of these will contain economic or business-related information; some of them contain policy statements, for example. But many of them are useful, and they are all free sites.

In fact, most university libraries have Web sites, and their collections are generally listed. The Web sites can be searched by subject, title, author, publisher, publication, and so on. They are often a good source of industry material.

***Federal Reserve Board*** ([www.federalreserve.gov](http://www.federalreserve.gov))

This is a good source for economic data, interest rates, monetary policy information, and international information. All of the Federal Reserve's statistical releases (daily, monthly, quarterly, and so on) are available. Information that is published in the monthly *Federal Reserve Bulletin* is on this Web site, including Federal Open Market Committee meeting minutes, transcripts of testimony before Congress, monetary policy reports, and more. The Federal Reserve District's *Summary of Commentary on Current Economic Conditions* (Beige Book) is published on this Web site as well and includes a summary and each District Bank's report.

There are also links to each of the 12 regional Federal Reserve District Banks ([www.federalreserve.gov/otherfrb.htm](http://www.federalreserve.gov/otherfrb.htm)). Federal Reserve District Banks' Web sites contain district economic activity and other economic research. Many of the research pieces are very academic and technical, but some may be useful in a valuation report.

***The Conference Board*** ([www.conference-board.org](http://www.conference-board.org))

This is a not-for-profit, worldwide research, and business membership organization and a leading private source of economic and business intelligence. The Economics Program is a recognized source of business economics research and objective indicators, analyses, and forecasts. Several widely watched economic indicators are published by this program, including: Consumer Confidence, Help-Wanted Advertising, U.S. Leading Economic Indicators, U.S. Regional Performance, and Business Executives' Expectations. U.S. Leading Economic Indicators were once produced by the Bureau of Economic Analysis. Business cycle indicators and general information about the economy are located on [www.globalindicators.org](http://www.globalindicators.org) as a public service. A subscription to Business Cycle Indicators is \$255 annually.

***Economagic*** ([www.economagic.com](http://www.economagic.com))

This is a free service where you can browse over 100,000 data files with charts and Excel files. You can browse by region or by source. Most of the data is from U.S. federal statistical agencies, but there are some links to foreign sources and a few trade associations and private companies. While there is a lot of free data here, not all of it is currently updated.

According to the Web site, Economagic is meant to be a comprehensive site of free, easy-to-access economic time series data useful for economic research, particularly economic forecasting. The core data sets contain macroeconomic data at the national level; however, much of it is at the local level. All of the data can be downloaded to Excel files.

***Moody's Economy.com*** ([www.economy.com](http://www.economy.com))

This site has sections that are free and others that offer reports for a fee. Some of the areas of this Web site are:

- *FreeLunch.com* ([www.freelunch.com](http://www.freelunch.com)). Free access to over one million economic time series in Excel file format—easy to use. Who says there is no such thing as a free lunch?
- *The Dismal Scientist* ([www.dismal.com](http://www.dismal.com)). Covers detailed information on the U.S. and global economies. This Web site is excellent because it includes analyses as well as raw data.
- *Industry Workstation*. The Industry Workstation has detailed coverage for 59 industries. Each industry report includes extensive written analysis on current and anticipated trends; upside and downside risk factors; four charts with commentary; and five-year forecast detail for approximately 40–50 financial variables. All forecast series are updated monthly with an annual periodicity, 5 year forecast horizon, and include extensive history.
- *Industry Forecast Database*. The Industry Forecast Database offers detailed coverage of approximately 60 industries. Data coverage includes standard financial series (revenues, expenses, capex, profit margins, and so on) and industry-specific series. All series are updated monthly with an annual periodicity, 5 year forecast horizon, and include extensive history.
- *Mercer Capital* ([www.mercercapital.com](http://www.mercercapital.com)). *The National Economic Review*, an overview of the national economy prepared specifically for the business valuation industry, is available on the Mercer Capital Web site. The reports take information from many business publications and government produced data, are about nine

to ten pages long, and include tables of statistics and references. They are offered on a subscription basis (quarterly issues), and quarterly reports can be obtained by request all the way back to 1992. A one year subscription costs \$259 (two years for \$399), and individual quarterly Reviews sell for \$150 each. The subscriptions may be worth it if you are not comfortable with interpreting the myriad statistics that are released each quarter on the nation's economy.

### **State and Local Information**

#### ***U.S. Census Bureau*** ([www.census.gov](http://www.census.gov))

This site gathers data at the state and local level and offers "Geography Quick Reports" by state and by county through the Economic Census link on its home page. These reports list industries in the area, number of establishments, number of employees, annual payroll, and sales. Data comes from the most recent Economics Census (year ending in 2 or 7). Data on population trends, employment, incomes, and other demographics is available at the county level as well.

The Census Bureau operates the State Data Center (SDC) program, a cooperative effort between the states and the Census Bureau that was created in 1978 to make data available locally to the public through a network of state agencies, universities, libraries, and regional and local governments. More information about this program and access to links to each SDC are available on [www.census.gov/sdc/www/](http://www.census.gov/sdc/www/). This Web page has a map of the United States, and one mouse click will bring the visitor to the state of interest. Many states have more than one data center.

#### ***Bureau of Economic Analysis*** ([www.bea.gov](http://www.bea.gov))

Regional accounts data is available at ([www.bea.gov/regional/index.htm/](http://www.bea.gov/regional/index.htm/)). GDP by state and metropolitan area is available as well as personal income information. The BEARFACTS reports consist of computer-generated narratives for states, counties, and metropolitan statistical areas. The narratives describe an area's personal income using current estimates, growth rates, and a breakdown of the sources of personal income.

#### ***State and Local Government on the Net*** ([www.statelocalgov.net](http://www.statelocalgov.net))

This is a guide to government-sponsored Internet sites maintained by Hello Metro. State and local links are to servers that are controlled and managed by state or local governmental agencies. They *exclude* personal sites, neighborhood pages, political advocacy and campaign pages, promotion and travel sites, and Chamber of Commerce sites. Although the State and Local Government on the Net pages are updated frequently, they are not as up to date as the information contained on individual state and local government servers.

#### ***State and Local Web Sites*** ([www.state.xx.us](http://www.state.xx.us) or [www.co.yyyyyy.xx.us](http://www.co.yyyyyy.xx.us))

Here "xx" is the two-letter state abbreviation, and "yyyyy" is the entire name of the county. So, for example, if you wanted to see the Beaver County, Pennsylvania, Web site, it would be [www.co.beaver.pa.us](http://www.co.beaver.pa.us). Hello Metro (see the preceding section) makes this easy.

### **Market Data (Stocks and Bonds)**

There may be times when the value of a market index at some date a few years ago is needed, or you would like to include a discussion of stock market trends in your report. Rather than save all of your old editions of *The Wall Street Journal*, you can get this information online.

#### ***Dow Jones Averages*** ([www.djindexes.com](http://www.djindexes.com))

Historical data on each of the Dow Jones indexes is available for free on this Web site. For example, you can select the Dow Jones Industrial Average, input a date range and generate a report showing the market close and total return for the selected time period.

#### ***S&P 500*** ([www.finance.yahoo.com](http://www.finance.yahoo.com))

The S&P 500 index is not the only market index that can be retrieved from this site. Under the heading "Market Summary Section" are links to pages with market indexes (up-to-the-minute as well as historical). You can also track individual company stock quotes, mutual fund data, news, interest rates, and much more.

**NASDAQ Web Site** (www.nasdaq.com)

This Web site has data on every stock that trades in the over-the-counter market and is listed in the National Association of Securities Dealers Automated Quote [NASDAQ] system. Essentially, these are all of the publicly traded stocks that are not listed on the New York or the American Stock Exchange. Available on the Web site are historical quotes for stocks and mutual funds and dividend information, as well as information about stock splits and the like. Daily, weekly, monthly, and quarterly results are available. There are links to news headlines, global markets, economic releases, and more. The information is all free.

**Other Sites**

Current and historic stock price information can be obtained from www.bigcharts.com or from www.finance.yahoo.com. There are others as well, but this should at least get you going in the right direction.

**INDUSTRY DATA**

Industry data that should be considered by the valuation analyst will generally include information about the competition, the general outlook for the industry (locally and nationally), and special industry situations, such as technological developments and the effect of regulatory activities. The purpose of obtaining industry data is to allow the valuation analyst to make an assessment of how the appraisal subject compares with its peers. Determining the strengths and weaknesses of the appraisal subject is an important element in the risk analysis and is necessary for the determination of appropriate pricing multiples for the market approach, or discount and capitalization rates for the income approach.

One of the best places to start in the search for industry information is a trade organization. These organizations frequently publish trade journals, gather statistical data about members of the organization, and are extremely helpful in getting information that the valuation analyst can use. I have found that people working at trade organizations are generally very helpful.

If you go to your local library, you can look up trade associations in books such as Gale Research's *Encyclopedia of Trade Associations*.<sup>2</sup> Several Internet sources of trade association information are reviewed later. Some of the other sources that you will find helpful for the industry outlook can be found in box 5.4 and a description of many of these data sources follows. This should help acquaint you with them.

**Box 5.4****Additional Data Sources for Industry Outlook and Financial Information****Industry Outlook**

- Standard & Poor's (S&P) industry surveys
- Brokerage house industry studies
- Regulatory agencies' reports
- Financial publications
- U.S. Industry & Trade Outlook (prior to 2000)

**Financial Information**

- Integra Information's *Business Profiler*
- Trade association surveys
- *Corporation Source Book of Statistics of Income*
- *Partnership Source Book of Statistics of Income*
- *Sole Proprietorship Source Book of Statistics of Income*
- *Almanac of Business and Industrial Financial Ratios*
- *Financial Statement Studies of the Small Business*
- *RMA Annual Statement Studies*
- *S&P Analysts' Handbook*
- D&B Industry Norms and Key Business Ratios

**Standard Industrial Classification (SIC) Manual**

To find guideline company information, the valuation analyst has numerous sources to consult. Usually, the starting point of this analysis is to determine the subject company's SIC code. Once the valuation analyst knows the SIC code for the subject company, he or she can consult various sources that categorize companies in this manner. If the valuation analyst is not sure which SIC code is appropriate for the subject company, he or she can consult the *SIC Manual*. (Exhibit 5.2 contains a sample from this publication.) The *SIC Manual* classifies business establishments by industry, arranging them by the primary activity in which the company is engaged. The code system is used to assist in comparing similar companies within a specific industry. Each individual industry is classified by a major group number, then further classified by an

<sup>2</sup> Gale Research, Inc., *Encyclopedia of Trade Associations* (835 Penobscot Building, Detroit, Mich. 48226-4095).

industry group number, followed by an industry number. The industries are arranged in the book in numeric order and in the back of the book in alphabetical order by business classification. The major group, industry group, and industry numbers are explained, and a listing of industries included under each classification number is also given.

The *SIC Manual* is published by the Executive Office of the President, Office of Management and Budget, and is sold by National Technical Information Service, Springfield, VA. The publication is revised periodically to reflect the changes within the industrial organization in the economy. The last revision of the *SIC Manual* was in 1987.

If you don't have this book, you can search for an SIC code and its description online at [www.osha.gov/oshstats/sicser.html](http://www.osha.gov/oshstats/sicser.html) and use keywords to find what you need.

**EXHIBIT 5.2**

**SAMPLE FROM SIC MANUAL**

*Major Group 72.—Personal Services*

*The Major Group as a Whole*

This major group includes establishments primarily engaged in providing services generally to individuals, such as laundries, dry-cleaning plants, portrait photographic studios, and beauty and barber shops. Also included are establishments operating as industrial laundrers and those primarily engaged in providing linen supply services to commercial and business establishments.

Industry

Group No.    Industry

**721            LAUNDRY, CLEANING, AND GARMENT SERVICES**

**7211    Power Laundries, Family and Commercial**

Establishments primarily engaged in operating mechanical laundries with steam or other power. Establishments primarily engaged in supplying laundered work clothing on a contract or fee basis are classified in Industry 7218.

Laundries, power: family and commercial	Power laundries, family and commercial
Laundry collecting and distributing outlets operated by power laundries	

**7212    Garment Pressing, and Agents for Laundries and Drycleaners**

Establishments primarily engaged in providing laundry and dry-cleaning services but which have the laundry and dry-cleaning work done by others. Establishments in this industry may do their own pressing or finishing work. Establishments operating their own laundry plants are classified in Industry 7211, and those operating their own dry-cleaning plants are classified in Industry 7216.

Agents, retail: for laundries and drycleaners	Press shops for garments
Bobtailers, laundry and dry-cleaning	Truck route laundry and drycleaning, not operated by laundries or cleaners
Cleaning and laundry pickup stations, not owned by laundries or cleaners	Valet apparel service

**7213    Linen Supply**

Establishments primarily engaged in supplying to commercial establishments or household users, on a rental basis, such laundered items as uniforms, gowns, and coats of the type used by doctors, nurses, barbers, beauticians, and waitresses; and table linens, bed linens, towels and toweling, and similar items. Establishments included in this industry may or may not operate their own laundry facilities. Establishments primarily engaged in providing diaper service are classified in Industry 7219.

*(Continued)*

**EXHIBIT 5.2** *(Continued)*

Apron supply service	Shirt supply service
Coat supply service	Table cover supply service
Continuous towel supply service	Towel supply service, except wiping
Gown supply service, uniform	Uniform supply service, except industrial service
Linen supply service	

**7215 Coin-Operated Laundries and Dry-cleaning**

Establishments primarily engaged in the operation of coin-operated or similar self-service laundry and dry-cleaning equipment for use on the premises, or in apartments, dormitories, and similar locations.

Coin-operated laundries	Laundromats
Dry-cleaning, coin-operated laundrettes	Laundry machine routes, coin-operated
Self-service laundry and dry-cleaning	

**7216 Dry-cleaning Plants, Except Rug Cleaning**

Establishments primarily engaged in dry-cleaning or dyeing apparel and household fabrics other than rugs. Press shops and agents for drycleaners are classified in Industry 7212; establishments primarily engaged in cleaning rugs are classified in Industry 7217; and establishments primarily engaged in dyeing fabrics for the trade are classified in Manufacturing, Major Group 22.

Clearing and dyeing plants, except rug cleaning	Drapery dry-cleaning plants
Collecting and distributing agencies-operated by cleaning plants	Dry-cleaning plants, except rug cleaning

**7217 Carpet and Upholstery Cleaning**

Establishments primarily engaged in cleaning carpets and upholstered furniture at a plant or on customers' premises. Establishments primarily engaged in rug repair are classified in Industry 7699, and those primarily engaged in reupholstering and repairing furniture are classified in Industry 7641.

Carpet cleaning and repairing plants	Rug cleaning, dyeing, and repairing plants
Carpet cleaning on customers' premises	Upholstery cleaning on customers premises
Furniture cleaning on customers' premises	

**7218 Industrial Launderers**

Establishments primarily engaged in supplying laundered or dry-cleaned industrial work uniforms and related work clothing, such as protective apparel (flame and heat resistant) and clean room apparel; laundered mats and rags; dust control items, such as treated mops, rugs, mats, dust tool covers, and cloths; laundered wiping towels; and other selected items to industrial, commercial, and government users. These items may belong to the industrial launderer and be supplied to users on a rental basis, or they may be the customers' own goods. Establishments included in this industry may or may not operate their own laundry or dry-cleaning facilities.

Clean room apparel supply service	Safety glove supply service
Flame and heat resistant clothing supply service	Towel supply service, wiping
Industrial launderers	Treated mats, rugs, mops, dust tool covers, and cloth supply
Industrial uniform supply service	Wiping towel supply service
Laundered mat and rug supply service	Work clothing supply service, industrial
Radiation protective garments supply	

## EXHIBIT 5.2

### 7219 Laundry and Garment Services, Not Elsewhere Classified

Establishments primarily engaged in furnishing laundry and garment services, not elsewhere classified, such as the repair, alteration, and storage of clothes for individuals and for the operation of hand laundries. Custom tailors and dressmakers are classified in Retail Trade, Industry 5699; fur shops making fur apparel to custom order are classified in Retail Trade, Industry 5632; and press shops are classified in Industry 7212.

## North American Industry Classification System (NAICS) Manual

([www.census.gov/epcd/www/naics.html](http://www.census.gov/epcd/www/naics.html))

Since having one classification system was not enough, our government decided to join forces with Canada and Mexico to come up with a new system. Those of us old enough to remember experienced this same disaster with the metric system. I think I still have a metric tool set that does not fit anything because our country never adopted the system. Well, this is another one of those questionable brainstorms.

The NAICS system is similar to the SIC system. It is more detailed and is designed to replace the SIC system. The official U.S. NAICS Manual, *North American Industry Classification System—United States*, includes definitions for each industry, tables showing correspondence between current NAICS and 2002 NAICS for codes that changed, and a comprehensive index—features also available on the Web site. To order the 1400-page manual in print see the National Technical Information Service website at [www.ntis.gov](http://www.ntis.gov).

## U.S. Industry & Trade Outlook

Beginning in 1997, DRI/McGraw Hill teamed up with Standard & Poor's and the U.S. Department of Commerce to bring back a close equivalent to the old *U.S. Industrial Outlook*, which ceased publication in 1994.

This publication includes a detailed analysis of hundreds of industries, including reviews and forecasts. Each chapter is devoted to an industry sector and includes a discussion of variables that affect it. Graphs are included that show growth trends, market share, U.S. trade and export dependence, import penetration, output, and output per worker. The U.S. Industry & Trade Outlook has not been published since 2000.

## Trade Association Web Sites

As mentioned, broad industry data is available from the Census Bureau and the Bureau of Economic Analysis. Additional broad data may be available in the Beige Book of the Federal Reserve Board. More specific industry data is available through newspapers, magazines, trade publications, and the like. Almost every human endeavor seems to have a trade organization devoted to it. Many of these are listed in *Gale's Encyclopedia of Associations*.<sup>3</sup> The listing gives addresses, phone numbers, contact information, number of staff, publications, and other information, including a Web site if there is one. Often, a Web site exists even if it is not listed in *Gale's*. Once a Web site is found, you can see what type of information is available through the organization. Sometimes the information is free; often there is a charge for a back issue of a publication or a survey.

## Associations on the Net ([www.ipl.org/div/aon/](http://www.ipl.org/div/aon/))

The Internet Public Library produces this guide to Web sites of prominent organizations and associations. The Internet Public Library ([www.ipl.org](http://www.ipl.org)) also has an excellent collection of links to a number of business and economic sites.

## The Dismal Scientist ([www.dismal.com](http://www.dismal.com))

Articles and analyses are featured on a variety of industries. The Web site includes archives devoted to almost two dozen general topics. Recent articles are on [www.economy.com/dismal](http://www.economy.com/dismal), and archives are on [www.dismal.com/dismal/archives](http://www.dismal.com/dismal/archives). This Web site is part of [Economy.com](http://www.economy.com).

<sup>3</sup> Available at most public libraries. Gale's listings can be found online, but there is a fee for this service.



### **Encyclopedia Britannica** ([www.britannica.com](http://www.britannica.com))

This is the online version of the encyclopedia. There is information on a large variety of subjects, but much of it may require updating if the valuation date is fairly recent. The information is easily located and is available for a subscription of \$69.95 annually.

### **Wikipedia** (<http://wikipedia.org/>)

Wikipedia is a multilingual, Web based, encyclopedia project operated by the nonprofit Wikimedia Foundation. Wikipedia contains more than 9 million articles in 252 languages. Wikipedia's articles are written collaboratively by volunteers around the world and the majority of them can be edited by anyone with access to the Internet. Steadily rising in popularity since its inception, it ranks among the top ten most-visited Web sites worldwide.

### **Dialog Corporation** ([www.dialog.com](http://www.dialog.com))

This resource is a leading provider of Internet based information. It was acquired by Thomson Corp. when it bought Knight-Ridder. Everything is being bought by Thomson.

*Dialog* provides access to thousands of authoritative business, scientific, intellectual-property, and technical publications. Among the wealth of information available is worldwide company and industry information, including trends, overviews, market research, and more. Full financial information is available at the company level. You can access Dialog online with a subscription at *DialogWeb* ([www.dialogweb.com](http://www.dialogweb.com)) or just purchase individual articles from Dialog Open Access at <http://openaccess.dialog.com/business/>.

## **Financial Benchmarking Data Sources**

### **Integra Information's Business Profiler**

Chapter 6 includes a complete discussion of how to use this database as part of the financial analysis process.

### ***Almanac of Business and Industrial Financial Ratios***

This annually updated publication provides current corporate performance facts and figures for a specific accounting period, summarized from tax return data. This information can be used to make comparisons of specific companies to similar ones in the industry. Two types of tables are given for each industry. Both report the operating and financial information for corporations; however, one reports it including companies with and without net income, whereas the other reports it specifically for those corporations that were operating at a profit.

The book divides each industry into categories according to asset size. For each category, ratios are given for the operating factors (cost of operations, repairs, bad debts, and so on), financial ratios (current ratio, quick ratio, asset turnover, and so on), and financial factors (debt ratio, return on assets, return on equity, and return on net worth), which are also defined in the book for reference purposes. The information supplied in the *Almanac of Business and Industrial Financial Ratios* is beneficial in determining how a company compares with its competition and in what areas improvements need to be made or costs need to be cut.

The industrial sectors that are covered in the *Almanac of Business and Industrial Financial Ratios* include construction, agriculture, manufacturing, mining, communications, transportation, banking, insurance, trade, real estate, holding and investment companies, and electric, gas, and sanitary services.

*The Almanac of Business and Industrial Financial Ratios* is written by Leo Troy, Ph.D., in association with Prentice-Hall, Englewood Cliffs, N.J.

### ***Financial Statement Studies of the Small Business***

The purpose of this annually updated publication is to offer a view of the small firm in a perspective that reflects the composition of the small firm. This specific analysis is necessary in making comparisons among firms of a smaller size, as opposed to comparing them with larger firms. This publication focuses solely on small firms that, according to the book, have a total capitalization of less than \$1 million.

The data in the book is compiled from more than 30,000 financial statements, as well as contributions made by CPA firms throughout the United States, and is based on fiscal year ends of April 30. The small firms are arranged by common characteristics and the data is expressed in tables. The firms are categorized by asset size and



sales volume, the top 25 percent most profitable firms are listed, and five-year trends are analyzed. The tables show income data, operating items, ratios, assets, liabilities, and capital for small firms, and they can be used in making industry comparisons. The industrial sectors analyzed include retailing, manufacturing, professional services, contracting, wholesaling, and other types of services.

*Financial Studies of the Small Business* is published by CCH, Inc. Chicago, IL.

### **Risk Management Association (RMA) Annual Statement Studies**

This publication consists of composite financial data on several industries (including agriculture, wholesaling, contracting, services, manufacturing, and retailing), which is categorized by SIC codes. Common-size financial statements and ratios are provided for each industry. Current data for each industry is sorted by sales and by assets, and comparative historical data is provided for both groups. Assets, liabilities, and income data are given with appropriate subdivisions (cash, inventory, payables, sales, and so on), and financial ratios are listed as well. These include liquidity ratios, coverage ratios, leverage ratios, operating ratios, and expense-to-sales ratios. In addition, formulas and explanations of the ratios are provided for a further understanding of their usefulness.

RMA, formerly Robert Morris Associates, the publisher of the book, receives its data from sources that submit it on a voluntary basis, not on a randomly selected basis. These sources include banks that have obtained financial statements from companies that are looking to borrow money. Therefore, the data in this particular publication should not be used as industry guidelines when comparisons are made to other businesses in the industry, because there is a possibility that the data may not include all of the necessary information to make an absolute comparison.

RMA *Annual Statement Studies* is updated yearly, and the data it presents for the more recent years is in terms of fiscal years from April 1–March 31 (for example, 2007, 2008). RMA is located in Philadelphia. An online version of the RMA *Annual Statement Studies* is available on the RMA Web site at [www.rmahq.org/RMA/](http://www.rmahq.org/RMA/).

### **Industry Norms & Key Business Ratios**

This publication provides financial information on over 800 lines of business and can be used for comparing companies in the same industry. The industries covered in the book are arranged numerically by SIC code. For each SIC code, the specific name of the industry that corresponds to the code is given, along with the number of companies in the industry that were surveyed for the determination of the statistical data. The financial information provided for each industry includes current assets, total assets, current liabilities, total liabilities and net worth, net sales, gross profit, net profit after taxes, and working capital, along with solvency, efficiency, and profitability ratios. The financial ratios are given for companies that fall into the upper quartile, lower quartile, and median.

The figures found in this publication can be used as a guideline in determining the financial condition of comparable companies regardless of whether the company is operating above or below the norms in the industry. In addition to statistical data, the book gives an explanation of the use and meaning of the ratios, along with an explanation of their derivation.

*Industry Norms & Key Business Ratios* is published by Dun & Bradstreet Information Services, a company of the Dun & Bradstreet Corporation. An online version of Key Business Ratios can be found at <http://kbr.dnb.com/login/KBRHome.asp>.

### **Industry Ratio and Compensation Data Sources**

Salary Assessor and the Executive Compensation Assessor, two products produced by the Economic Research Institute, contain salary information for more than 3,000 jobs compiled from salary surveys. The information is available online at [www.eri.com](http://www.eri.com). Pricing ranges from \$489 for nonprofit salary information to \$5,668 for the full package of salary data for the U.S. and Europe.

Compensation surveys are frequently done by industry trade groups, either in conjunction with an industry survey or as a stand-alone study. Often a hint of the study will be given on the trade association's Web site. Most of the studies are available to nonmembers for a fee, so it is worth it to check the Web site and perhaps call the association's headquarters to ask.

Integra Information, Inc. offers a terrific online product called *Business Profiler*, which provides detailed information on profiling small businesses and private companies. This resource covers more than 3.5 million

firms in more than 950 U.S. industries. It is capable of analyzing any size firm or one of 14 industry size ranges. See chapter 6 for more details about this product. It is one of my favorites.

Integra gets its information from 31 databases, which makes this product one of the most extensive of its kind. Integra will sell you individual reports by SIC code on their Web site at [www.integrainfo.com](http://www.integrainfo.com). This is too good to be ignored! (And no, I do not own the company!)

## GENERAL SOURCES DATA

### Access to Newspapers and Periodicals

Many local and regional newspapers publish articles on conditions in an area's economy. Every major city's daily newspaper and many small regional papers now have an Internet site. If the Web address is unknown, here are several Web sites that have links to many publications.

#### **Newspapers.com** ([www.newspapers.com](http://www.newspapers.com))

This site offers links to tens of thousands of interesting and useful sites, including newspapers within the United States, international newspapers by country, college newspapers, and business publications. For U.S. newspapers, you can enter the state and get links to all of the newspapers and periodicals published in that state. These cover such a variety of topics that it is difficult to describe them all. I entered New Jersey and got hundreds of links to such publications as *Advanced Coatings & Surface Technology*, *Burlington County Times*, *Bartender Magazine*, *Casino Player*, and *Catholic Advocate*, and I hadn't finished with the C's yet. Included on a separate page are links to the top 10 newspapers published in the United States ([www.newspapers.com/top10.html](http://www.newspapers.com/top10.html)). This site is another one of those freebies.

#### **American Journalism Review (AJR) NewsLink** ([www.ajr.org](http://www.ajr.org))

The American Journalism Review site has links to thousands of U.S. and foreign newspapers. You will also find links to television and radio stations and newswire services. The publication Web sites that you find may or may not have an archive feature for older articles, and they may or may not charge a retrieval fee for articles. But you can retrieve current news articles from most of them.

#### **The Internet Public Library** (<http://www.ipl.org/div/news/>)

This site has a comprehensive listing of newspapers that have Web sites located in Africa, Asia, Central America, the Caribbean, Europe, the Middle East, North and South America, the South Pacific, and the United States (by state). One can also browse by title. The Internet Public Library is a public service organization and learning and teaching environment at the University of Michigan, School of Information. Their mission is to provide library services to Internet users.

A Reference Center is included at [www.ipl.org/div/subject/browse/ref00.00.00](http://www.ipl.org/div/subject/browse/ref00.00.00) that includes links to Sciences & Technology, Reference, Education, Arts & Humanities, Health & Medical Sciences, Law, Government & Political Science, Computers & Internet, Business & Economics, Social Sciences, Entertainment & Leisure, and Associations.

#### **Factiva** ([www.factiva.com](http://www.factiva.com))

Factiva, formerly Dow Jones Interactive, provides access to a multitude of business news and information resources. Factiva's collection covers more than 10,000 authoritative sources and includes the exclusive combination of *The Wall Street Journal*, *The Financial Times*, Dow Jones and Reuters newswires, and the Associated Press, as well as Reuters Fundamentals, and D&B company profiles.

## PUBLICLY TRADED GUIDELINE COMPANY DATA

Another component of the data-gathering part of the assignment is to locate information about *comparables*. These comparables are also known as *guideline companies*. The business valuation committee of ASA captioned this terminology as a means of differentiating what the business valuation analyst does from what the real estate appraiser does in the application of the market approach. Since real estate appraisers can generally find comparables that are close enough to the appraisal subject to use in the appraisal process, this terminology seems appropriate. However,

business valuation analysts do not enjoy the same luxury of finding other companies that are close enough to be considered good comparables. Instead, we use other companies to provide guidance, and therefore, these companies are termed guideline companies.

### Standard & Poor's Register of Corporations

If the valuation analyst knows of public companies that are in the same industry as the appraisal subject, the valuation analyst can turn to the *Standard & Poor's (S&P) Register of Corporations*. This publication, found in most libraries, lists companies and their SIC codes. Other sources for finding public guideline company information include:

- *SEC Directory*. This directory lists all companies that are required to file annual reports with the Securities and Exchange Commission (SEC).
- *S&P Register—Indexes*. This publication lists both public and private companies according to SIC code.
- *S&P Corporation Records—Index of Companies by SIC Code*. This publication lists public companies only.
- *Mergent*
- *Value Line Investment Survey*
- Other Internet sources

This publication is the first of the three volumes of *S&P Register of Corporations, Directors & Executives*. This book is updated annually and serves as a guide to the business community, providing aid to those making buying decisions.

The publication lists corporations by name and provides such information as its address, telephone number, officers, directors, the exchange the company trades its stock on, its SIC code, and its subsidiaries. The register covers corporations in the United States and Canada, as well as other major international corporations.

*S&P Register of Corporations* is published by Standard & Poor's, a division of McGraw-Hill Inc., New York.

*S&P Register of Corporations, Directors & Executives—Indexes* is volume 3 of *S&P Register of Corporations, Directors & Executives*. This volume supplies the reader with a breakdown of the major SIC codes, a list of the companies in each grouping, a geographical list of the companies, an index of parent companies and their subsidiaries, obituaries, plus other significant information about the companies. This book is also published annually.

*S&P Register of Corporations, Directors & Executives—Indexes* is also published by Standard & Poor's. The *S&P Register of Corporations* is part of the online database S&P NetAdvantage available on the S&P Web site at <http://standardandpoors.com>.

### Mergent

*Mergent Online* (formerly *Moody's Manuals*) consists of data on more than 15,000 public U.S. companies and their SEC filings, including current and historical annual reports. International company data and annual reports are also available. Access to Mergent Online is available at [www.mergentonline.com/](http://www.mergentonline.com/). In addition to the online service, Mergent continues to offer a number of the former Moody's publications in print format (see box 5.5). Information on Mergent's print products can be found at [www.mergent.com/productsServices-print.html](http://www.mergent.com/productsServices-print.html).

### Value Line Investment Survey

This survey is published weekly in three parts: "Summary & Index," "Selection & Opinion," and "Ratings & Reports." The "Summary & Index" section features a listing of companies

#### Box 5.5 Mergent Print Publications

- Industrial Manual and News Reports
- OTC Industrial Manual and News Reports
- OTC Unlisted Manual and News Reports
- Transportation Manual and News Reports
- Public Utility Manual and News Reports
- Bank and Finance Manual and News Reports
- International Manual and News Reports
- Municipal and Government Manual and News Reports
- U.S. Company Archives Manual
- International Company Archives Manual
- Unit Investment Trusts Annual Payment Record and UIT Weekly Reports
- Dividend Record and Annual Dividend Record
- Bond Record and Annual Bond Record
- Industry Review
- Handbook of Common Stocks
- Handbook of NASDAQ Stocks
- Dividend Achievers

alphabetized by company name and shows the price, beta, current price and earnings ratio, the estimated dividends for the year, and other stock data for each company. There is also a listing of timely stocks in timely industries and various stock rankings and estimates. In addition, the index to part 3, "Ratings & Reports," lists the industries, the page references to them, and the rankings of each industry's probable performance.

Part 2 of the *Value Line Investment Survey* features articles, graphs, and tables on current economic conditions, the Federal Reserve's actions, stock market conditions, earnings estimates, Federal Reserve data, economic information on the GDP, consumer confidence, home sales and starts, and stock market averages.

Part 3 of the *Value Line Investment Survey* gives an in-depth analysis of each industry listed. Recent developments and actions that have affected the industry are discussed, and statistics and graphs showing both current and historical data are provided. News about the major companies involved in the particular industry is presented, along with stock information, the company's current financial position, quarterly earnings, earnings per share, and dividends. The information provided in the three parts of the *Value Line Investment Survey* can be used in analyzing the economy at specific time periods, analyzing industries, and making comparisons with those companies involved in a particular industry.

*The Value Line Investment Survey* is published and copyrighted by Value Line Publishing Inc., New York. Information is available on the Value Line Web site at [www.valueline.com](http://www.valueline.com).

Other financial and descriptive information about public companies can be obtained from Form 10-K, Form 10-Q, and the annual reports of the guideline company, which are available either directly from the guideline company, the SEC, or through commercial vendors.

Sources of forecast financial data include the following:

- Brokerage houses
- The Institutional Brokers Estimate System (I/B/E/S), available through the Thomson Corp.
- *S&P Earnings Guide*
- *Nelson's Earnings Outlook*
- *Zack's Earnings Forecaster*
- Bloomberg Financial Markets

In addition to locating specific guideline company information, the valuation analyst will also be looking for data about mergers and acquisitions in the same or similar industry as the appraisal subject's. I will explain more about this in chapters 7–8, but first let's point out where you can get merger and acquisition information.

Merger and acquisition data can be obtained from the following sources:

- *Acquisition/Divestiture Weekly Report*
- *Mergers and Acquisitions Sourcebook*
- *Mergerstat Review*
- *Mergerstat Control Premium Study*
- Computer databases:
  - The Institute of Business Appraisers Inc.
  - BizComps
  - Pratt's Stats
  - Done Deals
  - Securities Data Company (a Thomson Company)

## **Mergerstat Review**

This annual publication presents compiled statistics relating to mergers and acquisitions. Data on merger and acquisition announcements and purchase prices are presented annually and quarterly, for the current period and historically. Current transactions that are either completed or pending are also shown, as well as the prices offered and equity interest sought for companies that are in the \$100 million category.

The 100 largest announcements in history are featured, as are the largest by industry. The publication also has announcements on mergers and acquisitions for specific industries, including a ranking of the dollar value offered and the number of transactions in each industry. International transactions, divestitures, a transaction and cancel-

lation roster by industry, and acquisitions of privately owned companies are other areas featured in the book. The information provided in *Mergerstat Review* can be used to identify industry guideline companies that were involved in actual transactions. The most widely used application of *Mergerstat Review* is the reporting of control premium data. This is discussed in greater detail in chapter 12.

*Mergerstat Review* is published by FactSet Mergerstat LLC. More information is available at [www.mergerstat.com](http://www.mergerstat.com).

### **Mergerstat Control Premium Study**

The *Mergerstat Control Premium Study* offers quarterly information on control premiums and analyzes the mergers and acquisitions of public companies to determine the premium paid to obtain a controlling interest. This information can be used to help quantify premiums and discounts.

A list of the companies that were acquired, in addition to the companies that acquired those companies, is given, along with business descriptions and SIC codes. Numerous tables relating to the acquisition are provided and contain such information as the acquisition announcement and closing dates, the value of the deal, the percentage of common stock held by the acquirer before and after the acquisition, the price of the stock per share for various time frames, selected ratios, the specific stock exchange on which the stock is traded, and the nature of the takeover. The *Mergerstat* unaffected price is featured (the common stock price per share that has not been affected by the announcement of the acquisition), as is the *Mergerstat* control premium (found by subtracting the *Mergerstat* unaffected price from the purchase price, then dividing the difference by the *Mergerstat* unaffected price).

The book also contains a list of companies (grouped by their SIC codes) that were acquired during a 12 month period. The data provided on these acquisitions is the *Mergerstat* control premium and the range, median, and mean for each industry. Historical data on control premiums is also provided on a quarterly basis in the form of graphs.

The *Mergerstat Control Premium Study* is published and copyrighted by Fact Set Mergerstat LP and is available at [www.mergerstat.com/newsite/bookStore.asp](http://www.mergerstat.com/newsite/bookStore.asp).

### **Finding Publicly Traded Guideline Companies**

As will be explained in chapter 7, the guideline company method of developing a conclusion of value involves finding publicly traded companies that are comparable to the one being appraised. Perhaps the easiest way to do this is to find a database that is searchable by SIC code. This section provides some additional reference sources that might help in your search.

S&P has a product called Compustat that contains data on thousands of active and inactive publicly traded companies, including 20 year historical data if available. This database, together with S&P's Xpressfeed service, delivers a wealth of information to your computer—for a fee, of course.

Dialogweb, owned by Thomson Corp., provides access to the business databases of Dun & Bradstreet, S&P, Frost & Sullivan, Find/SVP, and SEC filings to produce a prodigious amount of information. It is searchable by SIC code, and, among other things, searches can be done for top companies in an industry and for mergers and acquisitions in an industry. Prices vary according to the databases searched and are available on the Web site ([www.dialogweb.com](http://www.dialogweb.com)).

NASDAQ's Web site ([www.nasdaq.com](http://www.nasdaq.com)) makes information on publicly traded companies available for free. If a publicly traded company in the industry you are studying is known, it can be entered on the NASDAQ home page to obtain a quote. Below the quotes are links to additional information. One link is called *Fundamentals*. By clicking on *Fundamentals* you will find additional information and other links, one of which is called *View Competition*. Clicking on *View Competition* will reveal a list of other publicly traded companies in the same industry as the one originally entered. The search cannot be done by SIC code and must begin with a known company. This may not work well in all situations, but it is an overlooked source of a lot of free information about companies in a given industry.

### **Additional Data Sources**

Hoover's Company Database ([www.hoovers.com](http://www.hoovers.com)) contains a great deal of good information about publicly traded companies as well as industries. Most of it is available through a subscription, but a free search can be done for companies by industry type. The search will produce general information about the company for free; the more



detailed profiles are available to subscribers. Searches by SIC code are also available to subscribers. These searches can turn up both publicly traded and privately held companies.

The most economical method of creating a guideline company group uses the databases available through NASDAQ or Hoover's. Another site with a lot of free information is [www.zacks.com](http://www.zacks.com), the home of Zacks Investment Research. A company search can be done by industry type, revealing analysts' reports on companies within the industry group. Each report is priced individually, and they range from about \$10 each on up. You can choose which ones you want, adding them to a shopping cart as you would at any online store. Earnings estimates are available in most cases for free. At the other end of the pricing spectrum is Standard & Poor's CompuStat product, which contains 20 years of annual financial data on approximately 9,000 companies.

## Publicly Traded Guideline Companies—Financial Statement Information

All of the sources listed in the section "Finding Publicly Traded Guideline Companies" also contain financial statement information on public companies.

### EDGAR

The Electronic Data Gathering Analysis and Retrieval (EDGAR) database allows free access to SEC filings of publicly traded companies. EDGAR filings are available on the SEC site at [www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml).

In addition to the SEC site, third party vendors offer EDGAR data with value-added features such as enhanced searching or more option options for a fee. These vendors include EdgarOnline ([www.edgar-online.com/](http://www.edgar-online.com/)) and 10-K Wizard ([www.10kwizard.com](http://www.10kwizard.com)).

Several of the databases mentioned here contain earnings estimates. I/B/E/S (recently acquired by Thomson Corp. when it acquired Disclosure Inc.) earnings estimates are available electronically on its Web site, [www.thomson.com](http://www.thomson.com), for a fee.

Other print sources include the *Standard & Poor's Earnings Guide*, which contains consensus earnings estimates on thousands of stocks at [www.netadvantage.standardandpoors.com](http://www.netadvantage.standardandpoors.com). The *Value Line Investment Survey*, mentioned previously, includes at least two years of projected financial statement data for most companies. *Zacks Earnings Forecaster* and *Bloomberg Financial Markets* (Merrill Lynch) are other print sources. Analysts' reports are available from the major brokerage houses and contain earnings estimates, buy and sell recommendations, and sometimes forecast financial information. *Nelson's Directory of Investment Research* lists the names of analysts and the industries they follow. Some public companies make analysts' reports available to prospective investors.

### Stock Quotes

Since part of the pricing multiples that you may want to use include the prices of the publicly traded guideline companies, I thought that it might also be a good idea to give you some sources for gathering pricing information. Historical and current stock prices for any publicly traded company are available on the Web sites of the New York Stock Exchange and the NASDAQ (which includes the American Stock Exchange prices), as well as on Yahoo! All of these sources are free, so there is no reason ever to pay for this information.

### Tradeline

If you insist on paying for something you can get for free, this database is available at [www.tradeline.com](http://www.tradeline.com). Tradeline includes current and historical security pricing for over 145,000 U.S. and Canadian securities, 30,000 international securities, and 1,600 market indexes. It also contains exchange rate, dividend, capitalization, and descriptive information about the companies. This is not a free service. Tradeline is produced by SunGard Market Data Services and is accessible through Dialog.

## Finding Acquired or Merged Guideline Companies

There is no limit to the amount of information that can be retrieved if you know where to find it. The scary part about what we do for a living is not knowing what is out there. I discuss the various databases that are used in chapter 8. Be patient and you will eventually get there.

## Cost of Capital and Betas

Information about cost of capital and betas, topics to be discussed in chapter 11, is available from numerous sources. One can use Value Line projections to produce an estimate of expected returns on the market.<sup>4</sup>

Additional data sources include Standard & Poor's CompuStat, which is perhaps the best source for betas. *Standard & Poor's Stock Reports*, available in print and online, contains descriptive and summary financial information on hundreds of publicly traded companies as well as on betas. For more information, see [www.netadvantage.standardandpoors.com](http://www.netadvantage.standardandpoors.com).

Betas for individual companies are available free on the NASDAQ Web site. These betas use the S&P 500 as the underlying index to calculate performance of the market.

I think that I have given you enough to get started. By now, you probably wish you were finished. The sources of information listed in this chapter are some of my favorites. Surely once you log on to the Internet and begin clicking around on things, you will find many of your own favorite sources. Be wary, though. A person can easily get lost in his or her Internet research. It has a way of drawing you in. Good luck and happy clicking!

Information about many of the databases and publications discussed in this section, as well as about others that you may want to become familiar with, is included in appendix 19, "Business Valuation Resources," at the end of this book.

## THE ON SITE INTERVIEW

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An important part of the data-gathering phase of the appraisal engagement is the on site interview. It is generally a good idea to see what you are appraising. Interviewing management at the company's facility has several advantages. First, seeing the physical layout of the facility can help you understand such items as the capacity of the plant and the working environment (is the place busy or can you take a nap there?). Management will also feel more comfortable in its own environment. Being at the business location will also make it easier for the valuation analyst to obtain trade journals and other information that he or she may not have been supplied with yet.

The person or persons whom you choose to interview will vary from job to job, but in general, the following interviewees should be considered:

- Your client
- The company's officers and management
- The company's accountant
- The company's attorney
- The company's banker

The questions that should be raised at the interview(s) will cover such topics as operations, financial performance, the depth of management, competition, the history of the company, personnel, suppliers, customers, marketing, legal issues, and capital requirements. In addition, don't forget to ask your client for any trade journal articles that he or she may be aware of on how to value the client's business. If you don't find it yourself, you may be confronted by your client afterward for not using a particular methodology. Exhibit 5.3 contains a monograph published by The Institute of Business Appraisers titled "Questions to Ask When Appraising a Business."

A valuation analyst will generally find that more information is gathered during the management interview than by reviewing the volumes of documents that are frequently gathered. Financial documents rarely tell the entire story. Management should be able to provide the valuation analyst with a good history of the company, an understanding of what made the company's financial results appear the way they do, and expectations about where the company is going. The history could even be written by the client. Sometimes, this information can be obtained by going to the company's Web site or by going through the company's brochures.

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<sup>4</sup> See David King, "The Equity Risk Premium for Cost of Capital Studies: Alternatives to Ibbotson," *Business Valuation Review* (September 1994): 123-129.



### EXHIBIT 5.3

## QUESTIONS TO ASK WHEN APPRAISING A BUSINESS

The answers to the following questions should give the appraiser a good base of information about the business he has been asked to appraise.

Not all of these questions will apply to all businesses, nor to all situations. However, many of them will apply in a given situation, and even those that do not apply directly may suggest other information that the appraiser may wish to obtain.

No list of questions about a business can be exhaustive. However, the following questions cover many of the most important aspects of a business that should be scrutinized when the business is to be appraised.

#### *About the Form of Organization of the Business*

Is the business a sole proprietorship, partnership, or corporation?

If a partnership:

- How many partners, and who are they?
- Are they all in favor of selling?
- If not, is this likely to be a serious problem?

If a corporation:

- How many stockholders are there?
- Who are the major stockholders, and what percentage of the total outstanding shares does each of them own?
- Are all of the stockholders in favor of selling?
- If not, what percentage of the total outstanding shares is represented by those stockholders who are in favor of selling?
- Are the stockholders who are not in favor of selling likely to be a serious problem?
- Is the stock traded on a market?
- What market?
- What are recent prices for shares traded?

#### *About the Products/Services of the Business*

- What are the principal products/services?
- For what length of time has each been sold?
- What has been the sales volume of each, for each of the past 5 years?
- What are the (a) costs and (b) gross profit for each of these products/services?
- What portion of the total cost is for materials?
- What portion is for labor?
- What portion is for overhead?
- Which of the products/services are proprietary?
- Which products are purchased from others, for resale?
- What is the nature of the agreement(s) with the supplier(s) of these products?
- What features of the business' products/services distinguish them from competition?
- What product/service warranties are given to customers?
- What is the forecast of future sales and profits for each major product/service?
- How do quality and price compare with similar products/services offered by competitors?
- To what extent does the business rely on the services of outside vendors or subcontractors?
- Who are the principal vendors/subcontractors?
- What other products/services could be produced/furnished with the existing facilities?

**EXHIBIT 5.3***About Markets and Marketing*

- What are the principal applications for each major product/service?
- What are the principal markets for each major product/service?
- To what extent are these markets already established, and to what extent must they still be developed?
- What is the future outlook for growth, or lack of growth, of each of these markets?
- Who are the principal customers?
- What portion of the total sales volume does each of these customers represent?
- Which major potential customers have not yet been secured as actual customers?
- How do sales break down geographically?
- What is the present backlog for each major product/service?
- How has this backlog varied over the past 3 years?
- Who are the principal competitors?
- What are the relative strengths and weaknesses of each of these competitors?
- What is the estimated sales volume of each of these competitors?
- What is this business' relative position among its competitors with regard to sales volume?
- What is its relative position among its competitors with regard to reputation?
- Has the business' past sales growth generally followed the industry trend, or has it been ahead of or behind this trend?
- What is the forecast of future industry-wide sales for each of the business' products/services?
- What is the forecast of this business' future sales for each major product/service?
- Does the business regularly use the services of any advertising and/or public relations firms?
- Who are they?
- Is the marketing aggressive and skillful?
- Who is responsible for market research?
- Who is responsible for advertising and sales promotion?
- Who is responsible for product applications?
- Who is responsible for exploiting new markets?
- What is the nature of the direct selling organization (supervision, personnel, field offices, salary and other compensation)?
- What is the nature of the distributor and/or sales representative organization (list of distributors/sales representatives, exclusive or non-exclusive nature of agreements, expiration dates of individual appointments, past performance of each distributor/representative, commission and/or discount rates, contract terms)?
- What is the nature of the service organization (who is responsible for service, installation, maintenance, etc.)?
- Are there any foreign operations?
- Details?
- Does the business use the services of any outside consultants for market research or similar activities?
- Who are they?
- What is their past record of accomplishment?
- How are they compensated?
- Are any of them under contract?

*About the Financial Situation of the Business*

- What is the sales and earnings record of the business for each of the past 5 years?
- What salaries/dividends have been paid to owners/stockholders during each of the past 5 years?
- Are income/expense statements available for each of the past 5 years?
- Is a current balance sheet available?
- What are the details of the accounts receivable (from whom receivable, amounts, age, etc.)?
- What about inventory?
- What is normal inventory level?
- What is the actual inventory at present?

*(Continued)*

**EXHIBIT 5.3** *(Continued)*

- How does this inventory break down among raw material, work in process, and finished goods?
- What is the condition (new, obsolete, damaged, etc.) of the existing inventory?
- Is any portion of the inventory on consignment?
- What portion?
- Consigned to whom?
- For how long?
- On what terms?
- What are the details of the accounts payable (to whom payable, amounts, age, any special circumstances, etc.)?
- What loans are outstanding, to whom are they payable, and what are the terms of each loan (interest rate, payment schedule, collateral, etc.)?
- What is the amount of accrued expenses payable?
- What items does this include?
- Are all federal and state taxes (including employee withholding taxes) current?
- What is the present book value (net worth; invested capital plus retained earnings) of the business?
- What is the amount of available working capital?
- What is the business' depreciation policy for fixed assets?
- What overhead (burden) rates are used in determining costs?
- What are the various departmental budgets?
- What is the advertising and sales promotion budget?
- What is the total payroll?
- Does the business own equity in any other businesses?
- What liabilities, contingent or otherwise, exist in connection with product/service warranties?
- Are there any existing claims and/or known contingent liabilities of any nature whatsoever?
- Details?
- Are there any contract disputes or renegotiations pending?
- Are there any outstanding stock options, convertible notes, or the like?
- Is there an existing forecast of future sales, profits, and capital requirements?
- What does this forecast show?

*About the Physical Facilities*

- Is a complete list of physical facilities and equipment available?
- Is the real estate owned or leased?
- If owned, what is the appraised value?
- When was this appraisal made?
- By whom?
- If leased, what are the terms of the lease (period, rental, security deposit, restrictions on use of premises, renewal options, etc.)?
- What are the zoning restrictions?
- Are any of the other physical facilities or equipment leased rather than owned?
- Details?
- Is there any excess or idle capacity?
- How much?

*About Personnel and Organization*

- Is a complete organization chart available?
- Are position descriptions available?
- What are the functions of key executives and personnel?
- What is the total personnel complement?
- Are there established rates of pay or pay ranges for the various jobs?
- How do these rates compare with those of other employers in the general area?
- What is the wage and salary review policy?

**EXHIBIT 5.3**

- What employee benefits exist (life insurance, hospitalization insurance, vacation, sick leave, pension, profit sharing, etc.)?
- Is the cost of these benefits paid entirely by the business, or do the employees contribute part of the cost?
- What part?
- Are the workers unionized?
- Which ones?
- What are the contract details?
- Have there ever been any unsuccessful attempts to organize the workers?
- Details?
- Have there ever been any strikes?
- Details?
- What has been the experience with respect to employee turnover?
- Are the employees given any formal training for theft jobs?
- Details?
- Is there a house organ, employee bulletin, or newsletter for employees?
- Details?
- Are written personnel policies and/or procedures available?
- What is the general situation in the area with regard to availability of labor?

*About Management*

- Is an organization chart available?
- What are the backgrounds of key members of management?
- What is the compensation of key members of management?
- Are any members of management (or any other employees) under contract to the business?
- Details?
- Will the sale of the business involve or require any substantial reorganization of management?
- How is it regarded by its bank(s), and by the financial community in general?
- How is it regarded by its employees?
- How is it regarded by the community in which it is located?
- Has the business or any of its principals ever been found guilty, or ever entered a plea of no contest or been a party to a consent decree, with regard to anti-trust laws, anticipation regulations, securities laws or regulations, or the like?
- Details?
- Has the business complied with applicable requirements of the Occupational Safety and Health Administration (OSHA) to the satisfaction of the cognizant OSHA office?
- What has been the past history of the business with regard to litigation?
- Is the business involved in any joint ventures or similar undertakings?
- Details?
- What are the business' major accomplishments?
- Where has the business failed to an appreciable degree?
- Which members of management can be expected to remain with the business following the sale?
- What are the management capabilities of the persons in charge of each of the key departments?
- How well is each of these departments staffed?
- How capable is the second echelon of management?
- Are there any strong differences of opinion among members of management?
- Detail?
- Do separate departments cooperate willingly and effectively with each other, or are there cases where cooperation is grudging or non-existent?
- Is management progress-minded and willing to take reasonable risks?
- Who dominates the organization?

*(Continued)*

**EXHIBIT 5.3** *(Continued)*

- If the business is a corporation, what control do major stockholders exercise over the company's policies and/or activities?
- Are there any proxy fights, or attempts by outsiders to take over control of the company?

*About the Business in General*

- When was the business established?
- For how long has it been owned by the present owner(s)?
- Does success of the business depend to an unusual degree on the capabilities, performance, and/or contacts of one or more key persons?
- Details?
- What potentially dangerous situations exist, or might arise, in connection with the business' management, products, services, markets, finances, facilities, legal obligations, etc.?
- How is this business regarded by its customers?
- How is it regarded by its competitors?
- How is it regarded by its suppliers?
- How is it regarded by cognizant government agencies?
- How is it regarded by its bank(s), and by the financial community in general?
- How is it regarded by its employees?
- How is it regarded by the community in which it is located?
- Has the business or any of its principals ever been found guilty, or ever entered a plea of no contest or been a party to a consent decree, with regard to anti-trust laws, anti-discrimination regulations, securities laws or regulations, or the like?
- Detail?
- Has the business complied with applicable requirements of the Occupational Safety and Health Administration (OSHA) to the satisfaction of the cognizant OSHA office?
- What has been the past history of the business with regard to litigation?
- Is the business involved in any joint ventures or similar undertakings?
- Details?
- What are the business' major accomplishments?
- Where has the business failed to an appreciable degree?

(From *How to Price a Business* by Raymond C. Miles. Copyright © 1982.)

It's terrible to say, but frequently valuation analysts must take what their own clients tell them with a grain of salt. For example, if you have a client who is going through a divorce, you are most likely to get a story of doom and gloom. However, if that same client is looking to sell the business, the future always looks great. Do not lose sight of the purpose and function of the appraisal assignment when you conduct your interview.

Another practical consideration is whether the appraisal assignment is impaired if you do not get to speak to management. It is not uncommon in litigation assignments for the valuation analyst to be prevented from speaking to the company's management. Even if you are allowed to speak to them, they may not be as cooperative as you may like. What do you do then? We are all tempted to teach them a lesson, but it is unprofessional and highly unethical to make your point by becoming adversarial. You also may not want to hit them if they are bigger than you!

In the situation where you are prevented from getting information from management, you must determine if the missing information will prevent you from being able to give an unqualified conclusion of value. One of your limiting conditions in the report will be something like this:

This appraisal was conducted without the benefit of management's cooperation. We were not allowed to interview management. If we had been allowed to interview them, we might have discovered information that would have affected our conclusion of value.

This is called, protect thyself! The last thing you want sprung on you are questions like “How come you didn’t speak to management?” or “How come you did not know that the company was planning to file for bankruptcy?” or “Wouldn’t your answer be different if you knew that 82 percent of the company’s sales came from one customer?” Answers like “Of course it would” don’t bode well before a judge or jury. Of course, they may laugh inside because they know that you are right.

In litigation engagements, the valuation analyst can and should request that a deposition of the management personnel be taken if they won’t cooperate with you. You can provide your client’s attorney with all of the questions that you want asked. Your questions should generally be as detailed as possible in order to get a full response. This is because the person being deposed, if prepared for the deposition, will give a lot of “Yes,” “No,” and “I don’t remember” types of responses. The attorney asking the questions should be provided with an understanding of what you are trying to achieve. If permitted, you may even sit in the room while the deposition is taking place. Then if there are additional questions that must be asked to clarify some of the answers given, you can write them out and hand them to the attorney asking the questions.

## CONCLUSION

Now that you have finished this chapter, you should have more of an idea about the data-gathering process. You should also be more familiar with many of the data sources that will be needed to do the appraisal. At this point, you should also be familiar with the on site interview. If not, reread this chapter before going any further.





# CHAPTER 6

## *Data Analysis*

### CHAPTER GOALS

In this chapter, I will attempt to explain what to do with all of the data that I told you to get in the previous chapter. This will include a discussion on how to use the data, as well as what it means. Therefore, in this chapter, I will discuss the following:

- Economic analysis
- Industry analysis
- Subject company analysis
- Financial analysis
- Financial statement adjustments

### INTRODUCTION

Data analysis is an important component of the valuation process. Because assessment of risk is a goal of the valuation analyst, the analysis of the information collected must be performed with a view toward the future of the business. In general, we feel more comfortable using historical information for a valuation, but we have to remember that a willing buyer is not interested in buying history. As valuation analysts, it is our role to assess how much the future will resemble the past. To the extent the past resembles the future, and to that extent the past is predictive of the future, only then can we value the business.

### ECONOMIC ANALYSIS

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Revenue Ruling 59-60 tells us to consider “the economic outlook in general and the condition and outlook of the specific industry in particular.” During the analysis of the economy, the valuation analyst attempts to determine the economic risks associated with the subject business. Questions regarding the demand for the company’s goods or services and the sources of supply are frequently asked. The outlook for the general economic trends that might affect supply and demand for the company’s goods and services should be thoroughly investigated. This analysis must be relevant to the appraisal subject, not just taken from a boilerplate. For example, if the appraisal subject is a construction company, economic factors such as interest rates, housing starts, and building permits may be important. How important are they if the appraisal subject is a cardiovascular surgery practice?

Another component of the economy that should be considered by the valuation analyst is where in the economic cycle the appraisal subject is at the date of the appraisal. If the economy is in a recession, it will make a big difference whether the recession is just starting or is about to end. Depending upon where the company is in economic cycle, the short term and long term projections may be radically different. Because valuation is a prophecy of the future, this would be extremely important to the willing buyer, because he or she would have to ride out the balance of the cycle.

The economic analysis will be used in at least two sections of the appraisal assignment. The economic outlook will be helpful in forecasting the future performance of the subject company. The economic analysis will also help the valuation analyst in performing an analysis of the economic risk that the company is exposed to. This will be

one of the many considerations in the determination of (1) the pricing multiples used in the market approach and (2) the discount or capitalization rates used in the income approach.

During the management interview, the valuation analyst will want to ask company representatives about how the economy impacts the business. Some businesses are cyclical with the economy, while others may be counter-cyclical; these businesses react opposite to the economy. An example of one such business is a tractor-trailer driving school. When the economy is strong, business is bad. When the economy is weak, business is good. Why? During a good economy, people are working and they are not necessarily looking to be retrained in a new field. During a bad economy, economic layoffs require people to find new employment. The issues for the valuation analyst to consider about training schools are: Is available funding for the students (if they are unemployed, they may not want to or be able to spend \$2,000+ for education), and after the students complete the course, will the economy turn around so that drivers will be needed? Exhibit 6.1 gives you an illustration of a sample economic section from a real report.

Let me point out a few things to you about the exhibit. First, if you notice, we footnote our sources. In fact, we footnoted the fact that our national economy was adapted from a service to which we subscribe. Why recreate the wheel? It is perfectly acceptable to buy an economic report. Just make sure that you read it, modify it to fit the assignment, and do not just merely slap it into the back of the report. Also, in this appraisal, the local economy mattered as well, so we covered the parts of the state that we considered to be important to the appraisal subject.

### EXHIBIT 6.1

#### ECONOMY SECTION

The performance of every entity is influenced by the larger economic factors that operate at the national and local levels. Past performance must be evaluated in relation to the economic climate within which that business has been operating, and an intelligent assessment of future performance cannot be made without accounting for the projected forces that will impact that business in the nearer and longer terms.

#### **NATIONAL ECONOMY<sup>1</sup>**

According to advance estimates released by the Department of Commerce's Bureau of Economic Analysis, Real Gross Domestic Product (GDP), the output of goods and services produced by labor and property located in the United States, increased at an annualized rate of 1.6 percent during the third quarter of 2006. This is the 20th consecutive quarterly rise in GDP subsequent to the 2001 recession, and it compares to a revised increase of 2.6 percent in the second quarter of 2006. The third quarter 2006 increase represented the smallest increase since the first quarter of 2003, while the first quarter measure (5.6 percent) represented the largest quarterly increase since the third quarter of the same year. While the slowdown in GDP growth evidenced in the third quarter was anticipated by economists, it was greater than anticipated.

The growth in real GDP in the third quarter reflected increases in personal consumption expenditures, exports, equipment and software, nonresidential structures, and state and local government spending. These factors were partly offset by a negative contribution from residential fixed investment and imports. Economists note that GDP for all of 2005 grew 3.2 percent, down from the 3.9 percent in 2004, which represented the nation's most favorable economic performance since 1999. Although GDP growth was expected to slow in the third quarter, most economists predicted somewhat higher growth in GDP (2.0 percent to 2.5 percent) than the 1.6 percent preliminary estimate for the third quarter. GDP is expected to improve slightly for the remainder of 2006. Economists predict GDP growth on the order of 2.5 percent for the fourth quarter of the year. Growth for 2007 is expected to remain steady at 2.5 percent to 2.7 percent. Expected lackluster GDP growth is primarily the result of a cooling housing market; however, economists believe the worst of the residential decline has passed. Improvement over third quarter growth figures will stem from lower energy prices, improved trade, and consumer spending.

<sup>1</sup> Adapted from *The National Economic Review (3rd Quarter 2006)*, Mercer Capital.

**EXHIBIT 6.1**

The Federal Reserve's Open Market Committee (FOMC) kept its target for the federal funds rate unchanged at 5.25 percent during the third quarter. This marks the first quarter since the latter part of 2003 that the FOMC has not raised interest rates. In its staff forecast, significantly lower energy prices, sustained increases in labor income, and favorable labor market conditions were among the factors underlying a more favorable outlook during the third quarter. The staff forecast suggests that due in particular to the cooling housing market, growth would be subdued over the balance of the year. However, once the housing correction has abated, the forecast states that growth is likely to strengthen and economic expansion would probably track close to the rate of growth of the economy's potential next year and in 2008. It was noted that core inflation has been running at an undesirably high rate, and although core inflation is expected to decline gradually, substantial uncertainty remains with this outlook.

The Consumer Price Index decreased 0.5 percent to 202.9 in September. The seasonally adjusted annual rate (SAAR) of inflation for the third quarter of 2006 was 0.8 percent, compared to changes of negative 1.8 percent, 4.3 percent, and 5.1 percent, respectively, for the last quarter of 2005 and the first two quarters of 2006. For the 12 month period ended in December 2005, inflation rose 3.4 percent.

The core rate of inflation rose at a 2.7 percent SAAR during the third quarter of 2006 following increases of 2.6 percent, 2.8 percent, and 3.6 percent for the last quarter of 2005 and the first two quarters of 2006, respectively. In 2004 and 2005, the core rate of inflation advanced 2.2 percent. The Producer Price Index fell 1.3 percent in September, after increases of 0.1 percent in both July and August. The PPI fell 4.4 percent (SAAR) for the third quarter after declining 2.0 percent in the first quarter of 2006 and increasing 6.4 percent in the second quarter (all figures recently revised). The PPI increased 5.4 percent for 2005 following a 4.2 percent increase in 2004.

The unemployment rate was at 4.6 percent in September, unchanged from second quarter levels and in line with estimates. The 4.6 percent third quarter rate is at its lowest level in nearly five years. September payroll increased by 51,000 jobs, following a gain of 188,000 jobs in August. Economists had expected a larger increase on the order of 120,000 for the month. Manufacturing payrolls decreased by 19,000 in September, following a decrease of 7,000 in August. Economists anticipate payroll growth for October to approach 135,000 jobs.

New privately owned housing starts were at a seasonally adjusted annualized rate of 1.772 million units in September, 5.9 percent above the revised August estimate, and 17.9 percent below the September 2005 level. Single-family housing starts were 1.426 million, which is 4.3 percent higher than the August figure. An estimated 2.068 million privately owned housing units were started in 2005, 5.8 percent higher than in 2004, marking the highest construction volume since 1972. The seasonally adjusted annual rate of private housing units authorized by building permits was 1.619 million units in September, 6.3 percent below the revised August rate of 1.727 million units.

Economic growth in the third quarter of 2006 represented a noticeable decline from first quarter results. This decrease was not unexpected by economists, although the decrease was greater than initially anticipated. Surveys of private sector economists suggest GDP is projected to grow at a 2.5 percent rate in the final quarter of 2006 and 2.5 percent to 2.7 percent for the first half of 2007. This is short of the 4.1 percent growth achieved, on average, over the past two and a half years. This deceleration in growth is expected to be at least partially due to the continuing decline in the housing sector which began in 2006. However, experts note that what consumers are not spending on construction improvements, they are instead spending on personal consumption. This somewhat mitigates the downward effect on GDP. Additionally, a respite from high fuel prices has shored up consumer spending, which, if sustained, should bolster GDP. Despite declining growth rates, economists do not foresee a high likelihood of recession in the near future.

The Federal Reserve's outlook concurs with that of the private economists by suggesting real GDP growth will continue to slow into the second half of 2006 (due to the cooling of the housing market and lower motor vehicle production) before strengthening gradually thereafter. Inflation readings were elevated during the third quarter, but inflation is not expected to be a major problem for the remainder of the year. Economists are moderately bullish on the stock market through 2007 and decidedly optimistic long term. The Federal Reserve is expected to hold rates steady through the end of 2006, but possibly raise rates once by the middle of 2007. The goal is for interest rates to be at a low enough level to continue to spur expansion, while keeping inflation fears low.

The Dow closed the third quarter at 11679.07, up 4.7 percent for the quarter. The S&P 500 index rose 5.2 percent during the quarter to close at 1335.85 following a 1.9 percent decrease in the second quarter. The NASDAQ Composite

*(Continued)*

**EXHIBIT 6.1** (Continued)

Index rose 4.0 percent during the third quarter to close at 2258.43, following a 7.2 percent decrease in the second quarter. The NASDAQ rose 1.4 percent in 2005. The broad market Wilshire 5000 index closed at 13383.30, up 4.2 percent for the quarter. The Wilshire 5000 index reflected a gain of 4.6 percent for 2005. The monthly average yields-to-maturity on the 20 year Treasury bond during the third quarter of 2006 were 5.25 percent, 5.08 percent, and 4.93 percent, respectively, for July, August, and September.

Table 1 presents stock market performance for the period prior to the valuation date.

**TABLE 1**  
**CLOSING STOCK MARKET AVERAGES**

	November 15, 2006	November 21, 2006	% Change 1 Week	% Change 12 Months
Dow Jones Industrial Average	12251.71	12321.59	+0.6%	+13.9%
Standard & Poor's 500	1396.57	1402.81	+0.4%	+11.8%
N.Y. Stock Exchange composite	8901.55	8918.08	+0.2%	+16.2%
NASDAQ composite	2442.75	2454.84	+0.5%	+9.5%
NASDAQ 100	1793.82	1808.88	+0.8%	+7.3%
American Stock Exchange Index	2010.56	2022.19	+0.6%	+17.9%
Value Line (Geometric)	455.53	456.45	+0.2%	+11.0%
Value Line (Arithmetic)	2198.86	2204.52	+0.3%	+15.7%

(Source: Value Line Investment Survey—Selection & Opinion, December 1, 2006: 4989.)

**LOCAL ECONOMY**

The appraisal subject has various locations in Florida. Three of the four are located within Broward County, in the cities of Coral Springs, Davie, and Weston. The fourth is located in Tallahassee.

Gross State Product (GSP) is a measurement of the economic output of a U.S. state. It is the sum of all value added by industries within the state and serves as a counterpart to GDP. From 1997 to 2004, Florida's GSP grew by an average annual growth rate of 4.2 percent and ranked seventh of all states in the U.S. From 2004 to 2005, the growth rate was 7.7 percent, which was the third highest in the country.<sup>2</sup> Florida's October 2006 unemployment rate was 3.1 percent. The rate was down 0.4 percentage points from 3.5 percent a year ago. The October rate is also 1.3 percentage points lower than the national rate of 4.4 percent. Florida's unemployment rate has been below the national average since mid-2002.<sup>3</sup> Florida's economy relies heavily on tourism. About 60 million visitors visit the state every year. Other major industries include citrus fruit and juice production, banking, and aerospace.<sup>4</sup>

Broward County had a population of 1,623,018, making it the second most populated county in the state. According to a report released by the U.S. Census Bureau on August 4, 2006, the total population had risen to 1.8 million people in 2005, an increase of approximately 10.9 percent. Since the 2000 census, the percentage of the population identified as non-Hispanic white has now dropped to less than half. Broward County is one of the three counties that comprise the South Florida metropolitan area.<sup>5</sup>

Coral Springs, located in Broward County, Florida, had a population of 117,549 at the 2000 census. According to the 2005 U.S. Census estimates, the city grew by 9.6 percent to a population of 128,804. Coral Springs was ranked 27th

<sup>2</sup>U.S. Department of Commerce, Bureau of Economic Analysis "Gross Domestic Product (GDP) by State," 02005, (October 26, 2006) <<http://bea.gov/bea/newsrel/GSPNewsRelease.htm>> (accessed November 30, 2006).

<sup>3</sup>Florida Agency for Workforce Innovation, "Florida Employment & Unemployment," (November 17, 2006).

<sup>4</sup>Adapted from Chamber of Commerce information.

<sup>5</sup>Ibid.

### EXHIBIT 6.1

in *Money Magazine's* 2006 list of "100 Best Places to Live," and was the highest-ranked Florida city. It was also ranked among the 2006 top 10 safest places to live in the United States by Magan Quitnoproess using FBI statistics. As of the 2000 census, there were 39,522 households, out of which 48.4 percent had children under the age of 18 living with them. The median income for a household in the city was \$58,459, and the median income for a family was \$64,193.<sup>6</sup>

Davie is also located in Broward County, Florida. As of the 2000 census, the town had a total population of 75,720. As of 2004, the population estimated by the U.S. Census Bureau was 82,579, an increase of approximately 9 percent. Davie has always had a reputation as a "western" town. It boasts a huge horse owning population and once was home to many herds of cattle. As of the 2000 census, there were 28,682 households, out of which 36.7 percent had children under the age of 18. The median income for a household in the city was \$47,014 and the median income for a family was \$56,290. A large number of educational institutions have campuses in Davie including Nova Southeastern University, Florida International University, Florida Atlantic University, and the University of Florida. It is also home to the Miami Dolphins Training Facility.<sup>7</sup>

Weston is a city also located in Broward County, Florida. Established as a city in 1996, much of the community was developed by Arvida/JMB Partners and is located near the western developmental boundary of Broward County. As of July 2004, the city had a total population of 63,534. The town is home to an 800-year-old Tequesta Indian burial mound.

In 2007, *CNN Money Magazine* ranked Weston 20th in America in the "Biggest Earners" category, which ranks the 25 cities in America with the highest incomes. It was also ranked as the city with largest job growth in Florida and 18th largest in the nation. *Business Week* ranked Weston as the 11th most affordable suburb in the United States. It is jokingly referred to as "Westonzuela" due to the large number of Venezuelan immigrants who have made the city their home.<sup>8</sup>

Tallahassee is the capital of Florida and the county seat of Leon County. As of 2004, the population recorded by the U.S. Census Bureau was 156,512, while the Tallahassee metro area was estimated at 255,500. Tallahassee is the home of Florida State University and Florida A&M University. In recent years, Tallahassee has seen an uptick in growth, mainly in government and research services associated with the state and Florida State University. Tallahassee is the 12th fastest growing metropolitan area in Florida. Its 12.4 percent growth rate is higher than both Miami and Tampa. As of the 2000 census, there were 63,217 households, out of which 21.8 percent had children under the age of 18 living with them. The median income for a household in the city was \$30,571, and the median income for a family was \$49,359. Educationally, Leon County is the highest educated county in Florida with 4.9 percent of the population possessing a Bachelor's, Masters, professional or doctorate degree. This is well above the Florida average of 22.4 percent and the national average of 24.4 percent.<sup>9</sup>

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

## INDUSTRY ANALYSIS

The purpose of the industry analysis is to allow a comparison of the appraisal subject with the industry as a whole, as well as to allow the valuation analyst to use industry forecasts to help predict how the subject company will perform in the future. Box 6.1 includes questions frequently raised about the industry.

The answers to these questions are important in assessing the future of the subject company when you are considering what is happening around it. If the industry is made up of a few large players and the company being appraised is small, there is little likelihood that the company will influence the industry. A local hardware store with \$3 million in sales is most likely not going to be a major factor in an industry dominated by companies such as The Home Depot or Lowes, with billions in sales.

### Box 6.1 Frequently Asked Industry Questions

- Who makes up the industry? Are there many companies or are there very few companies that control everything?
- Is it a cyclical industry?
- Is it a new industry with many new companies entering it, or is it a mature industry that has reached its saturation point?
- What are the barriers to entry, if any, into the industry?
- Is this a self-contained industry, or is it dependent on another industry?
- Is the industry dependent on new technology? If so, is the appraisal subject keeping up with the industry?
- Is the industry expected to change? If so, how will that affect the appraisal subject?
- What is the forecast for growth within the industry?

If an industry is cyclical, as are automobile dealerships, consideration should be given to where in the economic cycle the industry is. If the economy is at the bottom of the cycle, the forecast for the next several years may look good. This will affect the forecast of future operations, as well as the risk component of the market multiples, discount rates, or capitalization rates that will be used. You also need to understand which economic factors impact the industry, and sometimes the industry(s) of its customers. For example, what is the impact of rising interest rates for an automobile dealership? Sales and leasing may go down, so this is a bad thing. However, people will keep their cars longer, and the repair bays may get busier because of the older cars needing more maintenance. This is a good thing. Don't be quick to jump to conclusions.

Sometimes, the industry analysis must extend beyond the appraisal subject to its customers. Imagine a trucking firm that provides services for major retailers without a discussion about how the trucking firm's customers are expected to do. If the trucking firm is dependent on its customers, it would be negligent to ignore this important point. Exhibit 6.2 illustrates this exact situation. Keep in mind that the valuation date for this assignment was November 29, 2000.

### EXHIBIT 6.2

#### INDUSTRY SECTION—TRUCKING FIRM *(footnotes omitted)*

The trucking industry plays an integral part in the U.S. economy. Trucking services make up well more than half of the volume and revenue for goods produced in the United States. Trucking services begin with the transport of raw materials to manufacturers and continue through shipments to distributors, retailers, and, in increasing numbers of cases, to end consumers. According to the figures that the U.S. Department of Transportation released at the end of 2000, the share of transportation related to final demand in GDP accounted for 10.6 percent in 1999.

Although the trucking sector of the U.S. economy includes private carriage (enterprises that maintain fleets of trucks in order to haul the goods which they produce), the trucking industry traditionally only includes those companies engaged in the business of transporting goods for others. This industry is divided up in a variety of ways: by size of shipment, length of haul, and types of services offered. There is much overlap among these divisions.

These broad service markets can be defined by shipment size: truckload (TL), less-than-truckload (LTL), and small package. Since the appraisal subject is not engaged in the small package delivery market, it will not be discussed. But TL and LTL are distinct subsections of the trucking industry, with different modes of operation, services offered, and cost structures.

Truckload freight, the largest motor carrier market in terms of tonnage, can best be described as the hauling of full loads of general or specialized commodities over irregular routes from a shipper's dock to a consignee's location, typically without passing through carrier terminals to consolidate or sort freight. An LTL carrier's primary business entails consolidating and hauling multiple shipments in a vehicle and operating a regular route system connecting local, break-bulk, and relay terminals.



### EXHIBIT 6.2

The Interstate Commerce Commission (ICC) defines LTL traffic as shipments weighing less than 10,000 pounds. The operation typically includes five separate operations: local pick-up, sorting at a terminal facility, line haul, sorting at a destination terminal, and local delivery. Since TL carriers have no need to establish a network of terminals, start up costs for this type of operation are lower in terms of plant and equipment needs than for LTL operations. As a result, there are many more TL carriers. Low entry costs combined with ease of obtaining a license to do business create a highly competitive market.

Carriers are also classified as regional, interregional, or national, depending on their average length of haul. Regional carriers' average length of haul is typically under 500 miles; interregional carriers' average length of haul is between 500 and 1,000 miles. National carriers have coverage coast to coast and their average length of haul is greater than 1,000 miles. National carriers' average length of haul has been declining in recent years as trucking companies seek to become more efficient, reduce costs, and retain drivers. The more business a carrier experiences in a given traffic lane (or route), resulting in a greater line haul density, the lower its incremental costs.

Truckers provide a variety of services to shippers, but most enterprises will specialize in one or a few. Some companies only carry bulk liquids, for example, while others specialize in carrying only automobiles. The special nature of the equipment needed for certain types of transport require that a company specialize in one type of haulage. Besides special types of cargo, some companies offer only trucking services, while others offer a full range of services, including warehousing, fleet maintenance, and logistics support service.

Total revenue generated by for-hire trucks in the U.S. in 1999 was \$249 billion. This includes truck transportation services carriers, messengers, and warehousing and storage. Truck transportation services revenue increased from 1998 levels of \$173 billion to \$187 billion, which is an 8 percent increase. General freight generated 63 percent of all trucking revenues. Long-distance trucking, which is a component of general freight showed the greatest increase with a 9 percent increase over 1998 levels. Revenue from the hauling of electronics, motorized vehicles, and precision instruments increased by 14 percent. Truck transportation numbers exclude private motor carriers that operate as auxiliary establishments to non-transportation companies. Table 5 provides growth information for the various categories.

**TABLE 5**  
**REVENUES FOR TRUCK TRANSPORTATION SERVICES, AND**  
**MESSENGER AND WAREHOUSING AND STORAGE: 1998–1999**

	1998	1999	Growth Rate
Truck transportation	\$173,000,000	\$187,000,000	8.09%
Messenger service	46,900,000	49,600,000	5.76%
Warehousing and storage	12,100,000	12,600,000	4.13%
<b>Total Revenues</b>	<b>\$232,000,000</b>	<b>\$249,000,000</b>	<b>7.41%</b>

(Source: U.S. Census Bureau News, Annual Survey 2000.)

Operating expenses in the trucking industry are fairly high. The most recent expense data from 1997 show that operating expenses as a percentage of revenues were 93 percent. Standard Industrial Classification (SIC) Code 4213—"Trucking, ex local" had an operating profit margin of only 7 percent in 1997. Slim profit margins are not unusual in this industry.

The appraiser examined data on the 100 largest Class 1 motor carriers of property that is available annually from the Department of Transportation. This gives a more current story for the industry as a whole.

(Continued)



**EXHIBIT 6.2** (Continued)

	1998	1999
Operating revenues (\$000)	\$34,417,005	\$37,689,123
Operating expenses (\$000)	32,456,495	35,728,803
Operating ratio	5.70%	5.20%

(Source: Bureau of Transportation Statistics  
<<http://www.fmcsa.dot.gov/reporting/ProductsAndReports/html/prop99.htm>>.)

Four companies experienced a net loss in 1998, compared with three in 1999. The industry was operating in basically a flat environment in 1999 as compared with the previous year.

The fortunes of the trucking industry closely track the economy. Analysts point to economic activity and growth in production when discussing the industry's outlook. With this in mind, the appraiser compared an index of ton-miles in the transportation sector with the index of industrial production for all industries. Ton-miles are an indicator of the amount of freight being moved in a given period of time, and the industrial production index for all industries is a good indicator of economic activity.

Trucking companies operate in a highly fragmented, price-sensitive, and competitive environment. Pricing, customer service, and cost control are significant competitive factors. No single carrier has a dominant share of the market.

Less-than-truckload carriers traditionally compete with other LTL truckers and, to a small extent, package carriers such as United Parcel Service. This has changed in recent years, and LTL carriers are now experiencing competition from truckload carriers and to a lesser extent rail and air.

A fourth service market emerged in the trucking industry during the last decade. Logistics became especially important as customers focused on ways to reduce costs and improve quality in a competitive global environment. According to *Industry Week* in 1997, the logistics business was approximately a \$20–\$30 billion industry and was expected to grow about 20 percent annually.

Providers of logistics in the trucking industry have unique industry-specific traits that become a powerful edge in relation to competitors. By focusing on specific industries in the economy, firms can “achieve learning curve advantages in leading technological and transportation planning knowledge.”

Customer service is seen to be more of a competitive factor in the future than price; although cost will always be important to shippers, “now shippers want 100 percent on time delivery, and they want the freight before noon. The focus is becoming more time definite.” To control inventory costs, shippers increasingly use just-in-time inventory techniques. This results in smaller, more frequent shipments and longer service lanes. “Shippers are emphasizing speed and consistency to support inventory reductions. Regional carriers see this as their strength.”

In April 2000, six of the largest publicly traded trucking companies combined their logistics businesses to create Transplace.com, LLC. Transplace provides a one-stop shop for a full array of global transportation services. Also, a similar company Freightquote.com went online in May 1999.

David Weinstein, partner with Anderson Consulting discussed freight marketplaces:

When freight marketplaces first came along, shippers thought they could buy transportation cheaper, playing one against another, says Weinstein. A lot of carriers were uncomfortable with that thinking and didn't participate. However, to work, freight marketplaces need a large number of players—both shippers and carriers. They have been starved for volume, and many are still hungry.

This year, the reality of what the marketplaces can do finally sank in, says Weinstein. It's not just cheaper freight. The real benefit will be in reducing transaction costs and automating mundane tasks. Within the logistics department, the process of arranging transportation—negotiation and interaction—is very manual.

Carriers and shippers will have to redesign their business processes and integrate information technology around these marketplaces. So they want to make sure the marketplace will be around.

The outlook for the remainder of 2000 and 2001 is for slight improvement in the industry. Despite the fact that 2000 was one of the most operationally difficult years for the trucking industry, Value Line believes that the warnings issued by numerous carriers of a potential freight-volume slowdown have been premature.

**EXHIBIT 6.2**

While just about every carrier reported a decline in freight volume and shipment size in the first and second quarters, subsequent accounts have varied. Some companies have reported shipments to be up sequentially, while others have experienced continued weakness in recent months.

Nonetheless, we are slightly more optimistic than we were three months ago. We now expect relatively healthy shipper demand for the remainder of 2000 and 2001, though we cannot rule out a possible slowdown.

The U.S. Department of Labor makes projections of output and employment for all sectors of the economy for 10 year periods. In its *Employment Outlook: 1994–2005*, the Department made the following projections for the trucking and warehousing division of the transportation sector:

The transportation division is expected to add 476,000 jobs over the 1994–2005 period. Job gains over the 1983–1994 period were slightly more than 1 million. The trucking and warehousing industry accounted for more than half (575,000) of those jobs. During the projections period, trucking and warehousing is expected to increase by another 203,000 jobs, rising from 1.8 million in 1994 to 2 million in 2005, at an average annual rate of 1.8 percent. Over the 1983–1994 historical period, employment for trucking and warehousing grew at an average annual rate of 3.6 percent, while output grew at an annual rate of 5.4 percent, indicating strong gains in productivity. With increased use of such technologies as the global positioning system, high rates of productivity growth are expected to continue. The projected annual average growth rate for trucking and warehousing output is 5.0 percent through 2005.

Perhaps one of the most comprehensive forecasts of freight transportation is one which is provided by DRI/McGraw-Hill for the American Trucking Association. According to Martin Labbe of Martin Labbe and Associates, a transportation information consultant in Ormand Beach, Florida, if nothing else changes, it will take a 19 percent increase in the number of medium and heavy duty vehicles by 2007 to move the extra tonnage, and trucks will have to drive nearly 34 percent more total miles. DRI estimates that total tonnage of primary freight shipment in the U.S. will increase from 11.2 billion tons to 13.6 billion by 2007, an increase of 21.2 percent over 10 years, and trucks will carry 56 percent of it.

The volume of freight transported in the U.S. is expected to grow more slowly in the first five years. This expectation is based on DRI's view that average annual U.S. economic growth would remain in the 2 percent to 2.5 percent range, with a gradual slowing through 2002, and a moderate risk of recession through 2007.

Trucks moved the lion's share of freight in 1997; 6.6 billion tons or 59.5 percent of total volume of 11.2 billion tons. In terms of revenue, trucks claimed the largest share—\$371.9 billion, or 81.3 percent of the total.

As of 1997, bulk freight represented 61.2 percent of total volume of 6.6 billion tons moved by trucks and 27.6 percent of total revenues. By 2007, bulk freight will decline in significance to 57.4 percent of total volume, and 25.4 percent of total revenues.

General freight is expected to grow from 38.8 percent of total volume to 42.6 percent by 2007. While this may seem small for a 10 year period, total revenues will increase from 72.4 percent of total freight to 74.6 percent. This translates into over \$100 billion in additional revenue over the 10 year period.

**TABLE 7**  
**TOTAL TRANSPORTATION MARKET**

	<b>1997</b>	<b>2007</b>
Total shipments (millions of tons)	11,203	13,576
General freight (%)	38.8%	42.6%
Bulk freight (%)	61.2%	57.4%
Total revenues (\$ Billion)	\$457.3	\$583.6
General freight (%)	72.4%	74.6%
Bulk freight (%)	27.6%	25.4%

(Source: American Trucking Association Foundation, "U.S. Freight Transportation Forecast...to 2007," *Monitor*, May/June 2000.)

(Continued)

**EXHIBIT 6.2** (Continued)

The industry continued to be critically important to the economy in 2000. At that time, it was highly competitive and was facing high demands for efficiency, while experiencing frequent entries and exits with small carriers outnumbering a few larger firms. There were challenges and opportunities as e-commerce took hold. As trucking progressed through 2000, there were dual demands for greater efficiency and innovative services. The internet was creating substantial pressure on the capabilities of the trucking companies.

The headline of the July 31, 2000, edition of *Transportation Topics* was "For Trucking, 1999 was the year of the Internet." A survey done by the American Trucking Association (ATA) found that 57 percent of TL carriers and 61 percent of LTL carriers were using internet technology. That is a substantial increase from 1996, which had internet technology usage of 11 percent and 14 percent, respectively.

More recently, in early 2000, the University of Michigan Trucking Industry (UMTIP) conducted a mail survey of 177 trucking companies. Their data showed that 75 percent of the respondents used the internet. A summary of their findings is contained in Table 8.

**TABLE 8**  
**FIRMS USING INTERNET**  
**FOR DOING BUSINESS**  
**1999–2000**

<b>Segment</b>	<b>Total No. of Firms in Segment</b>	<b>No. of Firms Using Internet</b>	<b>Percent of Firms Using Internet</b>
TL	19	15	79%
LTL	36	26	72%
Combined	69	52	75%
Private fleet	53	40	75%
<b>TOTAL</b>	<b>177</b>	<b>133</b>	<b>75%</b>

(Source: Survey of the Transportation Management Industry Information Technology: Use, Resources, and Strategy, University of Michigan Trucking Industry Program, 2000.)

According to the University of Michigan, the very reason that the internet is affecting the trucking industry stems from availability of more detailed inventories to customers and competitors about goods and services, prices and timing. These changes will result in both opportunities for improved efficiency in traditional areas of the trucking industry, as well as in the creation of the demand for new types of services.

The combined convergence of global competition and the increasing use of technology has forced companies to begin outsourcing logistics or use third party logistics to manage the complexities of distribution. Third party logistics can be labeled as:

A relationship between a shipper and a third party which, compared with basic services, has more customized offerings, encompasses a broader number of service functions and is characterized by a longer-term, more mutually beneficial relationship.

According to Armstrong & Associates, Inc., a Wisconsin based consulting firm that has tracked the third party logistics industry since 1980, third party logistics was an approximately \$46 billion market in the U.S. by the end of 1999, an increase of 16.5 percent compared to the previous year. It is estimated to grow to \$50 billion by 2000. Additional projections forecast annual growth at 15 to 20 percent through 2003.

**EXHIBIT 6.2**

Thomas Craig, President of LTD Management, a supply chain management consulting company, discussed future growth in the third party logistics industry:

The third party logistics market will explode-big time. Users and providers will not be able to keep up with it. There is precedence for this view. Look at what happened with manufacturing. Not long ago firms did most of their own manufacturing. Then they outsourced some components, tooling and other odd items and work. Then it exploded.

**RETAIL INDUSTRY**

The appraisal subject transports apparel and other consumer goods for several large multi-state retailers in the eastern U.S., to some extent the Midwest, and in California. Since the company relies on the retail sector for most of its business, it is important to review the outlook for this sector of the economy.

The outlook for retailing is mixed due to the large variety of companies and retail subsectors that exist in the industry. *Value Line* specialty retail analyst Maurice Levenson, CFA states, "Despite the likelihood of continued intense promotional pressures in the fourth quarter, we expect the strongest retailing in the group to post higher profits and to deliver another healthy earnings advance the following year."

David R. Cohen, the Retail Store Industry analyst for *Value Line* states:

Prospects for leading players in the Retail Store Industry are varied. Discount chains will continue to outpace the department store segment, in terms of company-sales gains and store-count expansion, for the foreseeable future.

Like the trucking industry, certain retailers have stronger prospects than others. The ones that continue to execute effectively and adapt to consumers' needs will prosper in the years ahead. Department stores, which are having problems finding economically favorable locations in the U.S., will continue to reduce their debt and buy back stock. Discount retailers are expected to see sales gains, while specialty stores may see a mixed outlook depending on the merchandise mix.

Table 9 presents selected statistics for six major retailers that are customers of the subject company. These six companies had estimated sales totaling over \$18 billion in 1999 according to *Value Line*. The same companies combined operated more than 10,000 stores during the same year. Combined sales are forecast to grow to over \$126 billion in 2000 (up 6.83 percent for the year) and about \$178 billion by 2005, an increase of over 50 percent. The total number of stores is expected to grow about 33 percent to over 14,000 stores in 2005.

**TABLE 9**  
**RETAILERS' SELECTED STATISTICS: 1999–2005**

	1999A	2000E	2001E	2003–2005F
<i>K-Mart</i>				
Number of stores	2,171	2,100	2,100	2,200
% Change, stores		– 3.27%	0.00%	4.76%
Sales (\$ million)	35,925	36,650	37,850	45,750
% Change, sales		2.02%	3.27%	20.87%
<i>TJX Group</i>				
Number of stores	1,357	1,475	1,600	2,100
% Change, stores		8.70%	8.47%	31.25%
Sales (\$ million)	8,795	9,610	10,500	13,900
% Change, sales		9.27%	9.26%	32.38%

K-Mart Corp.'s margins have been hurt due to an ongoing major restructuring. Changes at the managerial level are ahead of schedule, but *Value Line* believes it should "still take almost two years before K-Mart is positioned for growth." K-Mart will continue to convert stores into its Big K-Mart concept, which should stimulate some store sales growth.

(Continued)

EXHIBIT 6.2 (Continued)

TABLE 9 RETAILERS' SELECTED STATISTICS: 1999–2005				
	1999A	2000E	2001E	2003–2005F
<i>Federated</i>				
Number of stores	404	412	417	435
% Change, stores		1.98%	1.21%	4.32%
Sales (\$ million)	17,716	18,450	19,350	22,400
% Change, sales		4.14%	4.88%	15.76%
<i>Best Buy</i>				
Number of stores	357	420	480	650
% Change, stores		17.65%	14.29%	35.42%
Sales (\$ million)	12,494	15,065	18,085	29,930
% Change, sales		20.58%	20.05%	65.50%
<i>Target</i>				
Number of stores	1,243	1,315	1,390	1,605
% Change, stores		5.79%	5.70%	15.47%
Sales (\$ million)	33,702	36,550	39,900	51,600
% Change, sales		8.45%	9.17%	29.32%
<i>Limited</i>				
Number of stores	5,023	5,375	5,750	7,050
% Change, stores		7.01%	6.98%	22.61%
Sales (\$ million)	9,724	10,120	10,800	14,200
% Change, sales		4.07%	6.72%	31.48%
A = Actual, E = Estimated, F = Forecast. (Source: Value Line Investment Survey, November 17, 2006.)				

The TJX Companies, the leader in off-price retailing, operates under the names TJ Maxx, Marshalls, Winners (Canada), HomeGoods, and A.J. Wright. "The MarMaxx combination (TJ Maxx and Marshalls) has been highly successful producing off-price sales three times more than its nearest off-price rival." According to Value Line, future growth should come from continued investments in smaller high-growth potential off-price businesses. The company's goal is to open 130 to 140 new stores in each of 2000 and 2001.

Federated Department Stores operates Macy's, Bloomingdale's, Sterns, Rich's, Burdines, and the Bon Marche department stores. The company is in the process of restructuring its money-losing Fingerhut subsidiary. Management hopes to bring Fingerhut back to profitability next year. The company plans to open five to eight new locations each year in the early part of the decade. Value Line believes "Profits at the department store division may well advance at a 7 percent to 10 percent annual rate through 2003–2005." A major edge that Federated has over competitors is its strength in private label brands, especially in its women's lines.

Best Buy is the nation's number one specialty retailer of name-brand consumer electronics, personal computers, entertainment software, and appliances. The company operates 373 stores in 36 states. In 2000, Best Buy opened 47 new stores, and in the fall will enter the lucrative metropolitan, New York area, with the opening of more than a dozen stores. This is just the beginning of its 3 year 40 store strategy for the market. The ultimate goal is to open 60 new stores per year for the next five years.

### EXHIBIT 6.2

Target Corp. has three retail divisions: upscale discount (Target), soft goods (Mervyn's), and department stores (Hudson's, Dayton's, and Marshall Field's). However, Target makes up 75 percent of the corporation's sales and profits. The company opened a record 40 Target stores in the third quarter, and according to Value Line, "We look for overall earnings gains of 13 percent to 15 percent in each of the coming 3–5 years." Selling space expansion at Target increased to 9 percent in 2000, and the 2001 goal is for 11 percent expansion. The number of Super Target locations is expected to reach 30 in 2000, and 60 by the end of fiscal 2001. There are plans for at least 200 Super Target locations within the next 10 years.

The Limited, Inc. operates stores under these names: Limited, Express, New York and Company, Lane Bryant, Henri Bendel, Structure, Victoria's Secret, and Bath & Body Works. The company has experienced a strong third quarter compared to sluggish sales during the first half of the year. Value Line thinks, "The continuance of trend-right offerings ought to fuel sales in the upcoming holiday season and over the 3–5 year pull."

#### Author's Note

I have intentionally omitted footnotes from this section. I figured that you could live without them. In the real report, there were many.

The industry analysis will vary depending upon the amount of information available, as well as the impact that it may have on the appraisal subject. Obviously, the example in exhibit 6.2 has a considerable amount of information. But think about this—while valuing a trucking firm, didn't this analysis cover everything that you can think of that may have been important? I hope so. Otherwise, we spent a considerable amount of time for no reason.

## SUBJECT COMPANY ANALYSIS

Item number one on the Revenue Ruling 59-60 hit parade tells us to consider the "nature of the business and the history of the enterprise from its inception." In other words, where has the company been and how did it get there? In this situation, the valuation analyst is looking to analyze not only the company's financial statements, but also the entire business operation. Of course, the financial statement analysis is an important component of the process, but at this stage in the valuation process, you are attempting to determine how effectively the company is being run. Also, what risk factors are associated with the company, and how would they affect the rate of return that an investor may require if a transaction was to be consummated? Box 6.2 captures some of the more common questions raised when performing a subject company analysis.

### Box 6.2 Frequently Asked Subject Company Analysis Questions

- How does the subject company compare with the entire industry? Is it a large player or a small player in the industry?
- Is it in its infancy, or is it mature?
- Has the company kept up with technology?
- What percentage of market share does the subject company have?
- Does the subject company distribute its products locally, regionally, nationally, or internationally?
- Are there alternative products available in the marketplace that may affect the future of the company's goods and services?
- What is the management structure of the company? Is the business highly dependent on one or a few key people?
- Is there a succession plan for management?

The answers to these questions will serve dual purposes. The first purpose is to demonstrate that the valuation analyst understands the nature of the business, as well as what makes the business run. The second purpose, once again, is to perform a risk assessment of the subject company. What we are trying to do is determine whether the appraisal subject is similar or dissimilar, or more risky or less risky, than other companies in the industry. Factors that the valuation analyst will analyze include the products and services offered by the company, customer base, suppliers, management, operations, and ownership structure. A good portion of this information will fit nicely into the history and nature of the company section of the appraisal report. This will also assist the valuation analyst in developing market multiples, discount rates, and capitalization rates.

## FINANCIAL ANALYSIS

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The purpose of the financial analysis is to review the subject company's performance with respect to other companies, its industry peers, or itself. Comparing the subject company to its peers helps the valuation analyst assess whether the company is more or less risky in relation to its peer group. Comparing the company to itself allows the valuation analyst to determine how the company has performed in the past. This can help give the valuation analyst an idea of future trends that may occur.

During the financial analysis, the valuation analyst attempts to identify unusual items, nonrecurring items, and trends. An attempt should be made to explain what happened and why it happened. If there is a departure from the norms of the industry, this should also be investigated and explained.

The following analytical tools are used by the valuation analyst:

- Comparative company analysis
- Common size financial statements
- Financial ratio analysis
- Comparative industry analysis
- Trend analysis
- Operational analysis

## COMPARATIVE COMPANY ANALYSIS

Most business valuation analysts will request at least five years of financial information about the subject company. I like to request six. This way we can calculate a five year cash flow for the subject company. The amount of data will depend on the facts and circumstances of each assignment. However, a good rule of thumb is to ask for enough years of data to cover a complete business cycle. This will allow the valuation analyst to create a spreadsheet looking for trends that may have occurred, as well as inconsistencies in the reported data.

## COMMON SIZE FINANCIAL STATEMENTS

The use of common size financial statements is an excellent way to analyze the subject company with respect to other companies of different sizes. By presenting the data as percentages, the size differentials are eliminated between the subject company and its peer group. Exhibit 6.3 illustrates a common size analysis taken from an actual report. In this illustration, industry information was used as a comparison to the appraisal subject.

### EXHIBIT 6.3

#### COMMON-SIZE FINANCIAL ANALYSIS

Another financial analysis tool is to look at a company's common size financial statements. A common size balance sheet depicts each value as a percentage of total assets. Common size statements are used to look at trends in a company's financial position, as well as to compare the company with industry data.



### EXHIBIT 6.3

In order to compare ABC Lumber to industry data, we determined the appropriate Standard Industrial Classification (SIC) code for ABC Lumber. A description of ABC Lumber and the services it provides was included in an earlier section of this report. Based on this description, we determined that ABC Lumber is best described by the following SIC code.

#### 5031 Lumber, Plywood and Millwork

Establishments with or without yards, primarily engaged in the wholesale distribution of rough dressed and finished lumber (but not timber); plywood; reconstructed wood fiber products; doors and windows and their frames (all materials); wood fencing; and other wood or metal millwork.

We located composite industry data in the *Business Profiler* database compiled by Integra Information, Inc. (Integra). Integra compiles its database from 31 proprietary and publicly available sources. The database consists of information of more than 3.5 million companies in more than 950 industries.

The Integra database contained composite data for 8,809 companies classified in SIC code 5031. This was further stratified by sales range. Data for 1,066 companies with sales in the range of \$10 to \$24.99 million was included.

Table 3 presents the common size balance sheet for ABC Lumber along with comparative data for companies classified within SIC code 5031.

**TABLE 3**  
**COMMON SIZE BALANCE SHEET AS OF DECEMBER 31**

	2000	2001	2002	2003	2004	2005	INTEGRA
Current assets							
Cash	5.43%	17.15%	4.95%	1.59%	8.01%	0.07%	5.32%
Marketable securities	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.13%
Accounts receivable	48.57%	42.21%	53.08%	45.21%	44.73%	53.52%	32.41%
Inventories	37.51%	33.27%	36.03%	44.26%	38.91%	38.47%	31.81%
Prepaid expenses	0.17%	0.45%	0.00%	0.05%	0.00%	0.00%	0.00%
Due from DEF Realty	0.17%	0.15%	0.17%	0.18%	0.16%	0.16%	0.00%
Due from XYZ Realty	0.00%	0.00%	0.00%	3.82%	4.84%	4.86%	0.00%
Other current assets	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.04%
Total current assets	91.84%	93.23%	94.24%	95.11%	96.65%	97.08%	73.71%
Fixed assets							
Land	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	n/a
Building and improvements	4.74%	4.43%	4.80%	5.21%	4.47%	4.69%	n/a
Machinery and equipment	23.67%	21.15%	21.81%	27.25%	26.31%	27.92%	n/a
Furniture and fixtures	2.06%	1.92%	2.08%	2.27%	1.94%	2.04%	n/a
Gross fixed assets	30.48%	27.52%	28.70%	34.75%	32.74%	34.66%	34.01%
Accumulated depreciation	22.32%	20.75%	22.94%	29.87%	29.38%	31.74%	16.53%
Net fixed assets	8.16%	6.77%	5.76%	4.89%	3.35%	2.92%	17.48%

(Continued)

## EXHIBIT 6.3 (Continued)

	2000	2001	2002	2003	2004	2005	INTEGRA
Other assets							
Intangible assets (net)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.36%
Other assets	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.45%
Total other assets	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.82%
<b>TOTAL ASSETS</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Current liabilities							
Accounts payable	25.99%	14.12%	19.78%	19.57%	18.83%	24.55%	17.54%
Long-term debt, current portion	0.00%	1.09%	1.18%	3.98%	4.45%	2.66%	11.08%
Notes payable	6.44%	2.57%	6.71%	4.07%	2.29%	1.52%	0.00%
Accrued expenses	0.04%	0.04%	0.04%	0.01%	0.04%	0.01%	0.00%
Payroll taxes payable	0.07%	12.17%	0.00%	0.00%	0.00%	0.00%	0.00%
Sales taxes payable	0.53%	0.47%	0.46%	0.67%	0.54%	0.64%	0.00%
Income taxes payable	0.00%	0.00%	0.13%	0.00%	0.00%	0.00%	0.00%
Other current liabilities	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.68%
Total current liabilities	33.07%	30.45%	28.30%	28.29%	26.15%	29.39%	35.30%
Long term liabilities							
Long term debt	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.88%
Loans from stockholders	31.01%	32.25%	32.98%	29.25%	36.58%	29.40%	2.24%
Loan payable, Jill investment	0.00%	2.63%	0.00%	0.00%	0.00%	0.00%	0.00%
Other liabilities	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.17%
Total long term liabilities	31.01%	34.88%	32.98%	29.25%	36.58%	29.40%	18.29%
Total liabilities	64.08%	65.33%	61.28%	57.53%	62.74%	58.79%	53.59%
Total stockholders' equity	35.92%	34.67%	38.72%	42.47%	37.26%	41.21%	46.41%
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

*Note: Figures may not add due to rounding.*

An analysis of the common size balance sheet indicates that ABC Lumber's current assets as a percentage of total assets have increased consistently since 2000. Overall, ABC Lumber is significantly stronger than its industry counterparts in this category. However, ABC Lumber has a much lower percentage of fixed assets than its industry peers. This is because ABC Lumber's fixed assets are old and have been fully depreciated. However, the fixed assets are still in use by ABC Lumber.

On the liability side of the balance sheet, ABC Lumber appears to be weaker than the industry composite data. Although total liabilities have decreased from 64.08 percent of assets in 2000, to 58.79 percent in 2005, this is slightly higher than the industry, which has total liabilities of 56 percent of assets. However, this is due to the greater amount of debt ABC Lumber has.

The next step in the analysis was to look at ABC Lumber's historic income statements for 2000–2005. ABC Lumber's revenues have been fairly erratic over the period, decreasing from a high of \$12.3 million in 2000 to a low of \$10.3 million in 2003, and back up to \$11.4 million in 2005.

**EXHIBIT 6.3**

Despite the drop in revenues, ABC Lumber finished 2005 with net income of \$65,058. This was very close to the 2000 net income of \$66,518, which was the high for the period. Since revenues were lower in 2005 than in 2000, ABC Lumber has shown improvement in managing its expenses.

ABC Lumber's common size income statement was compared to industry composite data. This is presented in Table 4.

	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>INTEGRA</b>
Total revenues	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Total cost of sales	62.72%	64.97%	67.18%	67.12%	63.67%	62.86%	91.06%
Gross profit	37.28%	35.03%	32.82%	32.88%	36.33%	37.14%	8.94%
Total operating expenses	38.59%	35.61%	33.44%	33.40%	35.73%	36.30%	6.82%
Operating income (Loss)	-1.31%	-0.58%	-0.61%	-0.52%	0.60%	0.84%	2.12%
Interest expense	0.20%	0.46%	0.49%	0.47%	0.36%	0.35%	0.46%
Other income	2.25%	1.44%	1.62%	1.34%	0.00%	0.08%	0.33%
Income before taxes	0.74%	0.40%	0.52%	0.36%	0.25%	0.58%	1.99%
Income taxes	0.20%	0.09%	0.19%	0.11%	0.00%	0.01%	0.76%
<b>NET INCOME</b>	<b>0.54%</b>	<b>0.31%</b>	<b>0.34%</b>	<b>0.24%</b>	<b>0.24%</b>	<b>0.57%</b>	<b>1.24%</b>

Note: Figures may not add due to rounding.

The data in Table 4 indicates that ABC Lumber's operating income as a percentage of revenue had been negative until 2004. Despite the turnaround, operating income is much lower than the industry counterparts. This is due to ABC Lumber's extremely high percentage of operating expenses. The industry average for operating expenses is 10.26 percent of revenues, whereas ABC Lumber's operating expenses were 36.30 percent in 2005. Over the six year period, this percentage had not changed significantly. Some of the distinction is the classification of expenses; cost of sales for ABC Lumber is significantly lower than the industry, while operating expenses are higher. However, management has indicated that their expenses might be higher than the industry because of ABC Lumber's commitment to service. This causes a higher investment in payroll.

 **Author's Note**

Some sources use average balance sheet figures whereas others use year-end data. Make certain that you are consistent in your calculations to ensure that you are using the same basis when comparing with industry sources of ratios. Also, make sure that you use the ratios from the comparative data that best match the time period of the valuation.

**FINANCIAL RATIOS**

The use of financial ratios allows the valuation analyst to analyze the subject company in terms of liquidity, performance, profitability, and leverage. These ratios are compared against industry data, guideline company data, or both, for the assessment of risk. Some ratios are more meaningful in different industries, but the analysis is essentially the same. For example, you would expect the inventory turnover ratio for a perishable food business to be greater than that for an automobile dealership. A description of some of the more common ratios follows.

### **Current Ratio = Current Assets ÷ Current Liabilities**

The current ratio measures the margin of safety that management maintains to allow for the inevitable unevenness in the flow of funds through the current asset and current liability accounts. A company needs a supply of current funds to be assured of being able to pay its bills when they come due. This ratio shows the company's ability to pay for its ongoing operations in the short term. A company's liquidity is essential to its good credit, its ability to grow with its own funds, and its ability to pay dividends to its owners.

### **Quick Ratio = (Cash + Marketable Securities + Accounts Receivable) ÷ Current Liabilities**

Quick assets include cash, marketable securities, and accounts receivable. Presumably, these items can be converted into cash quickly at approximately their stated amounts, unlike inventory, which is the principal current asset that is excluded from this calculation. The quick ratio is therefore a measure of the extent to which liquid resources are available to meet current obligations. This ratio tends to be a better measure of the company's short term liquidity, particularly if cash needs to be generated quickly to pay bills.

### **Cash to Current Liabilities = Cash ÷ Current Liabilities**

Cash and cash equivalents are the most readily available assets with which to pay liabilities. This ratio tells the valuation analyst whether the subject company has a strong enough cash position to meet its short term obligations. This ratio can also assist the valuation analyst in determining whether the subject company is carrying excess cash on its balance sheet. Excess cash may show a poor use of current assets by management. I wish that I had the problem of having excess cash. My kid makes sure that never happens!

### **Accounts Payable to Inventory = Accounts Payable ÷ Inventory**

Businesses generally purchase inventory on credit. The ratio of accounts payable to inventory measures the extent to which a company's inventory is financed by the suppliers of that inventory. A low ratio may indicate that management is not taking advantage of the credit terms available from suppliers. It may also indicate a high level of inventory being carried by the company, when the ratio is used in conjunction with inventory turnover ratios.

### **Accounts Payable Payout Period = Accounts Payable ÷ (Cost of Goods Sold ÷ Number of Days)**

The accounts payable payout period measures the timeliness of paying suppliers. This figure is related directly to the normal credit terms of the company's purchases. This ratio allows the valuation analyst to consider the company's ability to obtain favorable terms from vendors because of good creditworthiness.

### **Debt-to-Equity = Total Liabilities ÷ Net Worth**

Debt is risky because if creditors are not paid promptly, they can take legal action to obtain payment, which, in extreme cases, can force the company into bankruptcy. The greater the extent to which a company obtains its financing from its owners, the less worry the company has in meeting its fixed obligations. The debt-to-equity ratio shows the balance that management has struck between debt and owners' equity. A proper capital structure should include a portion of debt, because debt has a lower cost of capital. Different industries have different debt-to-equity relationships.

### **EBIT to Total Assets = Earnings Before Interest and Taxes ÷ Total Assets**

Earnings before interest and taxes (EBIT) to total assets is an important return-on-investment ratio that provides a profit analysis based on earnings before interest and income taxes. This ratio is best compared with a company's annual interest rate on borrowed funds. If the ratio of a firm's EBIT to total assets is higher than its weighted average cost of capital, the ratio is favorable.

### Times Interest Earned = EBIT ÷ Interest

The times interest earned ratio measures the number of times that the earnings before interest and taxes will cover the total interest payments on debt. The result indicates the level to which income can decline without impairing the company's ability to meet its interest payments on debt. If the ratio falls below 1.0, the firm is not generating enough earnings to cover the interest due on loans. This ratio indicates the financial risk of the company.

### Average Collection Period = Accounts Receivable ÷ (Credit Sales ÷ 365)

The average collection period can be evaluated against the credit terms offered by the company. As a rule, the collection period should not exceed one and one-third times the regular payment period; that is, if a company's typical terms call for payment in 30 days, the collection period should not exceed 40 days. Changes in the ratio indicate changes in the company's credit policy or changes in its ability to collect receivables.

### Inventory Turnover = Cost of Goods Sold ÷ Ending Inventory

Inventory turnover is an indication of the velocity with which merchandise dollars move through the business. An increase in the value of inventory may represent the additional stock required by an expanding business, or it may represent an accumulation of merchandise from a declining sales volume. In the latter case, the inventory turnover will decrease. A decrease in the inventory turnover ratio may be, therefore, a significant danger signal.

### Inventory Holding Period = 365 ÷ Inventory Turnover

Some of the company's products come in and go out in a matter of days; other goods may stay in stock for six months or longer. The holding period differs for different products. Business managers and owners must be concerned with a holding period that is longer than necessary because of the high costs of tying up capital in excess inventory. On the other hand, reducing inventory levels too much could result in lost sales, because certain products are not available when the customer wants them. The cost of carrying inventory has to be balanced against the profit opportunities lost by not having the product in stock, ready for sale.

### Other Financial Ratios

There are many other financial ratios that can be considered by the valuation analyst. Profitability ratios are one group of ratios that are often considered by the valuation analyst. Some of the ratios that will be calculated may relate to the company's equity, while others relate to the company's invested capital. Invested capital is considered to be the company's long term debt or nonworking capital debt plus the equity of the company. Because a proper capital structure will generally include an appropriate mix of debt and equity, some valuation analysts prefer to value the company in this manner. What this really does is allow the valuation analyst to value the company on an invested capital basis, eliminating differences in leverage between the subject company and the guideline companies. This becomes more important in the valuation of larger companies, because the companies being used for comparison purposes may be publicly traded and have very different capital structures. We will discuss this further in chapter 7.

The return-on-equity ratio (also known as the *Dupont analysis*) is considered to be one of the most important financial ratios because it measures profitability, turnover, and leverage all in one ratio. The Dupont formula allows the analyst to determine whether margin, leverage, or asset utilization (or some combination thereof) are driving returns to shareholders and, when compared to industry peer group data, how management manages these issues (better, worse, or differently) than the industry.

The mathematical breakdown of the return on equity ratio is as follows:

$$\frac{\text{Net Income}}{\text{Equity}} = \frac{\text{Net Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Equity}}$$

Another analytical tool used by valuation analysts is the compound growth rate. Compound growth rates are frequently used by the valuation analyst in the selection of guideline companies, pricing multiples, discount rates,

and capitalization rates. Both revenues and net income (cash flow can be used also) should be analyzed by the valuation analyst. The mathematical formula for calculating compound growth as a percentage is as follows:

$$\left( \sqrt[n]{\text{amount}_n \div \text{amount}_1} \right) - 1$$

The compound growth rate is calculated using historical data to give an indication of future growth. However, keep in mind that the formula considers only the first and last year. Therefore, it does not calculate a change from year to year. Because of this, you must be careful in selecting the first and last years for your calculation. Ideally, you want to look at the business cycle (peak to peak or valley to valley) or look at a constant trend. When looking at growth, the valuation analyst should also examine the year-to-year changes. Over a longer period of time, this is very often more meaningful than the compound growth rate. Let's look at a simple example to illustrate this concept. Assume that Smith Company had sales as follows:

Year	Amount
2002	1,350,000
2003	1,675,000
2004	2,100,000
2005	2,200,750
2006	2,450,000

The five year compound growth rate for Smith Company is 16.1 percent (calculated as the fourth root of \$2,450,000 divided by \$1,350,000, or 1.1606, then subtract 1). If you do not know how to use a financial calculator, here's the keystrokes for an HP 12C calculator:

Enter	1,350,000	Press PV
Enter	2,450,000	Press CHS*, then FV
Enter	4	Press n
Press i		

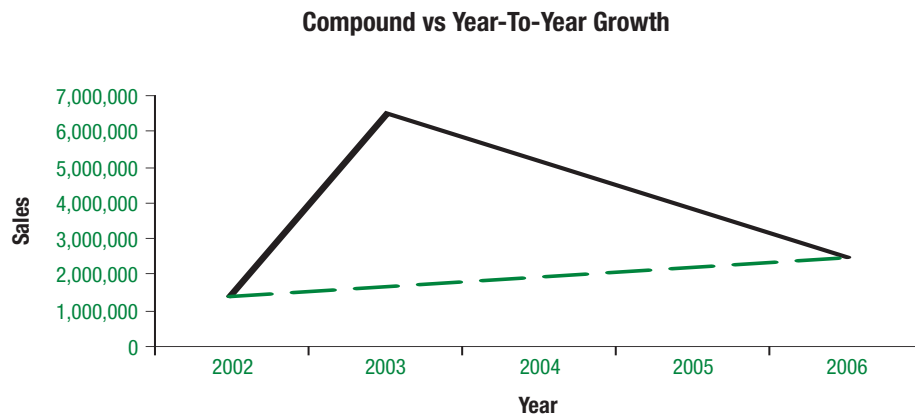
\*CHS = change sign. One of the data points must be a negative.

You should get 0.160668, which you can round to 16.1 percent. If you do not have a financial calculator, you can do what I do—yell for a staff person to help. A review of the increase in sales on an annual basis indicates that the company experienced constant growth during this five year period. But what if the sales were as follows?

Year	Amount
2002	1,350,000
2003	6,450,000
2004	5,375,000
2005	3,900,000
2006	2,450,000

In this situation, the compound growth rate would be the same 16.1 percent, but look at the difference in the trend (figure 6.1).

**FIGURE 6.1**  
**COMPOUND VS. YEAR-TO-YEAR GROWTH**



The solid line demonstrates the year-to-year growth while the dotted line illustrates the compound growth over the same period. Pretty different, huh?

Clearly, while the beginning and ending points of this five year period are the same in both series of numbers, the trends are dramatically different. The valuation analyst needs to pay attention to trends, not just a group of calculations. Remember that the goal is to be able to use this information to forecast the future and the risk of that future not occurring. What does the first illustration say about risk as contrasted with the second illustration?

In this instance, the valuation analyst would probably not use compound growth rates because they would have little relevance. You must pay particular attention to the information and not just go through the motions of doing a series of calculations because you read a book or you have a computer program that will calculate these ratios for you. Analysis means that you must analyze the information! Otherwise, financial analysis would be called financial calculation.

## COMPARATIVE INDUSTRY ANALYSIS

The purpose of a comparative analysis is to compare the subject company's operating performance with that of its peer group. This analysis is undertaken to determine the company's position with respect to its peers. Is it more or less risky than its peer group? How well does the company perform as compared with the peer group? Some of the more common sources for comparative data include the following:

- Trade association surveys
- Integra Information's *Business Profiler*
- *RMA Annual Statement Studies*
- *Almanac of Business and Industrial Ratios*
- *Financial Statement Studies*
- *D&B Key Business Ratios*
- Guideline companies

Comparative analysis is a useful tool for a valuation analyst to use only if the subject company can be meaningfully compared with either specific guideline companies or industry composite data. Common size financial statements and financial ratio analyses are much more meaningful if the results can be compared with guideline company results or industry data.

If a company is large enough, there may be publicly traded companies that can be used for this type of analysis. For smaller companies, and even sometimes for the larger companies, it is generally worthwhile to compare the subject to some form of industry data, whether it is obtained from a trade organization or Integra Information's *Business Profiler*.



## Business Profiler

I want to spend some time showing you the type of information that can be obtained and used from this great resource. For many valuation analysts that value smaller companies, this is the ideal type of information to use as a basis for comparison. Let me show you to what I am referring. I am going to use an example of a hardware store. When you logon, you are given choices as to the type of report that you would like to purchase (figure 6.2).

FIGURE 6.2  
BUSINESS PROFILER LOGIN SCREEN

**Trugman Valuation  
ASSOCIATES INC.**  
The certified leader in business valuation expertise.™

[Integra Home](#)   [Registration](#)   [History](#)   [Help](#)   [Log Off](#)

Main Page   Wednesday, August 08, 2007

You are currently logged in as: **Gary**  
To log in as a different user, [Click Here](#)

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- Understand average total officers compensation for any size company in over 900 industries
- Report includes sample sizes for reference
- Compensation numbers expressed in both \$ and % format
- Data current as of end of year 2006

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\$0.00

We use several of the reports. The first report that we will use is the Five Year Industry Report. When you click on *Order Report*, you will be asked for an SIC or NAICS code. After you enter 5251 (Hardware Stores), this is what you get (figure 6.3):

**FIGURE 6.3**  
**BUSINESS PROFILER ORDER REPORT SCREEN**

Integra Information - Identify Annual Sales Range

**Trugman Valuation**  
**ASSOCIATES INC.**  
The certified leader in business valuation expertise.™

Main Page    Integra Home    Help    Log Off  
5-Year Industry Report - Identify Annual Sales Range    Thursday, April 03, 2008

You are currently logged in as: **Gary**  
To log in as a different user, [Click Here](#)

**Annual Sales Range Selection**

Select one of the sales sizes below. The number in parantheses reflects the number of companies under your selected SIC code in each sales range.

---

Industry (SIC) Code: **5251 - Hardware stores**

**Sales Range (Firms Represented)**

<b>All Sales Ranges (7207)</b>
Less Than \$250,000 (2478)
\$250,000 - \$499,999 (1450)
\$500,000 - \$999,999 (1592)
\$1,000,000 - \$2,499,999 (1105)
\$2,500,000 - \$4,999,999 (355)
\$5,000,000 - \$9,999,999 (147)
\$10,000,000 - \$24,999,999 (62)
\$25,000,000 - \$49,999,999 (9)
\$50,000,000 - \$99,999,999 (2)
\$100,000,000 - \$249,999,999 (4)
\$250,000,000 - \$499,999,999 (2)
More Than \$500,000,000 (1)

**User Tip:**

**SALES RANGE**

What should you do if you don't see the correct sales range. First, be sure you have selected the correct SIC code. If you are sure of the SIC code, then select the closest range. For example, if your firm had sales of \$ 55,000,000 last year, (and the sales range \$50,000,000 - \$ 99,000,000 does not exist), select the sales range \$25,000,000 - \$ 49,999,999.

[Continue >](#)

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If you notice, there are 7,207 firms represented in this category. That is one of the reasons why I like this product. There is so much information that it is difficult to argue that you do not have a statistically valid sample size. Of course, not every SIC code is this plentiful, but it is great when it is.

This screen allows us to choose the sales size that is pertinent to the appraisal subject. In this instance, our subject has sales between \$1 million and \$2.499 million. There are still 1,105 companies in this dataset. We click and get this (figure 6.4):

**FIGURE 6.4**  
**BUSINESS PROFILER 5-YEAR INDUSTRY REPORT**  
**SUMMARY SCREEN**

5-YEAR 5-Year Industry Report		INTEGRA INFORMATION A Division of MicroBilt Corporation	
Summary			
<b>Prepared for:</b>		<b>SIC:</b> 5251	
<b>Date:</b> 4/3/2008		<b>Description:</b> Hardware stores	
<b>Database #:</b> 2006.3		<b>Sales Range:</b> \$1,000,000 - \$2,499,999	
<b>Profile Type:</b> Industry Profile		<b>Final Year Business Count:</b> 1,105	
SIC	Description	Sales Range	# of Firms In Sales Range
5251	Establishments primarily engaged in the retail sale of a number of basic hardware lines, such as tools, builders' hardware, paint and glass, housewares and household appliances, and cutlery.	\$1,000,000 - \$2,499,999	1,105

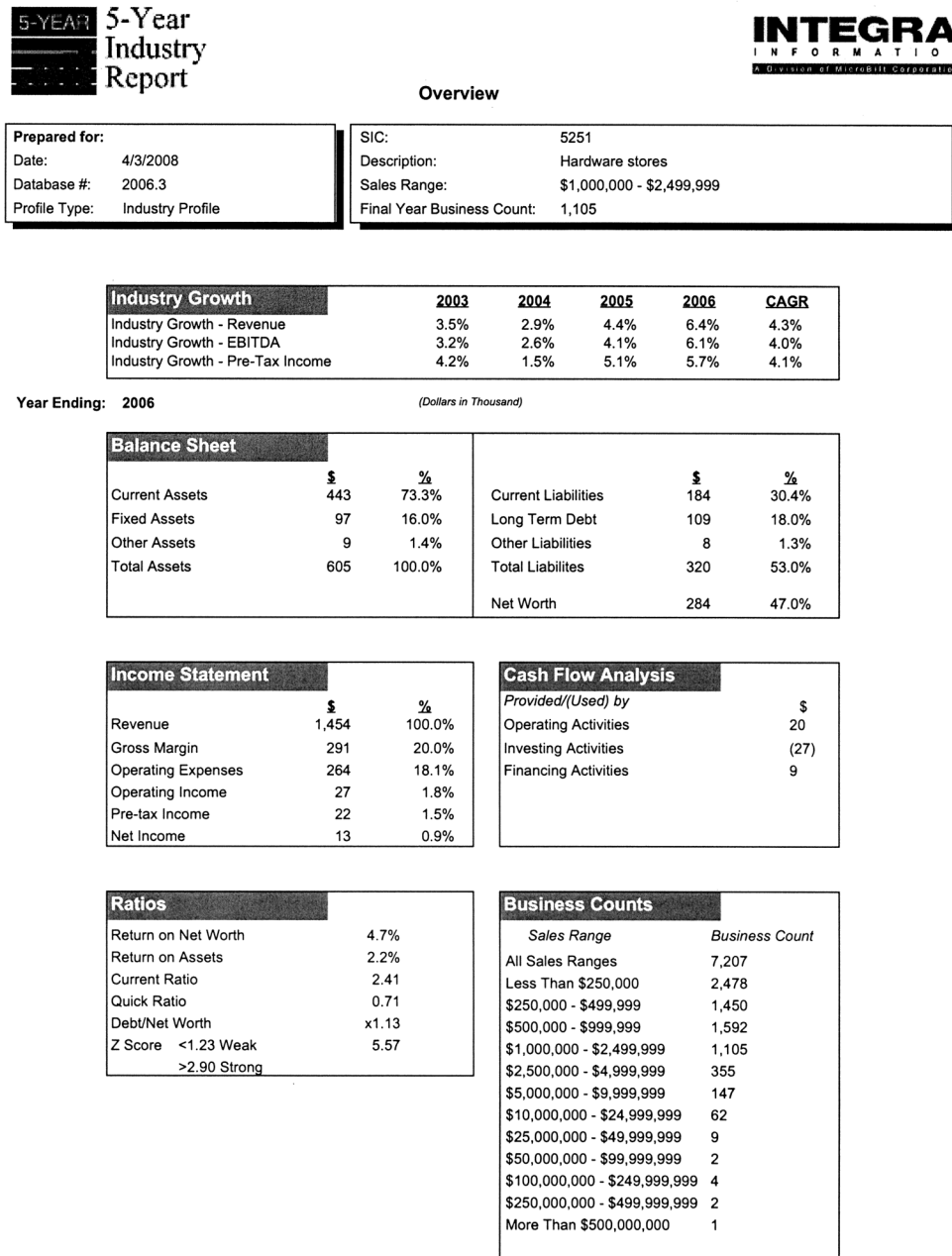
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Look at the neat stuff in figure 6.5 at the top, of next page. We get industry growth information. We then get condensed financial information and the summary count information. This page provides us with the 50,000 foot overview.

**FIGURE 6.5**  
**BUSINESS PROFILER 5-YEAR INDUSTRY REPORT OVERVIEW SCREEN**



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The next page begins giving us the details (figure 6.6).

**FIGURE 6.6**  
**BUSINESS PROFILER 5-YEAR INDUSTRY REPORT INCOME STATEMENT**

**5-YEAR**  
**5-Year**  
**Industry**  
**Report**

**INTEGRA**<sup>™</sup>  
I N F O R M A T I O N  
A Division of MicroBilt Corporation

**Income Statement**

**Prepared for:**  
Date: 4/3/2008  
Database #: 2006.3  
Profile Type: Industry Profile

**SIC:** 5251  
**Description:** Hardware stores  
**Sales Range:** \$1,000,000 - \$2,499,999  
**Final Year Business Count:** 1,105

Income Statement	2002	2003	2004	2005	2006
<b>Revenue</b>	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Cost of Sales</b>	80.0%	80.0%	80.0%	80.0%	80.0%
<b>Gross Margin</b>	20.0%	20.0%	20.0%	20.0%	20.0%
Selling, General & Administrative	7.2%	7.3%	7.3%	7.3%	7.4%
Officer Compensation	3.6%	3.6%	3.5%	3.4%	3.4%
Pension & Benefits	1.3%	1.4%	1.4%	1.4%	1.4%
Advertising & Sales	1.6%	1.6%	1.6%	1.6%	1.6%
Bad Debts	0.2%	0.2%	0.2%	0.2%	0.2%
Rents Paid	2.9%	2.9%	2.9%	2.9%	2.9%
Depreciation & Amortization	1.2%	1.2%	1.3%	1.3%	1.3%
<b>Operating Expenses</b>	18.0%	18.1%	18.1%	18.1%	18.1%
<b>Operating Income</b>	2.0%	1.9%	1.9%	1.9%	1.8%
Interest Income	0.1%	0.1%	0.1%	0.1%	0.1%
Interest Expense	-0.6%	-0.6%	-0.6%	-0.5%	-0.5%
Total Other Inc(Exp)	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Pre-Tax Income</b>	1.5%	1.5%	1.5%	1.5%	1.5%
Income Taxes *	-0.6%	-0.6%	-0.6%	-0.6%	-0.6%
<b>Net Income</b>	0.9%	0.9%	0.9%	0.9%	0.9%

\* Income taxes are derived by applying a 38% tax rate to pre-tax income.

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We get a five year common size, comparative income statement. Notice that it breaks out such items as "Officers' Compensation" and "Depreciation & Amortization." This may be very helpful when we have to adjust the financial statements for these items. We will talk about the adjustments in a little while, so be patient. After allowing us to compare the subject to the industry data, we then get the next page that provides us with the average dollars within the range of the companies based on the sales range selected previously. This allows us to see where our subject company falls with respect to size (figure 6.7).

**FIGURE 6.7**  
**BUSINESS PROFILER 5-YEAR INDUSTRY REPORT INCOME STATEMENT**



**Income Statement**

<b>Prepared for:</b>	SIC: 5251
Date: 4/3/2008	Description: Hardware stores
Database #: 2006.3	Sales Range: \$1,000,000 - \$2,499,999
Profile Type: Industry Profile	Final Year Business Count: 1,105

(Dollars in Thousand)

Income Statement	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
<b>Revenue</b>	1,228	1,272	1,308	1,366	1,454
<b>Cost of Sales</b>	982	1,017	1,047	1,093	1,163
<b>Gross Margin</b>	246	254	262	273	291
Selling, General & Administrative	89	93	96	100	107
Officer Compensation	44	45	46	47	49
Pension & Benefits	16	17	18	19	20
Advertising & Sales	19	20	21	21	23
Bad Debts	2	2	2	2	3
Rents Paid	36	37	38	40	42
Depreciation & Amortization	15	16	16	17	19
<b>Operating Expenses</b>	221	230	237	247	264
<b>Operating Income</b>	24	25	25	26	27
Interest Income	2	2	2	2	2
Interest Expense	(8)	(8)	(7)	(7)	(7)
Total Other Inc(Exp)					
<b>Pre-Tax Income</b>	18	19	19	20	22
Income Taxes *	(7)	(7)	(7)	(8)	(8)
<b>Net Income</b>	11	12	12	13	13

\* Income taxes are derived by applying a 38% tax rate to pre-tax income.



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We then get similar schedules for the balance sheet, providing us with common size and average dollars (figures 6.8 and 6.9).

**FIGURE 6.8**  
**BUSINESS PROFILER 5-YEAR INDUSTRY REPORT BALANCE SHEET**

 <p><b>5-Year Industry Report</b></p>	<p><b>Balance Sheet</b></p>	
<p><b>Prepared for:</b></p> <p>Date: 4/3/2008</p> <p>Database #: 2006.3</p> <p>Profile Type: Industry Profile</p>	<p>SIC: 5251</p> <p>Description: Hardware stores</p> <p>Sales Range: \$1,000,000 - \$2,499,999</p> <p>Final Year Business Count: 1,105</p>	

<b>Balance Sheet</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b>Assets</b>					
Cash	8.5%	8.6%	8.6%	8.6%	8.6%
Marketable Securities	0.1%	0.1%	0.1%	0.1%	0.1%
Accounts Receivable	12.8%	12.8%	12.8%	12.9%	12.9%
less Allowance for Bad Debt	0.0%	0.0%	0.0%	0.0%	0.0%
Accounts Receivable, net	12.7%	12.8%	12.8%	12.8%	12.9%
Raw Material	0.0%	0.0%	0.0%	0.0%	0.0%
Work in Process	0.0%	0.0%	0.0%	0.0%	0.0%
Finished Goods	0.0%	0.0%	0.0%	0.0%	0.0%
Inventory	50.0%	50.2%	50.4%	50.4%	50.4%
Other Current Assets	1.4%	1.4%	1.4%	1.4%	1.3%
<b>Total Current Assets</b>	<b>72.8%</b>	<b>73.0%</b>	<b>73.2%</b>	<b>73.2%</b>	<b>73.3%</b>
Property, Plant & Equipment	50.8%	52.6%	54.6%	56.2%	57.0%
less Accumulated Depreciation	-34.1%	-36.0%	-38.3%	-40.0%	-41.0%
Property, Plant & Equipment, net	16.7%	16.5%	16.3%	16.2%	16.0%
Intangible Assets, net	0.9%	0.9%	0.9%	0.9%	0.9%
Depletable Assets, net	0.0%	0.0%	0.0%	0.0%	0.0%
Investments	8.0%	8.1%	8.1%	8.3%	8.4%
Other Assets	1.6%	1.5%	1.4%	1.4%	1.4%
<b>Total Assets</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Liabilities &amp; Net Worth</b>					
Short Term Debt	7.5%	7.6%	7.7%	7.8%	7.9%
Accounts Payable	17.4%	17.6%	17.9%	18.1%	18.4%
Other Current Liabilities	3.7%	3.8%	3.9%	4.0%	4.2%
<b>Total Current Liabilities</b>	<b>28.6%</b>	<b>29.1%</b>	<b>29.5%</b>	<b>30.0%</b>	<b>30.4%</b>
Long Term Debt	18.0%	18.0%	18.0%	18.0%	18.0%
Loans from Shareholders	2.9%	3.0%	3.0%	3.1%	3.2%
Other Liabilities	1.5%	1.4%	1.4%	1.4%	1.3%
<b>Total Long Term Liabilities</b>	<b>22.4%</b>	<b>22.4%</b>	<b>22.5%</b>	<b>22.5%</b>	<b>22.6%</b>
<b>Total Liabilities</b>	<b>51.0%</b>	<b>51.5%</b>	<b>52.0%</b>	<b>52.5%</b>	<b>53.0%</b>
<b>Total Net Worth</b>	<b>49.0%</b>	<b>48.5%</b>	<b>48.0%</b>	<b>47.5%</b>	<b>47.0%</b>
<b>Total Liabilities &amp; Net Worth</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

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**FIGURE 6.9**  
**BUSINESS PROFILER 5-YEAR INDUSTRY REPORT BALANCE SHEET**



**Balance Sheet**

<b>Prepared for:</b>	SIC: 5251
Date: 4/3/2008	Description: Hardware stores
Database #: 2006.3	Sales Range: \$1,000,000 - \$2,499,999
Profile Type: Industry Profile	Final Year Business Count: 1,105

(Dollars in Thousand)

<b>Balance Sheet</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b>Assets</b>					
Cash	45	46	48	49	52
Marketable Securities					
Accounts Receivable less Allowance for Bad Debt	67	69	71	74	78
Accounts Receivable, net	67	69	71	73	78
Raw Material Work in Process Finished Goods					
Inventory	264	272	279	289	305
Other Current Assets	7	8	8	8	8
<b>Total Current Assets</b>	<b>384</b>	<b>396</b>	<b>405</b>	<b>419</b>	<b>443</b>
Property, Plant & Equipment less Accumulated Depreciation	268 (180)	285 (195)	302 (212)	322 (229)	345 (248)
Property, Plant & Equipment, net	88	90	90	93	97
Intangible Assets, net	5	5	5	5	5
Depletable Assets, net					
Investments	42	44	45	47	51
Other Assets	8	8	8	8	9
<b>Total Assets</b>	<b>528</b>	<b>542</b>	<b>553</b>	<b>573</b>	<b>605</b>
<b>Liabilities &amp; Net Worth</b>					
Short Term Debt	40	41	43	45	48
Accounts Payable	92	96	99	104	111
Other Current Liabilities	19	21	22	23	25
<b>Total Current Liabilities</b>	<b>151</b>	<b>158</b>	<b>163</b>	<b>172</b>	<b>184</b>
Long Term Debt	95	98	100	103	109
Loans from Shareholders	15	16	17	18	20
Other Liabilities	8	8	8	8	8
<b>Total Long Term Liabilities</b>	<b>118</b>	<b>122</b>	<b>124</b>	<b>129</b>	<b>136</b>
<b>Total Liabilities</b>	<b>269</b>	<b>279</b>	<b>288</b>	<b>301</b>	<b>320</b>
<b>Total Net Worth</b>	<b>259</b>	<b>263</b>	<b>266</b>	<b>272</b>	<b>284</b>
<b>Total Liabilities &amp; Net Worth</b>	<b>528</b>	<b>542</b>	<b>553</b>	<b>573</b>	<b>605</b>

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This is the type of stuff that financial analysts dream about! And it gets better. The next page looks like figure 6.10.

**FIGURE 6.10**  
**BUSINESS PROFILER 5-YEAR INDUSTRY REPORT CASH FLOW**

<b>5-YEAR</b>	<b>5-Year Industry Report</b>	<b>INTEGRA</b> INFORMATION <small>A Division of MicroBilt Corporation</small>			
<b>Cash Flow Analysis</b>					
<b>Prepared for:</b>	<b>SIC:</b> 5251				
<b>Date:</b> 4/3/2008	<b>Description:</b> Hardware stores				
<b>Database #:</b> 2006.3	<b>Sales Range:</b> \$1,000,000 - \$2,499,999				
<b>Profile Type:</b> Industry Profile	<b>Final Year Business Count:</b> 1,105				
<i>(Dollars in Thousand)</i>					
<b>Analysis of Cash Flow</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	
<b>Operating Cash Flow</b>					
Net Income	12	12	13	13	
Adjustments to reconcile net income to net cash provided by operating activities:					
Depreciation and Amortization	16	16	17	19	
Change in Accounts Receivable, net	(2)	(2)	(3)	(4)	
Change in Inventory	(8)	(6)	(10)	(16)	
Change in Accounts Payable	4	3	5	7	
Change in Other Operating	1	1	1	1	
Total Adjustments	<u>11</u>	<u>13</u>	<u>11</u>	<u>7</u>	
<b>Cash Provided by Operating</b>	<b>23</b>	<b>25</b>	<b>23</b>	<b>20</b>	
<b>Investing Activities</b>					
Capital Expenditures	(17)	(17)	(20)	(23)	
Change in Marketable Securities					
Change in Investments	(2)	(1)	(2)	(3)	
<b>Cash Provided by Investing Activities</b>	<b>(19)</b>	<b>(19)</b>	<b>(22)</b>	<b>(27)</b>	
<b>Financing Activities</b>					
Change in Short Term Debt	2	1	2	3	
Change in Long Term Debt	3	2	4	6	
Change in Loans from Shareholders	1	1	1	2	
Change in Equity	(8)	(9)	(6)	(1)	
<b>Cash Provided by Financing Activities</b>	<b>(3)</b>	<b>(5)</b>	<b>9</b>		

Note: The intent of the Cash Flow Analysis is to reflect operating performance. It does not address investments or changes in capital structure which can vary significantly from firm to firm. When evaluating cash flow, this information should be used in conjunction with specifics around an individual firm's capital structure.

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A cash flow analysis—how cool is that? Hey, if you haven't figured me out yet, I get into this stuff! Deep down inside, I am still an accountant.

Just when you thought it could not get any better, look at what comes next (figures 6.11 and 6.12)!

**FIGURE 6.11**  
**BUSINESS PROFILER 5-YEAR INDUSTRY REPORT RATIOS**

5-YEAR 5-Year Industry Report		Ratios				
<b>Prepared for:</b>		<b>SIC:</b> 5251				
<b>Date:</b> 4/3/2008		<b>Description:</b> Hardware stores				
<b>Database #:</b> 2006.3		<b>Sales Range:</b> \$1,000,000 - \$2,499,999				
<b>Profile Type:</b> Industry Profile		<b>Final Year Business Count:</b> 1,105				
<b>Liquidity / Solvency</b>						
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	
Quick Ratio	0.75	0.74	0.73	0.72	0.71	
Current Ratio	2.54	2.51	2.48	2.44	2.41	
Days Accounts Receivable	0	20	20	19	19	
Days Accounts Payable	0	34	34	34	34	
Days Working Capital	0	68	67	65	64	
Days Inventory	0	96	96	95	93	
Accounts Receivable to Sales	0.0%	5.4%	5.4%	5.3%	5.2%	
Accounts Payable to Sales	0.0%	7.4%	7.4%	7.4%	7.4%	
Current Liabilities to Net Worth	58.4%	60.0%	61.5%	63.1%	64.8%	
Current Liabilities to Inventory	x0.57	x0.58	x0.59	x0.60	x0.60	
Cost of Sales to Payables	x10.71	x10.64	x10.59	x10.53	x10.48	
<b>Turnover</b>						
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	
Receivables Turnover	0.00	x18.63	x18.67	x18.92	x19.22	
Cash Turnover	0.00	x27.77	x27.85	x28.24	x28.75	
Inventory Turnover	0.00	x3.79	x3.80	x3.85	x3.92	
Current Asset Turnover	0.00	x3.26	x3.27	x3.31	x3.37	
Working Capital Turnover	0.00	x5.40	x5.46	x5.58	x5.74	
Fixed Asset Turnover	0.00	x14.32	x14.54	x14.92	x15.34	
Total Asset Turnover	0.00	x2.38	x2.39	x2.43	x2.47	
<b>Debt</b>						
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	
Debt Service Coverage - EBITDA	0.00	0.85	0.85	0.86	0.88	
Debt Service Coverage - Pre-Tax	0.00	0.89	0.89	0.90	0.92	
Debt Service Coverage - After-Tax	0.00	0.74	0.73	0.75	0.76	
Interest Coverage	x3.14	x3.31	x3.41	x3.62	x3.76	
Current Assets to Short Term Debt	x9.66	x9.56	x9.47	x9.37	x9.25	
Accounts Payable to Total Debt	34.1%	34.2%	34.4%	34.5%	34.6%	
Short Term Debt to Total Debt	14.8%	14.8%	14.9%	14.9%	14.9%	
Long Term Debt to Total Assets	18.0%	18.0%	18.0%	18.0%	18.0%	
ST Debt plus LT Debt to Net Worth	52.2%	52.9%	53.6%	54.4%	55.1%	
Total Debt to Assets	51.0%	51.5%	52.0%	52.5%	53.0%	
Total Debt to Inventory	x1.02	x1.03	x1.03	x1.04	x1.05	
Total Debt to Net Worth	x1.04	x1.06	x1.08	x1.11	x1.13	
<b>Risk</b>						
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	
Z Score	5.82	5.76	5.70	5.64	5.57	
Fixed Assets to Net Worth	x0.34	x0.34	x0.34	x0.34	x0.34	

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## FIGURE 6.12

### BUSINESS PROFILER 5-YEAR INDUSTRY REPORT RATIOS

5-Year Industry Report	Ratios				
<b>Prepared for:</b> Date: 4/3/2008 Database #: 2006.3 Profile Type: Industry Profile	<b>SIC:</b> 5251 <b>Description:</b> Hardware stores <b>Sales Range:</b> \$1,000,000 - \$2,499,999 <b>Final Year Business Count:</b> 1,105				
<b>Profitability</b>					
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Gross Margin	20.0%	20.0%	20.0%	20.0%	20.0%
EBITDA to Sales	3.2%	3.2%	3.2%	3.1%	3.1%
Operating Margin	2.0%	1.9%	1.9%	1.9%	1.8%
Operating Cash Flow to Sales	0.0%	1.8%	1.9%	1.7%	1.4%
Pre-Tax Return on Assets	3.5%	3.5%	3.5%	3.6%	3.6%
After-Tax Return on Assets	2.2%	2.2%	2.2%	2.2%	2.2%
Pre-Tax Return on Net Worth	7.1%	7.3%	7.3%	7.5%	7.6%
After-Tax Return on Net Worth	4.4%	4.5%	4.6%	4.7%	4.7%
Pre-Tax Return on Sales	1.5%	1.5%	1.5%	1.5%	1.5%
After-Tax Return on Sales	0.9%	0.9%	0.9%	0.9%	0.9%
<b>Working Capital (Dollars in Thousand)</b>					
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Working Capital	233.0	238.0	241.0	247.0	258.0
Working Capital to Sales	19.0%	18.7%	18.5%	18.1%	17.8%
Net Income to Working Capital	4.9%	5.0%	5.0%	5.1%	5.2%
Inventory to Working Capital	113.2%	114.3%	115.3%	116.5%	117.7%
Short Term Debt to Working Capital	17.1%	17.4%	17.7%	18.1%	18.5%
Long Term Debt to Working Capital	40.8%	41.0%	41.3%	41.7%	42.0%
<b>Operating Efficiency</b>					
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Operating Expenses to Gross Margin	90.1%	90.3%	90.5%	90.6%	90.8%
Operating Expenses to Sales	18.0%	18.1%	18.1%	18.1%	18.1%
Depreciation & Amortization to Sales	1.2%	1.2%	1.3%	1.3%	1.3%
Total Assets to Sales	43.0%	42.6%	42.3%	41.9%	41.6%
Sales to Net Worth	x4.75	x4.84	x4.93	x5.02	x5.12
Sales to Fixed Assets	1,394.4%	1,420.1%	1,446.6%	1,473.8%	1,501.7%
Inventory to Cost of Sales	26.9%	26.7%	26.6%	26.4%	26.2%
Intangible Assets to Sales	0.4%	0.4%	0.4%	0.4%	0.4%
Capital Expenditures to Sales	0.0%	1.3%	1.3%	1.4%	1.6%
<b>Growth (CAGR 5 Years)</b>					<b>2006</b>
Sales					4.3%
Operating Income					2.4%
Pre-Tax Profit					4.1%
Net Income					4.1%
Assets					3.5%
Liabilities					4.5%
Net Worth					2.4%

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Two pages of financial ratios, 64 in total gets you more detailed financial analysis than you could ever have dreamed about. If you cannot analyze the subject company upward, downward, and sideways, I don't know what to tell you.

This is probably the most comprehensive product that I have ever seen for this type of information. What I also like about this product is that the ratios are calculated in the manner in which I was taught to calculate them in school. Turnover ratios use the average of the years rather than only the year end from one year. *RMA Annual Statement Studies* only calculates the ratios based on the end of year figures. It is just not right! However, every so often, I come across an SIC code that Integra does not cover and I use RMA. When I do, I calculate the ratios in the same manner as RMA so that the comparison is based on consistent data.

The financial ratios even reflect a Z score under the risk category. If you are like me, you are probably wondering what this is. The *Z score* is a financial distress (or solvency) prediction model. In assessing a company's level of financial distress or solvency, four ratios are used together, and each ratio is weighted. The following weighted averages are used:  $6.56 \times$  (working capital to total assets) +  $1.05 \times$  (net worth to total debt) +  $3.26 \times$  (net worth to total assets) +  $6.72 \times$  (operating income to total assets). A score greater than 2.90 is preferred, and a score less than 1.23 indicates significant risk of bankruptcy.

*Business Profiler* can also be downloaded to Excel from the internet. We wrote a macro in Excel that imports the data directly into our valuation model. No more data entry! Another cool thing.

Before we move off the topic of financial ratios, one other item needs to be raised. Frequently, financial statements of the subject company have to be normalized (discussed below) for economic adjustments that are necessary to present the subject company from the point of view that the willing buyer would be purchasing. This raises an issue—should the valuation analyst use the unadjusted or the adjusted figures to perform the financial analysis and compare the results against the industry group? The answer depends on the facts and circumstances of the appraisal, as well as the nature of the adjustments that are made. Sometimes we compare both the unadjusted and the adjusted to the industry group. How is that for being definitive? All kidding aside, when the adjustments being made are significant enough to change the outlook of the subject company, we are more likely to compare both sets of data and highlight the fact that the adjusted figures are more meaningful for that analysis.

## TREND ANALYSIS

The purpose of a trend analysis is to compare the subject company's performance over the past several years. The exact number of years used in the analysis depends on the facts and circumstances of each individual case. Although five years is the number commonly used, it is not always the correct number. Ideally, the period of years should cover a normal business cycle for the subject company. Certain industries may require the analysis to include many more years. There also will be times where the company has changed its operations in the near past, and as a result a shorter period will be more meaningful. Always keep in mind that more data, if meaningful, will allow the analyst to perform a more meaningful analysis.

During the trend analysis, the valuation analyst attempts to identify positive and negative trends affecting the company. The valuation analyst should review this data with the goal of determining the future prospects of the company based on historical growth patterns and based on the company's normal operations. This is a good time to identify items that are nonrecurring or excess items that will be removed during the normalization process and not considered in the forecast of future net earnings or cash flows.

Computer spreadsheet programs are an easy and efficient way to set up a trend analysis. The data entry can be viewed year by year to determine what is going on. It is also a good way to make sure that the data entry from year to year is consistent. For example, if there is an expense for four out of five years, what happened in the year that is blank? Did that expense not exist for a particular year or did the company have two different accountants that classified items differently? Or for that matter, did your staff person call four years "contribution expense" and the fifth year is on a separate line called "donations?" Obviously, these lines should be combined for the analysis to be meaningful.

## OPERATIONAL ANALYSIS

The purpose of performing an operational analysis is to determine information regarding the quality and stability of the earnings or cash flow from the business. The valuation analyst should be mindful that an equity investor is concerned with the ability of the subject company to provide earnings, cash flow, or both, so that he or she will obtain a return on investment (for example, dividends).

Some important components of this process include an analysis of (1) gross profit, (2) discretionary costs, and (3) financial statement consistency.

## GROSS PROFIT ANALYSIS

An analysis of the cost of goods sold will provide the valuation analyst with information about the gross profit that the company has been able to achieve. Because the selling price of the goods is dictated by competition, the company's gross profit should be in line with the industry's. The subject company must produce an adequate volume of sales if it is to cover its operating expenses.

A gross profit analysis is also a useful tool for determining if the inventory is properly valued or if there is unreported income. Although there is a difference between a valuation analyst and a forensic accountant, there are times when one professional may perform both functions. Let me share with you an example of how this analysis can impact an appraisal. We were valuing a pharmacy that also sold liquor. The store never took a physical inventory, and we found out from one of the owners that there was cash payroll. Our gross profit analysis is reflected in exhibit 6.4.

### EXHIBIT 6.4 GROSS PROFIT ANALYSIS

To account for the significant amounts of cash not recorded by the company, as well as the ending inventory being calculated based on a gross profit percentage rather than a physical valuation, the valuation analyst has recalculated gross profit based on industry gross profit percentages. Using these industry averages, we can estimate the amounts of gross revenue and net income that ABC Drug Stores Inc. should have had each year.

In order to reflect the gross profit percentage of ABC Drug Stores, we have relied on industry data from Integra Information. To accurately calculate a gross profit percentage, we utilized data from both the drug store industry (SIC code 5912), and liquor store industry (SIC code 5921). The Integra data consisted of 1,050 drug stores with revenues between \$2.5 million and \$5 million, and 3,621 liquor stores with revenues between \$250,000 and \$500,000. The gross profit information are as follows:

<b>Integra Gross Margins</b>					
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Drug stores	28.00%	27.60%	27.30%	27.00%	26.70%
Liquor stores	25.00%	24.60%	24.20%	23.80%	23.40%

The gross margin percentages shown above are then applied to the percent of revenues ABC Drugs received from the sale of drugs or liquor in each year. The breakdown of ABC Drugs' revenues by type are as follows:

<b>ABC Drug Revenue Breakdown</b>					
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Drug revenues	91.10%	88.09%	88.58%	87.20%	86.97%
Liquor revenues	8.90%	11.91%	11.42%	12.80%	13.03%

Multiplying the revenue percentages by the industry gross margin figures in each year results in a weighted margin for drugs and liquor. Totaling the two figures in each year results in a weighted gross margin for ABC Drugs based on industry gross margins, and ABC Drugs' revenue breakdown by product type. The margin calculations are as follows:

<b>Gross Margin Percentage Calculation</b>					
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Drug margin subtotal	25.51%	24.31%	24.18%	23.54%	23.22%
Liquor margin subtotal	2.23%	2.93%	2.76%	3.05%	3.05%
Gross margin percent	27.74%	27.24%	26.94%	26.59%	26.27%
Gross margin less 10%	24.97%	24.51%	24.25%	23.93%	23.64%



### EXHIBIT 6.4

After calculating the gross profit margins relative to ABC Drug Stores, the valuation analyst applied a 10 percent discount to those figures in order to account for economic and industry-specific risk related to ABC Drug Stores. Based on the company's operation in a low-income area, which includes a significant number of customers utilizing government prescription plans such as Medicaid, and the overall competitiveness of the retail pharmacy industry, especially within the metropolitan region in which ABC Drugs operates, a 10 percent discount was determined to be appropriate.

To account for the significant amounts of cash not recorded by ABC Drug Stores, as well as the ending inventory being calculated based on a gross profit percentage rather than a physical valuation, the valuation analyst has recalculated gross profit based on industry gross profit percentages. Using these industry averages, we can estimate the amounts of gross revenue and net income that ABC Drug Stores, Inc. should have had each year.

Using the calculated weighted gross profit margin percentages, the estimated amount of cost of goods sold, as a percent of revenues, can be calculated. These figures are as follows:

<b>Cost of Goods Sold Percentage Calculation</b>					
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Revenue %	100.00%	100.00%	100.00%	100.00%	100.00%
Less: gross profit %	24.97%	24.51%	24.25%	23.93%	23.64%
COGS %	75.03%	75.44%	75.75%	76.06%	76.36%

The above cost of goods sold percentages are then used to calculate the gross profit adjustment necessary to reflect the approximate amount of revenue that ABC Drug Stores should have achieved in each year. The gross profit adjustment for each year is listed in the income normalization table. With the addition of the gross profit adjustment to annual historic revenues and the cash payroll adjustment, the valuation analyst has reasonably calculated the annual revenues ABC Drugs attained each year.

Let me give you a word of caution if you attempt a similar analysis to this one. You *must* have a good SIC or NAICS code for the subject company. I have seen too many practitioners use SIC or NAICS codes that have so many unrelated types of businesses included in the data that the results become flawed.

### Discretionary Costs

Several items included in the company's income statement may be discretionary and should be investigated by the valuation analyst. Some of the common items to be reviewed are repairs and maintenance (have they been deferred, or are there items that should have been capitalized?), research and development (is the company's policy to continue spending an equal amount on R&D, or is there a measurable payback for past R&D?), and advertising (is the company spending too much for too little?).

An analysis of discretionary costs will almost always be performed by a willing buyer because that individual will be interested in knowing how much of the company's expense structure can be done away with to produce the maximum return to him or her. Because of the synergies that will be brought to the transaction by the buyer, merger and acquisition appraisals will also look to the level of discretionary costs that can be eliminated.

### Financial Statement Consistency

Just as an auditor looks for consistency in financial reporting, the valuation analyst should analyze the financial statements for consistency from period to period. The valuation analyst must pay particular attention to the company's accounting policies. If the company has an aggressive capital expenditure expensing policy, the company's balance sheet will be understated for those assets that were expensed rather than capitalized. Not only does this understate the value of the balance sheet, but it also destroys the usefulness of many of the financial ratios calculated, common size analyses, and cash flow projections.



Consistency should also be investigated during a trend analysis because a review of a spreadsheet of the past several accounting periods may highlight discrepancies that exist between the reporting periods. For example, table 6.1 indicates a valuation analyst review of insurance expenses from 2002 through 2006.

	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Insurance expense	\$ 39,888	\$ 62,255	\$ 22,984	\$ 45,977	\$ 47,395

Reviewing the figures in table 6.1 for consistency reveals that something happened in 2003 and 2004 that warrants further explanation. An inquiry by the valuation analyst determined that in 2003 this “cash basis” company made a \$21,000 insurance payment that was for 2004. The owner decided to accelerate the expense into 2003, so that she could reduce her taxes for that year. Let’s hear it for the matching principle!

## FINANCIAL STATEMENT ADJUSTMENTS

Before the valuation analyst can determine whether or not there will be the need to adjust the financial statements, he or she will have to assess the quality of the available financial information. While reviewing the historical financial statements, the valuation analyst must determine the answers to the following questions:

- Are the financial statements complete with all footnotes and supplemental schedules?
- Is there sufficient detail to make the information usable in the comparative analysis to the industry and market data?
- Are the financial statements prepared under generally accepted accounting principles (GAAP) (and, for that matter, does it make a difference)?

## CONVERSION OF CASH OR INCOME TAX BASIS TO GAAP

In assessing the quality of the company’s financial statement information, there may be times when adjustments are necessary to convert the information presented to GAAP. More often than not, this will prove to be an accounting exercise that may not add any value to the valuation process. A large part of the determination as to the need to make this conversion will depend on the information that the valuation analyst will be using for comparison purposes. For example, if you are valuing a medical practice that reports on a cash basis, and you are going to compare the practice to other practices reported on a cash basis, why bother going through the exercise of converting the financial statements to an accrual basis? Most likely, the balance sheet will need to be adjusted for accounts receivable and accounts payable, but the impact on the income statement may be relatively immaterial. (I love talking accounting talk!) This will be discussed further in chapter 18, on the subject of valuing professional practices.

## TAX RETURN ADJUSTMENTS

There will be many times when a valuation analyst will work from tax returns and not have the benefit of having financial statements (the client is probably too cheap to pay for this level of service). When this occurs, the valuation analyst needs to make the necessary adjustments to account for the different treatment of certain income or expense items between the tax returns and what would have been in the financial statements had they existed. For example, entertainment expenses are only 50 percent deductible on a tax return, but if a legitimate expense, 100 percent should be considered in determining net income for valuation purposes.

In order to address the differences between book and tax items, we modified our valuation model to automatically adjust the appropriate lines from the historical data entry that may have been input from the tax returns. We allow the data entry to take place from the tax return and we set up a separate sheet with formulas to combine those items that require combination. This way we do not have to worry about incorrect formulas and staff messing around with our templates. By the way, we password protect all fields that contain formulas. Nobody messes with my formulas! Even something like a Schedule C (sole proprietorship) should be adjusted for differences in reporting. Make sure that all material items are accounted for.

By the time we get through with the tax return data, we produce a financial statement that ties out to the “book income” rather than the “taxable income.” This may require certain items to be picked up from Schedule K on an S corporation tax return, as well as Schedule M-1 adjustments. Once we get to a clean starting point, we are able to consider making any adjustments that may be deemed appropriated for the valuation. By reconciling these various figures, we are also creating a good audit trail for the initial figures. This way, we do not have to worry that a figure was entered incorrectly.

## ANALYSIS OF HISTORICAL BALANCE SHEETS

Once the valuation analyst is pretty sure that all of the data is gathered and input into some form of spreadsheet program, he or she can use all of the analytical tools that I discussed before to try to understand more about the subject company’s operations and its industry. Some of the more frequently encountered issues addressed in the historical balance sheet analysis are included in box 6.3.

### Box 6.3 Frequently Asked Historical Balance Sheet Analysis Questions

- What is the minimum amount of cash or working capital required to operate the company? (See the discussion of Bardahl analysis in this chapter.)
- What is the status of accounts receivable (that is, condition, turnover, bad debt experience, reserve, and aging)?
- What are the amounts, terms, and collectibility of officer and employee loans?
- How are inventories valued? How does the company determine inventory quantity and pricing at year end?
- Does inventory cost include material, freight, labor, and overhead where applicable?
- What are the company’s operating and nonoperating assets and liabilities?
- What is the policy for capitalization of property and equipment?
- What depreciation methods and lives are used?
- Have write-downs for obsolescence or costs in excess of net realizable value been made?
- What are the terms of all interest bearing debt?
- What are the trends in payables and turnover ratios?
- What are the terms of all long term liabilities?
- Are there any preferences for classes of stock, rights, warrants, or options, among others?

Many of these questions can be answered by reading the notes to the financial statements, but many will be answered during the management interview.

## ANALYSIS OF HISTORICAL INCOME STATEMENTS

The income statement analysis is also intended to answer many questions. Some of the more frequent items addressed in the analysis can be found in box 6.4.

### Box 6.4 Frequently Asked Historical Income Statement Questions

- What is the method of recognizing income and expenses?
- What are the company’s sources of income?
- What is the breakdown of the revenues in terms of dollars and percentages? How have these changed during the last five years?
- Which of the company’s products and services are proprietary? Does this impact income?
- Which products are purchased for resale?
- What are the company’s main expenses? How have these changed during the last five years?
- How are expenses allocated to inventories?
- Which of the expenses are fixed, semi-fixed, or variable in relation to sales?
- What are the company’s gross margins by product and service?
- Are there any deferred charges? If so, do they have any value?
- Is depreciation included in cost of goods sold?

## BARDAHL ANALYSIS

One of the factors that a valuation analyst is often faced with is the determination of how much working capital is required in the subject company's operations. Frequently, there may be excess working capital, which becomes a nonoperating asset (explained shortly). However, there may also be a deficit in the working capital, which may become a reduction in the value of the company. There are a number of ways to analyze the working capital needs of the subject company. One such way would be to review industry data about companies or groups of companies, such as from *Business Profiler*. This could give you an idea as to the norm in the industry. Another way to test the working capital needs came out of a court case entitled *Bardahl Manufacturing Corp.*<sup>1</sup>—a formula that is easy to build into a spreadsheet program. Exhibit 6.5 presents the discussion from our training manual on the use of the Bardahl formula.

### EXHIBIT 6.5 BARDAHL ANALYSIS

	December 2002	December 2003	December 2004	December 2005	December 2006	December 2007
<b>Income Statement Data</b>						
Sales	-	2,154,089	1,951,404	2,455,757	3,324,830	2,973,599
Cost of Goods Sold	-	614,085	543,420	657,400	1,024,332	740,962
Other Operating Expenses (S,G. & A, etc.)	-	1,015,043	1,046,859	1,168,646	1,476,803	1,571,625
Depreciation and Amortization	-	15,484	18,947	21,900	24,878	24,048
<b>Balance Sheet Data</b>						
Accounts Receivable	309,865	184,858	349,468	474,637	527,683	550,072
Inventory	375,000	186,289	223,251	180,632	233,263	339,089
Accounts Payable	103,863	69,457	70,521	20,157	36,302	23,344
Current Assets	685,849	380,403	627,500	721,212	1,102,548	1,431,859
Current Liabilities	300,188	202,221	82,343	39,277	253,360	450,251
Inventory Turnover		32.7%	37.7%	30.7%	20.2%	38.6%
Accounts Receivable Turnover		11.5%	13.7%	16.8%	15.1%	18.1%
Accounts Payable Turnover		0.109636288	0.093306282	0.069043961	0.027558936	0.040249028
Operating Cycle Percentage		33.2%	42.0%	40.6%	32.5%	52.7%
COGS + Other Operating Expenses - D&A		1,613,644	1,571,232	1,804,066	2,476,257	2,266,538
<b>Necessary Working Capital</b>		<b>\$ 535,624</b>	<b>\$ 660,577</b>	<b>\$ 732,323</b>	<b>\$ 805,292</b>	<b>\$ 1,206,504</b>
Actual Working Capital		356,502	545,161	681,935	849,188	981,608
Excess Working Capital		(179,122)	(115,416)	(50,388)	43,896	(224,896)

This sheet in the valuation template takes data from the Adjusted Income Statement (I-Sadjd) and the Adjusted Balance Sheet (B-Sadjd) worksheets for each year in the analysis and calculates three ratios, as well as "necessary" and "excess" working capital. The following explanation is for each row and applies to all columns until row 24, where ratios are calculated. Since these require the use of a previous year's data, no ratios are available for the first year for which there is data. There is no input for this page.

<sup>1</sup> *Bardahl Manufacturing Corp.* (1965), TC Memo 1965-200, PH TCM 65200, 24 CCH TCM 1030.

## EXHIBIT 6.5

<b>Row 11, Sales</b>	This row comes from I-Sadjd!G7.
<b>Row 12, Cost of Goods Sold</b>	This row comes from I-Sadjd!G9.
<b>Row 13, Other Operating Expenses</b>	This row comes from I-Sadjd!G13 minus `I-S adjd'!G31 (Total Operating Expenses less Depreciation, Amortization).
<b>Row 14, Depreciation and Amortization</b>	This row comes from I-Sadjd!G31.
<b>Row 17, Accounts Receivable</b>	This row comes from B-Sadjd!G10.
<b>Row 18, Inventory</b>	This row comes from B-Sadjd!G12.
<b>Row 20, Current Assets</b>	This row comes from B-Sadjd!G33.
<b>Row 21, Current Liabilities</b>	This row comes from B-Sadjd!G88.
<b>Row 24, Inventory Turnover</b>	This row is calculated as $AVERAGE(C18,B18)/C12$ or Average Inventory, current and prior years, divided by Cost of Goods Sold, current year.
<b>Row 25, Accounts Receivable Turnover</b>	This row is calculated as $AVERAGE(C17,B17)/C11$ or Average Accounts Receivable, current and prior years, divided by Sales, current year.
<b>Row 26, Operating Cycle Percentage</b>	This row is calculated as $C25 + C24$ or Inventory Turnover Ratio plus Accounts Receivable Turnover Ratio.
<b>Row 28, COGS + Other Operating Expenses—Depreciation &amp; Amortization</b>	This row is calculated as $C12 + C13 - C14$ .
<b>Row 30, Necessary Working Capital</b>	This row is calculated as $C28 * C26$ or (COGS + Other Operating Expenses – Depreciation & Amortization) times Operating Cycle Percentage.
<b>Row 32, Actual Working Capital</b>	This row is calculated as $C20 - C21$ or Current Assets less Current Liabilities.
<b>Row 34, Excess Working Capital</b>	This row is calculated as $C32 - C30$ or Necessary Working Capital less Actual Working Capital.

So what does this exhibit do? It calculates the amount of working capital required for a manufacturing company after considering working capital turnover ratios, the level of cash expenses and the non-cash charges. It estimates the amount of working capital that the company needs to sustain itself based on its normal operating results. While this is not the only manner in which to calculate this, it is a very useful tool, particularly for manufacturing companies. It needs to be adapted for other types of companies.

## NORMALIZATION ADJUSTMENTS

Once all of the historical financial information has been analyzed, any potential adjustments should be made. Financial statement adjustments, frequently called “normalization adjustments,” are intended to place the subject company’s financial information on an economic basis. During this process, a “cleansing” of the financial statements takes place. This cleansing is intended to remove those items that the willing buyer would not necessarily take into consideration in assessing the income or cash flow of the company. Another reason for these adjustments is to make the subject company’s financial statements more comparable to either other companies that will be used in the analysis or the industry peer group.

The adjustments made to the financial statements will depend on the valuation approach and on whether a controlling interest or a minority interest is being valued. Because a minority interest may not be able to effectuate a change in the company’s financial position, it may be inappropriate to make such adjustments. For example, if the minority interest cannot set the rent paid by the company to a related entity, an adjustment should probably not be made to the income stream. There may be times, however, that an adjustment of this type might be made for the minority. For example, if the rent is so far from market that it does not reflect the economic substance of the transaction, certain shareholder valuations could warrant an adjustment. The facts and circumstances of whether to make the adjustment must dictate what the analyst does, as opposed to a valuation textbook. Use common sense and good judgment.

These adjustments are designed to provide better comparability to similar types of businesses or business interests. The normalization process involves adjusting items in the financial statements that are not considered to be normal operating expenses of the subject business. The result should be economic financial statements, rather than those that are GAAP or tax oriented. Most often, the normalization adjustments that are made are categorized as (1) comparability adjustments, (2) nonoperating or non-recurring adjustments, or both, or (3) discretionary adjustments.

The term normalization has changed in the valuation literature recently. Z. Christopher Mercer, ASA, CFA, distinguishes between different types of normalization adjustments from the literature published previously. Mercer takes what used to be grouped as normalization adjustments and breaks these adjustments down into *normalizing adjustments* and *control adjustments*. In fact, he distinguishes between these two types of adjustments as follows:

- With normalizing adjustments, we attempt to adjust private company earnings to a reasonably well-run, public company equivalent basis. Normalizing adjustments can be further divided into two types to facilitate discussion and understanding. Normalization adjustments are *not* control adjustments.
- Control adjustments adjust private company earnings 1) for the economies or efficiencies of the *typical financial buyer*; and 2) for synergies or strategies of *particular buyers*. Control adjustments can therefore also be divided into two types.<sup>2</sup>

Further, Mercer states that:

Normalizing adjustments adjust the income statement of a private company to show the prospective purchaser the return from normal operations of the business and reveal a “public equivalent” income stream. If such adjustments were not made, something other than a freely traded value indication of value would be developed by capitalizing the derived earnings stream.<sup>3</sup>

I like Mercer’s description of normalization adjustments because it begins to differentiate between the types of adjustments that we encounter in our daily practice. Figure 6.13 provides part of an internal form that our firm uses to make certain that the analyst does not overlook the obvious.

**FIGURE 6.13**  
**PARTIAL INTERNAL CHECKLIST FOR NORMALIZATION**

<b>TRUGMAN VALUATION ASSOCIATES, INC. BUSINESS VALUATION INTERNAL CHECKLIST</b>
<p>Company Name: _____</p> <p>Completed by: _____ Date Completed: _____</p>
<p><b>INSTRUCTIONS:</b> This form is to be completed and should become part of the working papers. It is intended to ensure that important items are not overlooked. Only the information that is relevant to the valuation should be obtained. If the information is not relevant, write “N/A” in the space opposite the step. If information is missing or incomplete, the analyst should let an officer of the company know before attempting to prepare a valuation report. The “Comments” section on the last page can be used to document problems that were encountered or to highlight unusual matters for discussion with others.</p>

<sup>2</sup> Mercer, Z. Christopher. *The Integrated Theory of Business Valuation* (Brockton, MA: Peabody Publishing, 2004), 146.

<sup>3</sup> *Ibid.*, 149. (Appraiser’s note for clarification: The reference to “capitalizing the derived earnings stream” would also apply to discounting a future benefit stream, whether cash flow or earnings, because the capitalization model is a shortcut that is derived from a discounting model.)

**FIGURE 6.13**  
**PARTIAL INTERNAL CHECKLIST FOR NORMALIZATION**

**BALANCE SHEET NORMALIZATION**

	Yes	No	N/A
<b>Cash</b>			
1. Is there excess cash on the balance sheet?			
<b>Accounts Receivable</b>			
2. Has accounts receivable been included in the balance sheet? If not, why?			
3. Did you tax effect the accounts receivable?			
<b>Inventory</b>			
4. Is inventory included in the balance sheet?			
5. Is it reflected on a first in, first out basis?			
6. Is there any excess inventory?			
<b>Marketable Securities</b>			
7. Are these nonoperating assets that should be segregated?			
8. Have they been reflected at market value as of the valuation date?			
<b>Stockholder Receivables</b>			
9. Are these collectible?			
10. Are they legitimate borrowings or just accounting adjustments?			
11. Have they been written off?			
<b>Fixed Assets</b>			
12. Is there real estate included on the books of the subject company?			
13. Is it a nonoperating asset?			
14. Has it been appraised?			
15. Why hasn't it been appraised?			
16. Have all corresponding mortgages been treated consistently with the treatment of the real estate?			
17. Have all real estate related expenses been segregated on the income statement for possible normalization adjustments along with rent expense?			
18. Have machinery and equipment, furniture and fixtures, vehicles, and other items been appraised?			
19. If not, did we use our depreciation template to estimate fair market value?			
20. Do we need to make a depreciation adjustment on the income statement?			
21. If there is high appreciation in these assets, have we considered taxes in our analysis?			

(Continued)

FIGURE 6.13 (Continued)

	Yes	No	N/A
<b>Other Assets</b>			
22. Did we write off intangible assets that will be revalued?			
23. Do we know what all of the assets represent in this category?			
<b>Accounts Payable</b>			
24. Did we include accounts payable on the balance sheet?			
25. Did we tax effect it?			
<b>Notes Payable</b>			
26. Are these notes at market rates of interest?			
27. Have noninterest bearing notes been reflected at FMV?			
28. Are any of the notes considered to be nonoperating?			
29. If notes are high, did we consider using a debt free approach?			
30. Does the debt-equity relationship compare to the industry data to allow a reasonable analysis to be performed?			
<b>Stockholder Payables</b>			
31. Are these legitimate?			
32. Should they be reclassified as equity?			

**INCOME STATEMENT NORMALIZATION**

	Yes	No	N/A
1. Was officer's compensation adjusted?			
2. If yes, did you consider if any adjustment was required due to retirement plan contributions?			
3. Are there officer's perquisites that need to be adjusted?			
4. Are there any nonworking family members on the books?			
5. Are there any other payroll adjustments necessary (for example, maid)?			
6. Have you considered the reasonableness of the following:			
a. Automobile expenses			
b. Travel			
c. Entertainment			
d. Non-arm's length rent leases			
e. Depreciation			
f. Interest expense			
7. Have you added back federal taxes before recalculating taxes on the adjusted income?			
8. Have you added back state and local taxes before recalculating taxes on the adjusted income?			
9. Have you adjusting all nonoperating income and expense items?			



FIGURE 6.13

	Yes	No	N/A
10. Have you adjusted all non-recurring income and expense items?			
11. Have you made generally accepted accounting principles adjustments to make the statements more comparable to the guideline companies?			
Comments. (This section may be used to document problems that were encountered or to highlight unusual matters for discussion with others.)			

## COMPARABILITY ADJUSTMENTS

Certain types of adjustments are designed to make the subject company more comparable to the guideline companies or industry group being used as a means of comparison. For example, if the subject company uses last in, first out (LIFO) inventory accounting, a switch to first in, first out (FIFO) may allow the valuation analyst to compare the balance sheet of the subject company with those of the guideline companies more appropriately, if the guideline companies are using FIFO. Depreciation methods are another type of adjustment that fall into this category. In some instances, even officers' compensation can fall into this category. This is especially true when the officers of the closely held business are taking a level of compensation out of the business that is dramatically different than the market. I will address this in more detail in a little while.

## NONOPERATING AND NON-RECURRING ADJUSTMENTS

According to the *International Glossary of Business Valuation Terms*,<sup>4</sup> the definition of a *nonoperating asset* is an asset that is "not necessary to ongoing operations of the business enterprise." This can also be the case for a nonoperating liability. Many times, these assets or liabilities, or both, have income and expenses associated with them. An example of a nonoperating asset is a condo in Myrtle Beach, S.C., that is owned by ABC Shoes, Inc., a shoe store in Miami, FL. ABC also has a mortgage against this property, which makes this a nonoperating liability. Included in the income statement is the rental income and expenses associated with the condo. If our assignment was to value the common stock of ABC Shoes, Inc., we would first remove the asset and related liability from the balance sheet. Next, we would remove all income and expense items that relate to these nonoperating assets and liabilities. We can now value the operations of the shoe store as a stand-alone business. However, because valuing the equity of the company is our assignment, we must then add back the fair market value of the nonoperating asset and subtract the market value of the nonoperating liability. After all, the buyer may purchase only the operations, but the seller would continue to own the assets that were not sold.

Another type of nonoperating asset that is commonly encountered in a business valuation assignment is real estate that is owned by the business, but that does not necessarily have to be part of the business. For example, a corporation that operates a restaurant and owns the real estate that the restaurant is housed in does not need to own the real estate. Therefore, in this type of situation, it is common to treat the real estate as a nonoperating asset, build a fair rent into the normalization of the income statement, and value the operating entity as if it was renting its facility. There is no reason that a restaurant could not rent its premises, and therefore, the real estate is a separate asset that should be valued apart from the operating entity.

<sup>4</sup> AICPA: *International Glossary of Business Valuation Terms*. AICPA, NY. 2008.

Nonrecurring items are also adjusted during the normalization process because the willing buyer would not expect these income or expense items to be pertinent to him or her in the future. An example of a nonrecurring item would be a one-time \$1 million contract that resulted in a net profit of \$350,000. Because the willing buyer would not expect to realize the benefit of this contract, it should be adjusted.

## DISCRETIONARY ADJUSTMENTS

The last group of adjustments that I will discuss are the most common adjustments made for small and medium-sized businesses. Although some of these adjustments may be applicable to larger companies as well, they will more frequently be applicable to the smaller ones. Discretionary adjustments are those items that relate to expenses that are solely at the discretion of management, generally the owners. Some of the more common items include the following:

- Officer's and owner's compensation
- Owner's perquisites
- Entertainment expenses
- Automobile expenses
- Compensation to family members
- Rent expenses (if not an arm's-length lease)
- Interest expense
- Depreciation expense

There also may be other items included in this list, although you will probably find that the preceding items are the most common. Let's discuss each one so that you can gain a better understanding of why we make these adjustments. Remember that most of these adjustments will be appropriate only when controlling interests are being valued. However, there may be times that some of these adjustments may be appropriate for minority interests as well. I will discuss this in more detail later.

## Officer's and Owner's Compensation

Smaller businesses frequently pay their officers or owners an amount equal to what the officers need to live, or what the businesses' accountants tell them to pay to reduce taxes. A common tax-planning technique used among smaller businesses is to bonus out profit at the end of the year to eliminate taxable income. Sometimes, we see businesses that are doing so poorly that they cannot afford to pay their officers a reasonable wage. Keep in mind that the owner of a closely held business receives two forms of compensation. First, as an employee, that individual is entitled to a return on his or her labor (salary for the job being performed). Second, as an owner, that individual gets a return on investment (dividends or capital appreciation). Be very careful not to confuse the two.

The officer's compensation adjustment is intended to restate the economic income statement of the company to a basis that includes the amount of salary that would be necessary to attract others that are qualified to perform the duties required by the company. I usually put myself in the position of an investor who will have to hire a replacement for the present management. How much will I have to pay to replace management going forward? Many factors should be considered in the determination of reasonable compensation. Among others, consider the type of duties, education, experience, the number of hours worked, and the geographical region of the country.

Further guidance for reasonable compensation can be obtained from Tax Court cases in which reasonable compensation was an issue. I said this in the last edition of this book, and I still believe it still to be true that one of the best constructed judicial opinions in this area can be found in *Mad Auto Wrecking, Inc. v. Commissioner*.<sup>5</sup> This opinion is discussed in greater detail in chapter 20. In this opinion, Judge Laro addressed, one by one, many points that eventually led to the allowance of what would otherwise seem to be a substantial amount of compensation for the two officers in an auto salvage business that had gross revenues of about \$2 million. But as good as this case is, keep in mind that the requirements for compensation to be a deductible expense under Section 162 of the IRC is different than the criteria to determine a reasonable level of compensation for the officers of the business on a prospective basis.

Where do you look for reasonable compensation? I wish someone (other than me) would write a book on that subject! If researched and analyzed properly, this can be a time consuming exercise. Reasonable compensation can be

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<sup>5</sup> *Mad Auto Wrecking, Inc. v. Commissioner*, T.C. Memo 1995-153, RIA T.C. Memo P. 95153, 69 CCH TCM 2330

obtained from numerous sources. Some are easier to find than others. I prefer salary surveys that break out the levels of compensation by individual, rather than as a percentage of revenues. As you perform industry research, it is generally a good idea to inquire whether the trade organization has a salary survey. That is always a good starting point. Your best bet will be to compare the officers of the subject company with officers of other companies in the same industry. If the company is large enough, salary disclosure information from the proxy statements of public companies can be used.

If you cannot narrow down this information from the trade associations, another good alternative is other types of salary surveys. However, I can't really say that we go to any book on a regular basis that will be applicable to all of our valuations. In fact, there are very few books in our library that we go to for compensation information more than a handful of times throughout the year.

It seems that surveys for professional salaries are more readily available than corporate salaries. We finally broke down and subscribed to the ERI—the Economic Research Institute's Salary Assessor database. Talk about pricy; it's \$2,389 per year for a single user license. However, ERI is a well-known database used by the IRS in reasonable compensation determinations. It has all types of neat stuff in it, but it hurts to write the check every year. I just don't sell enough copies of my book yet!

Then, there are industry specific resources. Some of the more common ones that we use include:

- *AICPA Small CPA Firm Compensation Survey*—accounting firms
- *BAI Bank Compensation Study*—banks
- *DataMasters Computer Industry Salary Survey*—computer geeks
- *LawJobs*—lawyers
- *In-House Counsel Average Salaries*—more lawyers
- *General Counsel Salary Survey*—more lawyers
- *Survey of Law Firm Economics* (Altman Weil & Pensa)—a lot more lawyers
- *Medical Devices*—medical device & diagnostic industry
- *PAS*—Construction industry
- *Physicians Search*—free salary information based upon a bunch of salary surveys conducted by MGMA and AMA, among others, and did I say doctors?

Other sources of compensation include business journals, specialized salary surveys published by employment agencies, and employment agencies. Don't be afraid to make telephone calls to executive recruiting firms or head-hunters to find out what compensation a specific position would command in the marketplace. If we use head-hunters, we generally call two or three firms, so that we can try to get a consensus of opinion. Make sure you carefully document your sources.

As a last resort, I will use publications such as *RMA Annual Statement Studies*, *Financial Statement Studies of Small Businesses*, and similar publications or I might even go to *Business Profiler*. It is not that they are bad, but they present officer's compensation as a percentage of revenues, based on the financial information that they accumulate. It is not possible to answer questions such as how many officers?; or what part of the country is the data from? This information can be useful, however, as a means of spot-checking other sources for reasonableness. Exhibit 6.6 shows a section from an actual report that addressed reasonable compensation. There is another example included in exhibit 6.7 further along in this chapter.

### EXHIBIT 6.6 REASONABLE COMPENSATION

An estimate of reasonable compensation was made for services rendered by the officers of the company. In order to estimate this amount, several sources were reviewed.

Public companies that were considered similar to ABC Company were analyzed to determine the level of compensation being paid to officers. We analyzed this data by dividing it between all of the publicly-traded guideline companies from our search under the market approach (explained later in this report) and those companies with revenues under \$200 million. This was intended to get closer to the size of the company. Data was also gathered from the ERI *Executive Compensation Assessor* database, a database frequently used by the Internal Revenue Service.

*(Continued)*

**EXHIBIT 6.6** (Continued)

The data compiled from these sources was as follows:

Public Co. Proxies: Percentage of Revenues (All Companies)	1997	1998	1999
Average	0.45%	0.42%	0.38%
Median	0.32%	0.29%	0.32%
Options (% of companies with options)	59.00%	52.00%	65.00%
Public Co. Proxies: percentage of revenues (under \$200 million)			
Average	0.69%	0.63%	0.62%
Median	0.58%	0.64%	0.73%
Options (% of companies with options)	50.00%	33.00%	50.00%
Median comp. per officer			
All companies	\$308,447	\$319,908	\$ 361,765
Under \$200 million	260,425	241,603	232,783
Compensation for 3 officers			
All companies	\$925,341	\$959,724	\$1,085,295
Under \$200 million	781,275	724,809	698,349
ERI (based on \$150 million)			
CEO			\$ 493,087
President			324,387
Vice President			229,324
			<u>\$1,046,798</u>
As a % of Revenues			<u>0.70%</u>

The ERI data is relatively close to the level of compensation indicated that is based on all of the public companies that were analyzed. Although the level of compensation is greater than the compensation for the "Under \$200 million" group, the appraiser believes that the greater profitability of ABC Company can support a higher level of compensation. Also, the public companies, on occasion, provide stock options as an additional feature of officers' compensation.

As a result of this analysis, the appraiser believes that compensation can reasonably be reflected at \$1.047 million for the most recent year. We have then deflated prior years by 3 percent.

## Owner's Perquisites

During your analysis of the company's financial statements, pay close attention to owner's perquisites. Many business owners will take as much income as they can out of their businesses, whether as salary or as fringe benefits (perks). These perks can range from retirement plans, life insurance, disability insurance, and health club memberships to sky boxes at sporting arenas. After all, why own a business if you can't enjoy the fruits of your labor? Well, besides the fact that many of these items are often buried so that our friends at the IRS (one hopes) will not find them, they are also considered to be another form of compensation to the owner of the business.

Part of the normalization process involves removing those items that are considered discretionary, which do not necessarily have to be paid to someone else who would be hired to replace the owner. If the company has a

retirement plan, a health insurance plan, a life and disability insurance plan, or other fringe benefit plans that are offered to all other employees, these items may not be considered a normalization adjustment. However, if the owner is getting a greater benefit than everyone else, a partial adjustment may be required. Whether you add back these expenses may also depend on the salary survey that you use to determine reasonable compensation. Sometimes, the surveys include not only base salary information, but also total compensation, including perks. Be careful of double counting!

## Entertainment Expenses

Entertainment expenses are reasonable and necessary expenses for many businesses. However, we all know that many business owners deduct entertainment expenses that really do not have anything to do with the business. There may be times when the amount of entertainment expense differs significantly from industry data. In this situation, the valuation analyst must investigate the reason for the differences. Ask yourself, would the willing buyer have to spend that much on entertainment? If you answer no, you probably need to consider an adjustment. For some reason, I see this happen frequently when we appraise medical practices. Specialists seem to have an incredible amount of entertainment on the books. When was the last time your doctor took you to lunch? Although they have some legitimate meetings with colleagues, many of the entertainment expenses are really perks.

## Automobile Expenses

Once again, be on the lookout for automobile expenses that are not business related. There are many businesses that require a vehicle for business use. However, the adjustments made during the normalization process are intended to remove the expenses related to nonbusiness vehicles (such as the husband's, wife's, son's, daughter's, boyfriend's, aunt's, uncle's, or cousin's). Don't forget to look at other line items on the income statement besides automobile expenses for the total expenses attributable to the vehicle. Automobile insurance may be in insurance expense. Automobile repairs may be in repairs and maintenance. Gasoline may be in utilities. Make believe that you are playing hide and seek!

Sometimes, the automobile will be a necessary business expense, but the type of vehicle may cause the expense to be excessively high. In this situation, the valuation analyst should try to estimate the normal vehicle expenses for the business. Similar companies can be a good source for this data. My all-time favorite automobile adjustment came as a result of the valuation of a two-doctor neurosurgery practice. Each doctor had a Lamborghini on the books (at an average cost of \$155,000). When I questioned the doctors about the need for these expensive cars, they told me that in the event of an emergency, they needed to get to the hospital fast!

## Compensation for Family Members

There is nothing wrong with family members working for the business, as long as they really show up and their pay is reasonable for the services that they render. Frequently, the spouse is on the books so that a contribution can be made to an individual retirement account, although no services are rendered for the compensation. (Well, that may not be the spouse's position on the services that are rendered! Certainly, no business services.) In other situations, children are on the books as a means to get spending money and college expenses to them in a lower tax bracket. When family members work for the business, the valuation analyst should check to see if the amount of compensation would be the same if it were paid to a nonfamily member. If my daughter performs secretarial services for my firm, she should not be compensated as the chief financial officer. Heck, I do not even get compensated that well!

## Rent Expense

Frequently, closely held businesses operate in a facility that is owned by the stockholders or a related entity and is leased to the business establishment. This is not a problem if the lease is at a market rate of rent. More often than not, the rent being charged is based on the mortgage payment that the owner is required to make. A market rental analysis should be obtained by the valuation analyst to support the fair rental value of the premises. This can be obtained from a real estate appraiser or a local realtor who is familiar with market rents in the area for that type of property.

Another factor to consider, although not necessarily a normalization adjustment, is when a business is operating without a lease. Rent may be paid to an unrelated landlord at market rates, which would not require an adjustment to be made, but the risk associated with not having a lease should be built into market multiples, capitalization rates, or discount rates. Also consider the difficulty of selling the business to a willing buyer if a lease cannot be obtained. This could cause the business to be less marketable.

## Interest Expense

An adjustment for interest expense may depend on whether the valuation analyst is valuing the equity of the company or the invested capital of the company. In an equity valuation, the interest expense adjustment may relate only to interest paid on nonoperating liabilities. This could be interest on the mortgage on the condo in Myrtle Beach that we discussed previously. Because the asset was considered to be nonoperating, all associated income and expenses, including interest, should be removed during the normalization process.

The valuation analyst should also pay attention to sizable amounts of interest related to debt used to finance excessive compensation and perks. A company may be borrowing for working capital and using the proceeds of the debt to pay the owners. A willing buyer would not be expected to incur this debt, and therefore, it should be removed during the normalization process.

When the valuation analyst values the invested capital of the company, the interest is added back to determine the earnings available to the invested capital holders. This can be useful when the valuation analyst values companies that have different capital structures from those of the guideline companies. This is not truly a “discretionary” adjustment, but the discretion is on the part of the valuation analyst to value the equity or the invested capital. More about this in chapter 7.

## MINORITY INTEREST VALUATIONS

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The conventional wisdom in business valuation is that the valuation analyst should not make adjustments to the financial statements that could not otherwise be made by the interest being valued. For example, the minority interest stockholder cannot determine the level of compensation for the officers of the company. However, with that being said, let’s be practical when we consider the appropriateness of the adjustments for the assignment at hand.

Would it be reasonable to ignore an adjustment for officer’s compensation in the following circumstance? A parent owns and runs a business, takes \$1 million out of the company as salary (when the market rate of salary is \$200,000 for those services), reduces the profits of the company to \$0, and the purpose of the valuation is for a 10 percent gift to the child of the owner. First of all, the answer is NO. It does not matter under fair market value whether the gift is to the child or not. Under these circumstances, a 10 percent owner, child or not, could probably bring an oppressed shareholder lawsuit in most jurisdictions against the controlling owner. Stripping the business of any dividend paying capacity for the benefit of the controlling shareholder, and denying the minority of dividends, would constitute oppression in my nonlegal opinion. The legal remedy, at that point, might be for the minority shareholder to be bought out at *fair value*, providing a value based on the *control* value of the interest, rather than the *minority* value. This would require the valuation analyst to make the adjustment for compensation and value the entity based on its true profitability.

In other circumstances, it may be necessary to make certain adjustments to make the company appear more comparable to the guideline companies. If the controlling shareholder is taking too little salary out of the company and chooses to take S corporation distributions instead, a proper comparison to publicly traded C corporations may require a salary adjustment even for a minority valuation.

What I am saying is use your head. Do not just blindly ignore adjustments because the valuation literature indications that you do not make adjustment for the minority. There may be facts and circumstances that require reasonable adjustments to be made. In chapter 9, I indicate that the asset based approach is generally not applicable for minority interests that cannot cause the liquidation of the assets to get at the value of those assets. However, we use an asset based approach frequently when valuing family limited partnerships, many of which are being valued for gifting of minority interests. Like I said, there are very few, if any, absolutes.

Exhibit 6.7 contains a sample normalization section of an actual valuation report.



**EXHIBIT 6.7**  
**SAMPLE NORMALIZATION SECTION FROM A REPORT**

The next step in the valuation process is to normalize the income statement. Table 4 reflects this normalization.

**TABLE 4**  
**NORMALIZATION OF INCOME**  
**FOR THE YEARS ENDED DECEMBER 31**

	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Historic net income (Schedule 2)	\$ 98,550	\$	\$	\$
Adjustments				
Revenues <sup>1</sup>		16,308	7,119	27,648
Inventory adjustment <sup>2</sup>	—	—	292,272	(292,272)
Smith Manufacturing <sup>3</sup>	46,741	42,715	70,555	34,723
Interest expense <sup>4</sup>	—	—	10,600	10,686
Officers' compensation, addback <sup>5</sup>	148,400	215,700	86,400	158,400
Officers' compensation, reasonable <sup>6</sup>	(205,351)	(211,703)	(218,250)	(225,000)
Professional fees <sup>7</sup>	81,115	—	—	21,399
Moving <sup>8</sup>	14,671	1,500	—	—
Auto expenses, addback <sup>9</sup>	23,433	28,045	18,611	35,042
Insurance, automobiles <sup>10</sup>	3,515	4,703	4,824	4,658
Insurance, other <sup>11</sup>	10,380	11,890	10,350	15,381
Credit cards <sup>12</sup>	56,007	72,755	62,496	51,036
Payments to Susan & Greg Johnson <sup>13</sup>	44,194	25,474	15,941	21,339
Health & Company Life Insurance <sup>14</sup>	6,754	7,907	9,478	10,351
Telephone <sup>15</sup>	4,441	4,942	2,593	2,636
Miscellaneous <sup>16</sup>	7,100	11,895	8,455	8,501
Loss on sale of assets <sup>17</sup>	—	24,264	—	—
Historic income taxes <sup>18</sup>	58,286	43,263	41,615	(25,140)
<b>ADJUSTED PRETAX NET INCOME</b>	<b>\$398,236</b>	<b>\$381,871</b>	<b>\$512,721</b>	<b>\$(166,926)</b>
Income taxes <sup>18</sup>	149,856	143,698	192,937	(53,952)
<b>ADJUSTED HISTORIC NET INCOME</b>	<b><u>\$248,380</u></b>	<b><u>\$238,173</u></b>	<b><u>\$319,784</u></b>	<b><u>\$(112,975)</u></b>

1. John Johnson deposited monies received from a vendor in his personal account instead of in the business. This adjustment is intended to reflect these monies as company revenues.
2. In 2004, an outside inventory service was hired to take a physical inventory. However, they missed some inventory that was written off in 2004. The amount of the error was \$292,272 and was corrected in early 2005. As a result of this error, 2004 net income was understated, and 2005 net income was overstated.
3. Smith Manufacturing was set up to do embroidery work for the company until May 2005 when it was merged into the company. During conversations with Mr. Johnson, he indicated that while the market rate was about \$0.10 per piece for embroidery, the company was paying between \$0.15 and \$0.25 per piece. A hypothetical willing buyer would not incur this additional expense over the market rate. Therefore, this overage must be added back to bring this expense back to a fair market rate.

*(Continued)*



**EXHIBIT 6.7** (Continued)

We were provided with a report showing all payments to Smith Manufacturing for the period 2002 through 2005. We applied a market rate percentage to the amounts based on the difference between what the company was paying compared to what the market was paying. This was calculated as follows:

Market piece price	\$ 0.10
What the company paid (average of \$0.15 and \$0.25)	\$ 0.20
Market rate percentage	$0.10 \div 0.20 = 50\%$

This market rate percentage was then applied as follows:

	2002	2003	2004	2005
Net payments to Smith Manufacturing	\$93,482	\$85,429	\$91,111	\$69,446
Market rate percentage	50%	50%	50%	50%
Adjustment	\$46,741	\$41,715	\$45,555	\$34,723

- In 2004, there was an unidentified payment of \$25,000 made by the company to Smith Manufacturing. With no support for this payment, it has been added back in its entirety. This brings the net adjustment in 2004 to \$70,555.
- This is the interest associated with the nonoperating shareholder loan. It is added back as a hypothetical buyer would not incur this expense.
  - Officer's compensation has been added back in its entirety as a reasonable level of compensation has been determined in number 6 below.
  - In order to estimate the amount of reasonable compensation, several sources were reviewed. *Executive Compensation Assessor*, a database available from Economic Research Institute (ERI) was the first source. We searched this survey for companies classified under SIC Code 5023 in Miami, Florida, with sales between \$5,000,000 and \$20,000,000. We did not find any usable data in this database.

We then looked at the *National Compensation Survey—December 2005* published by the U.S. Department of Labor. We reviewed data for private industry workers: mean hourly earnings for full-time and part-time workers by experience levels in Miami-Fort Lauderdale, Florida. Within this group is a subset called Management Occupations, with the highest work level in this subject being level 12. The hourly rate given was converted to an annual figure using 2,080 hours and is shown below.

\$ 96.92 per hour
× 2,080 hours
<u>\$201,594</u>

We also reviewed salary information located at salary.com. This database provided total compensation (salary, bonuses, and benefits) for a Top Operations Executive. The complete package amounted to \$349,701, consisting of salary of \$217,416, bonuses of \$65,065, with the balance representing other fringe benefits.

Finally, we reviewed Integra's *Business Profiler*, which provides officer's compensation by SIC Code as a percentage of sales. Officer's compensation for businesses operating in SIC Code 5023 with sales between \$10 and \$25 million, reflected an average compensation from 295 businesses at 2.2 percent in 2005. Using the company's 2005 revenues results in the following:

2005 Revenues	\$11,122,116
Officer's compensation as % of revenues	× 2.2%
Officer's compensation	<u>\$ 244,687</u>

**EXHIBIT 6.7**

Recognizing that this SIC code is extremely broad, we believe that compensation can be considered from this data since it includes 295 businesses within the sales range of the company. It is also within the range of the other sources we reviewed.

As a result of our analysis, we believe that reasonable compensation should be estimated at \$225,000 with prior years being deflated by 3 percent.

7. Professional fees were materially higher in 2002 and 2005 as compared to the other years. An adjustment was made to reflect a more normal level of expense based on an average of the other years. These calculations are as follows:

2000	\$ 26,913
2001	27,228
2003	30,173
2004	20,320
Total	104,634
	÷ 4
Average Expense	\$ 26,159

This average expense was then subtracted from the actual expense in 2002 and 2005 to arrive at the adjustment amount. This is shown below:

	2002	2005
Actual expense	\$107,274	\$47,558
Average expense	26,159	26,159
Adjustment amount	\$ 81,115	\$21,399

8. Moving expenses are considered non-recurring in nature and are therefore added back.
9. Auto expenses include car payments and other auto related expenses for the Johnson family, as well as other employees. Legitimate business expenses were considered to be all expenses paid for Robert Jones (unrelated sales manager), and one car for John Johnson. Our addback is calculated as follows:

	2002	2003	2004	2005
Total auto expense	\$46,122	\$45,861	\$35,959	\$53,111
Less: auto leases				
Robert Jones	5,868	5,868	6,265	6,464
John Johnson	7,365	8,635	10,412	10,123
Less: auto expenses				
Robert Jones	106	—	—	—
Net auto expense	\$32,784	\$31,358	\$19,282	\$36,524
Other lease payments <sup>A</sup>	14,083	24,732	17,941	33,559
Net operating auto expenses	\$18,701	\$ 6,626	\$ 1,341	\$ 2,965
Allowable portion (50%)	9,350	3,313	671	1,483
Disallowed portion <sup>B</sup>	\$ 9,350	\$ 3,313	\$ 671	\$ 1,483
Addback <sup>A+B</sup>	\$23,433	\$28,045	\$18,611	\$35,042

<sup>A</sup> Total lease payments from the general ledger less the leases listed above.

<sup>B</sup> Since most of the remaining expenses pertain to John and Elizabeth Johnson, we have considered only one-half to be a necessary business expense.

(Continued)

**EXHIBIT 6.7** (Continued)

10. Included in insurance expense are premiums related to the vehicles that were adjusted for above.
11. Various other insurance policies were paid by the company on behalf of the Johnsons. These expenses are summarized as follows:

	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
Homeowners, flood and disability	\$ 3,983	\$ 4,040	\$ 1,137	\$ 1,909
Officer's life	6,397	7,010	9,213	13,472
Auto, Greg Johnson (son)	—	840	—	—
<b>Totals</b>	<b><u>\$10,380</u></b>	<b><u>\$11,890</u></b>	<b><u>\$10,350</u></b>	<b><u>\$15,381</u></b>

12. Credit card statements were reviewed and non-business related expenses were added back, as these monies would be available to a willing buyer. The summary of our analysis is as follows:

	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
Specifically identified <sup>A</sup>	\$44,574	\$43,598	\$41,545	\$35,599
Estimated items <sup>B</sup>	398	455	—	—
Unidentified payments <sup>C</sup>	—	15,133	—	—
Costco <sup>D</sup>	7,645	9,446	14,546	12,165
Sams Club <sup>D</sup>	3,206	4,074	6,405	3,251
Lands End <sup>E</sup>	183	48	—	22
<b>Total Adjustment</b>	<b><u>\$56,007</u></b>	<b><u>\$72,755</u></b>	<b><u>\$62,496</u></b>	<b><u>\$51,036</u></b>

- A. These items were specifically identified as being personal in nature. We reviewed every available credit card statement with management for the years 2002-2005. Some of the items that were considered as non-business related were:
- Restaurants around the family residence
  - CVS Pharmacy
  - Nail salon
  - Animal hospital
  - Various clothing stores
  - Grocery stores near the family residence
  - Trips to Jamaica
- B. Over 230 credit card payments and the accompanying statements were analyzed to separate personal from business expenses. Only two statements are missing in the amounts of \$478 and \$628. We estimated the personal amount by the relationship between business and personal charges in those particular years.
- C. The unidentified amount consists of three payments made to credit cards that were not identified as business cards.
- D. In our discussion with management, it was indicated that a majority of charges at Costco and Sam's Club were personal in nature. After further discussion with management, 80 percent of charges were considered to be personal.
- E. Some items purchased at Lands End (towels) were business related. In order to account for this, 50 percent was added back. Overall, this amount was immaterial.
13. Wages paid to family members would likely not be incurred by a hypothetical buyer of the company. As a result, wages paid to Susan and Greg Johnson have been added back, along with the associated payroll taxes.

**EXHIBIT 6.7**

We were provided with W-2 Forms for Susan, representing gross wages. Payroll taxes were estimated to be 8 percent of gross wages. This is calculated as follows:

Susan	2002	2003	2004	2005
Payroll				
Gross from W-2's	\$12,000	\$12,000	\$ 3,840	\$ 9,555
Taxes (8%)	960	960	307	764
<b>Total payroll</b>	<b>\$12,960</b>	<b>\$12,960</b>	<b>\$ 4,147</b>	<b>\$10,319</b>

In addition, in 2003 there were checks payable to Susan in the amount of \$720 that were also added back. We were also provided with W-2 Forms for Greg, and again, estimated payroll taxes at 8 percent of gross wages. This is calculated as follows:

Greg	2002	2003	2004	2005
Payroll				
Gross from W-2's	\$28,920	\$10,920	\$10,920	\$10,203
Taxes (8%)	2,314	874	874	816
<b>Total Payroll</b>	<b>\$31,234</b>	<b>\$11,794</b>	<b>\$11,794</b>	<b>\$11,019</b>

It was discussed earlier that Greg received paychecks in order to receive health insurance. In addition to this, Greg received payments as a vendor for his actual services rendered. These amounts were not added back since the company would have had to pay someone else to do what Greg did.

The total adjustment is calculated as follows:

	2002	2003	2004	2005
Total Susan	\$12,960	\$13,680	\$ 4,147	\$10,319
Total Greg	31,234	11,794	11,794	11,019
<b>GRAND TOTAL</b>	<b>\$44,194</b>	<b>\$25,474</b>	<b>\$15,941</b>	<b>\$21,339</b>

14. Health insurance and company sponsored life insurance for Mrs. Johnson, Susan, and Greg were added back.

The 2003 and 2005 health insurance invoices were analyzed; the 2004 paid invoices could not be found. The actual premiums for Mrs. Johnson, Greg, and Susan for 2003 and 2005, along with the observed pattern of increases were used to estimate the 2004 amount. This is shown below:

<b>Neighborhood Health Insurance</b>		
	<b>Elizabeth + Susan</b>	<b>Greg</b>
<b>2003</b>		
Jan	\$ 449.37	\$ 155.80
Feb	449.37	155.80
Mar	449.37	155.80
Apr	449.37	155.80
May	449.37	155.80
Jun	449.37	155.80
Jul	449.37	155.80
Aug	449.37	155.80
Sep	449.37	155.80

(Continued)

**EXHIBIT 6.7** (Continued)

<b>Neighborhood Health Insurance</b>			
<b>2003</b>	<b>Elizabeth + Susan</b>	<b>Greg</b>	
Oct	\$ 554.04	\$ 192.09	
Nov	554.04	192.09	
<b>Dec</b>	<u>554.04</u>	<u>192.09</u>	
<b>2003 Totals</b>	<b>\$5,706.00</b>	<b>\$1,978.00</b>	<b>\$7,685.00</b>
<b>2004</b>	<b>Elizabeth + Susan</b>	<b>Greg</b>	
Jan	\$ 554.04	\$ 192.09	
Feb	554.04	192.09	
Mar	554.04	192.09	
Apr	554.04	192.09	
May	554.04	192.09	
Jun	554.04	192.09	
Jul	554.04	192.09	
Aug	554.04	192.09	
Sep	554.04	192.09	
Oct	628.82	218.03	
Nov	628.82	218.03	
<b>Dec</b>	<u>628.82</u>	<u>218.03</u>	
<b>2004 Totals</b>	<b>\$6,873.00</b>	<b>\$2,383.00</b>	<b>\$9,256.00</b>
<b>2005</b>	<b>Elizabeth + Susan</b>	<b>Greg</b>	
Jan	\$ 628.82	\$ 218.03	
Feb	628.82	218.03	
Mar	628.82	218.03	
Apr	628.82	218.03	
May	628.82	218.03	
Jun	628.82	218.03	
Jul	628.82	218.03	
Aug	628.82	218.03	
Sep	628.82	218.03	
Oct	689.27	236.67	
Nov	580.87	209.92	
<b>Dec</b>	<u>580.87</u>	<u>209.92</u>	
<b>2005 Totals</b>	<b>\$7,510.00</b>	<b>\$2,619.00</b>	<b>\$10,129.00</b>

**EXHIBIT 6.7**

An estimate was made for 2002 using the average change in premiums from 2003 to 2005, which was 15 percent.

The company-sponsored life insurance plan only showed premiums for Mrs. Johnson and Greg of \$9.25 per month for the years 2003 and 2004. The annual amount is \$222 and is assumed to be the same in 2002 and 2005. This amount is added to the health insurance expense to arrive at a total adjustment as follows:

	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Health insurance	\$6,532	\$7,685	\$9,256	\$10,129
Life insurance	222	222	222	222
<b>Total adjustment</b>	<b>\$6,754</b>	<b>\$7,907</b>	<b>\$9,478</b>	<b>\$10,351</b>

15. This adjustment reflects payments made by the company on behalf of the Johnsons. These are non-operating expenses and are therefore added back. The amounts are as follows:

	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
BellSouth	\$1,993	\$2,558	\$2,198	\$2,479
T-Mobile	1,106	2,076	395	158
Voicestream	1,342	—	—	—
Direct TV	—	308	—	—
<b>Total</b>	<b>\$4,441</b>	<b>\$4,942</b>	<b>\$2,593</b>	<b>\$2,636</b>

16. The miscellaneous adjustments are as follows:

	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Camp Havefun <sup>A</sup>	\$ —	\$ —	\$1,705	\$ —
Checks to Elizabeth Johnson <sup>B</sup>	—	3,744	—	—
Checks to John Johnson & Cash for Travel Expenses (50%) <sup>C</sup>	7,100	8,151	3,750	8,501
Checks to Cash in 2004 <sup>D</sup>	—	—	3,000	—
<b>Totals</b>	<b>\$7,100</b>	<b>\$11,895</b>	<b>\$8,455</b>	<b>\$8,501</b>

- A. This is a nonoperating expense and therefore added back.  
 B. Checks written to Elizabeth Johnson were considered personal in nature and have been added back.  
 C. The checks written to John Johnson are largely travel related. However, the company's records are relatively poor, and therefore, we have added back 50 percent as being nonbusiness related.  
 D. In 2004, there was a \$3,000 check made out to cash that was signed by Elizabeth Johnson and charged to warehouse expense. Since no support for this check has been provided, the entire amount has been considered discretionary and has been added back.
17. Losses sustained from selling assets are considered to be non-recurring and have been added back to better reflect the operating income of the company.
18. Historic income taxes have been added back and corporate taxes have been recalculated based on the adjusted net income.

The example shown in exhibit 6.7 is a good illustration of the normalization process because it shows many of the abuses that a closely held business owner tries to get away with. Many closely held business owners are not too terribly different that the client in this assignment. This is one of the factors that makes this business so much fun. And by the way, the owner of the business was our client.

Once the financial statements have been normalized, the valuation analyst uses the adjusted information as a basis for the valuation. This information can then be used to forecast the future operating results of the business as well as analyze the economic return to the owner. The valuation analyst should not use an average of the historical figures unless the outcome reflects the anticipated financial results of the appraisal subject. Remember, valuation is a prophecy of the future!

As a general rule, I like to use the adjusted figures in addition to the unadjusted figures in performing my ratio analysis. This gives me not only the unadjusted ratios that can be compared with similar data, but also the adjusted figures that can be used to assess the economic future of the company. This becomes an easy task if you use computer templates that you write yourself.

## CONCLUSION

You should have more of an idea about what to do with the data that you collect. By now, you should be getting the message that the valuation analyst performs a risk assessment with the data collected. This information can then be used in the determination of market multiples, discount rates, and capitalization rates.

The data collected and analyzed is critical to the valuation process. If you are not comfortable with analyzing the gobs and gobs of data that you will be collecting, you may want to reread some financial statement analysis textbooks. I hope for your sake you are O.K. with this stuff. Those types of textbooks are like watching paint dry on a wall—real excitement!



## CHAPTER 7

# *The Market Approach— Part I*

### CHAPTER GOALS

Now that you have read all about gathering stuff, we can now start to discuss what to do with it. In this chapter, I will begin to explain the market approach. There is a lot of important information here! After an introduction to the market approach, I will cover the guideline public company method. This discussion will include the following:

- The guideline public company method
- Selecting potential guideline companies
- Analyzing guideline companies
- Using valuation multiples
- Advantages and disadvantages of the guideline public company method
- Illustrating the guideline company method

### INTRODUCTION

The market approach is probably the most fundamental approach in a fair market value appraisal. Because fair market value is supposed to come from the “market,” it seems natural that this approach should be greatly emphasized. However, the application of this approach can, at times, be the most difficult approach to use in a business valuation. In real estate appraisal, the appraiser looks for properties similar to the piece of real estate being appraised in order to compare the similarities and dissimilarities between the properties. After the comparison is made, the real estate appraiser estimates the value of the subject property using the sales price of the “comparable” properties in table 7.1 as a starting point.

This concept can be illustrated using the following example. Property A sold for \$200,000. It is a single family house on a busy main road; it is on one acre of land and has three bedrooms, two baths, and a newly renovated family room. Property B sold for \$175,000. It is also a single family residence in the same neighborhood, but it is up the street, off the main road on one acre of land, and it has two bedrooms, two baths, and a well maintained interior.

Property C sold for \$190,000 on the same block as property B; it is also on one acre, has two bedrooms, two and one-half baths, and is in relatively good shape on the inside. An appraisal of property D is requested. The comparative statistics about the properties are given in table 7.1.

**TABLE 7.1**  
**SAMPLE REAL ESTATE COMPARATIVE STATISTICS**

	<b>Property A</b>	<b>Property B</b>	<b>Property C</b>	<b>Property D</b>
Sales price	\$200,000	\$175,000	\$190,000	Unknown
Acreage	1	1	1	1
Location	Main road	Quiet street	Quiet street	Quiet street
Bedrooms	3	2	2	3
Baths	2	2	2.5	2.5
Interior	New condition	Good condition	Good condition	Good condition
All else	Same	Same	Same	Same

After a comparison of the features of properties A, B, and C with those of property D, it appears that property D most closely resembles property C, except the appraisal subject has an extra bedroom. Therefore, the real estate appraiser concludes that the appraised value of property D is \$200,000.

This is a simplistic example and is not intended to make light of the role of the real estate appraiser. However, real estate sales are generally available in public records and, therefore, the real estate appraiser has a definite advantage over the business valuation analyst. The point being made is that an estimate of fair market value is an interpretation of market data indicating the worth of a property. The role of the valuation analyst is that of an interpreter, not a market maker. Our job is to use the information available in the market to estimate the value of the appraisal subject. Despite the similarities to real estate appraisal, business valuation methods are a bit different.

The market approach emphasizes the principle of substitution, which was discussed previously. This means that given alternative investments, an individual would be expected to gravitate toward the property with the lowest price if all other attributes are the same. This gravitation may frequently involve the personal choices of the purchaser, but risk is a key ingredient in the selection process.

The market approach is the most direct approach for establishing the fair market value of a business. The methods that are used most often under this approach are (1) the guideline public company method, (2) the merger and acquisition method, (3) sales of the company's own stock method, and (4) the industry method (sometimes called *rules of thumb*). This chapter will be solely dedicated to the guideline public company method. Chapter 8 will discuss the other stuff.

Regardless of the method used, the valuation analyst must consider the sources of market data. Whereas in real estate appraisal, the appraiser is able to obtain "good" information about the comparable properties, business valuation analysts do not always have the same luxury. The data that is available may differ significantly depending on the types and sizes of the companies. The data used will come either from publicly traded companies or from those that are closely held. Both of these sources can present real problems to the business valuation analyst.

## GUIDELINE PUBLIC COMPANY METHOD

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Proper application of the guideline public company method is labor intensive and will take time to perform. Following the basic steps laid out in this section will increase your success rate in applying this method, but remember, valuation is an iterative process, so don't kick yourself if you find that you are repeating these steps. Practice makes perfect.

The guideline public company method of appraisal is based on the premise that pricing multiples (a relationship between the price of a publicly traded stock and some other variable, such as earnings, sales, or book value) of publicly traded companies can be used as an indicator of value to be applied in valuing the closely held appraisal subject. Using multiples of public companies in this manner is suggested in Revenue Ruling 59-60 in the famous eight factors to consider (at a minimum). The Revenue Ruling tells us to consider the *market price of stocks of corporations engaged in the same or similar line of business having their stocks actively traded in a free and open market either on an exchange or over the counter*.

The mechanics of the method require the valuation analyst to use the stock price of the public company in conjunction with some other factor (such as earnings, cash flow, or book value), to create a pricing multiple. With certain adjustments, the pricing multiple is applied to the appraisal subject's similar factor to determine an estimate of value for the company. A price-to-earnings multiple would be applied to the company's earnings, a price-to-cash flow multiple would be applied to the company's cash flow, and so forth.

To use this method properly, the publicly traded companies that are used as surrogates must be comparable to the closely held appraisal subject. The comparable companies will not be identical to the appraisal subject but should be similar enough to provide guidance to the valuation analyst during the appraisal process. The similar companies, formerly known as *comparative companies* or *comparables*, a term taken from the real estate appraisal world, are known as *guideline companies* in our world. This terminology was suggested by the Business Valuation Committee of ASA to highlight the fact that no two companies are truly comparable, but rather, that similar companies can provide guidance about other companies in the marketplace.

In business valuation, the requirements for “similarity” are considered from an investment point of view. The factors that will be considered by the valuation analyst will vary from assignment to assignment. One concise list of factors to consider in determining the similarity of the guideline companies is impossible. However, some of the factors to consider have been included in the writings of Graham, Dodd, and Cottle<sup>1</sup>; Stockdale<sup>2</sup>; and Bolten, Brockardt, and Mard.<sup>3</sup> Box 7.1 lists some of the factors to consider, though not necessarily in any special order.

Various writings have created a substantial list of attributes to consider in determining whether the guideline companies are “comparable” enough to be used as good surrogates in an appraisal. In its courses, the Institute of Business Appraisers teaches that a guideline company must be “similar” and “relevant” to be used as a surrogate. Comparing the local hardware store with The Home Depot may involve similar businesses, but let’s face it, where’s the relevance? In chapter 20, I discuss the Tax Court case of the *Estate of Joyce C. Hall*. This case has some great stuff in it about choosing guideline companies. When you get to this chapter, read my summary, and then get the actual case. This will assist you further in understanding the concept of same or similar.

How do we really identify guideline companies? Earlier, I indicated the criteria for determining similarity. In the real world, the search for guideline companies can be accomplished the old fashioned way—by legwork at the library, or the modern way—sitting at your desk in front of a computer. Those of us who started in this business a long time ago (it seems like when the dinosaurs roamed the earth) did not have a choice. Today, I opt for the latter alternative. It’s much faster and a lot less work.

Before we walk through the process of finding guideline companies and figuring out what to do with them once we have found them, take a look at figures 7.1, 7.2, and 7.3. These are the document checklists that we use to help keep track of the basics. We have adapted them from Thomson PPC’s *Guide to Business Valuations*. I already told you, if it ain’t broke, don’t fix it. These can be modified (as we have done) for your own use.

### Box 7.1 Common Assessment Factors for Determining Similarity in Selecting

- Past growth of sales and earnings
- Rate of return on invested capital
- Stability of past earnings
- Dividend rate and record
- Quality of management
- Nature and prospects of the industry
- Competitive position and individual prospects of the company
- Basic nature of the activity
- General types of goods or services produced
- Relative amounts of labor and capital employed
- Extent of materials conversion
- Amount of investment in plant and equipment
- Amount of investment in inventory
- Level of technology employed
- Level of skill required to perform the operation
- Size
- Financial position
- Liquidity
- Years in business
- Financial market environment
- Quality of earnings
- Marketability of shares
- Operating efficiency
- Geographical diversification
- Similarity of business model

<sup>1</sup> B. Graham, D. Dodd, and S. Cottle, *Security Principles and Technique*, 4th ed. (New York: McGraw-Hill, 1962).

<sup>2</sup> John J. Stockdale, "Comparison of Publicly Held Companies With Closely Held Business Entities," *Business Valuation Review* (December 1986), 3–9.

<sup>3</sup> Steven E. Bolten, James W. Brockardt, and Michael J. Mard, "Summary (Built-up) Capitalization Rates for Retailers," *Business Valuation Review* (March 1987), 6–13.

## FIGURE 7.1 GUIDELINE COMPANY CHECKLIST

### TRUGMAN VALUATION ASSOCIATES, INC. GUIDELINE COMPANY VALUATION PROCEDURES CHECKLIST

Company Name: \_\_\_\_\_

Completed by: \_\_\_\_\_ Date: \_\_\_\_\_

**INSTRUCTIONS:** This form lists procedures commonly performed in applying these valuation methods. The exact procedures used are a matter of professional judgment based on the circumstances of each engagement, and this form should be tailored accordingly. The appraiser performing the procedures should initial the space labeled “Completed by” as each step is performed. If a procedure does not apply to a particular engagement, write N/A in the space opposite the step. If additional procedures are needed, document them on a separate page or memo. Use the “Comments” section on the last page to document problems encountered or unusual matters.

**Note:** This checklist is designed to determine a net of debt value. Modifications may be needed to determine a debt free value.

PROCEDURE	Completed by or N/A	Workpaper Ref
1. Obtain financial statements of the company being valued for a representative period of time. Adjust the financial statements for any GAAP errors or normalization adjustments. Recompute federal and state income taxes based on normalized pretax earnings.		
2. Identify comparative companies by performing the following procedures: a. Assemble a list of potentially comparative public companies. The list should normally be compiled in the following manner: b. Through discussions with management, identify the company's major competitors. c. Determine the company's Standard Industrial Classification (SIC) code and perform a search of published sources for companies with the same or similar code. The company's primary SIC codes are as follows: _____ _____ d. Identify additional companies from other sources, such as trade magazines, or stockbrokers.		
e. Obtain financial and other information for each potentially comparative company.		
3. Complete a “Comparative Company Comparison Worksheet” for each potentially comparative company.		
4. If necessary, adjust the financial statements of the comparative companies to make them more comparable to the company being valued.		
5. Decide which multiples are appropriate for the engagement given the unique aspects of the company being valued and the definition of value.		
6. Determine what time period of operations (recent 12 months, recent fiscal year, etc.) should be used in measuring the company's operations.		

FIGURE 7.1

PROCEDURE	Completed by or N/A	Workpaper Ref
7. Compute the selected multiples for each comparative company based on the adjusted financial information. You may use the “Value Multiple Computation Worksheet” to document each value multiple computation. Earnings or cash flow for each comparative company should be measured for the same time period as the company being valued.		
8. Select an appropriate value multiple based on the individual multiples of each comparative company. You may use the “Determination of a Single Value Multiple Worksheet” to document this selection.		
9. Increase or decrease the selected multiple based on differences between the comparatives and the company being valued. Any adjustments should be documented in the “Determination of a Single Value Multiple Worksheet”.		
10. Multiply the selected multiple by the normalized benefit stream of the company (or ownership interest) being valued to arrive at the estimate of value.		
11. If more than one type of value multiple (price/earnings, price/revenue, etc.) was used on the engagement, determine the relative weighting to be given each type of multiple.		
12. Apply sanity checks on the values computed in Step 11 to determine the reasonableness of those values.		
13. If there were any adjustments made in Step 1 to the financial statements of the company being valued for any nonoperating or excess assets, determine an appropriate value for those assets. Add the value of those assets to the values computed in Step 11. If asset shortages were identified in Step 1, determine if the value estimate should be reduced to reflect the value of such shortages, if the normalized income statement was adjusted to reflect the impact of identified asset shortages, it is not necessary to further reduce the value estimate.		
14. Determine whether the estimated values of the company that were determined in Step 11 should be adjusted for marketability discounts, control premiums, minority interest discounts, or other premiums and/or discounts.		
Comments. (This section may be used to document problems encountered or unusual matters.)		

## FIGURE 7.2 GUIDELINE COMPANY COMPARATIVE WORKSHEET

### TRUGMAN VALUATION ASSOCIATES, INC. COMPARATIVE COMPANY COMPARISON WORKSHEET

Company: \_\_\_\_\_ Valuation Date \_\_\_\_\_

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_

**INSTRUCTIONS:** This form should be completed for each potentially comparative company. The form is a guide to the key factors that should be considered in determining how similar each potentially comparative company is to the company being valued. It is not necessarily a complete listing of all factors that might be considered—specific engagement circumstances may require additional considerations.

#### A. Potentially Comparative Company Data

Name of potentially comparative company: \_\_\_\_\_

How was this company identified as a potentially comparative company?

\_\_\_\_\_  
\_\_\_\_\_

Briefly describe the operations of the potentially comparative company, including its products, customers, geographic markets, and apparent strengths and weaknesses. Indicate the source of this information.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

#### B. Trading Activity

Test for market activity in the guideline company's stock using data obtained from Yahoo! Finance or a similar source (adjusted for capital changes) (**Make certain that the trading volume has been adjusted for capital changes**) and the comparative company's current outstanding shares. This is done by downloading monthly stock pricing reports for the 12 months prior to the valuation date. Calculate the average trading volume for 6 and 12 months prior to the valuation date. Trading activity is equal to the calculated averages divided by current shares outstanding. This should be formatted as a percentage. See W/P reference \_\_\_\_\_ for a printout of this information. If the shares are too thinly traded, go to Part D of this form.

**FIGURE 7.2****C. Comparisons to the Company Being Valued**

Compare the potentially comparative company to the company being valued in the following areas. Highlight significant difference and similarities.

1. Product similarity:

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---

---

2. Similarity of customer services:

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3. Competitive advantages and disadvantages:

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---

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4. Historical trends (including growth rates):

---

---

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5. Financial risk (capital structure, credit status, liquidity, etc.):

---

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---

6. Size, including geographic diversification:

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7. Management depth:

---

---

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8. Other factors:

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*(Continued)*



**FIGURE 7.2** (Continued)**D. Conclusion**

Check one of the following conclusions:

\_\_\_\_\_ The company is comparable to the company being valued in many material respects.

---



---



---

\_\_\_\_\_ The company is insufficiently comparable to the company being valued and will therefore not be used. (Explain.)

---



---



---

\_\_\_\_\_ The company's stock is too thinly traded to be useable as a guideline company.

---



---



---



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**FIGURE 7.3****VALUATION MULTIPLE WORKSHEET**

**TRUGMAN VALUATION ASSOCIATES, INC.**  
**VALUE MULTIPLE COMPUTATION WORKSHEET**

Company: \_\_\_\_\_ Valuation Date \_\_\_\_\_

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_

**INSTRUCTIONS:** The valuation analyst should complete one of these forms for each comparative company. The form is a guide to the key factors that affect the numerator and the denominator of the value multiple computation.

**A. General Information**

Name of comparative company: \_\_\_\_\_

Check the value multiple that will be computed for this engagement:

Measures of operations for the period ended: \_\_\_\_\_.\*

\_\_\_\_\_ Price/earnings \_\_\_\_\_ Price/gross cash flow

\_\_\_\_\_ Price/dividends \_\_\_\_\_ Price/revenues

Measures as of a single point in time

\_\_\_\_\_ Price/book value \_\_\_\_\_ Price/net asset value

*Note:* Such adjustments are sometimes needed to make the comparative company more similar to the company being valued.

\* Note: The time period used for each comparative company should match exactly, or as closely as possible, the time period over which the same variable is measured for the company being valued.

**FIGURE 7.3**

If a measure of operations for a given period of time is selected above, indicate how the period will be determined:

\_\_\_\_\_ Most recent 12 months \_\_\_\_\_ Most recent fiscal year  
 (or 4 quarters)

\_\_\_\_\_ Projected Operations \_\_\_\_\_ Historical average

\_\_\_\_\_ Five-year \_\_\_\_\_ Three-year

\_\_\_\_\_ Simple \_\_\_\_\_ Weighted

\_\_\_\_\_ Other (Describe) \_\_\_\_\_

Indicate the type of value the value multiple will be used to determine.

**B. Numerator of the Value Multiple**

Indicate the stock price of the comparative company. \_\_\_\_\_

*Note:* This could also be the company price if it is based on a merger or acquisition transaction.

\_\_\_\_\_ What is the source of this stock price? \_\_\_\_\_

\_\_\_\_\_ Wall Street Journal dated \_\_\_\_\_

\_\_\_\_\_ Other (describe): \_\_\_\_\_

\_\_\_\_\_

**C. Denominator of the Value Multiple**

Indicate the company's earnings (or other measure) \_\_\_\_\_

*Note:* This measure should be in total or per share, depending on how the stock price is measured.

Should the earnings (or other measure) be adjusted in any way? If so, describe the nature of each adjustment and how the amount of each adjustment was determined.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Indicate the adjusted earnings (or other measure) of the comparative company. \_\_\_\_\_

**D. Computation of the Value Multiple**

Compute the value multiple by dividing the stock price of the comparative company from Section B by its adjusted earnings (or other measure) from Section C. \_\_\_\_\_

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Your procedures for employing the guideline public company method may go something like the sections following.

**CREATING A LIST OF POTENTIAL GUIDELINE COMPANIES**

The first step in each guideline public company analysis is to generate a list of potential guideline companies. It is important to consider as many potential guideline companies as possible, and that means that you must perform a

thorough and comprehensive search to locate as many as possible. I suggest that you consider, at a minimum, these four sources for learning about or finding potential guideline companies:

1. Management
2. Standard Industrial Classification (SIC) or North American Industry Classification System (NAICS) code search (I am going to refer to these as SIC, but NAICS can be substituted)
3. Online databases
4. Industry research

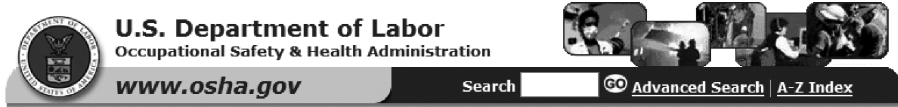
## Management

A management interview is a useful part of every valuation assignment. While you are asking management about all the stuff that was on your questionnaire, make sure to specifically ask about any publicly traded competitors. Good managers have a real handle on their competitive environment and will know who their public competitors are. This is a good starting point for each guideline company search. This will also be very helpful because many databases that classify companies by SIC code use different codes for the same company. If you perform a search of a database (which will soon be explained) and you do not come up with a company that management told you about, see what SIC code that company is categorized under and expand your search. You may find other companies there as well.

## SIC Code Search

An intuitive starting point when you are back at your computer is a SIC code search. If you do not know the SIC code for the subject or are not sure if your subject is correctly defined, there are many sources for SIC code information. The Occupational Safety and Health Administration (OSHA) Web site lists all SIC codes, as shown in figure 7.4.

FIGURE 7.4  
OSHA WEBSITE



The screenshot shows the top navigation bar of the OSHA website. On the left is the U.S. Department of Labor logo. In the center, it reads "U.S. Department of Labor Occupational Safety & Health Administration" and "www.osha.gov". On the right, there is a search bar with a "GO" button and links for "Advanced Search" and "A-Z Index". Below the navigation bar, the page title is "SIC Division Structure". Underneath, there is a search bar labeled "[ SIC Search ]". The main content is a list of divisions and their major groups:

- A. Division A: Agriculture, Forestry, And Fishing
  - Major Group 01: Agricultural Production Crops
  - Major Group 02: Agriculture production livestock and animal specialties
  - Major Group 07: Agricultural Services
  - Major Group 08: Forestry
  - Major Group 09: Fishing, hunting, and trapping
- B. Division B: Mining
  - Major Group 10: Metal Mining
  - Major Group 12: Coal Mining
  - Major Group 13: Oil And Gas Extraction
  - Major Group 14: Mining And Quarrying Of Nonmetallic Minerals, Except Fuels
- C. Division C: Construction
  - Major Group 15: Building Construction General Contractors And Operative Builders
  - Major Group 16: Heavy Construction Other Than Building Construction Contractors
  - Major Group 17: Construction Special Trade Contractors
- D. Division D: Manufacturing
  - Major Group 20: Food And Kindred Products
  - Major Group 21: Tobacco Products
  - Major Group 22: Textile Mill Products
  - Major Group 23: Apparel And Other Finished Products Made From Fabrics And Similar Materials
  - Major Group 24: Lumber And Wood Products, Except Furniture
  - Major Group 25: Furniture And Fixtures
  - Major Group 26: Paper And Allied Products
  - Major Group 27: Printing, Publishing, And Allied Industries

This Web site allows you to review two, three, and four digit SIC code descriptions, which is helpful in determining the subject's SIC code.

Remember that the goal of this exercise is to locate companies that are in a same or similar industry as the subject company. Using the information available on this site, you can research other SIC codes to determine if you could possibly use multiple codes to search for guideline companies.

A useful tool on this page is the "SIC Search." This search allows a user to search SIC codes by keyword. If the subject manufactures metal pipe, for instance, you may want to search for "metal pipe," the results of which are shown in figure 7.5. In addition to the subject company's SIC code, you have codes for all businesses that deal with metal pipe.

This tool allows a user to quickly and easily expand a guideline company search by performing a simple text search.

FIGURE 7.5  
OSHA SEARCH RESULTS

The screenshot shows the OSHA website search results for the keyword "Metal Pipe". The page header includes the U.S. Department of Labor logo and navigation links for "Advanced Search" and "A-Z Index". The search results are sorted by relevance, showing 25 results. A sidebar on the left lists various categories like Regulations, Interpretations, and SIC Manual. The main content area displays a list of SIC codes with their descriptions and relevance scores.

Search Results Found in:	Count	Description	Relevance
Regulations	44		
Interpretations	7		
SIC Manual	25		
Federal Register	47	Description for 3494: Valves and Pipe Fittings, Not Elsewhere Classified	*k
eTools	28	Description for 3498: Fabricated Pipe and Pipe Fittings	*k
Preambles	11	Description for 3444: Sheet Metal Work	*k
Directives	14	Description for 3312: Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	*k
Publications	17	Description for 3321: Gray and Ductile Iron Foundries	*k
Construction	19	Description for 3356: Rolling, Drawing, and Extruding of Nonferrous Metals, Except Copper and Aluminum	*k
Small Business	1	Description for 3443: Fabricated Plate Work (Boiler Shops)	*k
Alliances	5	Description for 3446: Architectural and Ornamental Metal Work	*k
MOUs	1	Description for 3541: Machine Tools, Metal Cutting Types	*k
Compliance Assist	3	Description for 3999: Manufacturing Industries, Not Elsewhere Classified	*k
Regs/Guidance	1	Description for 5051: Metals Service Centers and Offices	*k
Safety/Hlth Topics	9	Major Group 34: Fabricated Metal Products, Except Machinery And Transportation Equipment	*k
Tech Information	15	Description for 2842: Specialty Cleaning, Polishing, and Sanitation Preparations	*k
Tech Manual	2	Description for 3053: Gaskets, Packing, and Sealing Devices	*k
Sampling/Analysis	2	Description for 3069: Fabricated Rubber Products, Not Elsewhere Classified	*k
News Releases	6		
YPP	3		
Enforcement	1		

Now that you have a SIC code or group of SIC codes, you can use one of many search engines to find companies by industry code. The question becomes which one to use. There are many free Web sites that allow you to get information about guideline companies. There are also many fee based Web sites that charge without mercy. Basically, it works out that the higher the fees, the more services you sometimes get. The free sites have most of the same information; it's just not packaged as well. I discussed some of these sites in chapter 5. For free (or almost free) public company information, you can try out some of the following sites:

- Securities Exchange Commission (SEC) ([www.sec.gov/edgar/searchedgar/webusers.htm](http://www.sec.gov/edgar/searchedgar/webusers.htm))
- EDGAROnline ([www.edgaronline.com](http://www.edgaronline.com))
- 10K Wizard ([www.10kwizard.com](http://www.10kwizard.com))

Each of these sites provides EDGAR filings with minimal or no charge. However, keep in mind that the search should also be performed with keywords and not just SIC codes because many of these databases used the primary SIC code that appears in the header of the 10K that is filed by the company. While I will attempt to help you get through some of these sites, you need to be aware of the fact that they change regularly. Don't get frustrated if you try to follow this book and find that the directions have changed. Our firm runs into this problem on a regular basis. We have created our own internal manual to help staff muddle through this stuff, and updating the manual has become a full time job.

EDGAROnline is available by subscription. Figure 7.6 illustrates the different subscriptions available as well as what is available. Obviously, prices may change, but this can give you an indication of the cost. It is really relatively affordable. Once you have subscribed, you can search by company name, ticker symbol, or SIC code.

**FIGURE 7.6**  
**FREEEDGAR COMPANY SEARCH**

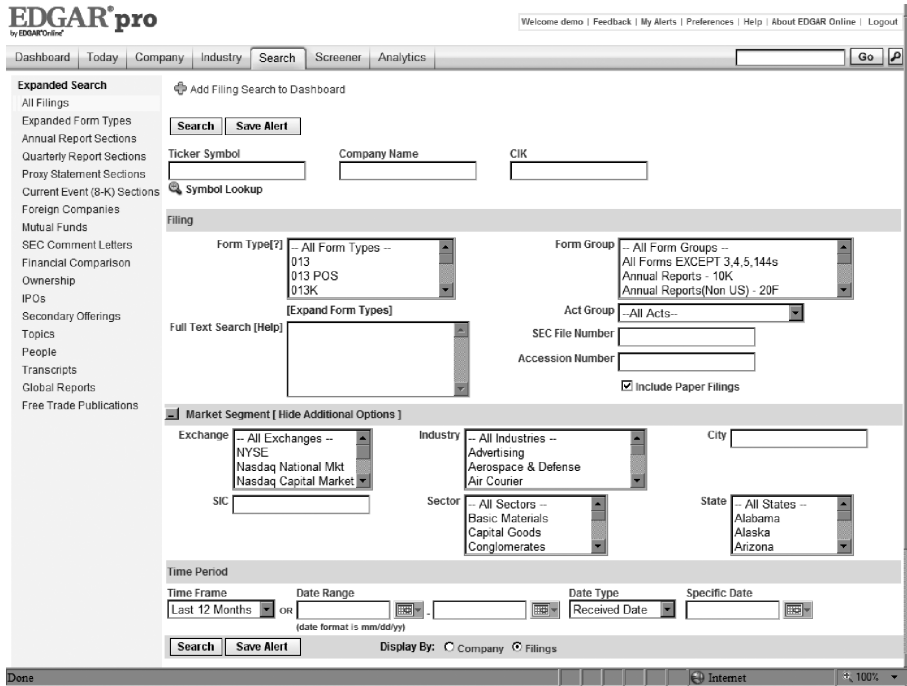
For individuals with periodic need for public company filings.	For individuals performing basic searches and tracking a limited number of companies.	For professionals with a need for comprehensive company and financial data, all in one place.
<b>2 Day Subscription</b>	<b>EDGAR'access</b>	<b>EDGAR'pro</b>
<input type="button" value="Subscribe"/>	<input type="button" value="Subscribe"/>	<input type="button" value="Subscribe"/>
Two day subscription to EDGAR Online Services	Real time and historic filings - up to 25 filings a month	Real time and historic filings - unlimited
	Document downloading in Word, Excel, Adobe (PDF)	Document downloading in Word, Excel, Adobe (PDF)
	Basic search functionality, including company name, ticker, and industry	Powerful search tools and alerting options using over 15 criteria
	Limited email alerting	Real-time email alerts on filings and on your saved searches
	Initial Public Offering data only	IPO and supplemental public offerings since 1997
		Company Profiles displaying performance, liquidity, profitability, financials and more
		Standardized financial data, with 5 years of history and 20 financial data elements. Plus peer comparison tools and ratios
		Institutional and insider trading and position history, representing 2,200 institutional holders. Insider Trades
<b>Two Day Subscription \$9.95</b>	<b>Annual Subscription \$18.30 per month</b>	<b>Annual Subscription \$100 per month</b> Group Subscriptions available

(Source: EDGAR Online, Inc. [<http://www.edgar-online.com>])

Simply plugging SIC code(s) into this search engine results in a list of companies in the subject's classification. Figure 7.7 reflects an EDGAROnline search screen. It is always a good idea to print your search so that your work file includes sufficient documentation to support your work. You can print the screens as you go along.

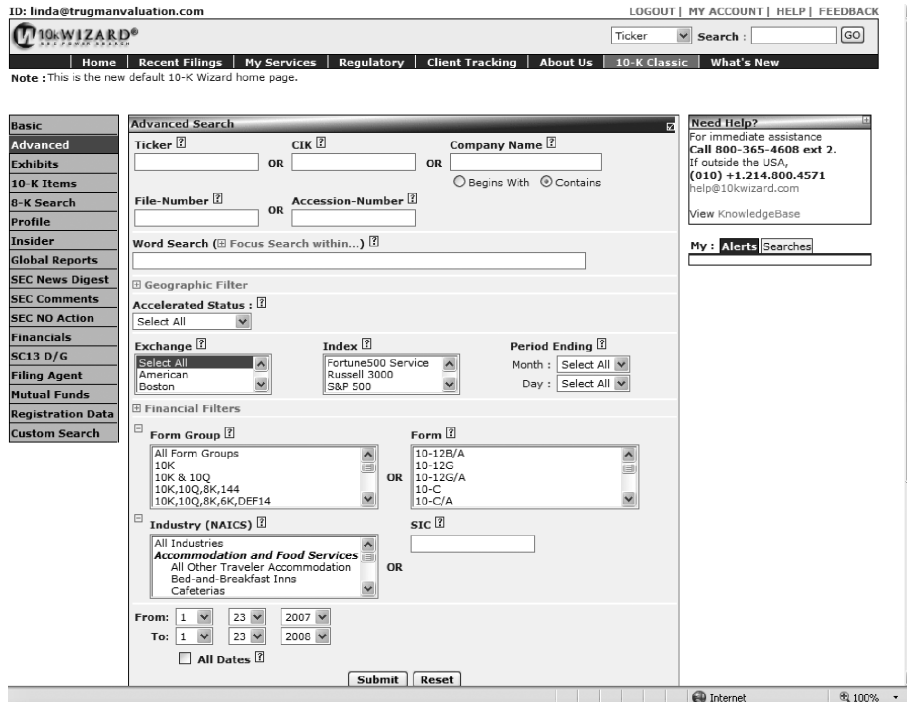
An alternative to using EDGAROnline is 10K Wizard. Its screen is shown in figure 7.8. In addition to searching by SIC code, 10K Wizard allows you to search by their own industry categorizations.

FIGURE 7.7  
EDGARONLINE SEARCH SCREEN



(Source: EDGAR Online, Inc. [http://www.edgar-online.com])

FIGURE 7.8  
10-K WIZARD



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The SIC code search takes only a few minutes and allows the analyst to quickly and easily develop a list of potential guideline companies. Previously, this search could take hours, and sometimes days, in the library. The companies that show up in your search will be based on the SIC code that is listed in the documents filed by the public company with the SEC.

Other databases may classify these companies under a different SIC code. This is part of the frustrating exercise that we call business valuation. It is also the reason for checking multiple Web sites and multiple SIC codes.

## Online Databases

There are a multitude of financial advice Web pages in existence that will provide some type of industry analysis. These tools should not be substituted for performing a thorough industry analysis, but can serve as a useful tool in locating guideline companies. For instance, Hoover's Online ([www.hoovers.com](http://www.hoovers.com)) provides free industry lists on its Web site. However, these industry lists are nothing more than company names. I would not depend on these types of services as a sole source for locating guideline companies, but they do help to expand a potential guideline companies list. An example of this is shown in figure 7.9.

**FIGURE 7.9**  
**HOOVER'S ONLINE INDUSTRY SNAPSHOTS**

(Courtesy of Hoover's, Inc. [[www.hoovers.com](http://www.hoovers.com)])



Some of the more sophisticated databases allow you to put in a greater search criteria than those which I just described. For example, using a database such as Standard & Poor's or Disclosure, you can enter your search criteria, which may include the SIC code, country of location, and maximum sales volume. I will explain the maximum sales volume criteria in a little while.

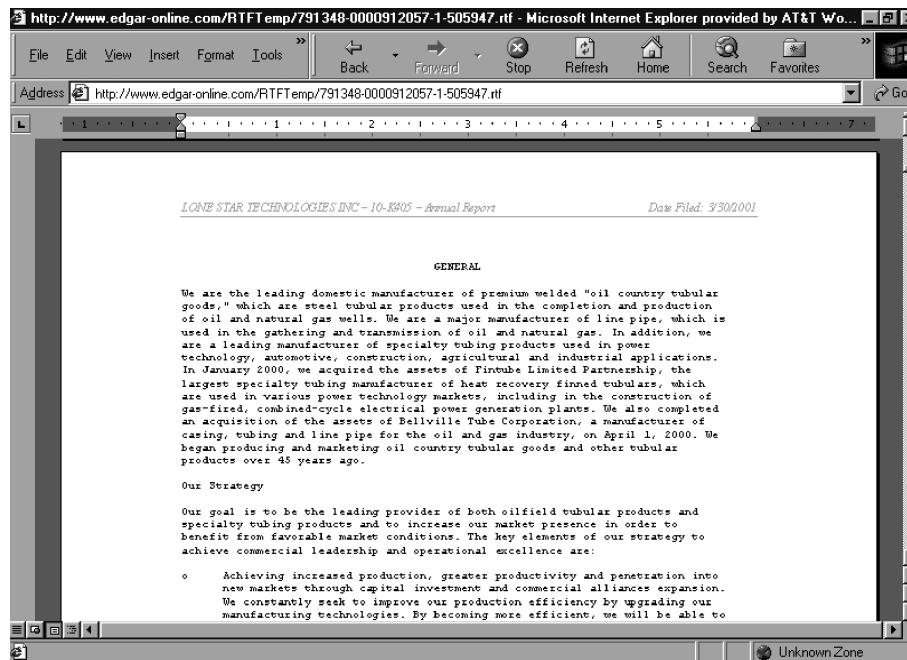
## Industry Research

As previously discussed, an analyst should have a thorough understanding of the valuation subject and its industry. In performing your industry analysis, you will frequently become aware of publicly traded companies in the subject company's industry. Trade journals and published industry reports are excellent tools for locating potential guideline companies. Another great source of information is industry experts. Business brokers, financial analysts, accountants, and industry consultants can be excellent sources of information, you just need to find them.

## GET THE BUSINESS DESCRIPTION

After the possible guideline companies are identified by the initial set of criteria, we used to examine the corporate description included in databases such as Standard & Poor's. Now, we look at the business descriptions that are included in the company's Form 10-K. Because access to the 10-K is free, we can view a more in-depth description than we used to do by looking at the databases. This allows us to look at the narrative about the possible guideline company to further determine if the company appears to be similar enough to use in our analysis. See figure 7.10.

**FIGURE 7.10**  
**LONE STAR TECHNOLOGIES, INC. BUSINESS DESCRIPTION**

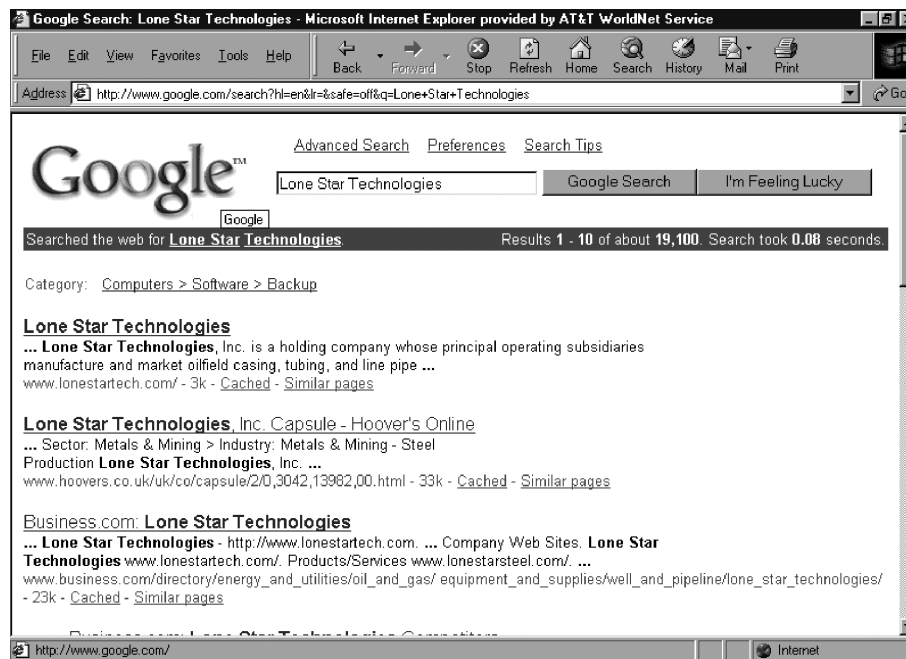


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From this description, you can find the business purpose, products, market segments, and many other significant pieces of information. You can use this information to perform a qualitative analysis of the potential guideline company.

Search engines can also be a valuable tool when finding information about the guideline companies. Figure 7.11 shows the search results from a search on the Google search engine. A quick search on a company name can turn up valuable information that may not have been picked up by a major news service. In addition to getting the 10-K, we generally will visit the company's Web site.

**FIGURE 7.11**  
**GOOGLE SEARCH ON LONE STAR TECHNOLOGIES, INC.**



## SIZE CRITERIA

If you value small companies, by now you are probably thinking that I am nuts. There is no way that you will jump through all of the hoops that I have been discussing. Number one, you do not have the budget for it, and number two, you are never going to find a public company that is comparable to the small company that you are valuing. I hear that nonsense all of the time.

Believe it or not, you can still use public company data when applying the market approach to smaller companies. First of all, the standards do not differentiate between valuing large and small companies. Your budget with the client certainly cannot influence the work you are required to do when you perform a valuation engagement. Second, it is generally a good idea to place a size restriction as part of the criteria used to select guideline companies. Now you probably are waiting for me to tell you what that size restriction should be. It depends. In a perfect world, I would like the guideline companies to be no more than 10 times the sales revenues of the valuation subject. However, this is not a perfect world. There will be times that I increase the size restriction to 20 or 25 times revenue. There are even times that

I will go higher. For a company with \$100 million in revenues, a guideline company with \$4 billion may not upset me. In fact, large companies will have less restrictions placed on them for size. But what about a \$25 million sales company? Would a \$2 billion sales company be a good guideline company? I doubt it. But with that said, I have used very large public companies as guideline companies in certain industries where the guideline companies would have been the logical acquirer of the small closely held company. It really does depend on the facts and circumstances of the assignment.

Another interesting fact that you should be aware of is that at the time that I was working on this book, there were 1,947 companies listed on a public stock exchange with revenues of \$10 million or less. There are a lot of small public companies. The problem with many of these companies is that they may be too thinly traded to be used as a good guideline company. I will discuss this further in a little while.

There are many valuation analysts who believe that no size restriction should be placed on the guideline company search criteria. The size differential should be made up in the multiple because of the risk factors relative to the size differential. I have a difficult time comparing IBM with the local computer manufacturer. Here also, common sense must be applied. If the guideline companies are too big, they lose relevance to the appraisal subject. It is not so much that they are too big, but rather the much larger companies tend to have a very different business model and are frequently much more diversified.

Individuals who disagree with the use of public company data for small, closely held companies generally state that the size differentials are often so great that the result is meaningless. I disagree. As I have already stated, there are many public companies that are small. In addition, when you look closely at these publicly traded companies, you will find that other than their financial ability to go public, they are not run much differently than many of our appraisal subjects. Granted, there are differences; for example, fewer perquisites for the owners, more reliable financial statements, and not much ability to raise additional capital.

## Active Trading and Penny Stocks

Once you have located possible guideline companies, it is generally a good idea to test these companies to see if their stocks are actively traded, and while you're at it, make sure that these stocks are not penny stocks. According to Revenue Ruling 59-60, guideline companies should have their stock actively traded in the market. Active trading is essential if the market forces are to interact in the manner necessary to reach the equilibrium point in the market known as fair market value. Greater market activity increases the possibility that fair market value will be achieved because many of the personal motivations of particular buyers and sellers would have been eliminated by offsetting their unique situations in arriving at the equilibrium point.

The question is what does active trading mean? None of the valuation textbooks that I have reviewed provides an explanation of active trading. I consider active trading to mean that at least 5 percent of the company's outstanding stock trades over the six-month period prior to the valuation date. However, like everything else in valuation, 5 percent is not a hard and fast rule. There are times that we will use a guideline company with less than 5 percent trading activity, but obviously, more is better.

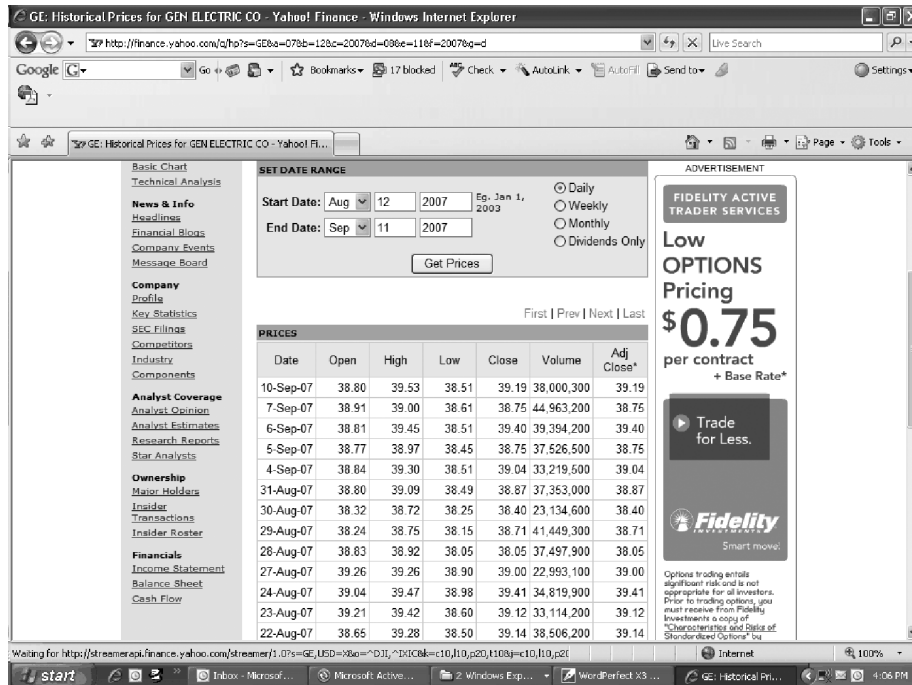
The problem with using stocks that are thinly traded is that the analyst must be able to investigate whether the trading that took place is among market participants or possibly insiders. If insiders are involved, they may have knowledge that the hypothetical individual may not have and, therefore, the true definition of fair market value may be violated. Many data sources provide information about insider trading, so this can be investigated.

With that being said, if you have many companies that are thinly traded, it may still be better than having no guideline companies at all. It may come down to how much weight do you place on the conclusions derived using this method. Even if you cannot use the guideline company method for this reason, it may serve as a good sanity check on the income approach.

## Stock Pricing Reports and Active Trading

Before selecting guideline companies from the pool of businesses that made our initial list, we check the stock price and trading activity of each. A monthly stock pricing report from Yahoo! Finance is depicted in figure 7.12.

**FIGURE 7.12**  
**YAHOO!FINANCE**



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A pricing report such as this can tell you many important things about a company. From this report you can see if a business has a very low stock price and would be classified as a penny stock. There is often speculation in the market for penny stocks, which may limit the quality of your pricing multiples. We generally prefer to use guideline companies when the stock is selling for at least \$5 per share. This gets rid of the speculators that violate the requirement that a willing seller be typically motivated. Speculation is not typical motivation. Here also, there is no absolute about a \$5 price. We will use a lower price if it makes sense to do so. We certainly do not want to use stocks that are priced at \$1 or less. These are the true penny stocks.

Stock price volatility is another factor that can be seen on a stock pricing history. Highly volatile stocks, or stocks that have high swings in stock value, will suggest that you should take a closer look at that company. Large price swings could indicate changes in the economy, industry, or company, and you will need to understand these factors to properly apply guideline company multiples.

Trading activity can also be calculated with the assistance of a stock pricing report. Calculating the average trading over a certain period will allow the analyst to see if the stock is trading regularly, or if it is thinly traded. A trading activity analysis is shown in figure 7.13. As seen in this analysis, we have divided the average monthly trading volume of the potential guideline companies by their respective shares outstanding to calculate a percentage of outstanding shares traded, which can be used as a criterion for thin trading. If some of the company’s shares are owned by insiders, you might want to subtract those shares to get an average “float” for this calculation.

**FIGURE 7.13**  
**STOCK TRADING ACTIVITY WORKSHEET**

	A	B	C	D	E	F	G	H	I	J	K
1	TRADING ACTIVITY ANALYSIS										
2	AVERAGE MONTHLY TRADING (000)										
3		AIND	CFWY	HTLD	JBHT	KNX	MSCA	CRGO	ODFL	TCAM	USAK
4											
5	Nov-99	961,867	1,465,524	65,371	338,476	87,200	277,905	577,810	5,425	14,566	48,380
6	Dec-99	602,500	2,363,045	83,686	302,345	95,840	512,955	185,955	6,662	15,522	40,695
7	Jan-00	423,350	1,321,750	75,905	314,860	37,275	789,250	147,059	15,721	92,095	22,755
8	Feb-00	532,500	2,349,650	129,442	397,473	52,600	636,500	122,158	11,427	116,088	24,864
9	Mar-00	429,435	740,555	269,530	732,000	94,878	495,870	149,650	6,277	48,530	75,804
10	Apr-00	419,000	1,286,211	114,710	479,852	28,889	317,156	56,765	13,268	33,505	34,621
11	May-00	570,364	778,619	84,077	328,200	16,327	634,409	62,667	8,650	20,595	22,518
12	Jun-00	612,955	2,020,783	152,865	447,640	44,561	831,000	126,824	22,260	44,676	48,652
13	Jul-00	416,450	942,750	94,165	206,950	33,030	210,150	92,200	9,290	16,925	31,380
14	Aug-00	312,783	1,551,348	47,623	244,990	38,585	166,191	210,875	22,590	59,557	11,757
15	Sep-00	448,400	698,200	62,410	260,450	24,790	184,950	169,923	20,070	45,905	21,105
16	Oct-00	287,727	814,955	80,940	260,509	23,931	186,273	127,667	19,895	61,836	18,368
17											
18	Average Monthly Trading (A)	501,443	1,363,450	104,969	369,530	44,909	436,884	167,379	13,463	47,398	33,420
19											
20	Outstanding Shares September 00 10Q (B)	34,647,976	21,658,943	25,366,582	35,165,323	15,236,423	11,150,001	6,601,340	8,312,840	8,331,083	9,224,354
21											
22	Average Shares Traded (A / B)	1.45%	6.30%	0.41%	1.02%	0.29%	3.92%	2.54%	0.16%	0.57%	0.36%
23											
24	Shares Held by Insiders (C )	5,562,148	1,563,871	13,667,576	18,425,704	8,215,845	3,133,050	4,274,061	4,498,144	868,021	5,126,431
25											
26	Shares Actively Traded (D)	29,085,828	20,105,072	11,699,006	16,739,619	7,020,578	8,016,951	2,327,279	3,813,696	7,443,062	4,097,923
27											
28	Actively Traded Shares (A / D)	1.72%	6.78%	0.90%	2.15%	0.64%	5.45%	7.19%	0.35%	0.64%	0.82%
29											
30											
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Many of the small public companies are relatively “thinly traded.” Little activity makes it a bit more uncomfortable for the valuation analyst, but it does not mean that the company cannot be used. After all, what is the alternative? In general, thinly traded data can be used, albeit cautiously, if the valuation analyst can determine adequate information about the thin trading. In order to learn more about a company’s trading activity, we will search the public documents filed with the SEC, look for press releases and other announcements, and even go as far as to call the investor relations people in the company to inquire whether there is anything special about the stock transactions that would disqualify the activity from being used in this analysis. Often, the thin trading takes place among insiders. This information can be used if it is determined that the logical market for the appraisal subject is insiders.

Let’s talk about insiders for a moment. There are many times when a valuation analyst must struggle to decide who the logical players in the market are. A fractional interest in a closely held business may be worth more in the hands of an insider than in those of an outside investor. As a matter of fact, there are many times when there may not be a market for a minority interest in a closely held business, other than for the other shareholders of the company. Swing votes and insider knowledge may create value for the insiders that an outsider would not be privy to. Remember, one of the components of fair market value is that the willing buyer and willing seller must have knowledge about the subject property.

## FOR THOSE THAT PASS MUSTER...

For those companies that pass muster, we now download financial information that is included as part of the Form 10-K filed with the SEC from EDGAR or a similar database. In fact, we will generally download the entire Form 10-K so that we can gain a thorough understanding about the public company. This will allow us to take a much more detailed look at the company to determine its level of comparability to the appraisal subject. This can be accomplished by comparing financial ratios and other attributes of the guideline companies with those of the appraisal subject. Before we can do this, certain adjustments may be necessary to the guideline company data.

## Analyzing Publicly Traded Information

Part of using public company information in the valuation process requires the valuation analyst to obtain and analyze the financial and operating data of the guideline companies. The valuation analyst will use this information to ensure that the appraisal subject can be properly compared with these other companies. Sometimes, there will be differences in the manner in which the publicly traded company reports its financial results, or nonrecurring events may have taken place that require the valuation analyst to recompute the multiples used after adjusting the public company data. These adjustments are made to compare the appraisal subject more appropriately with the guideline companies.

The valuation analyst should always keep in mind that there are limits to what can be done with the information that is obtained. Exact comparability will most likely never be achieved. Don't let this upset you. The adjustments that will be made will generally be similar to the normalization adjustments discussed in chapter 6, particularly the comparability adjustments and the nonrecurring adjustments. Rarely will you have to make a discretionary adjustment. The stockholders of the public company would go bonkers! Besides, the CEO's nephew being on the books would be an insignificant adjustment.

Some of the adjustments that are encountered as a result of the differences between public companies and closely held companies are for (1) inventory accounting such as LIFO-FIFO (last in, first out—first in, first out), (2) items that are nonrecurring, and (3) items that are extraordinary.

If the public company reports its results using the LIFO method of inventory valuation and the appraisal subject uses FIFO, an adjustment is generally made to the public company data in order to compare these companies properly. It would be silly, and probably impossible, for the valuation analyst to convert the appraisal subject to LIFO. Accountants reading this book will understand this better than anyone. The information necessary to perform a LIFO calculation is not available in any of the documents obtained by a valuation analyst. For the nonaccounting types, LIFO inventory valuation is relatively complicated and requires more than a few words to explain it properly. Because this book is a valuation text and not a book on LIFO, you will have to trust me.

The number of adjustments that a valuation analyst will make to the public company information is usually small. The adjustments are intended to achieve consistency. For right now, recognize the importance of being consistent in your analysis. You need to compare apples with apples, oranges with oranges, and pears with pears. Otherwise, your valuation will take on the characteristics of a fruit salad: a little of this and a little of that.

Before we go to the next step, let's discuss one other item. When searching for publicly traded company financial information, you want to get as close to the date of the valuation as possible. Many times, this will mean calculating the latest 12 months' financial results. Whenever possible, we will use this information. For an example, see exhibit 7.1.

### EXHIBIT 7.1

#### CALCULATING LATEST 12 MONTHS' RESULTS

Tables 1 and 2 reflect financial statements for Jones Corp. Notice in this analysis we have performed a latest 12 months calculation for the last period on the income statement. This is done using quarterly statements. For instance, Jones Corp.'s year end is September 30, but the valuation date is March 1. The market is pricing companies based on all available information, including the December 31 quarterly earnings. To estimate revenues for the latest 12 months, we would perform the following calculation:

**EXHIBIT 7.1**

$$\begin{array}{r}
 \text{December 31, 2006 Quarterly revenues} \\
 + \text{September 31, 2006 Annual revenues} \\
 - \text{December 31, 2005 Quarterly revenues} \\
 \hline
 = \text{December 31, 2006 LTM revenues}
 \end{array}$$

This calculation may be repeated for all line items, and the result is an income statement reflecting all known financial information as close to the valuation date as possible without going past it. The result looks like this:

LTM = Latest twelve months.

	<b>September 30</b>		<b>LTM</b>
	<b>2004</b>	<b>2005</b>	<b>Dec. 31, 2006</b>
	<b>(In Thousands of Dollars)</b>		
Revenues	\$466,795	\$492,414	\$876,642
Cost of goods sold	406,648	426,005	751,437
Gross profit	\$ 60,147	\$ 66,409	\$125,205
Operating expenses	23,754	31,981	45,039
Operating income	\$ 36,393	\$ 34,428	\$ 80,166
Other income	975	1,995	1,765
Interest expense	86	274	4,404
Income before income taxes	\$ 37,282	\$ 36,149	\$ 77,527
Provision for income taxes	14,345	15,838	32,372
<b>Net Income</b>	<b>\$ 22,937</b>	<b>\$ 20,311</b>	<b>\$ 45,155</b>
Earnings Per Share	\$ 0.68	\$ 0.59	\$ 1.12
Cash and equivalents	\$24,106	\$15,906	\$77,426
Marketable securities	5,517	17,224	—
Accounts Receivable	61,622	69,318	110,468
Inventories	57,321	79,017	221,417
Other current assets	7,278	9,932	16,174
Total current assets	\$155,844	\$191,397	\$425,485
Net property, plant, and equipment	26,517	35,868	108,506
Intangible assets	—	408	50,363
Deposits and other assets	1,993	1,963	3,325
<b>Total Assets</b>	<b>\$184,354</b>	<b>\$229,636</b>	<b>\$587,679</b>

(Continued)



## EXHIBIT 7.1 (Continued)

<b>TABLE 2</b>			
<b>JONES CORP. BALANCE SHEET AS OF</b>			
	<b>September 30</b>		<b>Dec. 31</b>
	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b>(In Thousands of Dollars)</b>			
Current portion of interest bearing debt	\$ 672	\$ 10	\$ 8,091
Accounts Payable	41,272	55,928	95,046
Other current liabilities	22,741	25,048	43,920
Total current liabilities	<u>\$ 64,685</u>	<u>\$ 80,986</u>	<u>\$147,057</u>
Long-term interest bearing debt	\$ 2,587	\$ 42	\$ 45,146
Other long-term liabilities	1,219	2,105	3,914
Total long-term liabilities	<u>\$ 3,806</u>	<u>\$ 2,247</u>	<u>\$ 49,060</u>
Total liabilities	<u>\$ 68,491</u>	<u>\$ 83,233</u>	<u>\$196,117</u>
Stockholders' equity	115,863	146,403	391,562
<b>Total Liabilities and Equity</b>	<b><u>\$184,354</u></b>	<b><u>\$229,636</u></b>	<b><u>\$587,679</u></b>
Common Shares Outstanding at End of Year (000)	<u>33,688</u>	<u>34,646</u>	<u>40,290</u>

The last column of the balance sheet is as of the specific date.

We typically present financial statements for the guideline companies for periods similar to those that we have for the subject. Doing so allows us to look at trends in operating performance of the guideline companies over as much time as possible. These trends, among other things, will indicate a level of comparability. For instance, if all of the guideline companies experience a sales decline, but the subject company's sales do not, it may indicate that the subject company is not sensitive to similar economic factors. Another tool that will help us in this analysis is a financial ratio analysis. Comparative financial ratio analysis allows us to look at what some businesses do better, or worse, than others and gives us a quantitative basis to compare subject to guidelines.

It is a good idea to set up a spreadsheet that will automatically calculate ratios based on the input financial statements. This can be done on a historic basis as well as on an adjusted basis. Tools such as this are helpful in speeding up the analysis for a business, and by setting it up in advance (and checking the formulas), you may limit errors that result from creating the spreadsheet. I respect the work that my staff does, but we have password-protected the majority of our spreadsheet template to avoid someone making the mistake of changing a formula. Better to be safe than sorry.

A sample ratio analysis of some guideline companies with the narrative that accompanied it in a report appears in exhibit 7.2.

## EXHIBIT 7.2

## FINANCIAL RATIO ANALYSIS WITH GUIDELINE COMPANIES

The next step in the analysis is to compare the Triad Entities' financial results with its public counterparts. Select financial ratios appear in table 1. These ratios have been analyzed in order to make quantitative and qualitative assessments regarding the similarities and dissimilarities between the companies. The last column of the balance sheet reflects the balance sheet of the latest quarter prior to the valuation date.

**EXHIBIT 7.2**  
**TABLE 1**  
**ADJUSTED FINANCIAL RATIOS**

	<b>AFWY</b>	<b>ABFS</b>	<b>AIND</b>	<b>TRUKQ</b>	<b>HTLD</b>	<b>JBHT</b>	<b>MSCA</b>	<b>OTR</b>	<b>SWFT</b>	<b>TCAM</b>	<b>XPRSA</b>	<b>WERN</b>	<b>TRIAD</b>
<b>LIQUIDITY / SOLVENCY</b>													
Quick ratio	1.08	0.67	1.14	0.38	1.63	0.80	0.67	0.35	0.96	0.47	1.03	1.37	0.92
Current ratio	1.47	1.06	1.41	0.84	1.97	1.01	1.01	0.40	1.11	0.78	1.47	1.86	1.05
Days accounts receivable	29.97	39.80	32.91	29.61	33.81	37.96	33.41	42.75	42.20	30.58	44.48	34.98	30.54
Days working capital	11.03	(2.34)	22.70	(2.84)	41.29	0.78	16.14	(55.85)	8.26	(5.20)	19.52	24.62	3.14
<b>TURNOVER</b>													
Receivables turnover	12.18	9.17	11.09	12.33	10.80	9.61	10.93	8.54	8.65	11.93	8.21	10.44	11.95
Cash turnover	172.29	140.89	22.52	4,907.24	6.82	422.44	21.29	1,726.70	137.59	38.28	71.17	41.31	13.74
Current asset turnover	8.70	5.66	4.90	5.74	3.02	7.34	5.71	7.62	6.92	6.31	5.27	6.09	5.46
Working Capital Turnover	33.10	(155.79)	16.08	(128.59)	8.84	467.01	22.61	(6.54)	44.17	(70.21)	18.70	14.83	116.32
Fixed asset turnover	1.64	4.62	1.79	1.58	2.33	1.69	1.54	1.36	2.11	2.30	2.86	1.49	4.14
Total asset turnover	1.37	2.40	1.30	1.22	1.30	1.35	1.20	1.15	1.61	1.64	1.83	1.20	2.31
<b>DEBT</b>													
Times interest earned	3.09	(1.68)	NM	1.00	385.46	1.56	4.72	0.89	6.96	6.26	1.92	26.74	3.70
Total liabilities to total assets	0.59	0.98	0.32	0.93	0.38	0.65	0.46	0.81	0.58	0.63	0.71	0.39	0.82
Total liabilities to equity	1.44	(31.13)	0.46	12.69	0.60	1.85	0.84	4.34	1.40	1.74	2.48	0.64	4.57
Short-term debt to equity	0.04	(1.60)	0.10	1.97	0.01	0.08	0.11	1.53	0.18	0.35	0.27	—	0.75
Long-term debt to equity	0.97	(16.14)	0.03	8.94	—	0.95	0.31	2.28	0.55	0.67	1.33	0.13	2.61
Total interest-bearing debt to equity	1.01	(17.75)	0.12	10.92	0.01	1.03	0.42	3.80	0.73	1.02	1.60	0.13	3.36
Total assets to equity	2.44	(31.68)	1.46	13.69	1.60	2.85	1.84	5.34	2.40	2.74	3.48	1.64	5.57
Total liabilities to invested capital	0.72	1.86	0.41	1.06	0.60	0.91	0.59	0.90	0.81	0.86	0.95	0.57	1.05
Net fixed assets/equity	2.03	(16.47)	1.14	10.82	0.75	2.27	1.53	4.59	1.85	2.05	2.18	1.32	3.43

(Continued)



**EXHIBIT 7.2**

Looking at the ratios in totality reveals many differences between the Triad Entities and the guideline companies. In order to do a more comprehensive analysis, we analyzed specific figures and ratios by ranking the information contained in table 1 from highest to lowest to determine how the Triad Entities stack up against the 12 guideline companies.

The first area looked at is the size of the company from both a revenue and earnings standpoint.

<b>Size of Revenues (\$000)</b>		<b>Size of Earnings (\$000)</b>	
ABFS	1,437,279	WERN	\$36,380
JBHT	1,352,225	AIND	30,501
WERN	576,022	SWFT	23,040
AFWY	572,100	HTLD	20,586
SWFT	458,165	MSCA	13,152
MSCA	333,070	AFWY	13,083
AIND	330,136	JBHT	8,725
TRUKQ	289,527	TCAM	6,106
XPRSA	282,468	<b>TRIAD</b>	<b>4,179</b>
HTLD	191,507	XPRSA	2,837
TCAM	144,254	TRUKQ	982
<b>TRIAD</b>	<b>109,812</b>	OTR	(157)
OTR	49,211	ABFS	(31,495)

The Triad Entities are smaller than all of the companies except OTR; most of the companies fall within five times the company's revenues, although ABFS and JBHT are 13 and 12 times revenues, respectively. The company has less earnings than most of the guideline companies. This does not necessarily mean that the Triad Entities are less profitable though. This will be discussed when we look at profitability ratios.

In conjunction with the size of revenues and earnings are compound annual growth rates. Three year rates are shown below.

<b>3 Year CAGR—Revenues %</b>		<b>3 Year CAGR—Earnings %</b>	
AFWY	31.98%	ABFS	NM
SWFT	28.61%	OTR	NM
OTR	26.72%	TCAM	61.40%
MSCA	21.74%	SWFT	37.01%
ABFS	19.30%	HTLD	29.86%
TCAM	17.49%	WERN	10.19%
WERN	17.35%	AIND	1.00%
XPRSA	16.75%	MSCA	-1.66%
JBHT	15.09%	<b>TRIAD</b>	<b>-2.43%</b>
AIND	10.03%	AFWY	-11.62%
TRUKQ	7.61%	XPRSA	-35.08%
<b>TRIAD</b>	<b>3.46%</b>	TRUKQ	-43.18%
HTLD	-9.92%	JBHT	-52.22%

(Continued)

**EXHIBIT 7.2** (Continued)

Three year compound annual growth in revenues indicates that the Triad Entities' revenues have been growing more slowly than all of the guideline companies except one. Looking at earnings growth reveals that the Triad Entities fall about midway between the faster earnings growth and the faster earnings losses. As previously discussed, the economy faltered somewhat in recent past resulting in a "down" year for the industry. Analysts who follow these companies have indicated that they expect better results in the near future.

Current R atio		Quick Ratio	
HTLD	1.97	HTLD	1.63
WERN	1.86	WERN	1.37
AFWY	1.47	AIND	1.14
XPRSA	1.47	AFWY	1.08
AIND	1.41	XPRSA	1.03
SWFT	1.11	SWFT	0.96
ABFS	1.06	<b>TRIAD</b>	<b>0.92</b>
<b>TRIAD</b>	<b>1.05</b>	JBHT	0.80
MSCA	1.01	ABFS	0.67
JBHT	1.01	MSCA	0.67
TRUKQ	0.84	TCAM	0.47
TCAM	0.78	TRUKQ	0.38
OTR	0.40	OTR	0.35

In looking at these ratios, the Triad Entities are closest to JBHT despite the difference in the companies' sizes. From a current ratio and quick ratio standpoint, the Triad Entities fall right in the middle.

Two other liquidity ratios, days accounts receivable, and days working capital appear to contradict one another somewhat.

Days Account Receivables		Days Working Capital	
XPRSA	44.48	HTLD	41.29
OTR	42.75	WERN	24.62
SWFT	42.20	AIND	22.70
ABFS	39.80	XPRSA	19.52
JBHT	37.96	MSCA	16.14
WERN	34.98	AFWY	11.03
HTLD	33.81	SWFT	8.26
MSCA	33.41	<b>TRIAD</b>	<b>3.14</b>
AIND	32.91	JBHT	0.78
TCAM	30.58	ABFS	(2.34)
<b>TRIAD</b>	<b>30.54</b>	TRUKQ	(2.84)
AFWY	29.97	TCAM	(5.20)
TRUKQ	29.61	OTR	(55.85)

**EXHIBIT 7.2**

Although the Triad Entities collect their accounts receivable faster than most of the guideline companies, they only have approximately three days of working capital available. Despite this, a number of the guideline companies appear to be ever weaker in this area.

Turnover ratios measure how effectively a company utilizes its assets.

<b>Current Asset Turnover</b>		<b>Fixed Asset Turnover</b>		<b>Total Asset Turnover</b>	
AFWY	8.70	ABFS	4.62	ABFS	2.40
OTR	7.62	<b>TRIAD</b>	<b>4.14</b>	<b>TRIAD</b>	<b>2.31</b>
JBHT	7.34	XPRSA	2.86	XPRSA	1.83
SWFT	6.92	HTLD	2.33	TCAM	1.64
TCAM	6.31	TCAM	2.30	SWFT	1.61
WERN	6.09	SWFT	2.11	AFWY	1.37
TRUKQ	5.74	AIND	1.79	JBHT	1.35
MSCA	5.71	JBHT	1.69	AIND	1.30
ABFS	5.66	AFWY	1.64	HTLD	1.30
<b>TRIAD</b>	<b>5.46</b>	TRUKQ	1.58	TRUKQ	1.22
XPRSA	5.27	MSCA	1.54	WERN	1.20
AIND	4.90	WERN	1.49	MSCA	1.20
HTLD	3.02	OTR	1.36	OTR	1.15

Overall, the Triad Entities are stronger in utilizing their assets than the guideline companies. Any weakness that exists is in their current asset turnover which confirms their liquidity ratios. Although the Triad Entities utilize their asset base more efficiently, their liabilities are high, which adds weakness.

The debt ratios indicate that although the Triad Entities are more than able to service their debt, and that they utilize more debt than most of the guideline companies. This is depicted in the following rankings:

<b>Times Interest Earned</b>		<b>Total Liabilities to Total Assets</b>		<b>Total Liabilities to Equity</b>	
AIND	NM	ABFS	0.98	TRUKQ	12.69
HTLD	385.46	TRUKQ	0.93	<b>TRIAD</b>	<b>4.57</b>
WERN	26.74	<b>TRIAD</b>	<b>0.82</b>	OTR	4.34
SWFT	6.96	OTR	0.81	XPRSA	2.48
TCAM	6.26	XPRSA	0.71	JBHT	1.85
MSCA	4.72	JBHT	0.65	TCAM	1.74
<b>TRIAD</b>	<b>3.70</b>	TCAM	0.63	AFWY	1.44
AFWY	3.09	AFWY	0.59	SWFT	1.40
XPRSA	1.92	SWFT	0.58	MSCA	0.84
JBHT	1.56	MSCA	0.46	WERN	0.64
TRUKQ	1.00	WERN	0.39	HTLD	0.60
OTR	0.89	HTLD	0.38	AIND	0.46
ABFS	(1.68)	AIND	0.32	ABFS	(31.13)

(Continued)

**EXHIBIT 7.2** (Continued)

With respect to profitability, the Triad Entities fall in the middle of the grouping.

<b>EBITDA Return on Net Sales</b>		<b>Aftertax Return on Net Sales</b>	
HTLD	25.41%	HTLD	10.75%
AIND	22.25%	AIND	9.24%
WERN	21.38%	WERN	6.32%
MSCA	19.58%	SWFT	5.03%
OTR	17.37%	TCAM	4.23%
SWFT	17.14%	MSCA	3.95%
TCAM	15.96%	<b>TRIAD</b>	<b>3.81%</b>
<b>TRIAD</b>	<b>14.59%</b>	AFWY	2.29%
TRUKQ	14.04%	XPRSA	1.00%
JBHT	12.49%	JBHT	0.65%
AFWY	12.07%	TRUKQ	0.34%
XPRSA	9.74%	OTR	-0.32%
ABFS	1.25%	ABFS	-2.19%

When looking at aftertax income, the company is closest to MSCA, which is slightly more profitable. Of the 12 guideline companies, six are more profitable and six are less profitable. This is influenced greatly by debt structure, age of the fixed assets, and tax rates. Therefore, another comparison utilized is EBITDA (earnings before interest, taxes, depreciation, and amortization) to Sales. In utilizing this category, The Triad Entities fall in the middle of the group, with seven companies showing more profitability.

One final profitability measurement is the EBITDA return on invested capital which reflects the amount of profits generated to a company's capital holders. Here, the Triad Entities are at the high end of the ranking. This could be the result of the company's reduced equity due to financial difficulties in the past.

<b>EBITDA Return on Invested Capital</b>	
HTLD	48.99%
AIND	37.25%
<b>TRIAD</b>	<b>36.64%</b>
SWFT	36.08%
WERN	35.28%
TCAM	31.35%
MSCA	30.11%
JBHT	23.26%
XPRSA	21.55%
OTR	19.44%
TRUKQ	18.52%
AFWY	17.57%
ABFS	4.34%



**EXHIBIT 7.2**

American Freightways (AFWY): AFWY is five times the size of the Triad Entities, with faster growing revenues, but weaker earnings growth. Whereas the Triad Entities have low liquidity ratios and working capital, AFWY is highly liquid. AFWY also operates with considerably less debt. Despite all of these factors, the Triad Entities were more profitable in the most recent year.

Arkansas Best Corp. (ABFS) ABFS is 13 times the size of the Triad Entities and has revenues that are growing considerably faster. Despite this, earnings have been growing at a negative rate over the past three years, and ABFS showed a substantial loss in the most recent period. Looking at liquidity and turnover indicates that each company has strengths and weaknesses, and these are neutral factors. After removing nonoperating assets from ABFS's balance sheet, the company shows negative equity. Therefore, we looked at the company's historic debt to equity ratio, which is 2.39, and is considerably lower than the Triad Entities. Finally, due to ABFS's most recent year loss, the profitability ratios indicate that the Triad Entities are stronger.

Arnold Industries (AIND): AIND is approximately three times the size of the Triad Entities and is experiencing faster revenue growth. Earnings growth has been flat, which is positive because many companies have experienced negative earnings. The Triad Entities appear to have weaker liquidity and profitability than AIND and utilize considerably more leverage. Overall, despite the similarity in size, the Triad Entities appear to be weaker than AIND.

Builders Transport (TRUKQ) is slightly less than three times the size of the Triad Entities in revenues. Revenues have grown a little faster over the past three years and were flat in the most recent year; earnings on the other hand, decreased considerably over the last three years, particularly in the most recent period. TRUKQ utilizes considerably more debt than the Triad Entities and was less profitable. Finally, its liquidity was extremely weak. Overall, TRUKQ is a very weak company, and the Triad Entities are considerably stronger.

Heartland Express (HTLD) is only two times the revenue size of the Triad Entities. Overall, its growth, liquidity, and profitability are all stronger than the Triad Entities, and HTLD utilizes much less debt. The only weak portion of HTLD is that the company experienced negative revenue growth over the last three years. In spite of this, the company has experienced 30 percent earnings growth over the past three years. Overall, despite its smaller size, HTLD appears to be a strong, well run company.

J.B. Hunt Transport Services (JBHT): JBHT is more than 12 times the size of the Triad Entities. Despite 15 percent growth in revenues over the last three years, JBHT's earnings have declined significantly. The company's utilization of debt is considerably lower than the Triad Entities, making it stronger in this area, yet JBHT is still less profitable, and its liquidity ratios do not indicate strength. Overall, despite JBHT's size, the company appears weak financially.

M.S. Carriers (MSCA): MSCA is approximately three times the size of the Triad Entities, but has experienced revenue growth of approximately 22 percent, and relatively flat earnings. MSCA utilizes very little debt, yet despite this does not show stronger liquidity or profitability than the Triad Entities.

OTR Express (OTR): OTR is approximately two times the size of the Triad Entities and has experienced substantial revenue growth over the past three years. The company's earnings had been increasing over the four year period leading up to the most recent year, but the company experienced a loss in that year. OTR utilizes less debt than the Triad Entities, but has very weak liquidity; the company's working capital deficit has been growing and was in excess of \$10 million at the end of the most recent year. Due to OTR's loss in that year, its profitability ratios were also weaker than the Triad Entities.

Swift Transportation (SWFT): SWFT is approximately four times the size of the Triad Entities, with revenues and earnings growth of 28.6 and 37 percent, respectively. SWFT utilizes less debt, is more liquid and more profitable than the Triad Entities, and overall appears to be stronger.

Transport Corp. of America (TCAM): TCAM is approximately the same size as the Triad Entities; in the most recent year, its revenues were only about 30 percent higher. TCAM has been growing very quickly; earnings and revenues have experienced annual compound growth of 61.4 and 17.5 percent, respectively. This fast growth has - created liquidity problems, and at the end of the current year, TCAM had a working capital deficit of \$6.2 million. The company has a very strong leverage structure, however, and could possibly borrow money to meet its current obligations. Along with the growth in earnings, TCAM has also been fairly profitable. Overall, TCAM is stronger than the Triad Entities.

*(Continued)*

### EXHIBIT 7.2

US Xpress Enterprises (XPRSA): XPRSA is approximately two times the size of the Triad Entities and despite increasing revenues is suffering from decreasing earnings. Despite this, XPRSA has built up \$19 million in working capital and has stronger liquidity ratios than the Triad Entities. XPRSA utilizes less debt than the Triad Entities, but appears to be less profitable. XPRSA does not appear to be substantially stronger or weaker than the Triad Entities.

Werner Enterprises (WERN): WERN is more than five times the size of the Triad Entities. Despite flat earnings from last year to this year, WERN has experienced both earnings and revenue growth over the past three years. Overall, WERN is more liquid and more profitable than the Triad Entities, and operates with less debt. It appears to be stronger overall than the Triad Entities.

As you can see from exhibit 7.2, there can be a tremendous amount of analysis required in the application of the guideline company method. While this analysis is a bit unusual, particularly where we had 12 good guideline companies, it is a good teaching tool because the analysis is the same regardless of how many guideline companies you find. The more guideline companies that you end up with, the more time you will spend. Make sure you leave an adequate amount of time built into your budget when you quote fees! What you just saw is an analysis that was done to determine the true level of comparability between the subject company and each of the guideline companies.

This analysis will allow us to select the best companies for our subject and ultimately perform our SGLPTL analysis. What is SGLPTL (pronounced single-pittle)? No, it is not what your puppy does on the carpet! If you read the checklist earlier in this chapter, you saw it there. How come you didn't ask about it then? Well, it stands for size, growth, leverage, profitability, turnover, and liquidity (SGLPTL).

SGLPTL is a great analytical tool for comparing the subject and guideline companies. These are the six categories of factors that assist the valuation analyst in determining comparability as well as justifying the multiples that are selected. I will discuss this part of the analysis later.

## USING VALUATION MULTIPLES

Valuation multiples are considered to be usable if the valuation analyst has good information about companies that are "similar enough" to the appraisal subject and if the engagement is to value the equity or invested capital of the appraisal subject. The conventional wisdom says that multiples used frequently result in a minority, marketable estimate of value because the pricing multiples are determined from the public market. As we will discuss in a short while, this is not always the case.

Once the multiples are derived from the marketplace, they must be adjusted for the differences between the valuation subject and the guideline companies. The multiple that will ultimately be used for the appraisal subject will probably not be exactly the same as that which was derived from the guideline companies. Risk and other characteristics generally play an important part in the process of adjusting the multiples. For example, if the publicly traded guideline companies have price-to-earnings multiples of 15 (assume an incredible coincidence and that all companies were the same), and the closely held company that is being appraised is considered to be more risky, the logical conclusion is that the closely held company would be worth less. Therefore, a lower multiple would be used.

The price represented in equity multiples is the equity price of the common stock of the public company. This is used when the valuation analyst chooses to value the equity directly. There will be times when the valuation analyst chooses to value the invested capital of the company. This is usually done when there are significant differences in the financial leverage between the subject and guideline companies. Some of the more commonly used equity and invested capital multiples can be found listed in box 7.2 (on the following page). Be patient, and I will demonstrate this point in a little while.

In these instances, MVIC represents the market value of invested capital, defined as the market value of equity and debt.

Those valuation analysts who value small and medium sized companies often lose sight of the reason why certain multiples are used rather than others. Comparability is probably the single most important factor in choosing

a particular multiple. Sometimes, the choice of multiples depends on the availability of good data. Avoid choosing your favorite multiple and using it in every appraisal. Chances are, if you stick with the same multiple all of the time, you will be wrong a good portion of the time.

## PRICE TO NET EARNINGS

The appropriate situation for using a price-to-net earnings multiple is (1) when the appraisal subject has relatively high income compared to its depreciation and amortization, or when depreciation represents actual or economic physical wear and tear, and (2) when the appraisal subject has normal tax rates. If a company has higher net income compared to depreciation and amortization, a

price-to-earnings multiple is considered to be the appropriate multiple to use. However, this considers the fact that the depreciation and amortization must be a good representation of the actual wear and tear of the assets, so that replacements are being accounted for properly. If book or tax depreciation is used, rather than economic depreciation, the company may need to replace these assets either more quickly or more slowly than the manner in which depreciation is being recorded. Capital expenditures can greatly affect the cash flow of the company and, therefore, have an effect on its value. In that case, a cash flow rather than an earnings multiple would be more appropriate.

A company with normal tax rates allows comparison to publicly traded guideline company data that is reported on an after tax basis. If the company has a unique tax structure (for example, S corporation, limited liability corporation, or IC DISC), better comparability may be achieved by using pretax earnings. For nontax people, an IC DISC is an interest charge domestic international sales corporations that does not pay tax. The shareholders are taxed on the income when it is distributed. Of course, a valuation analyst could also tax-effect the subject company's earnings to make them consistent with those of the guideline companies. Tax-effecting pretax earnings means that a provision for income taxes is subtracted as if the company paid these taxes in the normal course of business.

## PRICE TO PRETAX EARNINGS

A price-to-pretax earnings multiple should be used when the subject company (1) has a relatively high income compared to its depreciation and amortization, or when depreciation represents actual physical wear and tear, but (2) has abnormal tax rates. Once again, the same rules apply for the first two items. Pretax earnings should be used when taxes are different from those of the guideline companies. I generally prefer to use pretax earnings for smaller companies because they frequently pay no taxes. Most smaller companies (and professional practices) conduct business in a manner that minimizes taxes, as opposed to maximizing shareholder wealth. Comparing these companies with similar companies or industry composite data (not large public companies) will frequently be more meaningful if it is performed on a pretax basis (you know, apples with apples, oranges with oranges).

## PRICE TO CASH FLOW

A price-to-cash flow multiple is generally used when the appraisal subject has a relatively low level of income compared to its depreciation and amortization, or when depreciation represents a low level of physical, functional, or economic obsolescence. Low levels of physical, functional, or economic depreciation generally mean that the assets will not have to be replaced in the near term. Many profitable businesses go out of business because of insufficient cash flow. On the other hand, many businesses that have high levels of depreciation and amortization are cash machines, generating very high levels of cash for the owners in comparison to low earnings. These are typical situations in which a cash flow multiple makes sense.

Many experienced business valuation analysts are of the belief that “cash is king.” Let's face it, the more cash you have, the more you can buy. This is certainly the theory that my daughter operates under. Therefore, it seems

### Box 7.2 Commonly Used Multiples

#### Equity Multiples

- Price to net earnings
- Price to pretax earnings
- Price to cash flow
- Price to operating income
- Price to book value
- Price to dividend paying capacity or dividend yield

#### Invested Capital Multiples

- MVIC to revenues
- MVIC to EBIT
- MVIC to EBITDA
- MVIC to debt free net income
- MVIC to tangible book value and debt

logical that a great emphasis should be placed on cash flow. Thinking of my kid, I wonder if we can use a multiple of price to credit card? Anyway, in many small companies, there is little difference between cash flow and earnings so either becomes a pretty good surrogate for the other.

### PRICE TO SALES

A price-to-sales (really MVIC to sales because this measure is before interest expense is deducted) multiple is generally appropriate in two situations. The first situation is when the appraisal subject is “homogeneous” to the guideline companies in terms of operating expenses. The second situation in which this multiple may be appropriate is when smaller businesses, particularly cash businesses, are appraised. Service companies and companies that are light in tangible assets are considered to be candidates for application of a price-to-sales multiple.

Some analysts use a price-to-sales multiple based on an equity price, rather than invested capital, under the theory that there is no major difference between the two. For smaller businesses that do not have the ability to have a lot of debt on their balance sheets, this is probably true. Just keep in mind that whichever you use, the answer needs to make sense.

### PRICE TO DIVIDEND OR DIVIDEND PAYING CAPACITY

A price-to-dividend multiple is probably best utilized when the appraisal subject actually pays dividends. It can also be useful when the company has the ability to pay dividends, even if it does not actually pay them. Of course, dividend paying capacity can be measured only after the valuation analyst considers the appraisal subject’s ability to finance its operations and growth. Revenue Ruling 59-60 tells us to consider “the dividend paying capacity of the company.” But even the Revenue Ruling suggests that this is not as important as the other factors to consider.

In a valuation of a minority interest, actual dividends are more important than the dividend paying capacity because the minority interest cannot force dividends to be paid. Sometimes you may find that actual dividends paid are disguised as excess compensation. For example, assume you are appraising a 45 percent interest in GRT Corp. The company has two stockholders: one owns 55 percent of the stock, and the interest that you are appraising owns the balance. Compensation and bonuses are taken in proportion to the stockholdings. The salaries were \$55,000 and \$45,000, respectively, and the stockholders-officers received bonuses of \$110,000 and \$90,000. The minority stockholder received a total compensation of \$135,000.

Some professionals may argue that if the minority interest is truly a minority, the compensation should not be adjusted because that individual cannot change the policy of the company, nor can he or she force dividends to be paid. However, if you look at the relationship between the two individuals in my example, you may find that they run the company together, they have been friends and business partners for quite a while, and all major decisions are made jointly. In this situation, you may also find that reasonable compensation—defined as what it would take to replace the individual with someone of sufficient talent, experience, and so forth to do the job that is currently being done—will be less than the sum of the salary and the bonus. If reasonable compensation is deemed to be \$75,000, a dividend was actually paid ( $\$135,000 - \$75,000 = \$60,000$ ). In this instance, a multiple of dividends may allow you to value the minority interest directly by using multiples from the public market and adjusting them for risk.

Another consideration in determining the dividend paying capacity for minority shareholder valuations is whether the minority shareholder would be considered “oppressed” under state statutes. Oppression is a legal term, and the valuation analyst should not try to make a determination without input from legal counsel. If a company has the ability to pay dividends but the controlling shareholder refuses to do so, the minority shareholders may have recourse against the controlling shareholder under the oppressed shareholder statute in that jurisdiction. This could result in a mandatory buyout at fair value, or dividends may have to be paid. What all of this means is that a minority shareholder may have legal rights, at the expense of litigation, to force dividends. This could make this multiple feasible even when dividends are not actually being paid. There is a discussion about stockholder litigation in chapter 19.

### PRICE TO BOOK VALUE

A price-to-book value multiple may be appropriate when the appraisal subject is in an industry that has a meaningful relationship between the book value and the price of the company’s stock. This would require guideline companies to be used. In the determination of the book value, smaller companies would use the sales price of the entire company as the “price” and only those assets that were actually to be sold. The valuation analyst can use return on

equity to assist in the adjustment of the price-to-book value ratio to compensate for differences in quality between the company being appraised and the guideline companies being used to assist in the development of the multiple.

## VALUING INVESTED CAPITAL INSTEAD OF EQUITY

As indicated previously, there may be circumstances in which it makes more sense to value the invested capital of the appraisal subject instead of the equity. One of the questions often posed in a valuation assignment is when to use invested capital methods. If the appraisal subject's capital structure is significantly different from those of the publicly traded guideline companies, consider using a debt free method. For example, if the appraisal subject is highly leveraged (or operating with all equity) but the industry has a very different debt-to-equity relationship, it could make sense to eliminate the effects of leveraging to make a more meaningful comparison. This does not eliminate the financial risk of the subject company. This assumes, however, that the interest being appraised has the ability to change the capital structure of the business. A minority interest does not and, accordingly, the capital structure will generally not be altered in the valuation.

Smaller, closely held companies frequently have debt on their balance sheets that may have been used for either nonoperating purposes (a mortgage on a ski resort in Vail, Colorado, when the company is a manufacturer in New Jersey) or to finance the owner's perks (the owner would not have to borrow if an excessive salary was not being taken, or if a Ford was the company car instead of a Lotus). Using valuation multiples that include the nonoperating debt, or even operating debt that is out of line with the industry, would result in an incorrect estimate of the value of the company. A willing buyer will rearrange the debt-to-equity relationship as necessary to optimize the value of the company, if that is prudent. It may also be necessary to adjust the capital structure of the subject to make it more comparable to the guideline companies. Otherwise, a proper comparison cannot be made.

When an invested capital method is used, the valuation analyst will determine the value of the company's total invested capital (equity plus debt at market values) rather than just the equity. When a valuation analyst values a company based on the total invested capital, some modifications are generally made during the valuation process. Some of these modifications include the following steps:

- Add the market value of the publicly traded guideline company's equity (price per share times the number of shares outstanding) to the guideline company's market value of the interest paying debt. The sum of these two items takes the place of the "price" in the various multiples previously discussed.
- Interest expense reflected on the income statement is added back to the earnings (or cash flow) used in the denominator of the various multiples. If the valuation analyst is using an after tax basis, interest expense is added back to earnings or cash flow, net of taxes because there is a tax benefit that is derived from the deductibility of interest expense.
- Once an estimate of value has been reached on a total-invested-capital basis, the valuation analyst then deducts the fair market value of the appraisal subject's debt to determine the value of the company's equity.

If you can be patient for a little bit longer, I will illustrate these computations with an example. But before I illustrate the invested capital computations, I want you to feel more comfortable with the concept of using multiples. Let's go over a little more theory, and then you will be ready for some number crunching.

### ADJUSTING PUBLIC COMPANY MULTIPLES FOR RISK

Once valuation multiples are determined for the guideline companies, it becomes necessary for the valuation analyst to adjust these multiples for the qualitative differences between the guideline companies and the appraisal subject. Box 7.3 indicates different risk factors that the valuation analyst should generally include, however, is not fully comprehensive of all potential risk factors. These qualitative differences will most likely relate to such factors as expected growth and the risks attributable to the appraisal subject that are different from those of the guideline companies.

#### Box 7.3 Valuation Risk Factors

- Economic risk
- Business risk
- Operating risk
- Financial risk
- Asset risk
- Product risk
- Market risk
- Technological risk
- Regulatory risk
- Legal risk



There are many other risk factors to be considered as well, but these are some of the more important items that a valuation analyst must think about in the application of not only the market approach, but also (as you will see in chapter 10) the income approach. Each of these risk factors should be analyzed from the point of view of how the appraisal subject differs from the guideline companies. Most of the information about risk will be obtained from sources other than the financial statements (Imagine that: there is more to business valuation than number crunching!). Let's discuss the risk factors.

### **Economic Risk**

Economic risk is analyzed as part of the economic analysis performed by the valuation analyst. Revenue Ruling 59-60 suggests that consideration be given to "the economic outlook in general and the condition and outlook of the specific industry in particular." The valuation analyst must determine how the subject company will be affected by changes in the economic environment in which it operates. Economic conditions at the valuation date and how they affect the company must also be considered. For example, if you were appraising an automobile dealership, consideration would have to be given to the effect that interest rates have on auto loans. If the economic forecast was that interest rates were expected to go up, one would think that car sales may be affected if people could not afford to borrow at the higher rates. However, the dealership may experience an increase in its service revenues since people may keep their cars for a longer period, thereby requiring more maintenance.

To the extent that the guideline companies selected are good "comparables," economic risk will be incorporated in the pricing multiples. The adjustments to be made will more likely compensate for differences between the guideline company and the appraisal subject that are due to factors such as regional or local economic risk. The appraisal subject may operate in an area that is different from that of the guideline companies.

### **Business Risk**

Business risk involves the analysis of the appraisal subject's business. Once again, we are interested in how the subject company differs from the guideline companies. The valuation analyst analyzes the company in terms of the risk associated with factors such as sales volatility and the volatility of the company's growth. If a company has revenues that fluctuate widely, a greater risk exists than if the company is somewhat stable. Volatile growth is obviously a greater risk as well, when you consider the cash flow needs of a growing company. If growth is volatile, it may be difficult for the company to raise the necessary capital to foster that growth. The banks may be reluctant to lend money to a company that may not be able to repay its debt next year if a reversing trend takes place.

### **Operating Risk**

The operating risks associated with a business include such factors as the fixed versus variable cost structure of the appraisal subject. The valuation analyst must analyze the cost structure of the appraisal subject to determine how much risk the company is exposed to as a result of the commitments and costs associated with the business operations. If a company has a high level of fixed costs, that may not bode well in times when revenues decrease. Obviously, if two companies are the same except that one company has higher fixed costs than the other, the company with the higher level of fixed costs would be considered to be more risky and, therefore, worth less.

### **Financial Risk**

The financial risks associated with a company pertain to the amount of leverage the company uses and the company's ability to cover its debt payments. The valuation analyst must pay particular attention to the capital structure of similar companies to analyze the appraisal subject. Companies that are heavily leveraged can find themselves in trouble when a recession hits. To determine the level of risk of the appraisal subject, different debt structures should be analyzed when one performs the appraisal.

Proper capital structure plays an important part in the financial success of a business. Companies that are overcapitalized or undercapitalized are not necessarily "comparable" to companies that have a normal capital structure. A normal capital structure is one that is similar to that of other companies in the same industry. If the appraisal subject is heavily leveraged, the valuation analyst may want to consider using an invested capital approach using earnings before tax and interest (EBIT) or earnings before interest, taxes, depreciation, and amortization (EBITDA) in the pricing multiples.

In many instances, smaller companies that are heavily indebted are structured in that manner as a result of the owner of the business choosing to finance his or her excess salary and perks and, therefore, the interest and the liability should be treated as a nonoperating item because they do not affect the business operations of the company.

### Asset Risk

Asset risk relates to the age and condition of the company's assets. Older assets represent a higher degree of risk for a company in terms of higher maintenance costs, a lower level of productivity, and functional and technological differences in available production. Not only do these items increase the level of expenditures for the company, but the future cash flow needs may also be greater due to replacement needs, which further increase the risk of the enterprise.

### Product Risk

Product risk relates to a company that has little diversification in its product line or has a product line that may become extinct with the introduction of a newer product by a different company. An example of this is the effect that the iPod had on the Walkman.

### Market Risk

Market risk relates to how geographically diversified the company is. If the company operates within a local marketplace, it can be greatly affected by changes in that local area. A more diversified market reduces the risk associated with a company. An illustration of market risk is a local restaurant that operates in a community that is dependent on a military base for business. If the government decides to close the military base, what do you think will happen to the restaurant's business?

### Technological Risk

New technology can adversely affect a company if it does not have the ability to keep up with other companies in the appraisal subject's industry. For example, a company that is unable to automate its factory would be at a competitive disadvantage, which increases the risk of the company.

### Regulatory Risk

Regulatory agencies can also adversely affect a business. Environmental regulations are probably one of the best examples of the risks that a company faces. A chemical manufacturing company can be put out of business in a very short time by the Department of Environmental Protection. This increased risk will generally cause a willing buyer to pay less for a business because he or she must be able to generate a faster return on the investment to compensate for the possible effect of new regulations. Obviously, only those regulations that can be reasonably forecast can be considered in this analysis. Do not forget about possible cleanup costs if a problem is discovered. A valuation analyst may not be able to quantify these costs, but the increased risk will affect market multiples, discount rates, and capitalization rates.

### Legal Risk

The cost of litigation in today's society can mean the end of any successful business. Even if successful, litigation can create such a financial burden on a business that it can be greatly exposed to the risk of being put out of business. Product liability claims, employee discrimination claims, antitrust litigation, and a host of other types of claims will, at times, significantly affect the value of a business enterprise by affecting future margins, capital expenditures, and so forth, but if these are industry wide, market prices may have already taken these issues into account.

## VALUATION CONSIDERATIONS

Because valuation is premised on investment theory, the valuation analyst must perform a comparative analysis of qualitative and quantitative similarities and differences between the guideline companies and the appraisal subject to assess the investment attributes of the guideline companies relative to the appraisal subject. Not all pricing multiples will be appropriate for each guideline company. Therefore, the valuation analyst should use only those multiples that are deemed to be appropriate based on the underlying financial data of each guideline company. Financial



ratios for the guideline companies, as well as the comparative analysis of the qualitative and quantitative factors regarding the differences between the guideline companies and the appraisal subject, should be used together to determine the appropriate valuation multiples to apply to the appraisal subject.

Various valuation multiples may be selected for application to the appraisal subject, and this results in several value estimates. In arriving at the valuation conclusion, the valuation analyst should consider the quality of the information that is available for the determination of each multiple.

Another consideration is the time period to be covered in the application of pricing multiples. The following are some of the more common time periods that are used:

- Pro forma period
- Latest 12 months
- Last fiscal year
- Year ahead
- Average (mean) over number of years
- Weighted average over number of years

Regardless of which time period a valuation analyst uses, Revenue Ruling 59-60 makes it clear that “valuation is a prophecy as to the future.” Whether a three-year average, a five-year average, or pro forma earnings are used in the application of these multiples, the ultimate decision on which period will be used is a subjective one on the part of the valuation analyst. Which time period is most representative of what is expected to occur in the future?

The factors to consider in selecting the time period and the method of calculating the earnings base will depend on the valuation analyst’s (or management’s) ability to forecast the future. For example, if the company has cyclical earnings, the valuation analyst may want to consider an arithmetic average. This has the tendency to smooth out the effect of the periodic cycles of the business. If the past five years, on average, are expected to resemble the next five years, plus or minus some growth, using an arithmetic average as a base and adding or subtracting some growth may be perfectly acceptable.

Because we are addressing the market approach (and not the income approach), consideration must also be given to the timing of the earnings or cash flow of the guideline companies as compared to the subject. For example, let’s assume that the subject company went through a large expansion in the most recent year, but the guideline companies went through their expansion last year. In order to capture the expansion of all of the companies, a two-year average of the historical results may be required.

If the appraisal subject is experiencing modest growth, the valuation analyst should consider weighted average earnings, the earnings for the latest 12 months, or pro forma earnings. In high growth companies, the valuation analyst should consider a discounted future benefits method (this will be discussed in chapter 10). Because the intention of the valuation process is to arrive at a “prophecy of the future,” caution must be exercised when one uses a weighted average, particularly when the company is growing. The result of the weighted average will rarely, if ever, reflect “probable future earnings” (this is the future concept discussed in Revenue Ruling 68-609). The danger in using a weighted average is illustrated in exhibit 7.3 (on the following page).

In the foregoing example, the weighted average earnings would be \$15,066. Clearly, the company’s growth would not justify a forecast of earnings of \$15,066 in the subsequent period. The growth would warrant a forecast of earnings greater than \$25,000, all other factors remaining constant. Therefore, applying a pricing multiple to the weighted average earnings would result in a value that is not truly representative of what a willing buyer would use to assess an investment decision, unless the guideline companies have similar trends, which may cause their price-to-five-year weighted average earnings multiple to be pretty high. This same concept applies in the application of the income approach. Using a weighted average is appropriate only if the result reflects the “probable future earnings” of the appraisal subject or if the earnings trends are the same for the guideline companies.

If the company’s earnings are relatively stable, it does not matter what earnings base is used as long as it reflects the facts of your engagement. If the historic stable earnings are a reasonable representation of the future, by all means, use them. It is not too often that a valuation analyst will get lucky enough to have this portion of the assignment made easy. Forecasting is like using a crystal ball. Good luck!

If the company’s earnings are declining, the valuation analyst may want to consider weighted average earnings, the latest 12 months earnings, or pro forma earnings, assuming that a turnaround is expected to take place. If it

**EXHIBIT 7.3****DANGER OF A WEIGHTED AVERAGE**

Assume that a company's earnings grew from \$1,000 to \$25,000 over a five-year period. If the earnings were as indicated in the table, the weighted average would be calculated as follows:

<b>Year</b>	<b>Earnings</b>	<b>Factor</b>	<b>Extension</b>
2006	\$25,000	× 5	= \$125,000
2005	15,000	× 4	= 60,000
2004	10,000	× 3	= 30,000
2003	5,000	× 2	= 10,000
2002	1,000	× 1	= 1,000
		<u>15</u>	<u>\$226,000</u>
	$\$226,000 \div 15 = \$15,066$		

is not, declining earnings may also require the valuation analyst to consider a liquidation method if the decline appears to be long-term or permanent. Applying the concept of “highest and best use” requires the valuation analyst to consider whether the shareholder's value would be maximized by liquidating at the date of the valuation. Continuing to operate could cause the company's equity to decline. Obviously, this is a consideration only if the interest being valued has the ability to liquidate the company.

If the appraisal assignment involves a company whose earnings are volatile, use common sense and good judgment. Experts in the appraisal field who are much smarter than yours truly could not give you better advice. A company with erratic earnings is one of the most difficult appraisal subjects. Other than applying common sense to valuation methodologies and trying to support your assumptions with good reasoning, the appraisal assignment in this situation is almost impossible. After you write your report in this type of case, it is more important than ever to have another appraisal professional review your work to see if your logic holds together. Make believe your doctor just told you that you need a serious operation. Get a second opinion!

## WHAT PRICE DO WE USE IN THE MULTIPLES?

Once the earnings base is determined, the next step is to determine the price to be used in the determination of the multiples. For public companies, the price of the stock on the appraisal date will be used in most instances. The average of the “high” and “low” prices for the day may be preferred to the “close” price; this eliminates any last minute price run-ups that may have taken place on the appraisal date. In fact, valuations performed for tax purposes should be performed this way. However, price run-ups may reflect the market; these various prices are generally pretty close to each other. If they are not, that may indicate that the public company may be thinly traded and lacks liquidity.

There may be times when the valuation analyst will choose to use an average of the high and low prices over some time period other than the appraisal date in order to compensate for unusual peaks and valleys in the market. For example, a valuation analyst may wish to compensate for stock prices on any day where there was a significant change in the market. These types of unusual stock market corrections can cause the pricing multiples to be skewed. Be very careful if you use some date other than the valuation date for the price as you may be changing the standard of value from fair market value.

## REGRESSION ANALYSIS

One of the tools that valuation analysts frequently find useful is the statistical technique known as regression analysis. If you are a statistical nerd like me, you hate this stuff. However, like it or not, you better know how to use it.

Rather than me trying to explain this stuff to you in this chapter, I have included it in chapter 8. Unfortunately, this statistics stuff is needed in several areas of what we do. Therefore, I have dedicated a section to it.

## ADJUSTING MULTIPLES BASED ON SGLPTL

So what's the deal with this SGLPTL stuff? This is a technique that I learned from several coinstructors when I was teaching for one of the appraisal organizations. It is one of the most logical, well organized concepts that I have seen. For valuation analysts, one of the most difficult parts of applying the guideline public company method is figuring out how to get from the public company multiples to an appropriate multiple for the subject company. The purpose of the SGLPTL worksheet is to help the analyst do just that.

For each pricing multiple that is chosen to be appropriate in the valuation assignment, we create a separate worksheet. The worksheet in table 7.2 below is for a price-to-revenue analysis. The public company multiples are listed across the top of the worksheet. The analyst will then consider each of the six elements of SGLPTL and the similarities or dissimilarities between the public company and the subject company. The question asked is whether the subject company is stronger, weaker, or the same as the public company with regard to each attribute. If the subject is stronger, the analyst knows that the multiple should be higher than the public company multiple and puts a "+" on the appropriate line. A weakness gets "-", and the same gets a "+/-".

Then the analyst has to decide which of the six factors are the most important in the view of investors. Typically, growth drives the public market. The really high multiples that we see are created because the investors

**TABLE 7.2**  
**SGLPTL Analysis**

		Price to revenues analysis					
		ATEC	MTMC	SVTG	SYCM	Mean	Median
	Multiple	0.21	0.26	0.25	0.09	0.2	0.2
Ratio comparison	Size <sup>1</sup>	-	+	-	+		
	Growth <sup>2</sup>	-	+/-	-	+		
	Liquidity <sup>3</sup>	-	-	+	-		
	Profitability <sup>4</sup>	+	+	+	+		
	Turnover <sup>5</sup>	-	+	-	+		
	Leverage <sup>6</sup>	+/-	+/-	-	-		
	GPCM multiple*	0.2	0.25	0.2	0.15	0.2	0.2
<p>"+" Indicates that the subject company ratios are higher the guideline company.            "-" Indicates that the subject company ratios are lower the guideline company.            "+/-" Indicates that the subject company ratios are similar the guideline company.</p> <p>* Guideline public company method.  <sup>1</sup> Size was based on revenues for 2006.  <sup>2</sup> Growth was based on three- and five-year compound average growth of revenues, unless otherwise noted.  <sup>3</sup> Liquidity was based on the current and quick ratios.  <sup>4</sup> Profitability was based on return on sales.  <sup>5</sup> Turnover was based on the working capital turnover.  <sup>6</sup> Leverage was based on the long-term debt to equity ratio.</p>							

are paying for anticipated growth. Usually, the higher the growth, the higher the multiples. Our analysts will perform a regression analysis using the guideline company data to see what the investor seems to be putting the most weight on. For example, is the multiple more highly correlated with a return on equity, return on invested capital, or profitability? The analyst must then use his or her subjective judgment to determine the appropriate multiple for the subject company compared to that one guideline company. The same process is then performed for each guideline company.

The result of the analysis is that the analyst has considered the differences between each public company, individually, compared to the subject and has chosen what is believed to be an appropriate multiple.

Based on the analysis that was performed, the analyst concluded a range of possible multiples for the subject company from 0.15–0.25, fitting well within the range of the mean and median guideline company multiples. In this case, a multiple of 0.2 was chosen. If you notice, this multiple is better than some of the guideline companies and worse than others. The narrative that would appear in the working papers, and eventually the report, would be similar to the example that you saw in exhibit 7.2.

There is no doubt that the valuation process requires the appraiser to exercise subjective judgment. We cannot merely apply a mathematical formula to do this. If we could, none of our clients would pay us the kind of fees that we get for this stuff. While you cannot *quantify* every aspect of the assignment, you can at least attempt to *qualify* the judgment calls. This will allow you to explain to the reader of your report the thought process that went into selecting the multiples. Hopefully, there is a thought process behind it! Is it perfect? Of course not. That is why we try to use several different pricing multiples in our analysis, as well as why we consider other approaches to valuation as well. Until we have a chance to reconcile all of the approaches and methods, and then perform additional *sanity checks* to test the reasonableness of the result, we cannot possibly know if we are in the ballpark.

Exhibit 7.4 provides you with a simple example illustrating the application of the market approach using guideline company information. One of the sample reports that is included on the CD-ROM that accompanied this book contains a full blown market approach from a real report. Be patient! As you review exhibit 7.4, there are several points to keep in mind. First, the selection of the guideline companies would have come from a careful review of many of the items discussed previously that makes these companies similar to the appraisal subject. Another consideration is that the median multiple, rather than the arithmetic average, is calculated. This is because the median is often a better statistical measurement because it eliminates highs and lows that may skew the average.

#### EXHIBIT 7.4 EXAMPLE OF THE GUIDELINE PUBLIC COMPANY METHOD

Guideline company information

Guideline Companies	Price/Earnings	Price/Sales	Price/ Book Value
ABC Toy Company, Inc.	8.70	55.30%	2.85
XYZ Funtime, Inc.	9.30	47.43%	4.65
Toys, Inc.	8.50	35.25%	3.65
Games Corp.	6.60	54.80%	3.90
Fun Corp.	7.80	48.20%	4.25
<b>Median multiple</b>	<b>8.50</b>	<b>48.20%</b>	<b>3.90</b>
<b>Selected multiple</b>	<b>6.20</b>	<b>44.00%</b>	<b>2.50</b>

(Continued)

**EXHIBIT 7.4** (Continued)

The selected multiples are now applied against the figures of the appraisal subject.

	<u>Price/Earnings</u>	<u>Price/Sales</u>	<u>Price/ Book Value</u>
Aftertax earnings	\$ 959,446		
Gross sales		\$13,983,541	
Book value (without nonoperating items)			\$2,415,822
Multiple	× 6.20	× 44.00%	× 2.50
Operating entity value	\$5,948,565	\$6,152,758	\$6,039,555
Net nonoperating assets	+ 250,000	+ 250,000	+ 250,000
<b>Total entity value</b>	<b>\$6,198,565</b>	<b>\$6,402,758</b>	<b>6,289,555</b>
<b>Rounded</b>	<b>\$6,200,000</b>	<b>\$6,400,000</b>	<b>\$6,300,000</b>

This example intentionally omits any calculation of valuation discounts or premiums, which are discussed in chapter 12.

According to the conventional wisdom, the results, as presented in exhibit 7.4, represent the value of the company on a marketable, minority basis because the pricing multiples come from the public stock market. This also assumes that discretionary normalization adjustments (also considered to be *control* adjustments) were not made for the appraisal subject. Stock market activity consists primarily of minority shareholders who trade in a free and active market. This derives a minority basis value. The value indication stays on a minority basis if the valuation analyst does not make *control* normalization adjustments. If adjustments are made, the result is a hybrid of minority and control, and a reasonable control premium may be added to derive a full control value. However, many valuation analysts believe that the public market is not truly a minority value. Temporarily accept the conventional wisdom, and I will discuss this in greater detail in chapter 12.

Furthermore, these shareholders have the ability to call their stockbrokers to sell these shares, and they will generally have their money within three business days. This makes these shares marketable. If a controlling interest was being valued, you might add a control premium. If the shares being valued represented a minority interest, no such premium would be necessary. Regardless of which type of interest (control or minority) is being valued, a discount for lack of marketability would probably be required because a closely held stock is not as marketable as its publicly traded counterparts.

The selection of the multiple is a subjective process based on the analysis that the valuation analyst performs throughout the valuation assignment. This process considers the risk elements as well as the differences between the guideline companies and the appraisal subject with respect to growth expectations, size, financial performance, and everything else that makes these companies different. Unfortunately, if you bought this book looking for the answer to the mysterious multiple question, you're out of luck. Seriously, the differential in the multiples has to consider the differences between the companies under analysis, and you have to test your conclusion to see if it makes sense. There are no magic tables that you can turn to for help. Remember, our job is to opine on value, not develop multiples. If your value conclusion makes sense, your multiples are probably reasonable.

You will also notice that the multiplication of the base amount by the multiple results in the value of the operating entity. This amount includes all the operating assets and liabilities of the company (assuming that you are

valuing the equity). The nonoperating assets and liabilities are added or subtracted from the value of the operating entity to reach the final entity value. However, this assumes that the nonoperating income and expenses were adjusted in the first place. There may be the need to adjust this figure further for items that are not necessarily nonoperating, however, they would not be considered as part of the operations of the business. Exhibit 7.5 provides a sample section of a report that addresses this very point.

One item should be noted about the illustration in exhibit 7.5. This valuation was done for a shareholder litigation, and the standard of value was *fair value*. The only manner in which the minority shareholder could have received compensation for the assets of ABC II was to treat it in this fashion. It was his sacrifice of dividends during the construction period that helped build this facility.

### EXHIBIT 7.5

#### SAMPLE SECTION OF REPORT ADDRESSING NONOPERATING AND OTHER ITEMS

Therefore, in our opinion, the fair value of the Smith Entities as an operating concern is estimated to be \$195.0 million. In addition, the value of the segregated nonoperating assets of the company must be added to derive the equity value of the Company. Using book value as a surrogate for market value of the intercompany and shareholder/partner loans, the value of the nonoperating assets is approximately \$15.362 million.

As stated previously in this report, the assets and liabilities of ABC II, a related real estate entity, are being treated separate and apart from the operating entity. At the valuation date, the Smith Entities were in the process of constructing a state-of-the-art distribution facility within this entity. It was still under construction as of the valuation date, so all future benefits that would be realized by the Smith Entities (and their owners) would not occur until after the valuation. These future benefits have not been factored into the expected cash flows of the company.

Because ABC II has been considered to be an entity that is not part of the operating business at the valuation date, the value of this entity should be included at this point based on its appraised value. According to the real estate appraisal performed by We Are Real Estate Appraisers, Inc., the value of this property at November 29, 2006 was \$23.93 million. In addition, according to correspondence from Barry Gold, Esquire, ABC II had already spent \$1,852,590 in the year 2006 toward the installation of the new material handling unit.

The value of the assets and liabilities of ABC II are as follows:

Cash	\$ 22,488.00
Intercompany loans	(8,893,538)
Partner receivables and loans	3,976,197
Equipment	1,852,590
Real estate	23,930,000
Fair value	<u>\$20,887,737</u>

After reflecting the assets and liabilities of ABC II, the net addition to the operating value of the Smith Entities is \$20.887 million, rounded.

Therefore, the fair value of the Smith Entities is derived as follows:

Fair value of operations	\$195,000,000
Fair value of nonoperating assets	15,362,000
Fair value of ABC II (net)	<u>20,887,000</u>
Fair value of entity	<u>\$231,250,000</u>

Now that we have the basic concept of the guideline company method for equity under control (ha ha!), let's go back to our discussion about valuing the invested capital of the appraisal subject. As indicated previously, there are several different steps that the valuation analyst must take to accomplish this. Let's use one of the guideline companies from exhibit 7.5 for our example. ABC Toy Company, Inc. had a price-to-earnings ratio of 8.70 on December 31, 2006. If the price of ABC's stock was \$47.50 on this date, this means that ABC's earnings would have to have been \$5.46 per share. The price-to-earnings ratio would be calculated as follows:

$$\begin{aligned} \text{Price/earnings} &= \text{Multiple} \\ 47.50/\$5.46 &= 8.70 \end{aligned}$$

To convert the price-to-earnings ratio from an equity multiple to an invested capital multiple, we need to adjust both the price and the earnings. First, the price. To determine the market value of the company's equity, we would multiply the price per share by the number of outstanding shares. The outstanding shares can be obtained from the annual report. Let's assume that there were one million shares outstanding. This would make the market value of ABC's equity \$47.5 million (1,000,000 shares  $\times$  \$47.50 per share).

ABC's balance sheet reflects interest bearing debt in the amount of \$5 million. Assume that this debt is at a market rate of interest (this way, the market value of the debt is equal to the face amount). Therefore, the market value of the company's invested capital is \$52.5 million, or \$52.50 per share. This becomes the new price in the price-to-earnings ratio. The price is now referred to as MVIC (market value of invested capital).

Now we need to adjust the earnings. The earnings previously calculated for ABC were \$5.46 per share. This means that the net income, after taxes, was \$5.46 million (\$5.46  $\times$  1,000,000 shares). Upon review of the company's income statement, you find that the interest expense was \$500,000 for the year. The adjustment to the earnings in the price-to-earnings ratio would be as follows:

Net income after taxes		\$ 5,460,000
Add: Interest expense (net of taxes)		
Interest expense	\$ 500,000	
Effective tax rate	$\times$ 40%	
Tax benefit	<u>\$ 200,000</u>	<u>300,000</u>
Debt free net income		<u>\$ 5,760,000</u>

ABC's earnings have now been adjusted to an invested capital basis of \$5.76 million, or \$5.76 per share. The new ratio for the market value of invested capital to debt free net income (MVIC/DFNI) would be:

$$\$52.50/\$5.76 = 9.11$$

This same calculation would be performed for each of the guideline companies. The valuation analyst then selects the appropriate multiple to apply to the appraisal subject's debt free net income. In this situation, our appraisal subject had an after tax net income of \$959,446. Its interest expense, net of taxes, would be added back to get to the debt free net income. It would be this figure against which a multiple would be applied. Let's recalculate the price-to-earnings portion of exhibit 7.5 and do the new calculations. For simplicity, exhibit 7.6 (on the following page) already has the new price-to-earnings multiples for the guideline companies on an invested capital basis.



### EXHIBIT 7.6 GUIDELINE PUBLIC COMPANY METHOD USING INVESTED CAPITAL

Guideline company information

Guideline Companies	MVIC/DFNI
ABC Toy Company, Inc.	9.11
XYZ Funtime, Inc.	10.15
Toys, Inc.	9.45
Games Corp.	7.30
Fun Corp.	8.90
<b>Median multiple</b>	<b>9.45</b>
<b>Selected multiple</b>	<b>6.90</b>

The selected multiples are now applied against the figures of the appraisal subject.

	<b>MVIC/DFNI</b>
Aftertax earnings	\$ 959,446
Add: Interest (net of taxes)*	90,000
Debt free net income	\$ 1,049,446
Multiple	× 6.90
Value of operating invested capital	\$ 7,241,177
Net nonoperating assets	+ 250,000
Total value of invested capital	\$ 7,491,177
Rounded	\$ 7,500,000
* Interest expense for the year was \$150,000. Effective tax rate was 40 percent.	

We have once again intentionally omitted valuation discounts or premiums from this example.

Exhibit 7.6 illustrates the use of the invested capital pricing multiple. If you look at the multiples for the guideline companies, you will see that they were higher on an invested capital basis. This makes sense because the result is the value of the companies' invested capital. The result is that the multiple used for the appraisal subject was also higher (6.90 instead of 6.20). A similar type of analysis of the qualitative differences between the guideline companies and the appraisal subject would have been performed to derive the selected multiple.

There should always be a correlation between the multiples that you select, regardless of what earnings base you apply them to. In the example in exhibit 7.6, the valuation analyst can test the validity of the selection process by subtracting the interest bearing debt from the value of the invested capital of the appraisal subject. If the appraisal subject's balance sheet reflects debt in the amount of \$1.3 million, the value of the equity would have been calculated as follows:

Value of invested capital	\$7,500,000
Less: Interest bearing debt	1,300,000
Value of equity	<u>\$6,200,000</u>

The value of the equity is similar to the values illustrated in exhibit 7.4. Rarely will they be exactly the same.

## ADVANTAGES OF USING THE GUIDELINE PUBLIC COMPANY METHOD

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Different approaches and methods have distinct advantages and disadvantages in the valuation process. Not all methods will be appropriate every time, but it is up to the valuation analyst to determine the best methods to be used based on the facts and circumstances of each situation. The use of information from the public stock market is considered by many valuation analysts to be an objective source of data. The stock prices of public companies are set by many transactions involving relatively few buyers and sellers. Therefore, the result is considered to be objective. However, there are some skeptics who believe that factors such as institutional computer trading remove a considerable amount of the objectivity. Others believe that the public marketplace is efficient. For those of us who remember the “efficient market hypothesis” from our finance courses, one has to wonder if the creators of this hypothesis could have ever dreamed that computers would be trading stocks on Wall Street (there goes that theory!).

Many studies of the public marketplace have been performed, analyzing the activity that has taken place in the market. These studies assist the valuation analyst in the determination of risk and value. Control premium studies, restricted stock studies, initial public offering studies, and a group of proprietary studies have been performed and published as a basis of empirical data that can be used by a valuation analyst. These items are discussed in chapter 12.

Appraisals of larger closely held companies can be performed using these methods because larger companies frequently take on many of the characteristics of their publicly traded counterparts. Therefore, comparing larger, closely held companies with publicly traded guideline companies is an effective method of valuation (remember: fair market value comes from the market!).

## DISADVANTAGES OF USING THE GUIDELINE PUBLIC COMPANY METHOD

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Despite the fact that the public market affords certain advantages to a valuation analyst, many valuation analysts feel that there is a lack of comparability between publicly traded guideline companies and a closely held appraisal subject. Although the concept of using publicly traded guideline companies as surrogates is intended to be based on comparability, no two companies are ever so closely alike that they make perfect comparables. Sometimes, particularly if the appraisal subject is a small or midsize company, there are so many differences between the appraisal subject and the publicly traded companies (for example, size, depth of management, capital structure, ability to borrow, product diversification, and geographical diversification) that a meaningful comparison cannot be made without making extraordinary leaps of faith.

In addition, the public stock market has an emotional aspect to it. This is evidenced by the fact that announcements made by companies, the government, or both create peaks and valleys in the stock market.

Another disadvantage of using publicly traded methods is that it is frequently difficult to interpret and understand the stock market data that is disseminated. Despite the amount of information available about public companies, there is often a considerable amount of information that is not available about public companies. This makes it difficult to truly compare the companies. The information that can be obtained about a public company appears in annual reports, 10-Ks, other SEC filings, and proxy statements, as well as information that is published in financial periodicals, trade publications, and the like. Because the valuation analyst is rarely given the opportunity to speak with the long range planning group, management, or anyone else in the public company, the only information that can be obtained is what the public company wants the valuation analyst (and the public) to know.

For those valuation analysts who value entire companies, there is also the difficulty of translating the minority, marketable value that is derived using these methods into a control, nonmarketable value (you know, small portions of companies with almost instant liquidity versus full companies with no liquidity). Ten shares of IBM stock have very different characteristics from 100 percent of the stock of closely held XYZ Computer, Inc.

### SO LET'S BE HONEST...

The guideline company method is as good as the data used to perform it. There are many analysts who are willing to live and die by the market, especially for a fair market value appraisal. I have frequently been told that the

income approach (which we will get to in a couple of chapters) is much more subjective because it involves a forecast and the selection of discount rates. Well, no offense, but the market approach is as subjective as, and possibly more so, than the income approach. If you do not feel comfortable with the fact that you have to analyze the appraisal subject, and then forecast its future performance, imagine the following:

1. Choose guideline companies that are a good enough fit to the subject company.
2. Understand which multiples are the most appropriate.
3. Be able to adjust the multiples for the public companies to make them applicable to the subject company.
4. Determine what income stream is the most representative for the subject company.
5. Determine if control premiums are required.

Give me a good forecast any day of the week! While I agree that fair market value comes from the market, there are times that the market approach may be very difficult to apply. Sometimes, the market approach is not the best approach to use. This can especially be the case if you are trying to measure fair value based on what a shareholder is really giving up. In chapter 19, I have included a critique that addresses the market and income approaches as used in a litigation setting. It has many good references that will emphasize many of the issues that I have discussed in this chapter. I do not want you to read it yet because you have not read the chapter about the income approach yet. Be patient, and you will get there.

## CONCLUSION

By now, either you should be very excited and ready to forge ahead, or you may be suffering from an anxiety attack. The guideline public company methodology can be overwhelming if you have never done this stuff before. In fact, if you have done it before, it still can be overwhelming. We discussed the methodology, the selection of multiples, the assessment of risk, and the advantages and disadvantages of the method. I hope you realize that the guideline public company method can be applied to small and medium sized companies. Sometimes it may be difficult to apply, but that does not excuse you from using it. In the next chapter, we get to apply the spirit of this same approach, but at the entity level. Let's do it!



## CHAPTER 8

# *The Market Approach— Part II*

### CHAPTER GOALS

In this chapter, I will finish explaining the market approach. Because the last chapter discussed the theory behind the market approach, it will not be repeated (too much) here. This chapter will include:

- A discussion about the merger and acquisition (transaction) method
- Highlights of different private transaction databases
- The practical application of the merger and acquisition method
- Internal transactions
- Rules of thumb (the only thing that some folks use!)

### INTRODUCTION

After the last chapter you are probably thinking that because you value small businesses, you will never use the market approach. And if you are not thinking that, you might be thinking that a job preparing income tax returns is starting to look better and better. So now I am going to shift gears to show you how the market approach will change your life. The guideline public company method will not be applicable in all assignments, particularly if the subject company is very small, but the valuation analyst has alternatives. The merger and acquisition method allows the valuation analyst to locate sales of businesses in the same or a similar industry for the purpose of applying the market approach. Sometimes transactions that are internal to the subject company are the best data to be used to determine value. Also, although rules of thumb should never be used as a valuation method, the valuation analyst needs to be aware of them. Just sit back, grab a drink, and let's discuss the market approach some more.

### MERGER AND ACQUISITION (TRANSACTION) METHOD

The spirit of Revenue Ruling 59-60 is frequently applied by the use of the merger and acquisition method of appraisal. In this method, transaction data is used in a manner similar to that in the guideline public company method previously described. Instead of selecting individual guideline companies, actual transactions involving companies similar to the appraisal subject are used to determine pricing multiples. In this instance, the price is that of the entire company instead of a share of stock.

The merger and acquisition method can be applied by using either public company or private company data. Because the entire company has been sold, the transaction is considered by valuation analysts to result in a control value. If public companies are used to develop the multiples, the results are control, marketable values. If private companies are used instead, the result is a control, nonmarketable value.

Before we go too far, let's discuss this concept of control, nonmarketable value. This tends to confuse a lot of people. The control portion of that phrase should not be the problem. Obviously, if an entire company is sold, it represents a controlling interest. But how can it be nonmarketable if it has been sold? Here is where the confusion sets in. Chapter 12 will cover this stuff in more detail, but a preview is in order. An interest in a privately held company is often considered to be less marketable than an interest in a publicly traded company. If you own shares of

a public company, you can call your broker, sell the stock, and usually receive cash in about three days. You cannot do that with closely held stock. That is why the private company is considered to be nonmarketable compared to the public stock. Perhaps a better term would be *illiquid*.

Because selling a privately held company takes more than three days, it too is considered to be nonmarketable. This does not mean that it cannot be sold. It only means that it lacks the liquidity of shares of publicly traded stock. There is a debate in the appraisal profession that has been going on for a very long time about this entire topic, and I discuss it in much greater detail in chapter 12. However, for the purpose of this chapter, and until you decide which side of the battle you want to defend, sales of closely held companies are considered to be nonmarketable. Sales of entire publicly traded companies are considered to be marketable. This should give you enough for the time being, but here's something to tuck away in the back of your head (if it isn't already spinning from this stuff): Can an entire company really be sold in three days, and if not, does the closely held company, taken as a whole, really have any less liquidity than the public company sold as an entire unit?

Sources of data about acquired or merged companies were discussed in chapter 5. At this point, the manner in which you proceed depends on whether you are using transaction data from the public or private marketplace. Let's discuss each separately:

- **Public market.** Once you have identified transaction data from the public market, an analysis must be performed similar to what was suggested under the guideline public company method. Once the target companies are determined to be similar enough to the appraisal subject, pricing multiples can be calculated for the transactions. These multiples can then be adjusted for the differences between the appraisal subject and the target companies and then applied to the appraisal subject's figures. Because this process is so closely related to the guideline public company method, there is little need to elaborate further.
- **Closely held market.** The real difference in the merger and acquisition method comes when one uses closely held company transaction data. This type of data is frequently available with limited amounts of details. Some authors believe that if you cannot verify each and every transaction, you cannot use this data. I believe that some data may be better than no data. As long as the valuation analyst recognizes the potential deficiencies in the application of this method, it remains a viable alternative. In fact, sometimes I would rather use this method than any other for small businesses.

Getting away from the public sector moves our discussion to compilations of actual transactions in the closely held world. Our firm has found several sources to be somewhat useful in our quest for transaction data for the closely held business. These sources can be found in box 8.1. Needless to say, some are better than others.

### **Box 8.1 Sources of Business Transactions**

1. The Institute of Business Appraisers (IBA) Market Database
2. BizComps
3. Pratt's Stats
4. Done Deals
5. Public Stats
6. Mergerstat/Shannon Pratt's Control Premium Study
7. Thomson Financial Mergers and Acquisitions
8. Business Brokers

The resources in box 8.1 are presented in no particular order, but the first few will be more useful for smaller businesses being valued. The databases numbered four through seven contain both: public and private transactions. One of the first things that the valuation analyst must do if these databases are going to be used is to learn the various definitions used by each one. The terminology used in these databases varies, and, therefore, it is very easy to apply a multiple to the

wrong level of earnings, or other benefit stream, if you are not careful. Some of the more important variations of the terminology will be detailed in this discussion. Recognizing that each of these sources of information has certain deficiencies, the valuation analyst is faced with using common sense and sanity tests to ensure the reasonableness of the results. This is not any different from everything else that we do in this business.

## IBA MARKET DATA BASE

Available only to Institute of Business Appraisers (IBA) members, this database is the largest known source of market transactions of small closely held businesses. It has been compiled over the years from IBA members and other professionals associated with the sales of businesses. The current database parameters for the IBA Market Database, according to the IBA Web site ([www. http://www.go-iba.org/benefits.php](http://www.go-iba.org/benefits.php)),<sup>1</sup> are included in exhibit 8.1.

### EXHIBIT 8.1

#### INSTITUTE OF BUSINESS APPRAISERS MARKET DATABASE PARAMETERS

##### Database Parameters:

1. Number of transactions in the database: 30,311.
2. Number of transactions in the database in the following size ranges:

\$0–\$500,000 in annual sales:	21,611 (71.30%)
\$500,001–\$1,000,000 in annual sales:	4,240 (13.99%)
\$1,000,001–\$5,000,000 in annual sales:	3,114 (10.27%)
\$5,000,001–\$10,000,000 in annual sales:	353 (1.16%)
Greater than \$10,000,000 in annual sales:	258 (.85%)

3. SIC categories in which there are:

At least 1 transaction:	775
At least 2 transactions:	596
At least 5 transactions:	427
At least 10 transactions:	299
At least 20 transactions:	184
At least 50 transactions:	99
At least 100 transactions:	50

4. The significance of the number of transactions is that, the greater the number of transactions, the more accurately the market can be defined. Not surprisingly, the SIC categories with the largest number of transactions correspond to the most common types of small and mid-size businesses.

Some individual SIC categories with more than 100 transactions in the database:

SIC	Business Type	No. of Transactions
5812	Eating Places	5358
8021	Dental Practices	2583
5813	Drinking places	942
5411	Grocery Stores	895
7231	Beauty Shops	689

(Continued)

<sup>1</sup> Accessed September 17, 2007.



**EXHIBIT 8.1** (Continued)

<b>SIC</b>	<b>Business Type</b>	<b>No. of Transactions</b>
7389	Business Services	679
5541	Gasoline Stations	671
7215	Laundry & Dry-Clean	670
0782	Lawn & Garden	480
5992	Florists	445
7349	Building Clean/Maint.	421
5921	Liquor Stores	380
5999	Misc Retail	379
2752	Commercial printing	337
7538	Auto Repair	336
8721	Accounting	334
8351	Day Care	313
7299	Personal Services	306
5947	Gift, Novelty Retail	290
7841	Video Rental	261
5461	Bakery	234
7216	Dry-Cleaning Plants	225
4724	Travel Agencies	217
5451	Dairy Product Retail	212
7331	Direct Mail Advertisers	196
7532	Auto Body Repair	194
5531	Auto and Home Supply Retail	192
6531	Real Estate Agent/Management	176
7212	Garment Pressing	174
1711	Heating, Plumbing A/C	158
5962	Vending Machine Operators	157
5331	Variety Stores	156
5941	Sporting & Bicycle Shops	153

The IBA Market Database includes more than 30,000 transactions in 775 SIC codes. Many SIC categories have so many transactions that a highly supportable statistical inference can be drawn from this data. Most of the transactions included in the database are for businesses that had a sales volume below \$1 million. As you can see, the database is geared toward transactions of the very small business. Small businesses typically are sold as asset sales as opposed to stock sales. An *asset sale* is a transaction where only certain assets (and maybe liabilities) are transferred to a purchaser who will effectively become the new owner of the business. More often than not, only the operating assets of the business are transferred to the buyer. This type of transaction is common for smaller businesses. It is also very different from a *stock sale*, which is typical of larger business transactions. In a stock sale, the stock (all assets and liabilities) is transferred to a buyer. This transfer represents the entire equity of the company. The transaction type is a critical point to understand when considering multiples, and it will be addressed in length later in this chapter.

Figure 8.1 depicts a sample of what you get when you request information from IBA. It is in Excel format.

**FIGURE 8.1**  
**IBA MARKET DATA BASE—SIC CODE 6531**

	A	B	C	D	E	F	G	H	I	J
	Business Type	Annual Gross \$000's	Annual Earnings \$000's	Owner's Comp. \$000's	Sale Price \$000's	Price/Gross	Price/Earnings	Geographic	Yr/Mo of Sale	
23	Real estate brokerage	63000			46000	0.73			84/8	
24	Real estate broker	30000	2430		19700	0.66	8.11		79/7	
25	Real estate brokerage etc	20000			8000	0.40			84/6	
26	Real estate	8100	1000		10200	1.26	10.20		73/1	
27	Hotel Management Co.	4500	20	1000	7000	1.56	350.00	TN	90/12	
28	Reit Management Co.	1229	485	144	2400			ND	00/5	
29	Property Management	1224	25		115	0.09	4.60	SC	91/12	
30	Real estate	1200			1300	1.08			72/1	
31	RE Sales & Management	1102	152		350	0.32	2.30	CA	93/11	
32	Property management	607	92		300	0.49	3.26	FL	93/10	
33	Real estate	475	110	80	200	0.42	1.82	WI	90/8	
34	Property Management	459	112		200	0.44	1.79		98/2	
35	Property Management	455	70		165	0.36	2.36	SC	90/12	
36	RE Property Management	410	95		171	0.42	1.80	Central FL	98/2	
37	Real estate agency	400	80		120	0.30	1.50		89/1	
38	Real estate office	393	40		35	0.09	0.88	IL	89/10	
39	Property Management	340	90		175	0.51	1.94		98/4	
40	Real estate mngmt	336	50	50	68	0.20	1.36	FL	90/2	
41	Property management	276	58		110	0.40	1.90	FL	93/12	
42	Property Management	262	89		200	0.76	2.25	OR	98/1	
43	Property Management	250	70		130	0.52	1.86	UT	97/10	

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Now that you have a feel for what the data looks like, you may want to know what the data represents. Box 8.2 lists the fields contained in the IBA database, along with a definition of each item.

In reviewing box 8.2, there are a few things that may come to your attention. The first is that the database lists only the principal line of business, which is typically two or three words. Not much information is given about the target company (the one that was acquired) that will aid a valuation analyst in determining comparability. One of the major drawbacks of this database is that it contains little qualitative information about each business.

### Box 8.2 IBA Data and Definitions

Business type	Principal line of business
SIC code	Principal Standard Industrial Classification number applicable to the business sold
Annual gross	Reported annual sales volume of business sold
Annual earnings	Reported annual earnings before owner's compensation, interest, and taxes
Owner's compensation	Reported owner's compensation
Sale price	Total reported consideration (that is, cash and liabilities assumed, among other items, but excluding real estate)
Price, gross	Ratio of total consideration to reported annual gross
Price, earnings	Ratio of total consideration to reported annual earnings
Year per month of sale	Year and month during which transaction was consummated

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Annual earnings are reported as earnings before owner's compensation, interest, and taxes, which reflects the total compensation of an investor in a small business (assuming that the owner will be the operator of that business; it also assumes only one owner). As discussed throughout this book, a valuation analyst must take care to apply a multiple to the correct level of earnings. When applying an IBA multiple to earnings, make sure that the earnings stream is defined and calculated as indicated in box 8.2.

Another question that may arise when using this data is about the sales price, which is reported as a dollar figure. Terms of the deal (typically including some type of seller financing) are not disclosed. As every good student knows, a dollar today is more valuable than a dollar 10 years from now. Because fair market value is considered to be a cash or cash equivalent value, knowing the terms of the deal could make a difference. If you do not know the terms of a deal, the IBA listed price may not be its cash equivalent value.

In an attempt to better understand the significance of the transaction data included in the database, an empirical study was undertaken by Raymond Miles, the founder and past Executive Director of IBA, and his results were presented at an IBA national conference many years ago. The data from this presentation is still currently on the IBA Web site as it is still believed to be true.

Mr. Miles concluded the following:

The price-to-earnings and price-to-gross revenues multiples are almost equally valid criteria for estimating the market value of businesses. This conflicts with the conventional wisdom that the price-to-earnings ratio is the most significant performance criterion of a business.

In practice, the price-to-gross revenue multiple is especially useful for appraising closely held businesses, because price-to-gross revenue multiples are available for all sales in the IBA Market Database, while price-to-earnings multiples are only available for some sales.

Empirical data for all business categories, in aggregate, does not show any significant change in business value as a function of time. This is contrary to the conventional wisdom that only recent sales should be considered when choosing guideline (comparable) companies.

The data shows no significant correlation between the selling price and the percentage down payment. This differs from the conventional wisdom that a business sold for cash should bring a lower total price than one sold for terms.

As expected, business values as measured by price to earnings and price to gross multiples differ from one kind of business to another. However, this difference is not as large as might have been expected. This suggests that the search for guideline companies does not need to be limited to businesses in the same SIC category as the business being appraised. Thus, the search for guideline companies can reasonably include SIC categories other than the category assigned to the business being appraised.

Empirical evidence indicates that the "most probable price" for a business is significantly different from the average price of businesses that have been sold. Thus, when the standard of value is "most probable price," use of the average selling price of guideline companies can lead to a value estimate that is in error by a significant amount.<sup>2</sup>

Being the accountant that I am, and being suspicious of people who publish information that could be deemed self-serving, I was provided with the opportunity to review Mr. Miles' study in this area. His findings were accurate. In fact, what really blew my mind was the fact that transactions that were 10 and 15-years-old, in most industries, were still valid. Now, don't get me wrong, using dated transactions can often be a difficult task, especially when you have to explain it to a judge or jury, but certain industries have been fairly consistent over the years. With that said, certain industries are very different. What I am really saying is analyze the data to see what the impact is for the particular situation.

Even geographically, the multiples were not materially different. In another study<sup>3</sup> published by Mr. Miles, he disclosed the data presented in table 8.1.

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<sup>2</sup> Raymond C. Miles, "Business Appraising in the Real World: Evidence From the IBA Market Database" (paper presented at the IBA National Conference, Orlando, FL, February 7, 1992).

<sup>3</sup> Raymond C. Miles, "Business Values in the Real World: Evidence from the IBA Transaction Database" (paper presented at the American Society of Appraisers Business Valuation Conference, Houston, TX, October 23, 1993).

As can be gleaned from table 8.1, Price/Earnings multiples, and especially Price/Gross Revenue multiples, were not materially different from one geographic region to another. Following completion of the study, the author determined that a major reason for the higher Price/Earnings multiples for the Northeast geographic region was submission of many business sales by one business broker who dealt with high-end businesses.<sup>4</sup>

Now of course, you want to test the data before you use it, but this database gives the valuation analyst a methodology that can be applied to small businesses.

You must also use your head when using this or any other database to ensure that you have enough transactions to be statistically reasonable. As you can see, there are many things to consider when using this data. Answers to many of the issues discussed above, as well as others that may not have been addressed, can be found in publications available from IBA on its Web site ([www.go-iba.com](http://www.go-iba.com)). In fact, IBA also has a variety of tutorials on its Web site as to how to use this data. IBA even offers a free data analyzer (I like that word) on its Web site that allows the user to analyze market data (the IBA market analyzer is available for download at [www.go-iba.org/analyzer](http://www.go-iba.org/analyzer)). Use of this analyzer, as well as a more detailed discussion of transaction data analysis, is included later in this chapter.

## BIZCOMPS

The BizComps database includes sales information by SIC category as accumulated by Jack Sanders. The most convenient manner in which to subscribe to this database is through Business Valuation Resources, LLC ([www.bvmarketdata.com](http://www.bvmarketdata.com)). Here also is a lot of useful data, but the valuation analyst should be careful to understand what is included in each item. Much like the IBA database, BizComps reports seller's discretionary cash flow as a measure of earnings, but this definition includes depreciation, amortization, and all other non-cash and nonoperating expenses.

According to Business Valuation Resources,

BizComps contains transactional information on "Main Street" businesses (service station, restaurant, convenience store, print shop, travel agent, florist, coin laundry, beauty salon, auto repair shop, video rental, day care center, etc.) dating back to 1993. Jack Sanders, who is located in San Diego, California, publishes this study. Historically, transaction data on small business transfers has been virtually nonexistent, leaving the investor or advisor to speculate about the fair market value of the small business enterprise. This database removes the marketplace uncertainty and provides the user with detailed, meaningful financial information about these "real world" transactions.

Subscribers to BizComps are granted access to all of the details in the database, including annual gross revenue, asset figures, operating ratios, and the price and terms of the sale. Additionally, Sale Price/Gross Revenues and Sale Price/Seller's Discretionary earnings multiples are calculated for each transaction reported. And once you have found the information you need, you can effortlessly export it to a Microsoft Excel spreadsheet, print the individual transaction reports, or recalculate the summary financial statistics.

As of July 2007, BizComps contained 10,157 total transactions. In addition to 1,592 transactions in the restaurant industry, the database also contains over 900 deals in business services (SIC 7300) and 740 deals in the area of personal service (SIC 7200). 61% of the deals in the database have less than \$500,000 in annual gross revenue, while 18% of the deals have annual gross revenues over \$1 million. The entire database is searchable by various parameters with transactions updated throughout the year.<sup>5</sup>

**TABLE 8.1**  
**MILES' PRICE TO EARNINGS AND PRICE TO GROSS REVENUE DIFFERENCE STUDY**

Region	Price to Earnings Different From		Price to Gross Revenue Different From	
	Mean	Nat'l avg.	Mean	Nat'l avg.
Southwest	2.10	-11.00%	0.54	-4.00%
Northwest	2.60	11.00%	0.57	6.00%
Southeast	2.23	-7.00%	0.56	1.66%
Northeast	2.99	25.00%	0.54	1.66%
All Regions	2.39	—	0.54	—

<sup>4</sup> Ibid.

<sup>5</sup> *BizComps*, <http://www.bvmarketdata.com/defaulttextonly.asp?f=BIZCOMPS%20Intro> (accessed September 17, 2007).

According to the *BizComps User Guide*, what was actually sold includes the following:

Only two elements are contained in either the BizComps Asking Price or the Sale Price. The items are Fixtures & Equipment (F&E) and Goodwill, the intangible value. Cash, accounts receivable, loans receivable, real estate, and other assets are not included, and all liabilities have been excluded. All licenses necessary to conduct business are generally included. This is nothing magical—just simply the way these businesses are sold. They are all asset sales or have been converted to an asset sale.

The sellers of these businesses rarely are willing to part with the cash and accounts receivable and the buyers are rarely willing to pay for it. And the businesses are considered to be debt-free at close even if there are new loans coming on board from the seller or others. Sellers usually are responsible for paying off all debt at the close of sale.<sup>6</sup>

To better illustrate the contents of this database, as well as what the contents include, I have included a listing of the BizComps fields as outlined in its user guide in box 8.3.

### Box 8.3 BizComps Field Definitions

SIC = Small Business Industry Classification Number (Standard Industrial Classification)  
 NAICS = North American Industry Classification System  
 BUS TYPE = Best Description of Subject Business  
 ASK PRICE = Asking Price (000's) *Does not include inventory*  
 ANN GROSS = Annual Gross Sales (Normally Net of State Sales Tax)  
 SDE = Seller's Discretionary Earnings (Net Profit Before Taxes *and any compensation to owner plus Amortization, Depreciation, Interest, Other Non-Cash Expense and Non-Business Related Expense*) *SDE Assumes One Working Owner*  
 SDE/GROSS SALES = Seller's Discretionary Earnings Divided by Gross Sales  
 SALE DATE = Actual Date of Sale  
 SALE PRICE = Actual Sale Price (in 000's) *Inventory has been deducted if it was in Sale Price*  
 % DOWN = Down Payment as a Percent of Sale Price  
 TERMS = Terms of New or Assumed Encumbrance  
 SALE/GROSS = Sale Price Divided by Gross Sales  
 SALE/SDE = Sale Price Divided by Seller's Discretionary Earnings  
 INV = Inventory At The Time of Sale (in 000's) *Inventory is not included in Sale Price*  
 FF&E = Estimate of Value of Furniture, Fixtures & Equipment  
 RENT/SALES = Rent as a Percent of Sales  
 DAYS ON MKT = Actual Number of Days Business Was on Market  
 FRANCHISE ROYALTY = Actual Royalty Less Advertising Percentage  
 AREA = Region or Geographical Location of Business

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There are many useful data points in the BizComps database that the IBA database does not have. BizComps has the asking price as well as the sales price, which can give a valuation analyst a better idea of what is really going on in the market. Two important pieces of information included in BizComps are the percent down payment and terms of financing. Although the Miles study claims that the down payment does not matter, the terms of financing certainly do. This will allow a valuation analyst to estimate the cash equivalent value of the transaction price. An example of a BizComps transaction is shown in figure 8.2.

<sup>6</sup> *BizComps*, "User Guide," <http://www.bvmarketdata.com/pdf/BIZCOMPS-Guide.pdf> (accessed September 17, 2007).

FIGURE 8.2  
BIZCOMPS TRANSACTION

The screenshot shows the BIZCOMPS 2001 software interface. The window title is "BIZCOMPS 2001". The menu bar includes "File", "View", and "Help". The toolbar contains icons for file operations, a search icon, a graph, and a help icon. The main area is divided into three tabs: "Database View", "Detail View" (selected), and "Valuation View". The "Detail View" tab displays the following information:

SIC Code.....	5992.00	SP/SDCF.....	1.76
NAICS Code....	45311	SDCF/REV....	0.27
Business Type..	Retail-Florists	SP/REV.....	0.47
Asking Price....	92	Inventory.....	4
Ann Rev.....	267	FF&E.....	45
SDCF.....	71	Rent%.....	9.0%
Sales Date.....	8/29/1996	Area.....	W
Sales Price.....	125	Location.....	Texas
% Down.....	32%	Franchise Pyl	N/A
Terms.....	5 Yrs @ 9%	Days on Mkt..	177

At the bottom of the window, there is a status bar that reads "Database Sorted By : SIC #". Above the status bar, there are navigation buttons: "K", "<", "RECORD: 4681", ">", and "I", along with a "Selected" checkbox.

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As seen in figure 8.2, this particular transaction was closed at a sales price of \$125,000, with a 32 percent down payment and the remainder financed over five years at an interest rate of 9 percent. As of the date of the sale, the prime rate was 8.25 percent. For argument's sake, let's assume that a typical buyer of this type of business could

only get financing at prime rate plus 3 percent, or 11.25 percent. What this means is that this buyer was able to obtain below market rate financing, which adds value to the buyer, but the price listed is not indicative of a cash equivalent value. To calculate the cash equivalent value, the analyst must forecast all cash flows from the loan and discount them to the present value at the date of the transaction using the market rate of debt as the discount factor. For illustration purposes, let's assume that the loan is paid out in equal installments over a five year period (table 8.2).

TABLE 8.2  
EXAMPLE OF A CALCULATED CASH EQUIVALENT VALUE

Sale price	\$125,000				
Down payment	<u>40,000</u>				
Amount financed	<u>\$ 85,000</u>				
Financing period	5				
Interest rate	9.00%				
Market interest rate	11.25%				
Year	1	2	3	4	5
Loan balance	<u>\$ 85,000</u>	<u>\$68,000</u>	<u>\$51,000</u>	<u>\$34,000</u>	<u>\$17,000</u>
Principal payment	<u>\$ 17,000</u>	<u>\$17,000</u>	<u>\$17,000</u>	<u>\$17,000</u>	<u>\$17,000</u>
Interest payment	<u>7,650</u>	<u>6,120</u>	<u>4,590</u>	<u>3,060</u>	<u>1,530</u>
Total payment	<u>\$ 24,650</u>	<u>\$23,120</u>	<u>\$21,590</u>	<u>\$20,060</u>	<u>\$18,530</u>
Present value of total payment	<u>\$ 22,157</u>	<u>\$18,680</u>	<u>\$15,680</u>	<u>\$13,096</u>	<u>\$10,874</u>
Total present value	<u>\$ 80,487</u>				
Plus: down payment	<u>40,000</u>				
Cash value	<u>\$120,487</u>				

**TABLE 8.3**  
**RESULTING DIFFERENTIAL BASED**  
**ON MULTIPLE OF SALES PRICE**

	<b>As Reported</b>	<b>Cash Equivalent Value</b>
Annual revenues	\$267,000	\$267,000
Deal value	125,000	120,487
Multiple	0.47	0.45

The data from table 8.2 indicates that the cash equivalent value of this deal was only \$120,487, almost \$4,500 below the reported transaction price. In this same example, the annual revenues of the business were \$267,000. If the valuation analyst were to calculate the multiple of sales price to annual revenues, a very different result is realized (table 8.3). Table 8.3 includes only a small difference, but imagine how far off you could be depending on the financing terms.

Also stated separately in this database are inventory and fixed assets. As with the IBA Market Database, the

BizComps transactions are asset sales, which means that only the operating assets are transferred to the purchaser. The \$125,000 sales price, by definition in the database, excludes \$4,000 of inventory. However, it would include the fixed assets (these are the operating assets). Therefore, even though it is not given in the database, the intangible assets that were part of the transaction can be calculated by subtracting the fixed assets from the transaction price ( $\$125,000 - \$45,000 = \$80,000$ ). By including the operating assets in the database, BizComps gives the user the ability to estimate the intangible value that was part of the deal.

BizComps lists rent and franchise royalties as a percent of sales so that a user of the database can get a better idea of the fixed costs of the business. It also provides the number of days that the business was on the market before the sale closed. This piece of information is very interesting. One of the issues that analysts encounter with every assignment is the level of marketability of the subject business and a corresponding discount for lack of marketability (discussed in chapter 12) if it is applicable. Although using a sales price to earnings stream multiple yields a control, nonmarketable value, this information gives the user some basis to support a discount for lack of marketability for another method (let's say that you capitalized earnings—discussed in Chapter 10).

Overall, BizComps gives more data fields than the IBA Market Database, but as discussed, it has much fewer transactions (10,000 as compared with 30,000). The desktop version of the database comes with software that enables quick and easy analysis of selected transactions and gives a user the ability to value subject companies based on sets of transaction multiples. The analysis performed is by no means all-inclusive, but it provides an easy way to do a quick analysis. Analysis of transaction data will be discussed in more detail later in this chapter.

## PRATT'S STATS

Pratt's Stats is a resource for small or medium to large closely held company sale information. Pratt's Stats contains details on approximately 10,000 private and closely held business sales from 1990 to the present ranging in deal price from under \$1,000,000 to \$14,435,000,000. The industries represented in Pratt's Stats are also pretty broad, as evidenced by the roughly 700 unique SIC Codes and 840 unique NAICS Codes. Additionally, Pratt's Stats has about 210 SIC and 230 NAICS Codes with 10 or more transactions reported. This database, started by Shannon Pratt, and now carried on by Business Valuation Resources, is an excellent source for transaction data, and it has taken small business transaction reporting to the next level. Pratt's Stats data is available online at [www.bvmarketdata.com](http://www.bvmarketdata.com).

Pratt's Stats search criteria includes the industry SIC or NAICS code, company description, city and state location, revenue range, text searches, and many other key data fields for each transaction. The ability to further select specific deals from the initial search, recalculate the summary statistics, and print or export to Excel spreadsheet formats are some of the features found here. Currently, you can download up to over 80 fields of information for each transaction from the database (although, as you may have noticed with IBA and BizComps, not all information is available for each transaction). Figure 8.3 reflects a Pratt's Stats transaction report for a hardware distributor.



### FIGURE 8.3 PRATT'S STATS TRANSACTION REPORT

Pratt's Stats <sup>®</sup> Transaction Report			Prepared: 2/15/2008 10:00:31 AM (PST)		
<b>Seller Details</b> Target Name: N/A Business Description: Distributor of Hardware Items to Hardware and Paint Stores SIC: 5072 Hardware NAICS: 423710 Hardware Merchant Wholesalers Sale Location: United States Years in Business: 40      Number Employees: 8			<b>Source Data</b> Broker Name: Humphrey, David Broker Firm Name: Beacon Capital Group		
<b>Income Data</b> Data is "Latest Full Year" Reported: Yes Data is Restated (see Notes for any explanation): No Income Statement Date: 12/31/2005 Net Sales: \$2,841,659 COGS: \$2,095,706 Gross Profit: \$745,953 Yearly Rent: \$42,310 Owner's Compensation: \$107,400 Other Operating Expenses: \$493,818 Noncash Charges: \$12,525 Total Operating Expenses: \$656,053 Operating Profit: \$89,900 Interest Expenses: \$0 EBT: \$89,900 Taxes: \$0 Net Income: \$89,900		<b>Asset Data</b> Data is Latest Reported: Yes Data is "Purchase Price Allocation agreed upon by Buyer and Seller": Yes Balance Sheet Date: 7/10/2006 Cash Equivalents: \$0 Trade Receivables: \$331,000 Inventory: \$593,000 Other Current Assets: \$0 Total Current Assets: \$924,000 Fixed Assets: \$0 Real Estate: \$0 Intangibles: \$400,000 Other Noncurrent Assets: \$0 Total Assets: \$1,324,000 Long-term Liabilities: N/A Total Liabilities: N/A Stockholder's Equity: N/A		<b>Transaction Data</b> Date Sale Initiated: 3/15/2005 Date of Sale: 7/10/2006 Asking Price: N/A Market Value of Invested Capital*: \$1,324,000 Debt Assumed: N/A Employment Agreement Value: \$0 Noncompete Value: \$0 Amount of Down Payment: N/A Stock or Asset Sale: Asset Company Type: C Corporation Was there an Employment/Consulting Agreement?: No Was there an Assumed Lease in the sale?: Yes Was there a Renewal Option with the Lease?: Yes *Includes noncompete value and interest-bearing debt; excludes real estate, employment/consulting agreement values, and all contingent payments.	
<b>Additional Transaction Information</b>					
Was there a Note in the consideration paid? No			Was there a personal guarantee on the Note? No		
Terms:			Terms of Lease: 18 months left on lease with renewal period		
Assumed Lease (Months): N/A			Noncompete Description: New England		
Noncompete Length (Months): 60					
Employment/Consulting Agreement Description:					
Additional Notes:					
<b>Valuation Multiples</b> MVIC/Net Sales: 0.47 MVIC/Gross Profit: 1.77 MVIC/EBITDA: 12.93 MVIC/EBIT: 14.73 MVIC/Discretionary Earnings: 6.31 MVIC/Book Value of Invested Capital: N/A		<b>Profitability Ratios</b> Net Profit Margin: 0.03 Operating Profit Margin: 0.03 Gross Profit Margin: 0.26 Return on Assets: 0.07 Return on Equity: N/A		<b>Leverage Ratios</b> Fixed Charge Coverage: N/A Long-Term Debt to Assets: N/A Long-Term Debt to Equity: N/A	
<b>Earnings</b> EBITDA: \$102,425 Discretionary Earnings: \$209,825		<b>Liquidity Ratios</b> Current Ratio: N/A Quick Ratio: N/A		<b>Activity Ratios</b> Total Asset Turnover: 2.15 Fixed Asset Turnover: N/A Inventory Turnover: 4.79	

N/A = Not Available

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As illustrated in figure 8.3, Pratt's Stats has many more data points for each transaction than IBA or BizComps. For instance, look at the item on the page, titled "Broker Firm Name." As previously discussed, the first two databases had limited data to determine comparability, whereas Pratt's Stats has taken the next step and given the user the name of the intermediary who participated in the transaction. Just from this one field, you have the opportunity to verify the listed transaction with the broker. There are many other useful data points listed in Pratt's Stats, and full definitions for all fields are available on the Web site under Pratt's Stats FAQ, which is shown in exhibit 8.2.

## EXHIBIT 8.2

### PRATT'S STATS DEFINITIONS

#### What is the legend for Pratt's Stats Transaction Details?

Term	Definition
Broker Name	The name of the business broker or business intermediary that was involved with the sale of the business. This intermediary provided the sale details to Pratt's Stats.
Firm Name	The name of the firm with whom the business broker or business intermediary works. This is not the name of the acquirer.
SIC	The four-digit Standard Industrial Classification (SIC) code associated with the description of the sold business. Go to <a href="http://www.osha.gov/oshstats/sicser.html">http://www.osha.gov/oshstats/sicser.html</a> to search for an SIC code.
NAICS	The North American Industry Classification System (NAICS) code associated with the description of the sold business. Go to <a href="http://www.naics.com/search.htm">http://www.naics.com/search.htm</a> to search for a NAICS code.
Business Description	The description of the sold business.
Company Name	The name of the sold business.
Sale Location	The geographic location of the sold business.
Years in Business	The number of years the sold business has been in operation.
Number of Employees	The number of employees working in the sold business.
Report Date	The date on which the included information was captured.

#### What is the legend for Pratt's Stats Income data?

Term	Definition
Data is "Latest Full Year" Reported	Indicates that the Income data reflects the latest reported full year financial statement.
Data is Restated	Indicates that Income data is reported without non-recurring and exceptional items that will not affect future financial statements. (e.g. Items not transferred with the sale of the business.) The Pratt's Stats notes field may contain further details pertaining to the restatements.
Income Statement Date	Date of the last filed Income Statement.
Net Sales	Annual Gross sales, net of returns and discounts allowed, if any.
COGS	(Cost of Goods Sold) the cost of the inventory items sold during the year. Net of any discounts, returns or write-offs.
Gross Profit	Net Sales minus COGS.
Yearly Rent	Annual cost of occupying all space necessary for operation of the business.
Owner's Comp	Annual income, salary or wage paid to one business owner plus any incidental payment, benefit, privilege or advantage over and above the income, salary or wage.
Other Operating Expense	All selling and general and administrative expenses, excluding Rent, Owner's Compensation and Non Cash Charges.
Non Cash Charges	Annual decrease in value due to wear and tear, decay or decline in the price of tangible and/or intangible fixed assets (Depreciation and Amortization).
Total Operating Expenses	Sum of Yearly Rent plus Owner's Compensation plus Non Cash Charges plus Other Operating Expenses.
Operating Profit	Gross Profit minus Total Operating Expenses.

**EXHIBIT 8.2**

<b>Term</b>	<b>Definition</b>
Interest Expense	Cost of borrowing expressed as an annual dollar amount. (Does not include interest earnings. If the company had interest earnings, you will find information on it in the notes field.)
EBT (Earnings Before Taxes)	Operating Profit minus Interest Expense.
Tax Expense	Annual value of tax expense. This figure only includes income taxes and does not include sales taxes, property taxes, payroll taxes, etc. (Does not include an income tax benefit. If the company had a tax benefit, you will find information on it in the notes field.)
Net Income	EBT minus Tax Expense.

**What is the legend for Pratt's Stats Asset data?**

<b>Term</b>	<b>Definition</b>
Data is "Latest Reported"	Indicates the data is from the latest Balance Sheet. (See Balance Sheet Date)
Data is "Purchase Price Allocation" agreed upon by "Buyer and Seller"	Asset Data reflects the agreed upon allocation price between buyer and seller.
Balance Sheet Date	Date of most recent balance sheet reported.
Cash and Equivalents	All cash, marketable securities, and other near-cash items. Excludes sinking funds. Cash equivalents (NOW accounts and money market funds) must be available upon demand in order to justify inclusion.
Trade Receivables	All accounts from trade, net of allowance for doubtful accounts, that will result in the collection of cash.
Inventory	Anything constituting inventory for the firm including raw material, work in progress and finished goods. Those items of tangible property which are held for sale in the normal course of business, are in the process of being produced for such purposes, or are to be used in the production of such items.
Other Current Assets	Any other current assets, excluding Cash and Equivalents, Trade Receivables and Inventory.
Total Current Assets	Cash and Equivalents plus Trade Receivables plus Inventory plus Other Current Assets.
Fixed Assets	All property, plant, leasehold improvements and equipment, net of accumulated depreciation or depletion.
Real Estate	Dollar value placed on any real estate associated with the sale of the business. The real estate value is not included in the Equity Price or MVIC.
Intangibles	Assets with uncertain or hard-to-measure benefits such as brand names, trademarks, patents or copyrights, a trained workforce, special know-how, and customer or supplier relationships, that make the company a viable competitor and give it earning power. These values are net of accumulated amortization.
Other Noncurrent Assets	Any other non-current asset, excluding Real Estate, Fixed Assets, Intangibles, a Noncompete Agreement and an Employment/Consulting Agreement.
Total Assets	Total Current Assets plus Real Estate plus Fixed Assets plus Intangibles plus Other Noncurrent Assets.
Long-term Liabilities	Any monies owed that are not payable on demand within one year. The current portion of long-term debt is a current liability, as distinguished from a long-term liability.

*(Continued)*

**EXHIBIT 8.2** *(Continued)*

<b>Term</b>	<b>Definition</b>
Total Liabilities	Current Liabilities plus Long-term Liabilities.
Stockholder's Equity	Paid-in capital, donated capital, and retained earnings less the liabilities of the company. (Stockholder's Equity Total Assets—Total Liabilities)
Liabilities assumed	Those long term financial liabilities that the buyer assumes upon the purchase of the company.
<b>What is the legend for Pratt's Stats other data?</b>	
<b>Term</b>	<b>Definition</b>
Date Sale Initiated	Date business was listed for sale.
Date of Sale	Date sale of business was closed.
Length of Time on Market	In months.
Asking Price	Price desired by seller at time of listing.
Equity Price	Dollar value of consideration paid for the equity of the business sold. The Equity Price includes the noncompete value and excludes (1) any long term liabilities assumed, (2) the real estate value and (3) any earnouts (because they have not yet been earned, and they may not be earned) and (4) the employment/consulting agreement values. In an Asset Sale, the assumption is that all or substantially all operating assets are transferred in the sale. In an Asset Sale, the Equity Price may or may not include all current assets, noncurrent assets and current liabilities (liabilities are typically not transferred in an asset sale). Asset Data labeled as a "Purchase Price Allocation" will provide definitive information as to what was included in the asset sale. If the Asset Data is labeled "Latest Reported," the appraiser needs to use his/her experience and knowledge in the field and the buyer's/seller's knowledge and experience with his/her business to determine what is customarily transferred in an asset sale in that industry.
MVIC (Market Value of Invested Capital)	Equity Price + Long Term Liabilities Assumed (MVIC is the total consideration paid to the seller and includes any cash that changed hands plus any long-term financing liabilities assumed by the buyer. An example to which most can relate is provided: If one buys a home and pays \$100,000 cash to the seller and assumes a mortgage of \$20,000, the Equity Price is \$100,000 and the MVIC Price is \$120,000.)
Liabilities assumed	Those long term financial liabilities that the buyer assumes upon the purchase of the company.
Employment/Consulting Agreement	Dollar value placed on an agreement between the buyer and seller for the seller's personal services to be provided to the buyer either as an employee or consultant after the sale of the business. The Employment/Consulting Agreement is not included in the Equity Price or MVIC.
Noncompete Agreement	Dollar value placed on an agreement with the selling party not to compete with the purchaser, usually for a certain period of time and usually in a

**EXHIBIT 8.2**

specified geographic area. The Noncompete Agreement value is included in the Equity Price and MVIC.

Amount Down

Dollar value of consideration given as a down payment.

**What is the legend for Pratt's Stats business type data?**

<b>Term</b>	<b>Definition</b>
C Corp	A corporation acting as a separate entity, for income tax purposes.
S Corp	A corporation with restrictions on equity ownership.
LLC	A Limited Liability Company is one wherein the members have limited legal liability and may participate in the management of the organization.
Partnership	A business comprised of two entities, either created as a general partnership or limited partnership.

**What is the legend for the Pratt's Stats Valuation Multiples and Financial Ratios Calculations?**

<b>Valuation Multiple</b>	<b>Database Calculation</b>
MVIC / Discretionary Earnings	$[\text{MVIC}] / ([\text{Net Income}] + [\text{Taxes}] + [\text{Interest Expense}] + [\text{Owners Compensation}] + [\text{Noncash Charges}])$
MVIC / Net Sales	$[\text{MVIC}] / [\text{Net Sales}]$
MVIC / Gross Profit	$[\text{MVIC}] / [\text{Gross Profit}]$
MVIC / EBITDA	$[\text{MVIC}] / ([\text{Operating Profit}] + [\text{Noncash Charges}])$
MVIC / EBIT	$[\text{MVIC}] / [\text{Operating Profit}]$
MVIC / Book Value of Invested Capital	$[\text{MVIC}] / ([\text{Total Assets} - \text{Total Liabilities}] + \text{Long-term Liabilities})$
<b>Financial Ratio</b>	<b>Database Calculation</b>
Net Profit Margin	$[\text{Net Income}] / [\text{Sales}]$
Operating Profit Margin	$[\text{Operating Profit}] / [\text{Sales}]$
Gross Profit Margin	$[\text{Gross Profit}] / [\text{Sales}]$
Return on Assets	$[\text{Net Income}] / [\text{Total Assets}]$ (see Purchase Price Allocation Q & A below)
Return on Equity	$[\text{Net Income}] / ([\text{Total Assets}] - [\text{Total Liabilities}])$
Fixed Charge Coverage	$[\text{Operating Profit}] / [\text{Interest Expense}]$
Long-term Debt to Assets	$[\text{Long-term Liabilities}] / [\text{Total Assets}]$
Long-term Debt to Equity	$[\text{Long-term Liabilities}] / ([\text{Total Assets}] - [\text{Total Liabilities}])$
Current Ratio	$[\text{Total Current Assets}] / ([\text{Total Liabilities}] - [\text{Long-term Liabilities}])$
Quick Ratio	$([\text{Total Current Assets}] - [\text{Inventory}]) / ([\text{Total Liabilities}] - [\text{Long-term Liabilities}])$
Total Asset Turnover	$[\text{Sales}] / [\text{Total Assets}]$ (see Purchase Price Allocation Q & A below)
Fixed Asset Turnover	$[\text{Sales}] / [\text{Fixed Assets}]$ (see Purchase Price Allocation Q and A below)
Inventory Turnover	$[\text{Sales}] / [\text{Inventory}]$ (see Purchase Price Allocation Q & A below)

*(Continued)*

**EXHIBIT 8.2** *(Continued)***Data Principles and Collection****What are the assumptions for Pratt's Stats data?**

1. N/A indicates that the data in question was not available. Please see assumption number 4 below for one caveat to this.
2. A dollar value of zero, has been expressly specified as zero.
3. Interest on the noncompete agreement value is not included unless expressly stated.
4. If it can not be definitively determined if there were any reported liabilities assumed, the assumption is made that there were either zero liabilities assumed or that there were insignificant liabilities assumed such that they would not make a material difference in the calculation of a MVIC (Equity Price + Liabilities Assumed). Therefore, when it can not be definitively determined if there were any reported liabilities assumed, we report the MVIC to be equal to the Equity Price.

**What, if any, inclusion criteria and exclusion criteria does Pratt's Stats use in its data collection process?**

The inclusion criteria for Pratt's Stats transactions is as follows:

1. Date of sale must be disclosed
2. The selling price has to be clear (i.e. if restricted stock is part of the consideration, the value of the restricted stock issued in the transaction must be given, etc.)
3. Earn outs (or contingency payments) cannot be included in the selling price; if the earn outs cannot be removed from the given selling price then the transaction will not be included
4. Product/Service description of the seller must be disclosed
5. Latest full year Income Statement must be given in US dollars
6. Company type must be disclosed (C or S Corp, LLC, LLP, Sole Prop. etc.)
7. The type of transaction must be disclosed; either a stock or asset sale
8. The transaction must not be a reverse acquisition, reorganization, recapitalization etc.
9. Must be 100% acquisition (no partial transactions)
10. Avoid transactions where the consideration is mostly real estate (i.e. hotels, mining property). If any transaction includes the value of real estate and buildings as part of the selling price, we deduct their value from the selling price

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Each transaction does not have information in every data field, but this database does a good job at increasing the amount of information that is available for small company transactions. The more information that is available, the better the decision-making process will be. This will lead to better valuation opinions. Pratt's Stats provides up to eight different valuation multiples including equity and invested capital (deal price) multiples. These include:

- MVIC / Net Sales
- MVIC / Gross Profit
- MVIC / EBITDA
- MVIC / EBIT
- MVIC / Discretionary Earnings
- MVIC / Book Value of Invested Capital

In addition, the database gives the user information to calculate other multiples (for example, equity price to book value). With so much data available, the possibilities are endless, but be careful that you understand what is listed in each field before you go crazy making up multiples.

Another important item that you must consider is that Pratt's Stats reports two different transaction types. BizComps and IBA report only asset sales. In addition to asset sales, Pratt's Stats also reports stock sales. Stock sales are transactions in which a business transfers its equity to the acquirer, or in other words, transfers all of its assets and liabilities. Based on the transaction type, price will most likely reflect different assets or liabilities, or both, that were transferred as part of the deal. This becomes very important in comparing and applying multiples. I will demonstrate this shortly.

Pratt's Stats' Web site automatically calculates statistics on selected transaction data, and these are displayed on the subscriber results page. Users can limit the data set to include certain transactions and may recalculate statistics such as count, range, mean, median, and coefficient of variation for each data set. These statistics can be useful in performing transaction searches, as well as multiple selections. Discussion of transaction analysis is included later in this chapter.

Another very useful tool that comes out of Pratt's Stats is the ability to calculate multiples for S corporations versus C corporations. This can further support your analysis when it comes time to address the question of whether to tax effect the earnings of an S corporation. This topic is discussed in greater detail in chapter 10.

Finally, one more useful tool that comes out of this database is the ability to calculate the relationship of the value of noncompete agreements to the total transaction price of the deal. This is really handy when you have to address the issue of personal goodwill allocations. This topic will be discussed in much greater detail in chapter 17.

## DONE DEALS

The Done Deals database contains slightly larger transactions than the databases discussed previously, with purchase prices ranging between \$1 million and \$1 billion. Done Deals contains mid-market transaction data, with approximately half of the deals being under \$15 million and half being over \$15 million, and approximately 79 percent of the selling companies being privately owned.

According to its Web site, Done Deals contains the following information:

- Hundreds of completed transactions each quarter with up to 1,000 deals reported on annually
- Company contacts provided (name of the executive handling the deal, address, phone)
- Price, terms, and sources of financing
- Seller financials, EBITDA, and price multiples for every transaction
- Key aggregate statistics and price multiple graphs for deals selected
- Available online, updated weekly
- Search and sorting function that allow you to find just the deals you want

Some of the transactions included in this database are international. Figure 8.4 on the following page shows the sample search results found on the Done Deals web site.

Done Deals does not list as many data points as Pratt's Stats, but it is still significantly more detailed than BizComps or the IBA Market Database. Similar to Pratt's Stats, Done Deals lists asset and stock transactions. You can perform much of the same analysis that you can with Pratt's Stats.

As time has gone by, I have found that many of the transactions found in this database can be obtained through other databases. You may find many of the transactions to be redundant and probably too large for the small to mid-size valuations that you do. However, with that said, it is another resource that you should consider.

## PUBLIC STATS

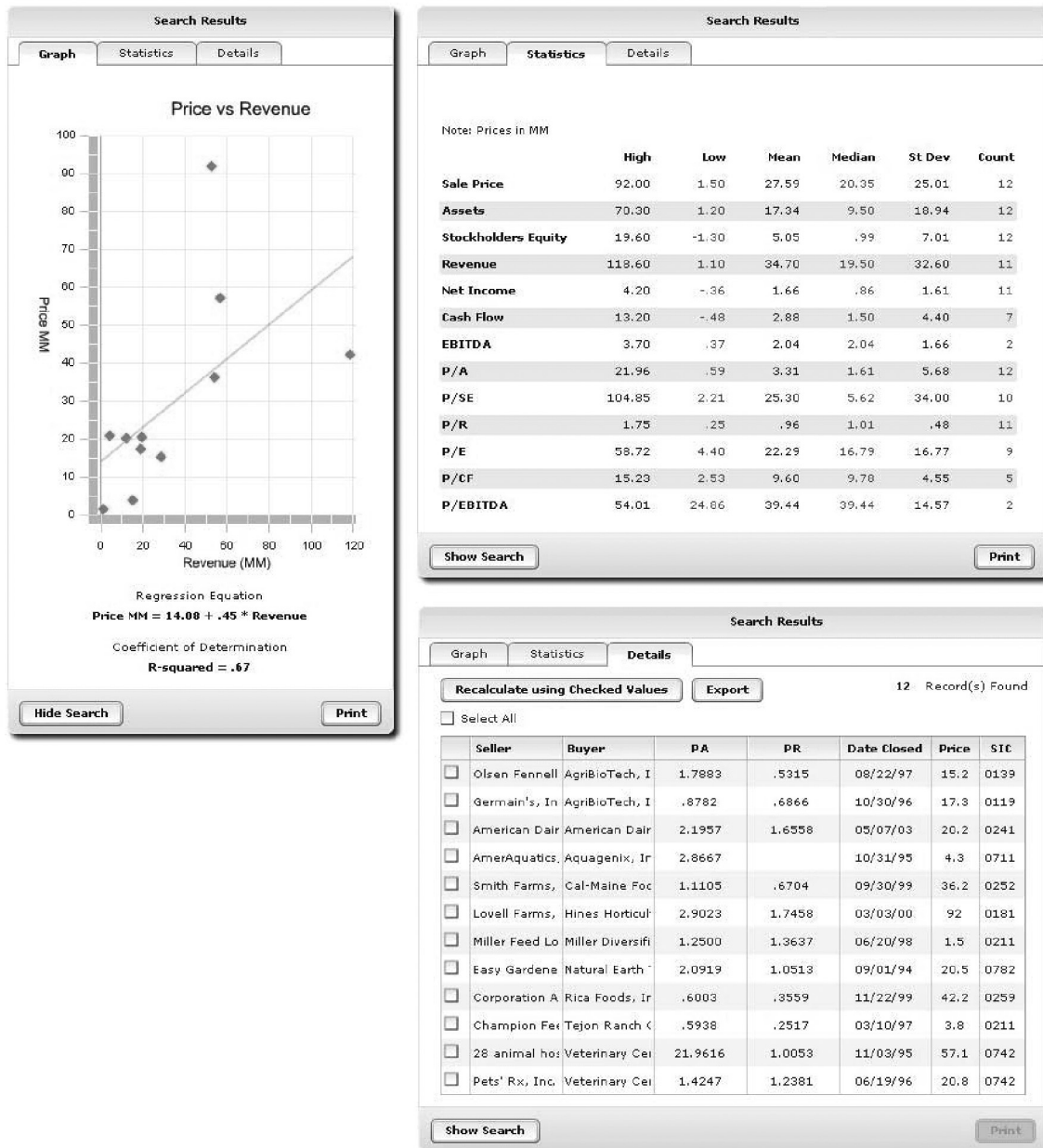
A new database since the last edition of this book is Public Stats. It is offered by Business Valuation Resources, LLC, the same organization that brings us Pratt's Stats. Public Stats is a database of public company sales where 100 percent of the company sold. Here also, some of the transactions are international. Public Stats compiles and reports information on 63 data points, highlighting the financial and transactional details of the sales of publicly held companies.

According to its web site, benefits enjoyed by Public Stats users include:

- An easy-to-use search engine that quickly identifies comparable transactions based on criteria specified by the user



**FIGURE 8.4**  
**DONE DEALS SEARCH RESULTS**



(Done Deals, "Shell Sample Data," <http://www.donedeals.com/sitecomposer2/index.cfm?txtFuse=dspShellSampleData> accessed on September 27, 2007).

- Hard-to-find data on how deals are structured, including payment terms, employment agreements, and noncompete agreements
- Nine valuation multiples calculated for each transaction found in Public Stats making the identification of value drivers with the greatest market reliance transparent to the user.
- The ability to track market pricing trends via the Public Stats' timely deal updates.

As of July 2007, Public Stats had compiled details on approximately 2,069 public company business sales from 1995 to the present ranging in deal price from under \$1,000,000 to \$114,070,000,000. (Boy, I'll bet the upper range of this group will really help me value the local pizza shop!) The industries represented in Public Stats are represented by roughly 380 SIC Codes and 440 NAICS Codes. Public Stats collects its data from SEC filings submitted to the SEC by the business buyer. Public Stats data is updated online monthly with several transactions added per month.

## MERGERSTAT/SHANNON PRATT'S CONTROL PREMIUM STUDY

Another database that we search when looking for larger transactions is another newcomer since the last edition of this book. Any valuation analyst who has been working in this field for a number of years should recognize the name Mergerstat. We have been using *Mergerstat Review*<sup>7</sup> for as long as I am in this business (you know-when the dinosaurs roamed the earth). Shannon Pratt teamed up with Mergerstat to create this database. This, too, is part of the line up of databases offered by Business Valuation Resources, LLC. It is offered through other resellers as well, such as Alacra, Lexis-Nexis, and Dialog.

FactSet Mergerstat, LLC, located in Santa Monica, California, publishes this study. This study is mainly used to quantify minority discounts and control premiums used in the business valuation, venture capital, and merger and acquisition professions. However, this database also allows you to find transactions. This database can be searched by specifying any of the following variables:

- individual four-digit SIC code
- an industry (a range of SIC codes)
- financial performance ratios (operating profit margin and net profit margin)
- a keyword from a business description
- a range of control premiums
- financial data (including net sales, EBITDA, EBIT, net income, and invested capital)
- sale details (including sale date, deal value, attitude, form, and consideration and transaction purpose)

Subscribers to the Mergerstat/Shannon Pratt's Control Premium Study are granted access to all of the details in the database, including the control premium, five valuation multiples, and the available information to calculate the return on equity ( $\text{Net Income} / [\text{BV per share} \times \text{number of shares outstanding}]$ ).

Approximately 58 percent of the Mergerstat/Shannon Pratt's Control Premium Study represents U.S. based companies. Subscribers will instantly gain access to historical data (1998-present). The database has also been enhanced with the addition of the transaction purpose code, classifying each transaction into either a horizontal, vertical, conglomerate, or financial transaction. And once you have found the information you need, you can export it to Excel, print the individual transaction reports, or recalculate the summary financial statistics.

As of July 2007, the Mergerstat/Shannon Pratt's Control Premium Study contains 5,590 total transactions; with over 770 deals in business services, over 690 deals on depository institutions, and 195 deals in the communications industry. 52 percent of the deals in the database have net sales less than \$100 million.

An additional discussion about this data can be found in chapter 12.

## THOMSON FINANCIAL MERGERS & ACQUISITIONS (TF MERGERS & ACQUISITIONS)

The TF Mergers & Acquisitions database contains information about public company mergers and acquisitions of public and private companies. This database will be overkill for you if you only value small companies. However, I think that you should be aware of it, as you never know when that gas station valuation will turn into Shell Oil.

We access the TF Mergers & Acquisitions database through Alacra ([www.alacra.com](http://www.alacra.com)). This is a fee based service. The database contains information about U.S. transactions from 1979 to the present. Non-U.S. transactions have been included since 1985. There are 121,300 U.S. transactions and 157,350 non-U.S. transactions included in this database. It's big!

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<sup>7</sup> Mergerstat Review. Santa Monica, CA: FactSet Mergerstat, 2008.

Included in this database are all corporate transactions involving at least 5 percent of the ownership of a company where the transaction was valued at \$1 million or more (after 1992, deals of any value are covered) or where the value of the transaction was undisclosed. Public and private transactions are covered. Transactions include the following:

- Mergers and acquisitions
- Stake purchases
- Stock swaps
- Real estate investment trust acquisitions
- Asset sales and divestitures
- Rumored and seeking buyer transactions
- Leveraged buyouts
- Tender offers
- Privatizations
- Spinoffs and splitoffs
- Bankruptcy liquidations

This database boasts that there are 1,400 data elements available, but the reality is that many of the transactions have many blank fields. In some databases, when you download your reports, you pay per field whether there is data or not. This database can become very expensive to use. A more in depth discussion about this database is beyond the scope of this book.

## BUSINESS BROKERS

Business brokers can also be an excellent source of market transaction data. The local business broker is frequently involved in many transactions. He or she has access to information about many similar businesses that have been bought and sold in the geographical region of the appraisal subject. The major problem with business broker information is twofold: First, the broker may not have access to fully reliable financial information about the company that was sold; the seller frequently provides the figures to the broker without any verification. Second, the seller or the buyer, or both, are generally going to require the broker to respect their confidentiality, which would prohibit the broker from opening the file to the valuation analyst.

On occasion, enough data can be obtained from a business broker to allow some empirical data to be used in applying the market approach. There may be times when a reliable broker will be allowed to verify the transactions and the other party, assuming a litigation, will stipulate to confidentiality, because their expert will want to do the same. This is exactly what happened in the report excerpted in exhibit 8.3.

### EXHIBIT 8.3

#### BUSINESS BROKER INFORMATION

This valuation method uses information that comes from the actual sales transactions of similar properties to determine a ratio of the sales price to the net profit from the property (commonly known as a multiple), which is then applied against the appraisal subject's net profit. This is probably the most widely used ratio in valuation methodologies today. Two important components of this method are the net profit (for this appraisal, net profit is defined as the amount available to the owner after normal business expenses but before taxes, loan payments, and owner's compensation; this is sometimes called seller's discretionary cash flow) and the appropriate multiple to be used.

XYZ Products, Inc. had an average net profit for the past three years of \$110,500. The multiple applied to the net profit must reflect the appropriate amount of risk that is associated with the net profit as calculated. In this instance, a multiple of 1.81 has been deemed appropriate, as explained in a later section of this report.

Therefore, the value of the intangible assets of XYZ Products, Inc. is calculated as follows:

## EXHIBIT 8.3

Average net profit	\$110,500
Multiple	× 1.81
Estimate of value	<u>\$200,005</u>
Rounded	<u>\$200,000</u>

## THE MARKET PRICE OF THE SALES OF CLOSELY HELD FOOD ROUTES

To assess the market price of sales of routes comparable to XYZ Products, Inc., we consulted with John Smith, President of Busbroke Inc. and a business broker who specializes in the sale of food route businesses. Mr. Smith provided us with the actual sales transactions of 10 routes that were used as guidelines for sales of similar types of businesses to the subject company. Table 1 provides financial data regarding the 10 guideline companies. All 10 routes relate to either dairy, cheese, or yogurt product lines. Table 1 provides ratios based on the relationship of the purchase price of the route to the net profits of the selling company.

**TABLE 1**  
**SUMMARY OF FOOD ROUTE SALES<sup>1</sup>**

Route	Type	Net Sales (\$)	Purchase Profit Profit (\$)	Gross Profit (\$)	Price/Net Price (\$)	Profit (%)	Multiple <sup>2</sup>
1465	Cheese	390,000	50,700	44,200	100,000	13.00	2.26
1474	Dairy	520,000	78,000	68,380	125,000	15.00	1.83
1514	Yogurt	650,000	110,500	85,800	248,000	17.00	2.89
1543	Yogurt	610,000	118,950	85,700	200,000	19.50	2.33
1546	Yogurt	478,400	119,600	91,780	205,000	25.00	2.23
1571	Yogurt	442,000	88,400	80,600	165,000	20.00	2.05
1726	Yogurt	338,000	60,840	54,860	155,000	18.00	2.83
1773	Cheese	936,000	112,320	90,740	200,000	12.00	2.20
1784	Dairy	327,600	88,400	82,160	120,000	26.98	1.46
1818	Dairy	468,000	93,600	70,980	85,000	20.00	1.20
						Average	2.13

<sup>1</sup> Supplied by Busbroke, Inc.

<sup>2</sup> Calculated by the valuation analyst.

Some additional information should be highlighted about these transactions. The sale of food routes generally involves an individual purchasing a food route with the intention of working the route; in essence, the individual is purchasing his employment. This is in contrast to the potential investor, who would buy a route and then pay someone to service the route. As a result, an individual purchasing these food routes tends to be motivated and frequently bases the amount that he or she is willing to pay on a figure that is considered to be net profit but, in fact, excludes owner's compensation.

(Continued)

**EXHIBIT 8.3** (Continued)

The cash flow generated by the food route must be adequate not only to allow the owner to make a living, but also to pay down the debt service that comes about as a result of the purchasing of the route itself. To determine the fair market value of a food route business, reasonable compensation should be considered, to avoid confusing a true return on investment with the owner receiving compensation for working the business. Logically, value is generally measured by the return received in excess of reasonable compensation; otherwise, employees would be paying their employer for the opportunity to work.

In comparing XYZ Dairy Products, Inc. with the routes listed in Table 1, we noted that the guideline companies reflect a gross profit (sales less direct cost of sales) of 12 percent to 26.98 percent, whereas XYZ Dairy Products, Inc. has averaged only 10.35 percent over the last five years. Many of the guideline companies reflect a net profit to the owners of \$85,000-\$90,000 based on sales of \$300,000-\$600,000, whereas XYZ Dairy Products, Inc. reflects an average net profit of \$105,771 based on average net sales of approximately \$3,373,000.

In addition to the above, a price-to-net profit ratio was calculated by the valuation analyst for each actual transaction, resulting in ratios of 1.20–2.89, with an average ratio actually paid of 2.13 times the net profit. In fact, a multiple of 2.13 is equivalent to a capitalization rate of 46.9 percent, indicating an extremely high rate of return required by the buyers in the food route marketplace. This is the same as saying that the willing buyers expect to recoup their investments in a little over two years, in addition to their labor.

Another important factor that must be considered in reaching a value conclusion about intangible assets is risk. The level of risk associated with an investment generally determines the required rate of return for an investor. This is why, for example, certificates of deposit may pay 5 percent, while corporate bonds pay 8 percent and junk bonds pay 16 percent. The higher the level of risk, the higher the required rate of return must be in order to attract an investor.

Almost every closely held business is extremely risky. XYZ Dairy Products, Inc. is certainly no exception. The willing buyer of a customer list is not assured that customers will continue with that company. In fact, unless there were contracts guaranteeing volume, a substantial discount would normally be applied in the value of the company. In the real world, buyers and sellers address this contingency through sales contracts, because if a customer were lost, no payment would be required. This is almost like buying a business on a royalty basis. If the business volume continues as anticipated, the willing buyer will pay the willing seller.

Some of the more pertinent risk factors that a willing buyer would consider are the following:

- Brand X represented approximately 90 percent of XYZ Dairy Products, Inc.'s business.
- XYZ Dairy Products, Inc. had no contract with Brand X indicating that business would continue at any point in the future. The fact that the company had been delivering Brand X products for a number of years could not by itself be relied upon for continuity to take place in the future.

In the early 2000s, PQZ became a broker for Brand X. PQZ represented Brand X in stores and supermarket headquarters and actively worked with the supermarkets through central billing. At that point XYZ Dairy Products, Inc. started billing with Brand X invoices, and Brand X collected the money directly. PQZ also began handling the promotional aspects with the supermarket to further change the role of the company.

In approximately 2004, Cheese, Inc. purchased Brand X. According to the deposition of Sam Jones, when Cheese, Inc. took over Brand X, many distributors were concerned about Brand X "going warehouse" (that is, distributing through a central warehouse instead of directly to the supermarkets).

Compared to the guideline companies, XYZ Dairy Products, Inc. was considerably less profitable despite a larger sales volume. The company's gross profit on sales was lower than all 10 guideline companies. XYZ Dairy Products, Inc. had no control over the billing, distribution, and collections associated with Brand X products. The company was primarily a one-company distribution agent with little diversification.

In addition to the above, a financial analysis was performed by the analyst using Integra's *Business Profiler*. This database contains statistical data broken down by Standard Industrial Classification (SIC). In this instance, SIC code 5143, "Wholesalers of Dairy Products," was used.

In our opinion, XYZ Dairy Products, Inc. appears to be weaker than the industry group, due primarily to its lower profitability. As a result, we believe that a 15 percent discount is appropriate from the average guideline company multiple. This indicates that an appropriate multiple to be used for XYZ Dairy Products, Inc. is 1.81, to be applied against the net profit available to the owner.

Business brokers can be an excellent source of market data. Sometimes, you may find it helpful to offer the broker compensation for his or her time. (Brokers just love me!) Another excellent way to gain cooperation is to refer some sales his or her way. Because brokers are involved in the market, it is only natural that they should be able to provide good market information in the valuation analyst's local area.

## TRANSACTION ANALYSIS

Get ready. Here comes the good stuff! Now that you know where to find transaction data, I will shed some light on how to use it. The fact of the matter is that the merger and acquisition method has some major limitations because most of the transactions retrieved through database services cannot be independently verified, and there is a limited amount of information for each transaction. Real estate appraisers verify each transaction, whereas valuation analysts must rely on someone else's work, which is composed of limited information about the target companies.

However, fear not! Although a valuation analyst may have limited data, it can still be used. Actually, this method is often the most direct and applicable method for valuing a small company (just don't use it by itself as the only method). There is a wide array of tools and techniques that can help you analyze transaction data. Before we start in on the analysis, I want to clearly define what the valuation analyst is really trying to do. A valuation analyst needs to fully understand the purpose of this exercise to perform the task correctly. When we get a data set (transaction data), be it from IBA, BizComps, Pratt's Stats, or any other transaction information, we attempt to determine

- if the transactions appear to be usable transactions (qualitative analysis) and
- what multiple, if any, should be applied to the subject company (quantitative analysis)

A valuation analyst can utilize qualitative and quantitative analysis, much the same as was done in applying the guideline public company method to build a meaningful and supportable indication of value for the subject company.

## QUALITATIVE ANALYSIS

Qualitative analysis refers to the soft stuff, or the non-numerical information, known about the transactions. As discussed, we know very little about the transactions, as compared to real estate appraisers, who can get all sorts of information about their comparables. However, we have to work with what we've got. For instance, the business descriptions listed in the IBA and BizComps databases may be brief (often one or two words), but they still serve as a good indicator for what a business does. Analyzing business descriptions, particularly in large data sets, can prove to be an invaluable asset to an analyst. Exhibit 8.4 reflects an analysis of IBA transactions performed for an Italian restaurant and pizzeria located in a mall.

### EXHIBIT 8.4

#### INSTITUTE OF BUSINESS APPRAISERS' TRANSACTIONS ANALYSIS

This database was searched for transactions involving companies in SIC code 5812: Retail Trade, Eating Places. Our search located approximately 1,500 transactions in this SIC code containing all types of restaurants whose revenues ranged from \$13,000 to in excess of \$200,000,000. In order to more appropriately utilize this information, we stratified this data into several more applicable categories.

The first category consisted of small Italian restaurants and pizzerias. This data is presented in table 1.

*(Continued)*

## EXHIBIT 8.4 (Continued)

TABLE 1 INSTITUTE OF BUSINESS APPRAISERS MARKET DATA ITALIAN RESTAURANTS/PIZZERIAS					
Business Type	Annual Gross \$000's	Sales Price \$000's	Price/Gross	Geographic	Year/Month of Sale
Deli with pizza	89	28	0.31	CA	1986/04
Fast Food, Pizza	227	55	0.24	GA	1993/07
Fast Food, Pizza	230	49	0.21	CA	1994/12
Restaurant, Pizza	306	120	0.39	CA	1990/05
Restaurant, Italian	310	29	0.09	CA	1995/08
Restaurant, Pizza	317	81	0.26	TX	1991/04
Restaurant, Italian	324	75	0.23	FL	1994/05
Restaurant, Italian	390	53	0.14	CA	1995/07
Restaurant, Pizza	477	397	0.83	ID	1995/04
Restaurant, Italian	516	212	0.41	CA	1995/08
Restaurant, Italian	653	89	0.14	CA	1995/02
<b>Mean</b>			<b>0.30</b>		
<b>Median</b>			<b>0.24</b>		

As indicated, there were 11 transactions in this category, indicating an average price-to-revenue multiple of 0.30 and a median of 0.24. The second category consisted of 55 restaurants categorized as fast food restaurants. This information is shown in table 2.

TABLE 2 INSTITUTE OF BUSINESS APPRAISERS MARKET DATA FAST FOOD RESTAURANTS					
Business Type	Annual Gross \$000's	Sales Price \$000's	Price/Gross	Geographic	Year/Month of Sale
Fast Food, Coffee Shop	58	23	0.40	FL	1996/02
Fast Food, Yogurt	65	24	0.37	LA	1993/12
Fast Food, Coffee Shop	74	60	0.81	FL	1996/06
Fast Food, Smoothies	80	40	0.50	LA	1995/02
Fast Food, Yogurt	86	27	0.31	LA	1993/04
Fast Food, Coffee Shop	90	20	0.22	FL	1995/09
Fast Food, Sandwich Shop	90	34	0.38	Midwest	1986/07
Fast Food, Coffee Shop	100	32	0.32	FL	1994/10
Fast Food, Coffee Shop	108	50	0.46	FL	1993/12
Fast Food Restaurant	111	20	0.18	Midwest	1987/02
Fast Food, Chicken	120	68	0.57	FL	1994/04
Fast Food, Yogurt	120	52	0.43	FL	1994/08



## EXHIBIT 8.4

<b>Business Type</b>	<b>Annual Gross \$000's</b>	<b>Sales Price \$000's</b>	<b>Price/Gross</b>	<b>Geographic</b>	<b>Year/Month of Sale</b>
Fast Food, Chicken	120	40	0.33	FL	1995/01
Fast Food, Coffee Shop	120	40	0.33	FL	1995/02
Fast Food, Yogurt	120	38	0.32	TX	1992/02
Fast Food, Mall Store	120	48	0.40	FL	1991/03
Fast Food, Coffee Shop	120	56	0.47	FL	1994/08
Fast Food, Coffee Shop	132	27	0.20	FL	1995/08
Fast Food, Chicken	132	25	0.19	FL	1995/07
Fast Food, Deli	132	55	0.42	NJ	1991/
Fast Food, Yogurt	135	70	0.52	Midwest	1993/03
Fast Food, Yogurt	136	100	0.74	ID	1992/07
Fast Food, Coffee Shop	140	85	0.61	FL	1994/07
Fast Food, Coffee Shop	147	85	0.58	FL	1994/08
Fast Food, Coffee Shop	150	65	0.43	FL	1996/01
Fast Food, Baked Potatoes	152	43	0.28	MN	1994/11
Fast Food, Yogurt	160	80	0.50	CA	1992/01
Fast Food, Deli	175	76	0.43	MA	1990/09
Fast Food, Coffee Shop	175	70	0.40	FL	1996/10
Fast Food, Dairy Queen	185	25	0.14	NM	1992/09
Fast Food, Dairy Queen	186	20	0.11	NM	1991/10
Fast Food, Bakery/Coffee	200	95	0.48	FL	1995/03
Fast Food, Coffee Shop	200	65	0.33	FL	1996/11
Fast Food, Deli	200	70	0.35	MA	1990/08
Fast Food, Dairy Queen	220	99	0.45	Midwest	1993/09
Fast Food, Mall Store	220	90	0.41	NC	1996/10
Fast Food, Mexican	222	88	0.40	OR	1995/03
Fast Food, Pizza	227	55	0.24	GA	1993/07
Fast Food, Pizza	230	49	0.21	CA	1994/12
Fast Food, Hamburgers	237	140	0.59	CA	1991/08
Fast Food, Coffee Shop	250	128	0.51	FL	1995/05
Fast Food, Dairy Queen	275	57	0.21	NM	1991/07
Fast Food, Deli	285	83	0.29	FL	1991/11
Fast Food, Coffee Shop	300	70	0.23	FL	1997/05
Fast Food, Take Out	300	161	0.54	ID	1995/09
Fast Food, Dairy Queen	312	117	0.38	NM	1991/07
Fast Food, Dairy Queen	324	40	0.12	Midwest	1994/01
Fast Food, Coffee Shop	346	150	0.43	FL	1995/03
Fast Food, Coffee Shop	346	100	0.29	FL	1995/06
Fast Food, Sandwich Shop	354	205	0.58	IL	1989/
Fast Food, Ice Cream	354	185	0.52	CA	1995/07

*(Continued)*

## EXHIBIT 8.4 (Continued)

<b>Business Type</b>	<b>Annual Gross \$000's</b>	<b>Sales Price \$000's</b>	<b>Price/Gross</b>	<b>Geographic</b>	<b>Year/Month of Sale</b>
Fast Food, Roast Beef	398	93	0.23	CA	1994/11
Fast Food, Fried Chicken	540	248	0.46	TX	1994/08
Fast Food, Coffee Shop	832	200	0.24	FL	1994/11
Fast Food, Hamburgers	832	200	0.24	FL	1994/10
Fast Food, Hamburger	936	665	0.71	NV	1990/07
<b>Mean</b>			<b>0.39</b>		
<b>Median</b>			<b>0.40</b>		

This category indicated an average multiple of 0.39 and a median of 0.40. The final category consisted of restaurants with sales in the range of \$400,000 to \$700,000, regardless of type, as this range more appropriately reflects the revenues of the subject company. There were 168 transactions in this category shown in table 3.

**TABLE 3**  
**INSTITUTE OF BUSINESS APPRAISERS MARKET DATA**  
**REVENUES OF \$400,000 TO \$700,000**

<b>Business Type</b>	<b>Annual Gross \$000's</b>	<b>Sales Price \$000's</b>	<b>Price/Gross</b>	<b>Geographic</b>	<b>Year/Month of Sale</b>
Bagel Shop	400	190	0.48	L I New York	1990/03
Restaurant	400	125	0.31		1984/02
Bagel Shop	400	160	0.40	FL	1995/01
Bagel Shop	400	150	0.38	FL	1995/04
Deli/Bakery	425	125	0.29	NJ	1993/08
Restaurant	426	20	0.05	Texas	1986/03
Restaurant in Office Building	430	175	0.41	CT	1990/
Café	430	175	0.41	Texas	1992/
Restaurant	433	145	0.33	HI	1992/03
Restaurant with Lounge	435	142	0.33		1993/
Café, Gourmet	435	105	0.24	FL	1995/09
Delicatessen & Stationery	438	275	0.63		1984/10
<b>Many transactions were omitted from this exhibit to save space.</b>					
Restaurant, Italian	638	275	0.43	CA	1996/08
Restaurant, Ice Cream	639	215	0.34	IL	1991/
Restaurant, Ice Cream	639	215	0.34	IL	1991/
Franchise Store, Yogurt	640	400	0.63	PA	1990/
Restaurant, Full Service	643	175	0.27	WA	1990/
Restaurant, Dinner Only	644	190	0.30	FL	1996/01
Restaurant, Family	650	250	0.38	TN	1989/01
Restaurant, Italian	653	89	0.14	CA	1995/02

## EXHIBIT 8.4

<b>Business Type</b>	<b>Annual Gross \$000's</b>	<b>Sales Price \$000's</b>	<b>Price/Gross</b>	<b>Geographic</b>	<b>Year/Month of Sale</b>
Restaurant, Function Center	654	125	0.19	NH	1996/03
Restaurant	669	90	0.13	AL	1993/
Restaurant	669	90	0.13	AL	1993/
Restaurant, Dinner Only	672	158	0.24	FL	1992/08
Restaurant, Family-style	678	152	0.22		1989/12
Restaurant	679	275	0.41		1988/09
Restaurant, Full Line	680	325	0.48	NC	1993/
Restaurant	693	205	0.30	WA	1990/
Restaurant, Dinner Only	700	140	0.20	MA	1992/10
Dunkin Donuts	700	400	0.57	East	1990/01
Diner	700	235	0.34	FL	1993/12
<b>Mean</b>			<b>0.36</b>		
<b>Median</b>			<b>0.34</b>		

This category indicates an average price-to-revenue multiple of 0.36 and a median multiple of 0.34. The price-to-revenue multiple was analyzed, as this is typically the way that small businesses sell. This is because owners of very small companies tend to adjust expenses in order to minimize taxes, and, therefore, a willing buyer looks at the revenues he or she will be able to generate, believing that there will be certain costs that will be eliminated when he or she takes over the running of the business.

For each category, a mean and median price-to-revenue multiple was calculated. Statistically, the median is more appropriate than the mean because an average can be skewed by data that are outliers in the sample. The median is the point of central tendency when all of the values are arranged by size. Therefore, the median multiple was utilized.

The three median multiples derived result in an average price-to-revenues multiple of 0.33. This is the multiple that will be applied to the appropriate revenue stream.

An analysis of historic and adjusted revenues was performed in the financial analysis section of the report. This analysis indicated that revenues increased over the past few years but declined in the most recent year. Since there appears to be no consistent growth pattern over the last five years, it appears that average adjusted revenues over the period should be used to reflect the future. This amounts to \$703,067. The values derived using the Institute of Business Appraisers (IBA) database include any assets that the buyer will receive, such as equipment, but do not include the assets that the seller will keep, such as cash, accounts receivable, and accounts payable. Therefore, the value of these assets and liabilities must be added or subtracted from the sales value to determine the value of the operating entity.

Therefore, the calculation of value on a control, nonmarketable basis utilizing the data from the IBA is as follows:

Average revenues	\$703,067
Price-to-revenue multiple	× 0.33
Value	\$232,012
Plus: Inventory	6,250
Less: Current liabilities	(63,460)
Value of operating entity	\$174,802
Rounded	\$175,000

(Continued)

**EXHIBIT 8.4** (Continued) **Author's Note**

The IBA suggests that when you use its database that you use the most recent year's data and not an average of the past. However, there are times that I believe we need to be a little subjective by applying more of a common-sense type of analysis. Be especially careful in a litigation engagement as it will provide the cross-examining attorney material for attack.

Exhibit 8.4 illustrates how the valuation analyst can “slice and dice” the transaction data to attempt to get various cross sections of data that may be considered to be similar enough to provide guidance about pricing multiples. Other useful analysis can be done considering geography or any of the other descriptive factors found in the different databases. Stratification analysis based on qualitative factors can be an extremely useful tool in understanding how businesses are sold.

If more data is available, then why not use it? As I mentioned before, Pratt's Stats database has many more data points, many of which can be very useful. Pratt's Stats provides the valuation analyst with a business name and location, which can add a little meat to any analysis. Knowing which it is allows the valuation analyst to perform additional research about the company and the transaction itself. You can use search engines such as Google to find out much more information about a particular target company or transaction. Don't be afraid to do the necessary research to truly determine if you are using good data. If you don't, the expert on the other side of a litigation engagement probably will. The end result is that you will be embarrassed.

## QUANTITATIVE ANALYSIS

Once you have performed a qualitative analysis of a transaction set, and you are comfortable (ha ha!) with the remaining transactions, then it is time to figure out how to use the selected transactions to indicate values. There are important questions to answer, including the following:

- Are multiples calculated from a transaction set meaningful?
- Which multiple(s) should be used to indicate value?
- What multiple should be applied to the subject company?

These three questions should come to mind when looking at any set of pricing multiples, but the final, and often confusing, question is how to go about answering them. As indicated above, all of the databases offer some type of statistical toolbox to analyze transactions. The reason for this is that statistics are one of the few means that we have to glean information from a transaction data set. In the last chapter, I gave you a taste for statistics. I'm going to try again. If you are like me, the word statistics alone is enough to put you to sleep. Numbers and graphs and natural logarithms—it can be overwhelming. Like it or not, statistics provides an analytical toolbox that does what we need to do, which, as indicated in the transaction data described previously, is to pull significant information out of a data set. It is easy enough to take an average of multiples and not think about it anymore, but that can get you into a lot of trouble. Years ago, many of us did just that. If we really got crazy, we would use a median instead. However, to properly apply these ideas and techniques, you must be somewhat comfortable with the theory. A course in statistics is beyond the scope of this book, but I am going to try to provide you with some stuff that you need to know.

According to Webster's Dictionary, statistics is defined as follows:

*Statistics, n. Facts or data of a numerical kind, assembled, classified and tabulated so as to present significant information about a given subject.*<sup>8</sup>

Exhibit 8.5 lists and defines certain statistical tools that every appraiser should get to know and love, if they have not already done so.

<sup>8</sup> Webster's New World Dictionary of the American Language, college ed. (New York: World Publishing Company, 1968), 1425.

## EXHIBIT 8.5

### STATISTICS—TERMS AND DEFINITIONS<sup>1</sup>

**Measures of Central Tendency.** The purpose of a measure of central tendency is to determine the *center* of a distribution of data values or possibly the *most typical* data value. The following are measures of central tendency:

- **Mean (arithmetic).** Calculated by adding together all the observations and the number of observations.
- **Median.** Middle observation of a data set of ordered observations if the number of observations is odd; it is the average of the middle pair if the number of observations is even.
- **Mode.** Number that appears most often within the data set. This is probably the least useful to the appraiser.

**Measures of Dispersion.** Develop an understanding of the dispersion, or spread, of a data set.

**Dispersion.** The degree to which numerical data tend to spread around an average value.<sup>2</sup> The following are ways to measure dispersion:

- **Variance.** Equal to the sum of the squared deviation between each observation and the mean value.
- **Standard deviation.** Square root of the variance.
- **Coefficient of variation.** Ratio of the standard deviation to the mean and measure of relative dispersion<sup>3</sup> (observations relative to the mean).

**Measures of Relative Position.** Describes the relative position of an observation in a data set.

**Percentiles (decile and quartile).** Gives valuable information about the rank of an observation, and, if a set of data is arranged in order of magnitude, the middle value which divides the data set into two equal parts is the median. By extending this idea, we can think of those values which divide the data set into four equal parts (quartiles). Similarly, the values which divide the data into ten equal parts are called deciles.<sup>4</sup>

#### Author's Note

I am going to spare you from the formulas because they get really ugly! Most of this stuff can be calculated in Excel or a similar spreadsheet program. Learn how to use it—or at least make sure one of your staff knows how to use it. You just need to understand what it means.

<sup>1</sup> Lee, Cheng F., *Statistics for Business and Financial Economics* (Lexington, MA: D.C. Heath and Company, 1993), 92–106.

<sup>2</sup> Spiegel, Murray R., *Schaum's Outline Series, Statistics* (New York: McGraw-Hill, 1961), 69.

<sup>3</sup> Ibid, 73.

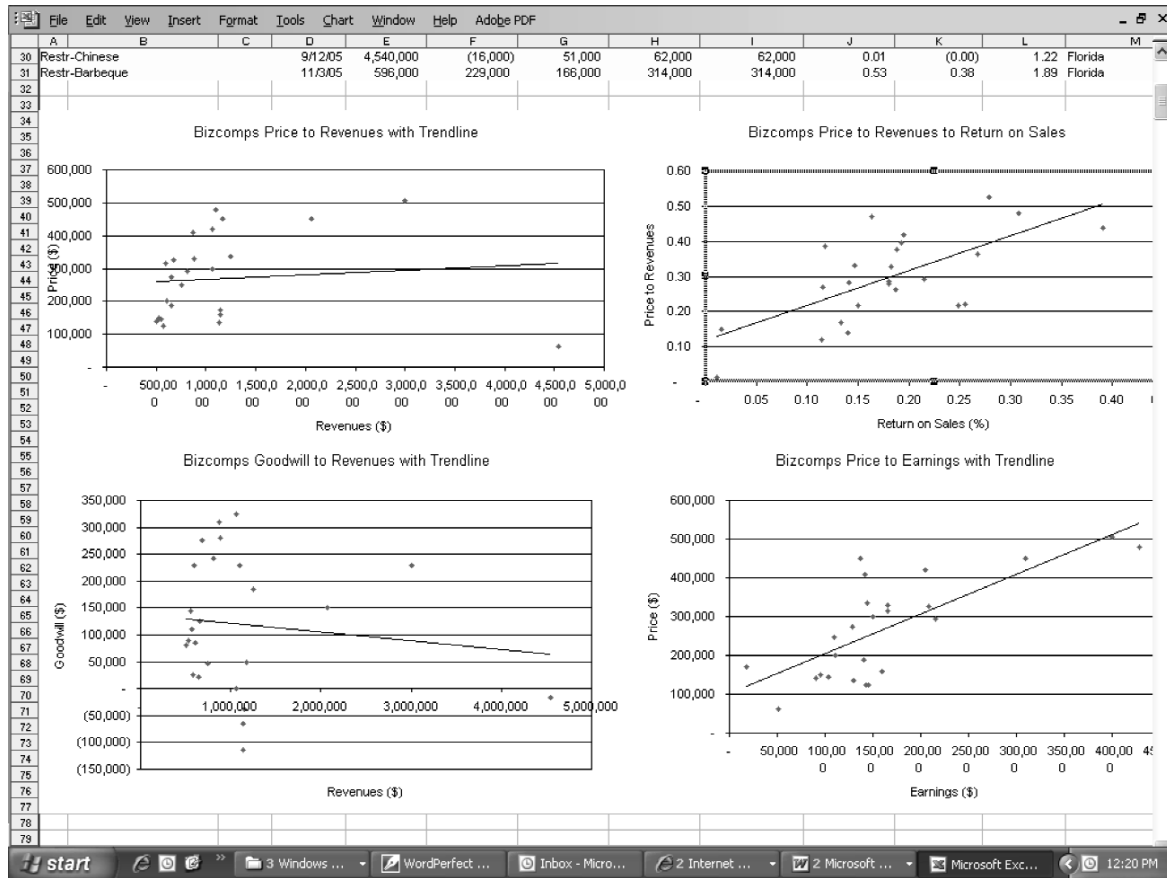
<sup>4</sup> Ibid, 49.

Exhibit 8.5 reflects one grain of sand in the universe of statistical theory, but you do not need too much more than this for what we are trying to accomplish here. Because we are attempting to figure out what multiple to use, the mean and the median reflect measures of central tendency. These are proxies for the most probable observation in a data set. If you have a set of multiples and you want to figure out what multiple to use, means and medians approximate the most likely one. Whether you use a mean or median is based on professional judgment. Some prefer one over the other. Means can be skewed dramatically by outliers, whereas medians have less reliability as the size of a data set decreases. Like everything else, which one to use is based on the facts and circumstances of the assignment.

Using statistics to assist in the selection process for the various multiples can make your conclusion stronger. Regardless of statistics, let's try to keep in focus that businesses often sell based on operating performance (profitability). Revenues, assets, and book value, while used to calculate multiples, do not reflect a level of operating performance. To compensate for this, we plot price to revenues and asset and equity multiples with their corresponding returns (return on revenues, among others). Several of these charts are shown in figure 8.5.

In my experience, these charts tend to be more meaningful for larger companies. Small companies are often bought based on sales, regardless of profitability. People buy jobs. Some of us also believe in the bigger fool theory. Some bigger fool will come along and overpay for a business, thinking that he or she will do a better job of running

**FIGURE 8.5**  
**PRICE TO REVENUES TO RETURN ON SALES**



the business than the seller. Sometimes the bigger fool can even be a large company. Think about Wall Street! Many of these public companies are the bigger fools.

We have built charts such as figure 8.5 into our statistical analysis templates, so they come up automatically. Once you have constructed such spreadsheets, it does not take any additional time to perform these statistical exercises, as the calculations are done automatically as you add new data. The charts give us a feeling of which multiples are similar, but how do you choose a single multiple to apply to an earnings stream? One intuitive comment is, "If you have a regression through a good data set with high correlation, then use the equation of the line to estimate price." This seems very logical, and sometimes it may be the best way, but think about what you are doing. A chart reflects how price varies with one variable. Thinking back to the size, growth, leverage, profitability, turnover ratio and liquidity (SGLPTL) analysis in chapter 7, there are many factors that affect the value of a business. For example, let's suppose that there is a high correlation between price and revenues in the selected data set. Now, consider that the subject company has very high debt and is having problems meeting its obligations. Can you simply apply a revenues multiple to it? You must consider other pertinent factors, including the SGLPTL factors when performing a merger and acquisition method. In the case of IBA or BizComps, you will not get enough information to do much analysis, but you do have price-to-revenues information. BizComps has a little more information, but when you get to Pratt's Stats, you have a lot of financial information. There is no reason not to perform SGLPTL analysis for data derived from the larger databases.

In addition to the charts, we calculate means, medians, standard deviations, and percentiles on the price to multiple data sets. This gives us a basis on which to estimate an applicable multiple. We base our analysis on all information available for the subject company, as well as that available for the transactions. Weighing the strengths and weakness of each transaction and the guideline transactions can prove an invaluable tool for developing a meaningful and supportable analysis. Exhibit 8.6 reflects an analysis of Pratt's Stats transactions for an automobile dealership.

**EXHIBIT 8.6**

**PRATT'S STATS ANALYSIS**

We searched the Pratt's Stats database for all transactions of businesses in SIC code 5511 with annual sales less than 20 times the subject company's latest-12-months sales. We then separated the transactions by type, stock or asset sale. In a stock transaction, the operating assets and liabilities are transferred to the new owner. In an asset transaction, only certain assets are transferred, and, therefore, to establish the value of the equity, an additional adjustment is required for those assets and liabilities not included in the transaction. The two transaction types result in very different multiples. Therefore, they were analyzed separately. The resultant transactions from this database are shown in tables 1 and 2.

**TABLE 1  
PRATT'S STATS ASSET TRANSACTIONS**

Business Name	Business Type	Sale Date	Selling Price	Revenues	Earnings Before Taxes	Net Income	Total Assets	Sales	Equity Price To:		
									Earnings Before Taxes	Net Income	
Shannon Automotive, Ltd.	Auto Dealers	03/06/97	\$8,400,000	\$96,962,172	\$3,122,682	\$3,122,682	\$13,333,038	0.09	2.69	2.69	0.63
Clearwater Dealership	Automobile Dealer	03/24/98	15,000,000	121,899,000	2,191,000	2,191,000	22,265,000	0.12	6.85	6.85	0.67
Hatfield Automotive Group	Automobile Dealer	06/09/98	48,600,000	275,280,000	(24,000)	(24,000)	61,335,000	0.18	(2,025.00)	(2,025.00)	0.79
<b>Some data intentionally left out of this exhibit.</b>											
Bowers Dealerships	Owns and Operates Automobile Dealership	10/01/97	33,500,000	127,115,799	830,658	769,808	63,006,557	0.26	40.33	43.52	0.53
De la Cruz Auto Group	Owns and Operates 4 Franchised Auto Dealerships	07/01/97	40,000,000	191,858,273	3,232,713	3,232,713	55,970,375	0.21	12.37	12.37	0.71
Pierce Automotive Group	Retail and Commercial Sales of New and Used Autos	06/01/97	48,000,000	138,636,000	6,322,000	6,322,000	24,953,000	0.35	7.59	7.59	1.92
					Mean			0.22	(97.38)	(96.72)	0.91
					90th Percentile			0.28	39.61	40.54	1.45
					75th Percentile			0.24	16.54	16.54	1.07
					Median			0.19	8.23	10.24	0.76
					25th Percentile			0.16	0.99	0.99	0.63
					10th Percentile			0.12	(55.07)	(55.07)	0.61

(Continued)



## EXHIBIT 8.6 (Continued)

**TABLE 2**  
**PRATT'S STATS STOCK TRANSACTIONS**

Business Name	Business Type	Sale Date	Selling Price	Revenues	Earnings Before Taxes	Net Income	Total Assets	Sales	Equity Price To:			
									Earnings Before Taxes	Net Income	Total Assets	
B & B Enterprises, Inc.	Auto Dealer, Retail	08/29/1997	\$2,977,549	\$24,473,010	\$(1,331,200)	\$(1,331,200)	\$2,878,465	0.12	(2.24)	(2.24)	1.03	
Young Automotive Group	Operates 18 Automobile Franchises	02/06/1998	68,600,000	410,298,000	11,933,000	11,933,000	84,307,000	0.17	5.75	5.75	0.81	
Gene Reed Automotive Group	Auto Dealers	05/31/1997	34,000,000	138,040,000	4,731,000	4,731,000	27,310,000	0.25	7.19	7.19	1.24	
<b>Some data intentionally left out of this exhibit.</b>												
Grubb Automotive	Owns and Operates 5 Franchised Auto Dealerships	01/01/1997	100,000,000	397,810,000	3,259,000	3,259,000	72,338,000	0.25	30.68	30.68	1.38	
Ken Marks Ford, Inc.	New and Used Automobile Dealership	07/01/1997	25,500,000	144,467,067	766,327	465,597	17,012,813	0.18	33.28	54.77	1.50	
Bledsoe Dodge, Inc.	Owns and Operates 3 Franchised Automobile Dealerships	05/31/1997	42,000,000	154,046,407	4,415,225	4,216,940	28,016,445	0.27	9.51	9.96	1.50	
							Mean	0.21	12.66	14.04	1.08	
							90th Percentile	0.27	30.94	31.24	1.52	
							75th Percentile	0.25	14.18	14.31	1.28	
							Median	0.19	9.84	10.24	1.05	
							25th Percentile	0.16	5.73	5.73	0.85	
							10th Percentile	0.14	4.91	4.91	0.64	

We performed a regression analysis on these transactions in an attempt to better understand these multiples. We found that price to revenues and price to total asset multiples had strong relationships, while there was little relationship between the profitability multiples. Due to the statistical relationship between these multiples, we chose the median as best representing the data set.

**EXHIBIT 8.6**

**PRATT'S STATS ASSET TRANSACTIONS.** Two different multiples were used from this database. The control, non-marketable values have been estimated as follows:

	<u>Revenues</u>	<u>Total Assets</u>
Base	\$20,571,235	\$2,984,772
Multiple	× 0.19	× 0.76
Indication of Value	\$ 3,908,535	\$2,268,427
Net Retained Assets	392,167	392,167
Value of Equity	<u>\$ 4,300,702</u>	<u>\$2,660,594</u>

In an asset transaction, a seller retains certain assets and liabilities. In this case, a seller would retain cash, accounts receivable, and marketable securities, as well as all liabilities except for floor plan financing. The floor plan financing is associated with the inventory, and, therefore, would most likely accompany the inventory to the purchaser. Net retained assets would be calculated as follows:

Cash	\$749,505
Marketable Securities	6,286
Accounts Receivable	520,976
Total Liabilities Less Floor Plan	(884,600)
	<u>\$392,167</u>

**PRATT'S STATS STOCK TRANSACTIONS.** The transaction data from the stock transactions resulted in the following estimates of control, nonmarketable values:

	<u>Revenues</u>	<u>Total Assets</u>
Base	\$20,571,235	\$2,984,772
Multiple	× 0.19	× 1.05
Indication of Value	<u>\$3,908,535</u>	<u>\$3,134,011</u>

## LET'S GET BACK TO THEORY

As with any valuation methodology, the merger and acquisition method has both advantages and disadvantages. Let's discuss them in case you have not figured them out yet for yourself.

### ADVANTAGES OF USING THE MERGER AND ACQUISITION METHOD

Merger and Acquisition methods are those that value a company based on transactions involving a large portion of the company or its entirety. The most readily determinable advantage of using this methodology is that the valuation analyst is able to estimate the value of the appraisal subject based on the prices of entire companies that changed hands. Because most closely held transactions involve entire companies, this method is a logical application of the market approach.

The merger and acquisition transactions used in this method are considered to be an objective source of information, because they come from the market. Market transactions are assumed to be between informed buyers and sellers, and, therefore, a good representation of fair market value occurs if there are enough transactions to be statistically meaningful. The problem becomes how to determine the number of transactions required for them to be statistically valid. Who said it would be easy?

## DISADVANTAGES OF USING THE MERGER AND ACQUISITION METHOD

Although the merger and acquisition method is logical and inherently makes sense, it is difficult to find similar companies that have been acquired. It would be great if we had access to the same type of data that the real estate appraisers have, but unfortunately we do not. Although public company information is sometimes available, there are generally not enough of these transactions to help the valuation analyst adequately. For a meaningful analysis to be performed, there have to be enough transactions to enable you to reach a conclusion. (If you just asked yourself how many is enough, you are getting the hang of this stuff!)

An experienced valuation analyst recognizes that valuation analysts do not work in a perfect world and, frequently, are forced to use less than perfect information. Although a greater amount of detail is generally available about public companies that are acquired, there are frequently times when a valuation analyst turns to closely held data. Private company transactions are difficult to locate, particularly because the owners of these businesses do not feel that they are anyone's business, and if a transaction is located, the details of the transaction are rarely available. For the deal to be consummated, the terms of the deal are frequently an important part of small company transactions. Hearing about two businesses that sold for \$200,000 could lead you to believe that they were of similar value if you did not know the terms of the transaction. If one sold for all cash and the other sold for \$20,000 down, with the balance due over 10 years with no interest, the value of these two transactions would be very different. This is because of the time value of money.

Another problem with this method is that once the transaction is located, it is generally difficult to find out anything other than the financial terms of the transaction. Of considerable importance would be whether the transaction was an asset or a stock sale. Acquisitions frequently involve specific buyers who pay a premium for special or unique considerations, such as the synergies between the two companies. This also makes it difficult to know if the price paid for the business truly represents the value of the business.

Another disadvantage of this method is that because the values derived under these methods result in a control value, it is difficult to translate the estimated value into a minority interest value. If the appraisal subject is a minority interest in a closely held business, the results of the merger and acquisition method will have to be discounted for the minority interest. The problems with these discounts will be discussed later.

### Author's Note

Before we conclude our discussion of the merger and acquisition method, I need to give you a few words of caution. First and foremost, know as much about the provided information as possible. If you are working in a litigation environment, you can expect that the other side will do their homework. Know how each data point is defined so that you can properly apply multiples to your subject company.

Second, you may not want to mix and match data from different databases. Even though you know how information is defined, it may not be input under the same assumptions or using the same conventions. Combining the information from the different databases is not a good idea.

Third, beware of duplicates. Duplicate transactions appear in some of these databases. If it looks like a flower and smells like a flower, it's probably a flower. Duplicates will mess up any statistical analysis.

And finally, combine suggestions 2 and 3. If you bite the bullet and decide to combine databases, be very, very careful of duplicates. The databases get their data from business brokers, who may submit the same data to more than one database. It's not uncommon to find very similar deals in the above-referenced databases, so carefully review transaction data.

One final point worth noting is the fact that some of the “errors” in the databases have already been corrected, and others are being corrected on a regular basis. This means that you really must understand the data that you are using and not just populate a field in a computer program and assume that it is correct. As I am writing this chapter, I just finished reviewing another appraiser’s report; he used a computer software program and its report writer that so totally destroyed the market approach using BizComps data I wanted to tar and feather him. But somehow, I felt that tar and feathering was too light a punishment for the job that was done. Instead, I will see him in court!

## INTERNAL TRANSACTIONS

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Another variation of the market approach comes from Revenue Ruling 59-60. This ruling suggests that the valuation analyst consider any sales of the company’s own stock. These internal transactions may provide the valuation analyst with useful information for use in the market approach. If internal transactions are located, the next step will be to determine whether these transactions were consummated at arm’s-length. Arm’s-length means that the transaction should not be longer than your arm. Actually, it is important to make sure that the transaction is a properly negotiated transaction between parties that have their own best interest in mind. The closer the relationship between the parties, the closer you need to look at that relationship to see if it was truly a negotiation as if between strangers.

Internal transactions are very useful if the valuation analyst has many transactions, rather than just a few. Professional practices, where partners come and go on a regular basis, may be a good example of when to use this data. In these instances, partnership agreements often are used as a road map as to how partners come and go. This concept is discussed further and illustrated in chapter 18.

## INDUSTRY METHOD

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Sometimes called “rules of thumb,” the industry method can prove to be a valuable tool but should never be relied on by itself for the valuation of an appraisal subject. Industry methods are an important part of the valuation process. If an industry uses a particular method to determine the value of a business, the valuation analyst should pay close attention to that method. If enough transactions take place using a particular method, then there is market data that will support the use of that method. However, if these formulas are the only methods used, an inappropriate valuation may result.

Sources of rules of thumb include published compilations, industry sources, business brokers, trade associations, and industry members. The advantage of the industry method is that it generally provides a sanity check on other valuation methods. The disadvantages of the industry method are as follows:

- Different sources may provide different rules of thumb for the same industry.
- The application of an uninformed rule of thumb may result in an incorrect estimate of value.
- While they are simplistic in their applications, rules of thumb may ignore the economic reality of the situation.
- Information (profit margins and capital structure, among others) about the companies that made up the rule of thumb transactions is not known.

Rules of thumb are sometimes used in the application of the market approach, but care must be exercised by the valuation analyst. Rules of thumb should not be used alone because valuation analysts frequently lack the information required to adjust the rule of thumb for particular questions, such as the following:

- Was the transaction based on an asset or equity purchase?
- Did the buyer pay cash, or were there terms that would affect the purchase price?
- Was there a continuation of employment by the seller or a covenant not to compete?
- Was the business profitable?

Clearly, if used incorrectly, a rule of thumb can be dangerous. However, it serves a useful purpose in some smaller appraisals when all else fails. Just be careful! In exhibit 8.7, the potential uses and dangers of rules of thumbs are discussed. This exhibit is based on excerpts from actual reports.

## EXHIBIT 8.7

### RULES OF THUMB

A very popular but often abused method of valuation for professional practices is the *multiple-of-revenue method*. This method is also referred to as the “industry rule of thumb” method. There are many disadvantages to this method, but the major disadvantage is the number of different multiples that are used for the same type of practice. A classic example of the danger in applying this method is the rule of thumb for an accounting practice. Over the years, accounting practices are said to have been sold for an amount that ranges between 50 percent and 150 percent of gross billings. This means that an accounting practice with gross billings of \$1 million could be valued anywhere from \$500,000 to \$1.5 million. This is clearly too wide a spread to be meaningful. Disparities such as this take place all of the time and must be considered before applying unsupported rules of thumb.

The major advantage of this method is that it is easily understood by all parties: buyer, seller, financier, and valuation analyst. According to Ronald Klein, CPA, “a particular multiplier may, in fact, be self-serving, used because it is so widely quoted.” In New Jersey, the multiplier of three became popular because of its application in *Dugan v. Dugan*. Since 1983, this multiplier has been used over and over again, regardless of the facts and circumstances of the current appraisal subject.

Some valuation analysts have extended the use of *Dugan* and have applied the *Dugan* multiplier to different types of professional practices. Mr. Dugan was an attorney. Even an appraisal of another law practice may not result in an appropriate multiple of three. Qualitative factors (such as the type of practice, the type of clients, and profitability) must be considered in the development of an appropriate multiplier.

Looking for rules of thumb for our valuation subject (a dental practice), we found several methods. In *Valuing Professional Practices*, published by CCH International, James L. Horvath, CA, CBV, ASA, suggests two different methods: (1) fair market value of furniture, fixtures, and equipment plus 20–60 percent of annual revenues; and (2) net asset value plus one year’s pretax earnings before owner’s compensation. Using method 1 results in a range of values from \$307,655 to \$802,615, whereas method 2 yields a value of \$730,489.

The *Business Reference Guide*<sup>1</sup> lists four different methods. These methods, with their calculated range of values, are as follows:

- 1 to 1.5 times annual adjusted earnings plus fixtures, equipment, and inventory: \$212,073 to \$286,272
- Net assets plus 25 to 30 percent of gross annual revenues: \$567,935 to \$629,805
- 20–60 percent of annual fee revenues plus fixtures, equipment, and inventory: \$311,155 to \$806,115
- One year’s pretax earnings before owners’ salary, plus fixtures, equipment, and inventory: \$535,579

In *Handbook of Small Business Valuation Formulas and Rules of Thumb*,<sup>2</sup> Glenn M. Desmond, ASA, MAI, suggests two additional methods: (1) monthly revenues times 8 to 12, plus net asset value, less fixed assets, which yields values of \$1,023,343 to \$1,435,810; and (2) monthly revenues times 2.5 to 5, plus net asset value, yielding a range of \$516,377 to \$774,168.

Finally, in *Valuing Small Businesses and Professional Practices*,<sup>3</sup> Shannon P. Pratt mentions two additional methods: (1) equipment and fixtures plus 25 to 35 percent of revenue, resulting in a range of \$369,525 to \$493,263; or (2) equipment and fixtures plus 50 to 100 percent of earnings available to the doctor, yielding values of \$29,127 to \$532,079.

Although some of the methods discussed previously are similar, there are 10 different methods that yield values for the practice ranging from \$212,000 to \$1.4 million.

<sup>1</sup> Tom West, *Business Reference Guide*, 18th ed. (Wilmington, NC: Business Brokers Press, 2008).

<sup>2</sup> Camden, ME: Valuation Press, 1993.

<sup>3</sup> New York: McGraw-Hill, 1998.

## CONCLUSION

By now, either you should be very excited and ready to forge ahead, or your anxiety attack has gotten worse. The market approach chapters contained a lot of stuff. We discussed methodologies, the selection of multiples, the assessment of risk, and the advantages and disadvantages of these methods. We even lightly discussed statistics. Wow, if my mother could see me now! I hope you realize that the market approach can be applied to all-sized companies. Sometimes it may be difficult to apply, but that does not excuse you from using it.

## CHAPTER 9

# *The Asset Based Approach*

### CHAPTER GOALS

In this chapter, I will attempt to explain the following:

- When to use the asset based approach
- The advantages and disadvantages of the asset based approach
- The adjusted book value method
- How to communicate with other appraisers
- How to find other appraisers
- The liquidation value method
- The cost to create method

### INTRODUCTION

The asset based approach is also commonly known as the *cost approach* or the *replacement cost approach*. Sometimes you may even see this approach called the *asset accumulation approach*. In this approach, each component of the business is valued separately. This also includes liabilities. The asset values are totaled, and the total of the liabilities is subtracted to derive the total value of the enterprise.

The valuation analyst estimates value by adjusting the asset values of the individual assets and liabilities of the business to fair market value. Some valuation analysts will use this approach for the tangible assets only and consider it to be complete. In fact, I used to do this. However, as we get older, we get wiser. This approach, like the market and income approaches, is intended to value the entire company. This means that the tangible assets, as well as the intangible assets, should be valued and the liabilities subtracted. You may have to use other approaches to value the intangible assets, but I will discuss that later. If you value only the tangible assets and liabilities, you could overstate the value of the business as a going concern because if there are insufficient earnings to support the asset base, you will end up with a higher value under this approach than the other approaches.

I used to think that valuing the tangible assets and liabilities would result in a “floor” value for an enterprise being valued as a going concern. I hate to admit it, but I was wrong. The purpose and function of the assignment (remember that from the beginning of this book?) has a lot to do with whether it can truly be a floor value. I will address this in greater detail later in this chapter.

### COMMON APPLICATIONS OF THE ASSET BASED APPROACH

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The asset based approach is most commonly applied to the following types of business valuations:

- Not-for-profit organizations
- Holding companies
- Manufacturing companies
- Asset intensive companies
- Controlling interests that have the ability to liquidate assets

In all of these instances, the valuation subject will have most, if not all, of its value in its tangible assets or identifiable intangible assets, such as copyrights, patents, or trademarks. Intangible assets, such as goodwill, will not play an important role in the value of this type of enterprise. If goodwill or another type of intangible value exists, it will be added to the value.

This approach is generally not used for the following types of business valuation assignments:

- Service businesses
- Asset light businesses
- Operating companies with intangible value
- Minority interests, which have no control over the sale of the assets

Service businesses and asset light businesses generally get the bulk of their value from intangible assets. Therefore, it seems logical that the asset based approach would not be an effective means of valuing these types of entities. Operating companies are generally valued based on the ability of the company to generate earnings and cash flow and, therefore, rely on a market or income approach for the determination of their value. If you recall, Revenue Ruling 59-60 indicates the following in Section 5:

*Weight to Be Accorded Various Factors.* The valuation of closely held corporate stock entails the consideration of all relevant factors as stated in section 4. Depending upon the circumstances in each case, certain factors may carry more weight than others because of the nature of the company's business. To illustrate:

- (a) Earnings may be the most important criterion of value in some cases whereas asset value will receive primary consideration in others. In general, the appraiser will accord primary consideration to earnings when valuing stocks of companies that sell products or services to the public; conversely, in the investment or holding type of company, the appraiser may accord the greatest weight to the assets underlying the security to be valued.
- (b) The value of the stock of a closely held investment or real estate holding company, whether or not family owned, is closely related to the value of the assets underlying the stock. For companies of this type, the appraiser should determine the fair market values of the assets of the company. Operating expenses of such a company and the cost of liquidating it, if any, merit consideration when appraising the relative values of the stock and the underlying assets. The market values of the underlying assets give due weight to potential earnings and dividends of the particular items of property underlying the stock, capitalized at rates deemed proper by the investing public at the date of appraisal. A current appraisal by the investing public should be superior to the retrospective opinion of an individual. For these reasons, adjusted net worth should be accorded greater weight in valuing the stock of a closely held investment or real estate holding company, whether or not family owned, than any of the other customary yardsticks of appraisal, such as earnings and dividend paying capacity.

Minority interests will usually not be valued using an asset based approach, because the minority shareholder does not have the ability to liquidate the assets. However, do not take this as a hard and fast rule. In chapter 16, I discuss valuing limited partnership interests in family limited partnerships, which is similar in many respects to valuing minority interests. All of this stuff will be explained further in my discussion about adjusting the balance sheet later in this chapter. Meanwhile, as a general rule, if the shareholder cannot get to the cash flow that will be generated by selling off the assets, this approach will not get to the value of the cash flow to the minority shareholder. After all, value is based on the future benefits stream that will flow to the investor.

## ADVANTAGES AND DISADVANTAGES OF THE ASSET BASED APPROACH

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The asset based approach has both advantages and disadvantages. Box 9.1 includes some of the advantages and disadvantages to consider when using an asset based approach.

The asset values derived using this approach allow a valuation analyst to test the reasonableness of the concept of highest and best use when he or she compares the results with other methodologies in the income or market approach. If these other approaches yield a value considerably less than the value of the entity's assets, liquidation may be a viable alternative if the interest being appraised has the ability to effect a liquidation.



**Box 9.1 Advantages and Disadvantages of the Asset Based Approach****Advantages**

- Net tangible assets can be valued more reliably under this approach than under the other two approaches.
- This approach creates a better reflection of the economic balance sheet of the appraisal subject.
- Net tangible assets can generally be seen and felt, giving the user of the appraisal a warmer feeling about the value.

**Disadvantages**

- This approach is most readily applicable only to tangible assets.
- The asset based approach provides the valuation analyst with the cost of duplicating the business being appraised.
- This approach is frequently more time consuming (and sometimes costly) to apply than the other approaches

## VALUATION METHODS

Included in the asset based approach are the following valuation methods: (1) the adjusted book value method, (2) the liquidation value method, and (3) the cost to create method.

### ADJUSTED BOOK VALUE METHOD

The adjusted book value method finds its theoretical basis in the principle of substitution, which was discussed in chapter 4. In the adjusted book value method, all of the assets and liabilities (including all intangible assets) are adjusted to reflect their fair market value. The fair market value of the subject company's equity will be the fair market value of the assets less the fair market value of the liabilities.

The adjusted book value method is primarily used in the appraisal of asset-intensive businesses in the valuation of a controlling interest. Just as a reminder, a control valuation is one in which the owner of the interest being appraised has the ability to throw his or her weight around. This is to be distinguished from a minority interest valuation or an interest that lacks control.

The mechanics of the adjusted book value method are to convert the book value of the assets and liabilities shown or not shown on the appraisal subject's balance sheet to a market-oriented basis. This will generally involve adjusting the appraisal subject's balance sheet to fair market value. Certain values are easily ascertained by the business valuation analyst, but others are not. There will be times when the business valuation analyst will look to other appraisers (such as real estate or machinery and equipment) to provide the values of certain assets. As a reminder, when you rely on the work of others, you need to pay attention to the standards regarding your responsibilities.

### Adjusting the Balance Sheet

The adjustments made to the balance sheet will depend on the purpose and function of the appraisal assignment. If the assignment is to value the equity of the company, every asset and liability should be reviewed for possible adjustment to fair market value. If specific assets, liabilities, or both are the subject of the valuation, only those assets or liabilities should be valued.

Balance sheet adjustments should generally be made only if the interest being valued has the ability to liquidate the assets and liabilities of the company. If a minority interest does not have the ability to sell off the assets to realize the fair market value of these assets, it makes little sense to revalue them in a fair market value appraisal. Sometimes, valuation analysts will adjust the values to fair market value and then apply a discount for lack of control. I find this to be a time consuming and costly exercise. However, if fair value is the definition of value being used, the minority shareholder is sometimes put in a position to receive the benefit of the appreciated net assets of the company.

In the *U.S. News & World Report* case,<sup>1</sup> this point was a much disputed part of the litigation. Retiring employee shareholders were being bought out based on an annual appraisal performed by one of the large appraisal firms.

<sup>1</sup> *Charles S. Foltz et al. v. U.S. News & World Report, Inc., et al., and David B. Richardson et al. v. U.S. News & World Report, Inc., et al.*, U.S. District Court, District of Columbia, Civil Actions Nos. 84-0447 and 85-2195 (June 22, 1987).

The stock was being valued on a minority, nonmarketable basis (as closely held). The company had amassed a large portfolio of highly appreciated real estate that was not valued at fair market value, because the assignment called for a minority valuation. A short while after a buyout of some employee shareholders, the company was sold for a considerably larger amount than the appraised value. Disgruntled former employees sued the appraisal firm and the company, claiming that their shares had been undervalued at the time that they were bought out. The court found otherwise. In the opinion, Judge Barrington D. Parker stated:

In a minority valuation . . . assets may or may not play an important part in arriving at a per share figure, because a minority shareholder cannot reach those assets. . . . Generally speaking, if the valuation being undertaken is of a business, such as U.S. News, that produces goods or services, primary consideration will be given to the earnings of the company and the resultant return on a shareholder's investment.

This was a good opinion and can be used as instruction for all valuation analysts. Get a copy of this case! It is worth having in your library.

The balance sheet should be adjusted as follows:

- *Cash and equivalents.* Cash and equivalents usually require no adjustment. On occasion, excess cash may be considered nonoperating and should be segregated from that which is used for working capital. This is done for analysis purposes only because it will not affect the value.
- *Marketable securities.* Marketable securities should be adjusted to their fair market value. Usually, an average of the high and low prices on the valuation date will be used to accomplish this.
- *Accounts receivable.* Accounts receivable should be reviewed to see what is collectible. Older receivables may require a present value adjustment. A comparison of the ratio of receivables to revenues with industry composite data should be made to determine if there are any significant differences. In certain valuation assignments, such as medical practices, where the entity reports its results using the cash method of accounting, it may make sense to treat the accounts receivable as a nonoperating (or really an excess) asset. Professional practices frequently have an additional subset of accounts receivable, namely, work in progress.
- *Inventory.* Inventory should be adjusted to reflect fair market value, which is generally the current cost to replace salable inventory. However, inventory valuations for income tax purposes must consider Revenue Procedure 77-12. A valuation analyst may want to consider the following procedures with respect to inventory:
  - Determine the method used to value the inventory carried on the books of the appraisal subject (first in, first out [FIFO] or last in, first out [LIFO], among others).
  - Determine if the inventory can be sold, and if it cannot, adjust the book value accordingly.
  - If the company uses the LIFO method, adjust the value to reflect the current cost to replace the inventory. Although LIFO provides better matching on the income statement, FIFO provides a better balance sheet valuation.
  - If the company does not maintain proper inventory records, consider if there are any necessary adjustments to management's estimate to compensate for possible errors in the valuation of the inventory. If the effective date of the valuation is relatively recent, suggest a physical inventory. A physical inventory that was taken long ago may prove to be meaningless (what's long ago?).
- *Prepaid expenses.* Prepaid expenses should be reviewed to determine whether the balance reflected on the balance sheet reflects fair market value. Prepaid insurance may be subject to short ratings by the insurance company and, as such, may be worth less than its face value. Many cash basis professional practices write off insurance when it is paid, although it may have value on the balance sheet as a prepaid asset. This is particularly true with medical practices, for which the malpractice insurance premiums can be substantial.
- *Land.* Land should be appraised at fair market value and adjusted accordingly. This will generally require the services of a real estate appraiser. If the standard of value is not fair market value, you may be faced with an interesting challenge. Real estate appraisers use a concept called *market value*. This may not always fit your assignment.
- *Buildings.* Buildings should also be valued at fair market value, which is generally considered to be the estimated depreciated replacement cost, considering such factors as age and economic depreciation. The alternative

is to value the property using an income or market approach. This will also generally require the services of a real estate appraiser. This may have the same issues as land when it comes to the standard of value.

- *Machinery and equipment.* Machinery and equipment should be adjusted to reflect their estimated fair market value in use. Assets owned by the business that are not being used can be valued as if those assets will be sold. We will discuss some definitions later in this chapter.

A visit to the business premises will often disclose assets that may be fully depreciated or expensed, or both, and that do not appear on fixed asset schedules. These assets may have significant value to the enterprise and must be considered in the valuation. The services of a machinery and equipment appraiser will frequently be required.

- *Leasehold improvements.* Leasehold improvements may have a fair market value greater than what is shown on the balance sheet, if the expected life of the improvements is greater than the term of the lease and if the probability of a renewal of the lease is high. In certain situations, the value of the leasehold improvements may be practically nil, particularly when these improvements will shortly revert to the property owner.
- *Leasehold interests.* Leasehold interests may have value to the lessee if the lease is transferable and the lease calls for favorable rental payments based on the current market conditions for that type of property. The fair market value of the lease is usually determined as the discounted present value of the future benefits to the lessee. This is the difference between the market rent and the actual rent being paid. An unfavorable lease could be a liability for the company, and if it is not treated in that manner, it will affect profitability and make the company worth less.
- *Identifiable intangible assets.* Identifiable intangible assets may require the services of a specialist in the appraisal of a particular type of asset. Whether or not a specialist is employed, an estimate of the remaining useful economic life of the asset is essential. All three approaches to value may be used, depending on the type of asset being valued. A market approach may be difficult to apply in many cases due to the lack of information about comparable sales of similar intangible assets, but it should not be overlooked. It may be applicable for such assets as customer lists. A cost approach may be used for such assets as an assembled workforce, architectural drawings, or computer software, whereas an income approach may be appropriate for patents, copyrights, and trademarks.
- *Contracts.* Contracts that provide future income to the business, such as royalty agreements, often have a determinable value. Other types of contracts may require the business to actually make payments, but by the very nature of the contract (for example, a covenant not to compete), these contracts may also have value. However, there may also be the need to recognize a corresponding liability in some instances.
- *Accounts payable.* Accounts payable should be reviewed to determine if these items would actually be paid. If the payable has been on the company's books for a long time, the valuation analyst may want to discount the liability based on when it might actually be paid. Cash basis taxpayers may need to have accounts payable added to the balance sheet, because this item is frequently omitted. This is similar to accounts receivable.
- *Notes payable.* Notes payable, particularly the current portion, should be reviewed to determine not only whether the liability is valid but also whether it is properly classified as short term. The valuation analyst uses this information in the financial analysis portion of the assignment. Therefore, incorrect classification will result in the use of incorrect ratios when comparison is made with guideline company data or industry composite data.
- *Credit lines.* Working capital credit lines must be carefully analyzed to determine whether this form of debt is temporary or permanent in nature. A credit line that is used and paid down on a regular basis should be considered as short term debt. However, some companies use the credit line as a form of permanent financing that keeps growing as the company grows, with no principal reductions taking place. This may be considered long term financing or a form of invested capital.
- *Long term debt.* Long term debt should be analyzed similarly to the current portion. All notes payable should be adjusted to fair market value if the interest rate does not reflect the market rate of interest.
- *Deferred taxes.* Deferred taxes can be valued by estimating their market value and adjusting the book value of the deferred taxes account to its market value. Deferred taxes caused by temporary timing differences are similar to zero percent government financing, and as such, they are essentially the same as an interest free loan. The valuation analyst should calculate the present value using a discount rate based on the current

market rate of interest. If the liability can be permanently deferred (this may be possible if the company is growing and the asset base grows while the tax rates do not change), the valuation analyst may be able to exclude this item from the economic balance sheet.

- *Stockholder loans.* Stockholder loans frequently show up on the company's books and records. More often than not, the subject company, particularly a smaller business, is undercapitalized and the "loans" are actually a form of paid-in capital. In these instances, the loans should not be considered a valid liability of the business but rather equity. In other situations, the stockholder loan shows up as a receivable because the stockholder is either disguising compensation in this manner or because the stockholder is using the company's checkbook as his or her personal checkbook. Because the likelihood of repayment is slim, the value of these loans would be zero. A legitimate stockholder loan should be treated as a bank loan and valued accordingly if it is in lieu of bank financing.

The final acid test would be to determine if these loans would have to be repaid if the business were sold.

## Tax Effecting the Balance Sheet

Tax effecting of the balance sheet adjustments will often depend on the purpose and function of the appraisal assignment. The Treasury Department indicated in Private Letter Ruling 91-50001 that capital gains taxes should not be considered when one determines fair market value if there is no plan of liquidation. However, in recent years, the Tax Court allowed built-in gains taxes to be considered as part of the discount for lack of marketability. I will discuss this in greater detail in chapter 12.

Before the Tax Reform Act of 1986, a tax free liquidation of a corporation could have been accomplished under the General Utilities Doctrine.<sup>2</sup> The former position of the Tax Court was that if there was no plan for liquidation, the taxpayer should not be allowed to value an asset as if it were going to be liquidated. However, as the tax law changed, the prevailing wisdom presented to the Tax Court by an IRS valuation analyst was that the willing buyer and the willing seller would consider taxes, even if there were no plan for liquidation. Quite frankly, a willing buyer is not going to pay the market value for an asset without considering the impact of a large built-in gains tax on the asset.

In the first edition of this book, I said that in my opinion, Private Letter Ruling 91-50001 was problematic. At that time, I said:

It defies the concept of what a willing buyer would pay a willing seller if all of the facts are known. In some instances, the potential built-in gains tax could be so great that the purchaser would not purchase the corporate stock at all. The real estate would be sold as an asset sale, and the taxes would be paid at the corporate level. In the *Estate of William Luton*,<sup>3</sup> the Tax Court did not permit a discount for the costs in selling the stock in a real estate holding company, nor was the potential capital gains tax at the corporate level taken into account. The Internal Revenue Service has recently settled several cases that have allowed some discount for the built-in taxes.

Do not think that built-in gains taxes are an automatic deduction from the value of the assets. The case law has not always allowed a full deduction for the amount of taxes that would be paid by the purchaser of these assets. In fact, as you read the case law, the rationale in which the taxes were calculated is extremely unclear, because they were buried into the discount for lack of marketability. Exhibit 9.1 presents selected sections of a real valuation situation that we were involved in before the most recent cases allowing the discount. Exhibit 9.2 presents selected sections of a real valuation situation after the recent cases.

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<sup>2</sup> See old IRC Sections 336 and 337, as amended by Section 631 of the Tax Reform Act of 1986.

<sup>3</sup> T.C. Memo. 1994-539, RIA T.C. Memo. 94539, 68 CCH T.C.M. 1044 (1994).

## EXHIBIT 9.1 REAL ESTATE HOLDING COMPANY VALUATION

### VALUATION CALCULATIONS

In this instance, there is only one valuation method that is appropriate. Section 5, paragraph b of Revenue Ruling 59-60 states the following:

The value of the stock of a closely held investment or real estate holding company, whether or not family owned, is closely related to the value of the assets underlying the stock. For companies of this type the appraiser should determine the fair market values of the assets of the company. Operating expenses of such a company and the cost of liquidating it, if any, merit consideration when appraising relative values of the stock and the underlying assets. The market values of the underlying assets give due weight to potential earnings and dividends of the particular items of property underlying the stock, capitalized at rates deemed proper by the investing public at the date of appraisal. A current appraisal by the investing public should be superior to the retrospective opinion of an individual. For these reasons, adjusted net worth should be accorded greater weight in valuing the stock of a closely held investment or real estate holding company, whether or not family owned, than any of the other customary yardsticks of appraisal, such as earnings and dividend paying capacity.

Clearly, the value of the underlying assets must be considered. This is the analysis that follows.

Table 1 reflects the balance sheet of the corporation at the valuation date per the corporate tax return. Certain adjustments have been made to reflect the fair market value (FMV) of the underlying assets.

<b>TABLE 1 BALANCE SHEET ANALYSIS</b>			
	<b>Book Value</b>	<b>FMV Adjustments</b>	<b>Adjusted Book Value</b>
Cash	\$ 81,081	\$ —	\$ 81,081
Stockholder loan	184,783	—	184,783
Fixed assets	111,266	814,309	925,575
<b>Net worth</b>	<b>\$377,130</b>	<b>\$814,309</b>	<b>\$1,191,439</b>

Fixed assets consist of the real estate and an Oldsmobile Cutlass Sierra automobile. The real estate was appraised for \$920,000 by ABC Appraisal Company. The automobile is valued at \$5,575 based on the N.A.D.A. Used Car Guide, published by the N.A.D.A. Used Car Guide Company. The adjustment brings these assets to fair market value.

Based on the above, the enterprise value of Smith Holding Company Inc. is estimated to be \$1,191,439 before applicable premiums or discounts.

### PREMIUMS AND DISCOUNTS

#### Discount for Lack of Marketability/Discount from Net Asset Value

A discount for lack of marketability (DLOM) is used to compensate for the difficulty of selling shares of stock that are not traded on a stock exchange compared with those that are traded publicly. A DLOM may also be appropriate when

*(Continued)*

**EXHIBIT 9.1** *(Continued)*

the interests have either legal or contractual restrictions placed upon them (for example, restricted stock, buy-sell agreements, and bank loan restrictions). Even when a 100 percent interest of a subject is being valued, a DLOM may be appropriate if the owner cannot change the restrictions on the stock or readily liquidate the investment.

A control value may reflect a DLOM, although it probably would be smaller than a DLOM attributable to minority shares. Since a minority interest is more difficult to sell than a controlling interest, the DLOM is usually larger for minority interests.

Sources of data about the DLOM include the SEC Institutional Investor Study and studies by Maher, Moroney, Gelman, and others.

**A “Real World” Consideration**

Establishing the appropriate discount for a closely held business is a subjective process. There is no doubt that the size of the various discounts has been a constantly controversial topic in the courts. However, it is difficult to ignore the real world. Discounts attributable to the lack of *marketability*, the illiquidity of an investment, are a reality and must be considered. Many times, these discounts are taken from the net asset value and reflect not only a lack of marketability and the illiquidity of the investment, but also a profit factor for the purchaser, who looks for a reasonable rate of return to justify the investment.

In *IRS Valuation Guide for Income, Estate and Gift Taxes—Valuation Training for Appeals Officers*,<sup>1</sup> the concept of *highest and best use* is discussed with respect to real estate. In the *Dictionary of Real Estate Appraisal*,<sup>2</sup> highest and best use is defined as follows:

The most important concept on which the final estimate of value is based is the “highest and best use” of the property being appraised. This may be defined as “the reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value.”

The IRS Valuation Guide points out that the four criteria the highest and best use test must meet are: (1) legal permissibility, (2) physical possibility, (3) financial feasibility, and (4) maximum profitability. Also pointed out in the guide is that “the existing use may not be the highest and best use.”

The principles of business valuation come from the real estate world. We consider similar concepts but apply them differently because of the differences in the appraisal subjects.

The concept of highest and best use is not unique to real estate. It has an application in business valuation. Regardless of the discipline, the question becomes, in what capacity is the property going to provide the maximum financial benefits to the owner(s)?

In real estate, the concept might be to value the property as a commercial office building or a single-family house. In business valuation, the concept might be, should the business be valued as a going concern or as if in liquidation? The bottom line is that some businesses are worth more dead than alive.

Although earnings and cash flow are considered of primary importance as a going concern, there are also instances (such as holding companies) in which the value of the underlying assets can provide the company’s value without liquidation being considered. However, investors in the real world generally make a financial investment in a business for three reasons: (1) income distributions (dividends), (2) capital appreciation (growth), and (3) a combination of dividends and growth.

According to the real estate appraisal that was performed:

During the previous decade, Jackson County’s strong attraction and appeal led to tremendous price increases and corresponding increases in new development.

<sup>1</sup> Chicago: Commerce Clearing House, 1994.

<sup>2</sup> Stephanie Shea-Joyce (Chicago: The Appraisal Institute, 2002).



**EXHIBIT 9.1**

Price escalations were experienced in some years in excess of 30 percent per year, which were significantly sustained through the later years in this time period. Such growth in price coincided with the national and regional expansion of the economy. Property appreciation seen in most, if not all, sectors of the market resulted in a significant increase in new construction, which produced enormous supply.

As a result, the last four years have displayed dramatic decreases in potential rents and market values in most segments of the real estate market. This is partially due to the increasing prices, which exceeded the rise in real income of the area and were further exacerbated by the increased supply. The market had stabilized as of the first half of last year and has been relatively stable with no discernible value changes since this period.

Due to the lack of speculative construction in recent years, vacancy rates, potential rents, and values should begin to improve slightly over the next several years. However, significant improvement in these areas is not expected in the foreseeable future even as the economy moves through its usual cycle.

Pursuant to the foregoing comments, it does not appear as if growth will take place in the foreseeable future. Therefore, an investor in the subject company would most likely look for income.

According to the real estate appraisal, the net operating income from this property was estimated to be approximately \$100,000. The net operating income from the real estate should be reduced by the other expenses incurred at the corporate level, which are not considered a part of the value of the real estate. Other than legal and accounting expenses, estimated at \$5,000 annually, the company's only other expense appears to be income taxes.

Income taxes are estimated to be \$27,000, resulting in a corporate net income of about \$68,000. This would be the amount available to a willing buyer for a return on investment. If the buyer paid \$1,191,439 for this business, the return on investment would be about 5.7 percent. Logically, this does not make sense. At the valuation date, 30-year U.S. Treasury bonds were paying about 6.3 percent, higher than an investor could earn by investing in Smith Holding. Furthermore, the investment in the bonds would be virtually risk-free.

A willing buyer with little prospects for growth and, with a choice of a safe U.S. Treasury bond investment or riskier income from a real estate venture, could not be induced to invest in the latter based on these figures. A discount from the net asset value would be required to produce a reasonable return to the buyer. A differentiation must be made, however, to distinguish between risk and illiquidity.

Risk of loss has been considered in the discount rates used to value the underlying real estate. There is also an element of liquidity loss in this rate as well, according to the ABC appraisal. However, the valuation subject is not the real estate but, rather, common stock in a closely held corporation that owns the real estate.

Owning appreciated real estate inside a corporate entity has some tax problems associated with it. In this instance, a sale of the real estate would trigger a gain of approximately \$800,000 and a corresponding tax of \$320,000. Tax court cases have frequently taken the position that prospective capital gains taxes are speculative and not includable in a valuation. This was made clear in *Estate of Piper*, 72 T.C. 1062; *Estate of Cruikshank*, 9 T.C. 162; and *Estate of Robinson*, 69 T.C. 222.

Despite prior case law, changes in the tax code by the Tax Reform Act of 1986 have now made capital gains taxes a reality, as opposed to speculation. After the repeal of the General Utilities Doctrine, a C corporation is no longer allowed to liquidate tax-free. Therefore, a tax liability could exist if the appreciated property were sold.

Another issue that has been addressed by various cases is whether liquidation was being contemplated. The IRS has taken the position, and the tax court has concurred, that if liquidation was not being contemplated, associated costs should not be permitted.

However, this violates the concept of highest and best use. If the highest and best use of a property was as if in liquidation, the property should be so valued. A poor decision on the part of the property's owner should not affect the value of the property to a willing buyer. If that were the case, Smith Holding would be worth considerably less based on the actual average historical annual income of about \$15,900, as opposed to \$100,000 in the real estate appraisal.

*(Continued)*



**EXHIBIT 9.1** *(Continued)*

The purchaser of Smith Holding would most likely continue to use the company for what it is currently intended to do, namely, generate net rental income. Therefore, liquidation would probably not occur. However, that same purchaser would require a higher rate of return to make the investment worthwhile.

At the valuation date, the rates of return on various types of investments were as follows:

<b>U.S. Treasury bonds</b>	
5-year	5.14%
10-year	5.77%
20-year	6.41%
30-year	6.28%
<b>Corporate bonds (seasoned issues)</b>	7.28%
<b>Corporate bonds</b>	
Aaa	6.94%
Aa	7.15%
A	7.33%
Baa	7.71%

Considering the increased risk of illiquidity, an investor would not be unreasonable to expect a 10 percent return on his or her investment based on alternative rates of return available in the marketplace. The result is that the maximum price paid for this investment would be about \$680,000 ( $\$68,000 \times 10\%$ ). This would indicate a discount of approximately 43 percent.

Although this method of justifying a discount from net asset value is a bit unconventional, the result is within a reasonable range when one considers the previously discussed studies on discounts for lack of marketability. This also results in an estimate of value that makes sense.

**FINAL VALUE**

In our opinion, the value of 100 percent of the common stock of Smith Holding, after appropriate discounts, is approximately \$680,000. The decedent's pro rata share, representing a 62.5 percent interest, is estimated to be \$425,000 ( $\$680,000 \times 62.5\%$ ).

**EXHIBIT 9.2****AFTER THE MORE RECENT CASES****DESCRIPTION OF THE ASSIGNMENT**

Trugman Valuation Associates, Inc. has been retained by Tony Korn, executor on behalf of the estate of Jack Jones, to determine the fair market value of the decedent's 100 percent interest in the common stock of XYZ Corporation. The date of death in the matter is March 10, 2006, and will be used as the effective date for this appraisal. The purpose of this appraisal is for utilization in the preparation of the estate tax returns.

**BRIEF DESCRIPTION OF BUSINESS**

XYZ Corp., a New York state corporation, holds a leasehold interest in a New York City property located at 123456 First Avenue. There are approximately 40 years to run on the lease. XYZ subleases this space, as it has no other operations. The decedent, Jack Jones, was the sole shareholder of the company. This valuation analyst has been informed that as of the valuation date, the subject company is a C corporation. Previously, XYZ had been an S corporation.

**EXHIBIT 9.2**

At the valuation date, there was a contract for sale of the leasehold interest. However, there were numerous problems, involving lawsuits and the inability to obtain a certificate of occupancy from New York City that would permit a legal transfer of this leasehold interest. As a result, there was great uncertainty as to whether the sale would be consummated. It was expected that a significant sum of money would have to be expended to cure the various problems before such a sale could take place.

**BOOK VALUE AND FINANCIAL CONDITION OF THE COMPANY**

The balance sheet of XYZ Corp., as reflected on Form 1120S, U.S. Federal Return for an S corporation, was as follows:

<b>Balance Sheet as of December 31,</b>			
<b>Assets</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>
Cash	\$ 26,641	\$3,167	\$ 1,572
Loans receivable	12,868	8,378	8,378
Loans to shareholders	241,548	43,012	30,149
Security deposits	10,872	10,872	10,872
<b>Total assets</b>	<b>\$291,929</b>	<b>\$65,429</b>	<b>\$50,971</b>
<b>Liabilities</b>			
Loans payable	\$(561)	\$(18,665)	\$ 7,885
Security deposits payable	43,877	43,877	43,877
Loans from shareholders	(27,097)	(26,052)	(25,302)
Capital stock	500	500	500
Retained earnings	275,210	65,769	24,011
<b>Total liabilities &amp; stockholder's equity</b>	<b>\$291,929</b>	<b>\$ 65,429</b>	<b>\$50,971</b>

The stockholder's equity was \$275,710 (\$275,210 + \$500) as of the end of the fiscal year closest to the valuation date.

**THE EARNING CAPACITY OF THE COMPANY**

The earning capacity of XYZ Corp., as a real estate (lease) holding company, is meaningful only in the context of the earnings that can be converted to cash flow available for distribution to the shareholder. The reported earnings for these periods were as follows:

Net rental income	\$209,441	\$41,758	\$9,079
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XYZ has become substantially more profitable as time has gone on. Profitability from the sublease arrangement is expected to continue. It is described in more detail in the real estate appraisal performed by Thomas B. Smith & Associates, Inc. Valuation Calculations.

**Asset Approach—Adjusted Book Value Method**

Revenue Ruling 59-60 Section 5 paragraph (b) states the following:

The value of the stock of a closely held investment or real estate holding company, whether or not family owned, is closely related to the value of the assets underlying the stock. For companies of this type, the appraiser should determine the fair market values of the assets of the company. Operating expenses of such a company and the cost of liquidating it, if any, merit consideration when appraising relative values of the stock and the

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**EXHIBIT 9.2** (Continued)

underlying assets. The market values of the underlying assets give due weight to potential earnings and dividends of the particular items of property underlying the stock capitalized at rates deemed proper by the investing public at the date of appraisal. A current appraisal by the investing public should be superior to the retrospective opinion of an individual. For these reasons, adjusted net worth should be accorded greater weight in valuing the stock of a closely held investment or real estate holding company, whether or not family owned, than any of the other customary yardsticks of appraisal, such as earnings and dividend paying capacity.

Clearly, the value of the underlying assets must be considered. The primary asset of XYZ Corp. is a leasehold interest. According to the real estate appraisal report prepared by Thomas B. Smith & Associates, Inc., the market value of this leasehold interest is \$2,750,000 as of March 10, 2007. In order to apply the adjusted book value method, we must also add any other assets to and deduct any liabilities from the value of the leasehold. The adjusted book value is calculated as follows:

Appraised value of leasehold	\$2,750,000
Plus other assets and liabilities	
Cash	26,641
Loans receivable	12,868
Security deposits	10,872
Loans payable	(561)
Security deposits payable	(43,877)
Net asset value	\$2,755,943
Net asset value (rounded)	<u>\$2,760,000</u>

Loans from stockholders and loans to stockholders were removed from the balance sheet in determining the adjusted book value of XYZ Corp. These loans are considered to be distributions to the estate.

Based on the adjusted book value method, the net asset value of XYZ Corp. is estimated to be \$2,760,000 before applicable premiums and discounts. After the application of the appropriate discounts, the value is as follows:

Net asset value	\$2,760,000
Discount for lack of marketability	1,742,116
Value after discount	\$1,017,884
Rounded	<u>\$1,018,000</u>

Please see the section of this report titled "Premiums and Discounts" for a detailed explanation of the discount for lack of marketability.

**Income Approach**

The capitalization of benefits method is premised on the concept that value is based on a stabilized income stream that is capitalized by an appropriate capitalization rate to reflect the risk associated with the income stream. The use of this method requires an estimate of income to be made for the subject business. In order to apply this method, we are estimating future income to be equal to the most recent period, or \$209,441. The next portion of the application of this method requires the determination of the appropriate capitalization rate to be used for this level of income.

In order to estimate an appropriate capitalization rate, the valuation analyst researched the composite dividend yield for equity interests in publicly traded real estate investment trusts (REITs) as of the valuation date. This information was obtained from *Global Research*.<sup>1</sup> This publication listed a dividend yield composite of 10.3 percent.

<sup>1</sup> *Merrill Lynch Global Research*. Pennington: Merrill Lynch, March (1999)

**EXHIBIT 9.2**

However, the publicly traded REITs are more diversified, considerably larger, and professionally managed. In our opinion, an investment in the subject company would be considerably more risky. Therefore, we believe that a capitalization rate of 15 percent is appropriate. The calculation for capitalizing income is as follows:

Latest-year net income	\$ 209,441
Capitalization rate	× 15%
Capitalized value	\$1,396,273
Rounded	\$1,400,000

Therefore, based on the income approach, XYZ Corp. has a value of \$1,400,000 before any applicable premiums and discounts. After discounts, we believe it should be valued as follows:

Capitalized value	\$1,400,000
Discount for lack of marketability	490,000
Value after discount	\$ 910,000

Please see the section of this report titled "Premiums and Discounts" for a detailed explanation of the discount for lack of marketability.

**RECONCILIATION OF VALUE**

The asset and income approaches were used to estimate the value of XYZ Corp. The results are summarized as follows:

Asset approach	\$1,018,000
Income approach	910,000

Weighting the estimates 75 percent to 25 percent results in the value of XYZ Corp. being estimated as \$991,000.

**PREMIUMS AND DISCOUNTS**

The valuation subject in this report is a controlling interest that was valued on a control basis. Therefore, control premiums and discounts for lack of control are not applicable in this appraisal.

**Discount for Lack of Marketability**

The most commonly used sources of data for determining an appropriate level of discounts for lack of marketability (DLOM) are studies involving restricted stock purchases or initial public offerings. Revenue Ruling 77-287 references the Institutional Investor Study, which addresses restricted stock issues. Many studies have updated this one.

**Other Considerations**

Another consideration in determining a discount for lack of marketability is the cost of flotation of a public offering. These costs are generally significant and will frequently include payments to attorneys, accountants, and investment bankers. The costs associated with smaller offerings can be as much as 25 percent to 30 percent of a small company's equity.

As far back as 1977, through Revenue Ruling 77-287, the Internal Revenue Service recognized the effectiveness of restricted stock study data in providing useful information for the quantification of discounts for lack of marketability. The Baird and Willamette studies of transactions in closely held stocks did not exist at that time, but the IRS and the courts have been receptive to using this data to assist in quantifying discounts for lack of marketability.

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**EXHIBIT 9.2** *(Continued)*

The IPO studies are proof that larger discounts can be justified than those quoted from the restricted stock studies. One of the best explanations of why a DLOM varies from case to case was included in an article published by Robert E. Moroney titled "Why 25% Discount for Nonmarketability in One Valuation, 100% in Another?"<sup>2</sup> In Moroney's article, he points out 11 factors that should be considered in the application of a DLOM. (Author's note: These factors are discussed in chapter 12.)

The discount for lack of marketability for XYZ Corp. comprises three factors: the present value of litigation costs, the present value of income taxes on the sale of the leasehold interest, and the risk inherent in holding the business as an investment prior to sale.

At the valuation date, XYZ Corp. was already entangled in litigation with tenants and already experiencing problems with its certificate of occupancy. The contract for sale of the leasehold was for \$3,000,000, but there was great uncertainty as to whether that contract price would ever be realized. In fact, there was already some renegotiating being pursued by the purchaser. In the meantime, XYZ Corp. was incurring litigation expenses that would continue until all of the problems were resolved. Based on a discussion with legal counsel and the real estate broker who assisted in the deal, these litigation expenses could easily reach \$300,000 to \$400,000. We have, therefore, assumed \$350,000 to be part of the discount necessary to achieve liquidity.

The next factor considered as part of the DLOM is the amount of income taxes that would be incurred on the sale of the leasehold interest by XYZ Corp. If the leasehold interest had been sold as of March 10, 2007, the seller would have incurred significant income taxes on the sale. A willing buyer could not ignore these taxes as they would be substantial. The notion of built-in gains taxes as part of a DLOM has been allowed in various modern-day cases, such as *Estate of Artemus D. Davis v. Commissioner* (110 T.C. 530), *Irene Eisenberg v. Commissioner* (82 AFTR 2d 98-5757, 155 F.3d 50), and *Estate of Welch v. Commissioner* (85 AFTR 2d 2000-1200, 208 F.3d 213).

Under such precedent, we have considered taxes in the DLOM for XYZ Corp. The sale of the leasehold interest would trigger an immediate tax to the corporation. We have estimated the expected taxes to be paid based on the appraised value of the leasehold and discounted these taxes one year to approximate the timing of when the sale and resulting taxes might take place. This calculation is presented below.

<b>C Corp Tax Calculation</b>	
Federal	\$ 768,765
New York State	254,372
New York City	200,105
<b>TOTAL TAXES TO BE PAID</b>	<b>\$1,223,242</b>
Present Value Factor	
Interest Rate = Prime (7.75%) + 2%	× 1.0950
<b>PRESENT VALUE OF TAXES</b>	<b>\$1,117,116</b>

As indicated above, the willing buyer of the XYZ Corp. stock would be faced with a corporate tax liability of approximately \$1,117,116 on a present value basis if the leasehold interest was sold on March 10, 2007. The best that the buyer could end up with is the net amount after taxes are paid.

The final component of the DLOM is the holding period risk, as the seller attempts to sell the stock of XYZ Corp. The real estate market faces many ups and downs as the economy goes through its various cycles. At the date of death, the market was well on its way to the top of the current cycle. Therefore, the risk of holding the investment in a downturn could impact liquidity. Also unknown at this date is how much of a concession will have to be reached with the purchaser of the leasehold interest, clearly the largest owned asset, before a sale is ultimately consummated. Taking all of this into consideration, we have added an additional 10 percent to the discount.

<sup>2</sup> Robert E. Moroney, "Why 25% Discount for Nonmarketability in One Valuation, 100% in Another," *Taxes* (May 1977): 316-320.

**EXHIBIT 9.2**

Therefore, the DLOM for XYZ Corp. has been estimated as follows:

Litigation and Occupancy Costs	\$ 350,000
Income Taxes	1,117,116
Holding Risk	275,000
<b>Total</b>	<b>\$1,742,116</b>

The DLOM applied to the asset approach of \$1,742,116 is not the same DLOM that should be applied to the income approach. Although there is a large built-in gains tax, if an investor purchases XYZ based on its lower income-producing capacity, we believe that the intention would be to hold the investment and not incur the income tax from selling the leasehold interest. In this instance, we believe the litigation and occupancy expenses would still have to be incurred, which was not factored into the income stream capitalized, and there would still be a holding period risk (10 percent of the capitalized value), resulting in a DLOM of \$490,000.

Exhibit 9.2 demonstrates, among other things, that the income taxes that might be paid should probably be estimated based on when the taxes might be paid. This allows a present value calculation to be made, reducing the income taxes to their net present value. The obvious difficulty arises when you have no idea as to when the sale might take place. Here's another question that arises in the negotiation process between the willing buyer and willing seller: would the full amount of taxes be part of the deal? The answer is probably no. However, as valuation analysts we have to figure out the most likely situation.

The situation in exhibit 9.2 was that an actual sale had taken place, but under the fair market value standard we could consider only that which was known or knowable at the appraisal date. The knowledge was that there was a contract for sale, but there were some problems with ongoing litigation that delayed the expected closing. Here also, we had to check with legal counsel.

Tax effecting the balance sheet has been the subject of much controversy in the appraisal profession and has not been fully resolved. However, most experienced valuation analysts believe that accounts receivable and accounts payable should be tax effected when going from cash basis to accrual basis, if there is a likelihood that taxes would be paid by the entity. Be careful not to get caught in the trap of automatically tax effecting these items. The purpose and function of the assignment must be considered here. If the accounts receivable are the same at the beginning and end of the accounting period and revenues have been flat, taxes will probably not be paid in the immediate future. In addition, many professional practices bonus out profit, eliminating any tax. If it is assumed that the hypothetical willing buyer will do the same, there may not be tax here either.

If an asset, such as inventory, is sold as a normal part of the business, the adjustment should be tax effected if there is a likelihood that taxes would be paid by the entity. This relates to income taxes, as opposed to capital gains taxes. Therefore, it appears that a reasonable argument can be made for making this type of adjustment.

Changes from LIFO to FIFO will frequently require a tax adjustment. Here also, the income tax implications are being considered. Clearly, there are no hard and fast rules about tax effecting. Why should this be any different from everything else that we have discussed? Common sense must be used to justify tax effecting. There is no substitute for using your head to support your position.

## When All Adjustments Have Been Made

After all of the adjustments have been made, the difference between the value of the adjusted assets and the value of the adjusted liabilities equals the value of the adjusted equity of the enterprise. If all assets, both tangible and intangible, have been considered, the value should be in the same ballpark as the value estimates reached in the other approaches. However, if the unidentifiable intangible assets (that is, goodwill) are excluded, the result may or may not be considered to be the "floor" value in a valuation of a controlling interest (without any discounts at this point). This

“floor” value is probably greater than what the company would realize in liquidation but may be less than the values derived under the income and market approaches if the company is not strong. That is when the fun really begins!

Most likely, the valuation analyst will have to value the unidentifiable intangible assets using a different methodology and add the result to the adjusted book value estimate of all of the other assets and liabilities. A frequently used method to accomplish this is the excess earnings method. The problem with this method is that it should not be used unless there is no better basis for determining the value of the intangibles. If you don't believe me, re-read Revenue Ruling 68-609. I will discuss the mechanics of the excess earnings method in the next chapter, so be patient.

## Communication Among Appraisers

Communication among appraisers is an important component of the valuation process. The business valuation analyst should be thought of as the team's quarterback. He or she will be responsible for making sure that the other appraisers provide information that will be useful in the business valuation. This means that the business appraiser must have a clear understanding of the terminology used by appraisers in other disciplines (for example, real estate and machinery, among others) to ensure that the same premise of value (going concern or liquidation) is consistently applied throughout the appraisal. This is more of a problem when the client hands you an appraisal that was done for a different purpose than the assignment that you are involved in. For example, an insurance appraisal may end up with a very different standard of value than an appraisal for estate tax purposes.

To keep the lines of communication open and clear, the business valuation analyst should be familiar with certain terminology used by these other professional appraisers. One way to accomplish this is to take the introductory courses in machinery and equipment and real estate offered by the American Society of Appraisers. Some of the important terms are outlined in box 9.2.

### Box 9.2 Professional Appraiser Terminology

**Replacement cost new.** This has been defined by machinery and equipment appraisers as “the current cost of a similar new item having the nearest equivalent utility as the item being appraised.”\* As the term implies, “replacement cost new” is the cost of replacing a piece of equipment that is similar (not exact) in functional usage to the item being appraised. Because technology and models change, this term recognizes the fact that an exact duplicate may not be used as a replacement for an old piece of equipment. Why would anyone want to replace a 57-year-old machine with 57-year-old technology when the new and improved models are so much more efficient?

**Depreciated replacement cost new.** This is the current cost of replacement of an item less the physical deterioration, and functional and economic obsolescence. This term takes into account the loss of value of the existing item as a result of age, deterioration (wear and tear), obsolescence (functional or economic), or a combination of the three. This value may include the costs of getting the asset delivered, installed, and debugged.

Depreciated replacement cost new takes into consideration the fact that the piece of equipment being appraised is not new and, as such, the replacement should be appraised in roughly the same condition as the appraisal subject. In most business appraisals, this concept makes sense. Unless you are forecasting the cash flow needs that will result from the replacement of the existing plant, a willing buyer will not pay the new price of an asset if it is in used condition.

**Reproduction cost new.** This represents the current cost of duplicating an identical new item. Rarely will this concept be used in practice. Other than for special purpose equipment, this concept would not necessarily be feasible.

Reproducing the exact same item could be considerably more expensive than replacing it with a new and improved model.

**Fair market value in place in use.** This term assumes that the asset will be used for the same purpose and in the same place as it is in the hands of the current owner. The value is determined based on the economic contribution of the asset being valued. It is the cost of replacing the existing item with a similar item of equivalent utility. This definition also includes all of the costs of getting the asset ready for use.

**Fair market value in exchange.** For this term, the assumption is made that the asset will be sold. Rather than valuing the asset based on the economic contribution that it makes to the company, the valuation analyst values the asset as if a sale will take place to a willing buyer of only that asset or a group of assets. This concept is frequently used when one values nonoperating assets, because they, by definition, do not make a contribution to the business operations of the appraisal subject.

\*John Alico, ed., *Appraising Machinery and Equipment* (New York: McGraw-Hill, 1989) (sponsored by the American Society of Appraisers).



## The Adjusted Book Value Method Illustrated

In exhibit 9.3, the adjusted book value method is illustrated. The example in exhibit 9.3 was part of an appraisal that was being used by the client for a divorce litigation.

### EXHIBIT 9.3

#### ADJUSTED BOOK VALUE METHOD

The next step in our analysis was to normalize the financial statements. The process of normalization is intended to restate the company's financial statements on an economic basis; in other words, restate the financial statements to reflect the financial condition and operating income that the willing buyer would anticipate. The balance sheet is normalized in table 1.

**TABLE 1**  
**BALANCE SHEET NORMALIZATION**

	<b>September 2007</b>	<b>Adjustments</b>	<b>Adjusted 2007</b>
<b>Current Assets</b>			
Cash	\$ 46,794	\$ —	\$ 46,794
Accounts Receivable	140,879	—	140,879
Inventories	69,619	—	69,619
Prepaid Expenses	11,136	—	11,136
Prepaid Insurance	879	—	879
<b>Total Current Assets</b>	<b>\$269,307</b>	<b>\$ —</b>	<b>\$ 269,307</b>
<b>Fixed Assets</b>			
Land <sup>1</sup>	\$ 24,770	\$ (24,770)	\$ —
Building & Improvements <sup>1</sup>	532,628	374,372	907,000
Machinery & Equipment <sup>2</sup>	285,672	(188,672)	97,000
Land Improvements <sup>1</sup>	18,942	(18,942)	—
Gross Fixed Assets	\$862,012	\$141,988	\$1,004,000
Accumulated Depreciation <sup>3</sup>	292,648	(292,648)	—
<b>Net Fixed Assets</b>	<b>\$569,364</b>	<b>\$434,636</b>	<b>\$1,004,000</b>
<b>Other Assets</b>			
Patent Costs (Net) <sup>4</sup>	\$ 7,044	\$ (7,044)	\$ —
Deferred Loan Costs <sup>5</sup>	3,700	(3,700)	—
<b>Total Other Assets</b>	<b>\$ 10,744</b>	<b>\$ (10,744)</b>	<b>\$ —</b>
<b>TOTAL ASSETS</b>	<b>\$849,415</b>	<b>\$423,892</b>	<b>\$1,273,307</b>
<b>Current Liabilities</b>			
Accounts Payable	\$ 45,295	\$ —	\$ 45,295
Long-Term Debt-Current Portion	24,610	24,610	—
<b>Total Current Liabilities</b>	<b>\$ 69,905</b>	<b>\$ —</b>	<b>\$ 69,905</b>

(Continued)

## EXHIBIT 9.3 (Continued)

	<b>September 2007</b>	<b>Adjustments</b>	<b>Adjusted 2007</b>
Long-Term Liabilities			
Long-Term Debt	\$598,231	\$ —	\$ 598,231
Deferred Taxes <sup>6</sup>	—	95,620	95,620
Total Long-Term Liabilities	\$598,231	\$ 95,620	\$ 693,951
Total Liabilities	\$668,136	\$ 95,620	\$ 763,756
Stockholder's Equity			
Common Stock	\$ 500	\$ —	\$ 500
Paid-In Capital	25,625	—	25,625
Retained Earnings <sup>7</sup>	155,154	328,272	483,427
Total Stockholder's Equity	\$181,279	\$328,272	\$ 509,551
<b>TOTAL LIABILITIES AND STOCKHOLDER'S EQUITY</b>	<b>\$849,415</b>	<b>\$423,892</b>	<b>\$1,273,307</b>

<sup>1</sup> Real estate, including land, building and improvements, and land improvements have been adjusted to \$907,000 as estimated by real estate appraiser Calvin L. Brown, IFAS, CREA. The real estate appraisal is attached to this report as exhibit 1.

<sup>2</sup> The company's machinery and equipment has been appraised by G. Murphy & Associates as of October 7, 2007. The fair market value in continued use of the company's machinery and equipment was estimated at \$97,000. The appraisal report is attached to this report as exhibit 2.

<sup>3</sup> Accumulated depreciation has been adjusted to zero, because the appraised values reflect the economic value of the fixed assets.

<sup>4</sup> Patent costs have been normalized from the balance sheet, because these capitalized costs would not be transferred to a willing buyer.

<sup>5</sup> Deferred loan costs have been normalized from the balance sheet, because this asset would not be transferred in the event of a sale.

<sup>6</sup> Deferred taxes reflect the tax liability incurred due to the difference in the economic value of the fixed assets and book value. In the event of sale, the company would owe tax on the appreciation of these assets, which was calculated as follows:

Fair Market Value	\$1,004,000
Book Value	(569,364)
Appreciation	\$ 434,636
Tax Rate	0.22
Tax Liability	\$ 95,620

The tax rate has been calculated based on applicable state and federal capital gain tax rates as of the valuation date.

<sup>7</sup> Stockholder's equity has been adjusted to reflect the previous adjustments to the balance sheet.

 **Author's Note**

There was no intangible value in this assignment, so the value before a discount for lack of marketability was \$509,551.

## LIQUIDATION VALUE METHOD

Before we can discuss the liquidation value method, let's first define *liquidation value*. Liquidation value is the net amount expected to be left over after the assets are sold off and the proceeds are used to satisfy existing liabilities. The types of liquidation value are *orderly liquidation* and *forced liquidation*. Orderly liquidation value is defined as the value given a reasonable amount of time to find a purchaser of the assets. The reasonable amount of time will differ based on the facts and circumstances at the time of the appraisal, as well as on the type of assets involved; in general, the time is three to six months or longer. The values used in an orderly liquidation are based on the price that the market would pay for an asset in a similar, depreciated condition.

In a forced liquidation, there is generally a lack of adequate time to find a purchaser for the assets. A fire sale value will generally apply. This is a case in which the assets are disposed of as quickly as possible, generally in less than three months. A forced liquidation will generally take place when someone other than the owners of the business forces the liquidation. Obviously, an owner will want to maximize the amount derived from a liquidation. Thus, a plan of liquidation, combined with an adequate amount of time to get the best price in the market, will accomplish this task. This does not happen in a forced liquidation.

When considering the liquidation value method, all costs of liquidation should be deducted. Some of the following liquidation costs may apply:

- Commissions
- Administrative costs and losses that may continue during the period of liquidation
- Legal and accounting costs
- Taxes on the disposal of assets as a result of the liquidation

The time value of money should also be considered, because it may take time to liquidate the company. It is rare that a business owner can liquidate the assets quickly. For example, if the company is no longer servicing its customers, it may take longer to collect the accounts receivable. Furthermore, during the winding-down stage of the business, the company may not be able to dispose of certain assets that may be required until the very end. Depending on the time frame involved, the valuation analyst may feel that a present value adjustment is in order.

When would you use the liquidation value method? The most obvious use of the liquidation method is when an actual liquidation of the business is contemplated. In this situation, the valuation analyst is aware that a liquidation will take place and will generally have the ability to discuss the plan of liquidation with the management of the company. This is the cleanest manner in which to deal with liquidation.

What do you do, however, if a liquidation is not actually planned? The liquidation methodology should also be considered when the highest and best use of the property is to liquidate, as opposed to valuing the entity as a going concern, if the interest being valued has the right to liquidate.

Let's make sure that you are clear on what I just stated. Even though a business may not plan to liquidate, the valuation analyst may be required to value the company on a liquidation basis if the value estimate is higher than it would be as a going concern. This is especially true if the standard of value is fair market value.

**Example:** XYZ Fuel Oil Corp. is an old, well-established home heating oil business that delivers home heating oil and repairs furnaces. The company's financial statements reflect losses for the last seven years. A turnaround in profitability looks doubtful, but the owner of the company wants to continue the business so that it can provide a job for his son, who is employed by the company as a repairer of customers' furnaces.

The value of the net tangible assets of the company is \$350,000. Economic and industry research reflects several important factors that affect the valuation analyst's valuation. First, many customers have converted from home heating oil to natural gas, which explains why the company's sales per gallon have fallen off over the last several years.

Second, the large companies in the industry are making acquisitions of smaller local companies to utilize the excess capacity on their delivery trucks. Many of these companies are sending out trucks with a capacity of 2,800 gallons, but they are only half full. The management of these companies realizes that it costs them only the

price of the extra fuel oil to fill up the trucks and have their driver stop at additional locations along their routes. Therefore, the acquisition of additional customers, through the purchase of smaller independent dealers, is a good business decision.

If larger companies are making these types of acquisitions, the value of the customer list probably has a premium attached to it. However, the customer list is not worth much as an intangible to XYZ on a going concern basis if the company cannot generate profits. In the real world, the customer list can be sold to another fuel oil company for a significant amount of money. If the customer list is sold, XYZ is effectively out of business. Therefore, the sale of the customer list would be part of a liquidation, if the owner of the company wanted to truly maximize his or her value.

This is a classic situation in which the company is worth more dead than alive. The highest and best use of the company's assets is in liquidation. The only way that the shareholders of XYZ can gain the benefit of value of the customer list is to sell it, especially because the company has been losing money each year.

At a minimum, this method may be used to set the lower limit of the range of possible fair market values of a controlling interest in a going concern. However, that may not always be the case. Exhibit 9.4 comes from a real valuation where the standard of value was fair market value, indicating that the highest and best use of the property should be considered.

#### Author's Note

This was a valuation in a divorce that state law excludes personal goodwill from the marital estate. This will be discussed in chapter 17.

## EXHIBIT 9.4 HIGHEST AND BEST USE ANALYSIS

### RECONCILIATION OF VALUES

The value derived in this valuation indicates that there is no intangible value to John Johnson Sales. While the company may have some goodwill, in order for that goodwill to have value, it must be able to generate a return in excess of its net tangible asset value. That is clearly not the case here. The company has not been profitable enough to generate the excess earnings that would be used to measure goodwill value.

We also believe that if goodwill value was to exist, it would be personal in nature, clearly attributable to John Johnson. He is the namesake, the moving force, and the individual with the relationships, and he could compete directly with a willing buyer.

The issue in this valuation is that as of January 31, 2006, and we have determined the value of John Johnson Sales to be as follows:

Asset Based Approach	\$ 1,496,000
Income Approach	500,000

If a willing buyer was to purchase this business for its asset value of \$1,496,000, the question to be asked is, how does she or he get a return on her investment when the business does not generate enough of a profit to provide a return that is commensurate with the risk of the investment?

**EXHIBIT 9.4**

As indicated early in this report, a prudent investor must decide whether a greater return can be available in liquidation, rather than valuing the business as a going concern. According to the *Uniform Standards of Professional Appraisal Practice*, Standards Rule 9-3 states:

In developing an appraisal of an equity interest in a business enterprise with the ability to cause liquidation, an appraiser must investigate the possibility that the business enterprise may have a higher value by liquidation of all or part of the enterprise than by continued operation as is.

We tested this premise by assuming that a hypothetical “willing buyer” would purchase this business for the adjusted book value of \$1.496 million, and then immediately liquidate the balance sheet. During an orderly liquidation, the business would have liquidation costs, such as operating expenses that would continue until everything is liquidated. The assumptions used to arrive at a value in liquidation are as follows:

- Orderly liquidation will take three months.
- Accounts receivable factored at 80 percent.
- Inventory sold off at 60 percent.
- Fixed assets sold at 50 percent of carrying cost.
- Liabilities would have to be satisfied.

Based on these assumptions, the liquidation balance sheet is shown in table 1.

	<b>Adjusted Book Value 1/31/06</b>	<b>Liquidation Adjustments</b>	<b>Liquidation Value 1/31/06</b>
<b>Current Assets</b>			
Cash	\$ 89,816	\$ —	\$ 89,816
Accounts Receivable	1,582,543	(316,509)	1,266,034
Inventories	2,146,824	(858,730)	1,288,094
Prepaid Expenses	43,411	—	43,411
Prepaid Taxes	48,200	—	48,200
Other Receivables	6,214	—	6,214
Related Party Receivable	3,056	(3,056)	—
<b>Total Current Assets</b>	<b>\$3,920,064</b>	<b>\$ (1,178,294)</b>	<b>\$ 2,741,770</b>
<b>Net Fixed Assets</b>	<b>\$ 175,906</b>	<b>\$ (87,953)</b>	<b>\$ 87,953</b>
<b>Other Assets</b>			
Security Deposits	\$ 32,901	\$ —	\$ 32,901
Deferred Income Taxes	16,945	—	16,945
<b>Total Other Assets</b>	<b>\$ 49,846</b>	<b>\$ —</b>	<b>\$ 49,846</b>
<b>TOTAL ASSETS</b>	<b>\$4,145,816</b>	<b>\$ (1,266,247)</b>	<b>\$ 2,879,569</b>
<b>TOTAL LIABILITIES</b>	<b>2,649,504</b>	<b>—</b>	<b>2,649,504</b>
<b>NET WORTH</b>	<b>\$1,496,312</b>	<b>\$ (1,266,247)</b>	<b>\$ 230,065</b>

(Continued)

**EXHIBIT 9.4** (Continued)

As a result of liquidating the balance sheet, stockholder's equity is \$230,065.

Liquidation expenses are those operating expenses that the business would incur in order to effectuate the liquidation. These are shown in table 2.

<b>TABLE 2</b>			
<b>LIQUIDATION EXPENSES</b>			
	<u>Qty.</u>	<u>Salary</u>	<b>Liquidation Expenses</b>
Rent			\$ 53,272
Personnel			
Office	1	\$40,000	10,000
Warehouse	2	20,000	10,000
Insurance			25,000
Utilities			4,738
Professional Fees			10,000
<b>THREE MONTH LIQUIDATION EXPENSES</b>			<b>\$113,010</b>

The liquidation expenses calculated above do not include a provision for income taxes, as the company is an S corporation. As a result of these expenses, the total liquidation value is as follows:

Fair Market Value of Balance Sheet in Liquidation	\$230,065
Liquidation Expenses	(113,010)
<b>TOTAL LIQUIDATION VALUE</b>	<b>\$117,055</b>

This analysis shows that the company has greater value as a going concern than it does if it was liquidated.

However, the next question is, how much weight should be assigned to the results from the two approaches performed in this valuation? We must look at a weighting that will allow the willing buyer to obtain a return while recognizing that the willing seller does not want to give away the business. Despite the willing seller's desire to get as much as possible for the business, it just may not be worth that amount.

For guidance, we turned to Revenue Ruling 59-60, Section 5, which is titled *Weight To Be Accorded Various Factors*. According to this section:

- (a) Earnings may be the most important criterion of value in some cases whereas asset value will receive primary consideration in others. In general, the appraiser will accord primary consideration to earnings when valuing stocks of companies which sell products or services to the public; conversely, in the investment or holding type of company, the appraiser may accord the greatest weight to the assets underlying the security to be valued.
- (b) The value of the stock of a closely-held investment or real estate holding company, whether or not family owned, is closely related to the value of the assets underlying the stock. For companies of this type, the appraiser should determine the fair market values of the assets of the company. Operating expenses of such a company and the cost of liquidating it, if any, merit consideration when appraising the relative values of the stock and the underlying assets. The market values of the underlying assets give due weight to potential earnings and dividends of the particular items of property underlying the stock, capitalized at rates deemed proper by the investing public at the date of appraisal. A current appraisal by the investing public should be superior to the retrospective opinion

### EXHIBIT 9.4

of an individual. For these reasons, adjusted net worth should be accorded greater weight in valuing the stock of a closely-held investment or real estate holding company, whether or not family owned, than any of the other customary yardsticks of appraisal, such as earnings and dividend paying capacity.

Another source we reviewed was the course material taught by the American Society of Appraisers (ASA). Here, the ASA provided guidance on the application of the asset approach as follows:

Likely applications of the asset approach:

1. Holding or investment companies
2. Capital-intensive manufacturing companies
3. Poorly performing companies, where liquidation may be a reasonable means of maximizing value
4. Not-for-profit organizations

Less likely applications of the asset approach:

1. Service businesses
2. Many distribution companies
3. Labor-intensive manufacturing companies with little investment in fixed assets
4. Minority interests

John Johnson Sales is not a holding or investment company, it is not a manufacturing company, and it is not a not-for-profit company. Although the company is performing poorly, liquidation is not a reasonable means to maximizing values. Instead, the company is a distributor and the asset approach is less likely to apply.

According to Revenue Ruling 59-60, as well as the professional literature, more weight should be given to the income approach for companies such as John Johnson Sales. But how much? In this case, the income generated as a going concern does not support the value reached under the asset approach. The value reached using the income approach is commensurate with the risk involved in owning a 100 percent interest in John Johnson Sales. The willing buyer will not pay more for the stream of income generated by the company than the present value of the future benefits. Therefore, all of the weight should be placed on the income stream. In our opinion, the value of John Johnson Sales at January 31, 2006, was approximately \$500,000.

Remember, you do not want to use this method if the interest that you are valuing does not have the ability to liquidate the company (for example, a minority interest). The rights of the interest being valued must be taken into consideration during the valuation process. If you are not sure what those rights are, re-read the articles of incorporation, the bylaws, shareholder agreements, or ask an attorney.

If the appraisal is for tax purposes, you might want to consider the case law. The IRS and, particularly, the tax courts have frowned on a liquidation methodology unless a plan of liquidation is in place.

## COST TO CREATE METHOD

The *cost to create method* is similar to the adjusted book value method. The main difference is that under this method, in addition to valuing the net tangible assets, the valuation analyst values the intangible assets as well. This method requires the valuation analyst to estimate how much it would cost to recreate the enterprise being valued. This would also include trying to estimate the time, effort, and monetary contribution necessary to recreate the intangible assets of the business.

The cost to create method will often result in a value estimate that is higher than the cost to reestablish a business enterprise, much in the same manner I discussed earlier in this chapter when I defined *reproduction cost new*. There is rarely a situation in which the business would be rebuilt from scratch in the same fashion as had been done previously. However, the cost to create method can be useful for valuing intangibles such as customer lists, engineering drawings, and music libraries, among others.



## WORKING WITH OTHER APPRAISERS

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One of the first steps in working with other appraisers is to properly define the type of value that you will require as part of your business valuation. Very often, you may ask a machinery and equipment appraiser to give you two or more estimates of value for the equipment. This may include the value in place, the value if sold, and a liquidation value. Do not leave it up to the other appraiser to give you a value, because the result may be totally inconsistent with the appraisal approaches and methodologies that are chosen to value the equity of the company. For example, a machinery and equipment appraiser may value the assets as if they were in place in use, whereas the business valuation analyst has determined that the highest and best use of the business requires a liquidation methodology. Sometimes it may be necessary to have the machinery valued using two or more concepts.

## HOW TO LOCATE AND RECOGNIZE SPECIALISTS

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There are various organizations that designate appraisers. Some of the more common designations in real estate are granted by the American Society of Appraisers, the Appraisal Institute, and the National Association of Independent Fee Appraisers. These designations are as follows:

- The American Society of Appraisers
  - **AM.** This designation is granted in various disciplines to individuals who have qualified with at least two years of experience.
  - **ASA.** This designation is granted in various disciplines to individuals who have qualified with at least five years of experience.
 

The various disciplines of the American Society of Appraisers include business valuation, gems and jewelry (with subspecialties in diamonds and unmounted colored gemstones, contemporary jewelry, art and designer jewelry, Native American or other collectible ethnic jewelry, antique and period jewelry, rough gemstones, gemstone carvings, and mineral specimens), machinery and technical valuation (with subspecialties in agricultural chattels, aircraft, arboriculture, computers and high-tech personal property, cost surveys, industrials, machinery and equipment, marine survey, mines and quarries, natural resources, oil and gas, and public utilities), personal property (with subspecialties in antique and collectible glass, antique and decorative arts, antique firearms, armor and militaria, antique furniture, Asian art, automatic musical instruments, automotive specialties, books, equines, ethnographic art, fine arts, fine arts photography, furs, Native American art, numismatics, oriental rugs, pre-Columbian art, residential contents, silver and metal ware, stamps, violins, and fine and rare wines), and real property (with subspecialties in urban real property, residential real property, rural real property, ad valorem real property, and timber and timberlands).
- The Appraisal Institute
  - **MAI.** This is the highest level designation held by members who are experienced in the valuation and analysis of commercial, industrial, residential, and other types of properties and are qualified to advise clients on real estate investment decisions.
  - **SRPA.** This designation is held by members who are experienced in the valuation of commercial, industrial, and residential property, as well as other types of properties.
  - **SREA.** This designation is held by members who are experienced in the valuation and analysis of commercial, industrial, and residential property, as well as other types of properties, and are qualified to advise clients on real estate investment decisions.
  - **SRA.** This designation is held by members who are experienced in the valuation of single family homes, townhouses, and residential income properties up to and including four units.
  - **RM.** This designation is held by members who are experienced in the valuation of single family homes, townhouses, and two to four unit residential income properties.
- The National Association of Independent Fee Appraisers
  - **IFA.** This designation represent a member.
  - **IFAA.** This designation represents an agricultural member.

- **IFAS.** This designation represents a senior member.
- **IFAC.** This designation represents an appraiser-counselor.

By now, you must feel like alphabet soup; however, box 9.3 summarizes the various professional designations nicely. Your local Yellow Pages will assist you in finding many of these types of individuals. Most of the appraisal organizations also have directories, which you can obtain by calling them. Another alternative is to call equipment dealers, but be careful using the information that you get from them. Problems similar to those discussed earlier can arise from getting information from business brokers. Some pieces of information are going to be better than others.

### Box 9.3 Professional Appraisal Designations

#### American Society of Appraisers

AM—qualified with 2+ years of experience

ASA—qualified with 5+ years of experience

#### Appraisal Institute

MAI—*highest level designator* qualified to advise clients in commercial, industrial, and residential real estate valuation

SRPA—experienced in commercial, industrial, and residential real estate valuation

SREA—qualified to advise clients in commercial, industrial, and residential real estate valuation

SRA—experienced in single family homes, townhomes, and residential income real estate valuation

RM—experienced in single family homes, townhomes, and residential income real estate valuation

#### National Association of Independent Fee Appraisers

IFA—member

IFAA—agricultural member

IFAS—senior member

IFAC—appraiser-counselor

## CONCLUSION

Fortunately, this chapter was easier than the last one. By now, you should know when to use the asset based approach, how to apply the methods, and the advantages and disadvantages of each of them. So let's move on.



## CHAPTER 10

# The Income Approach

### CHAPTER GOALS

In this chapter, I will attempt to explain the following:

- When to use the income approach
- Advantages and disadvantages of using the income approach
- Using pretax or after tax information
- Valuing invested capital instead of equity
- The capitalization of benefits method
- The discounted future benefits method
- The excess earnings method
- Common errors in applying the income approach
- Issues affecting pass through entities

### INTRODUCTION

Revenue Ruling 59-60 suggests that a valuation analyst should consider the earning capacity of the business in the determination of fair market value. *Earning capacity or income*, as applied in the methods about to be discussed, may be defined in a number of different ways. Some of the more common definitions include the following:

- Net income after tax
- Net income before taxes (pretax income)
- Cash flow
- Net income to invested capital
- Net cash flow to invested capital
- Earnings before interest and taxes (EBIT)
- Earnings before interest, taxes, depreciation, and amortization (EBITDA)

These income streams, also known as *benefit streams*, are converted into estimates of the value of the appraisal subject. The two processes that are used in the income approach are known as *capitalization* and *discounting*. They are defined as follows:

1. **Capitalization.** A single period valuation model that converts a benefits stream into value by dividing the benefits stream by a rate of return that is adjusted for growth. A common variation of this theme is the reciprocal of the market multiple price/earnings, which would be earnings/price. An earnings/price ratio is a capitalization rate.
2. **Discounting.** A multiple period valuation model that converts a future series of benefit streams into value by discounting them to present value at a rate of return that reflects the risk inherent in the benefits stream.

Some of the definitions from the International Glossary of Business Valuation Terms regarding these two processes can be found in box 10.1. Viewing these two models as pictures, these processes are represented in figures 10.1 and 10.2.

### Box 10.1 Key Terms Related to Capitalization and Discounting Valuation Methods

**Capitalization.** A conversion of a single period of economic benefits into value.

**Capitalization factor.** Any multiple or divisor used to convert anticipated economic benefits of a single period into value.

**Capitalization of earnings method.** A method within the income approach whereby economic benefits for a representative single period are converted to value through division by a capitalization rate.

**Capitalization rate.** Any divisor (usually expressed as a percentage) used to convert anticipated economic benefits of a single period into value.

**Discount rate.** A rate of return used to convert a future monetary sum into present value.

**Discounted cash flow method.** A method within the income approach whereby the present value of future expected net cash flows is calculated using a discount rate.

**Discounted future earnings method.** A method within the income approach whereby the present value of future expected economic benefits is calculated using a discount rate.

FIGURE 10.1  
CAPITALIZATION MODEL



FIGURE 10.2  
DISCOUNTING MODEL



Believe it or not, a capitalization model is a shortcut for a discounting model. Although the arrows point in different directions, the concepts are really the same. I will explain this in more detail shortly.

A capitalization model uses a current benefit stream and assumes that the particular stream of income will be received into perpetuity. A discounting model uses a forecast benefit stream and then discounts that stream back to present value. While the pictures look like backward arrows at this point, stay with me on this for a while, and it will all start to make sense (hopefully).

In general, the capitalization rates and discount rates used for various benefit streams will be different in each situation. Capitalization and discount rates are discussed in chapter 11.

The fundamental theory behind the income approach to valuing a business interest is that the value of an investment is equal to the sum of the present values of the future benefits it is expected to produce for the owner of the interest. The present value of the future benefits is determined through the application of a rate of return (discount rate), which reflects the time value of money, the relevant investment characteristics, and the degree of risk perceived by the market. The application of the income approach results in an estimate of the fair market value of the normalized net operating assets. In simple terms, the income stream that is capitalized or discounted is produced by using the net assets of the business. Therefore, the value that results from these net assets is included in the income of the company as a going concern. If the income being produced is lower than it should be, there may

be a sign of economic depreciation that is applicable to the value of the assets. The assets alone have value only if they can be sold or exchanged (Value in exchange sound familiar? Come on, it was in the last chapter. You could not have forgotten it already!). If the owner sold these assets, the business could no longer generate income and, therefore, the value would be sold with the assets.

After the value of the net operating assets is determined, the value of the net nonoperating assets is added to the result to obtain the value of the equity. In the invested capital versions of the income approach, the estimate of the value derived results in the value of the invested capital of the enterprise.

## VALUE IS FROM AN INVESTOR'S VIEWPOINT

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The income approach is generally used in determining the value of the appraisal subject from the viewpoint of an investor. In many of the older textbooks, we see the income approach referred to as the *investment value approach*. This can become confusing because investment value is a standard of value and not an approach to valuation. Although the valuation analyst will most likely understand the difference in these terms, he or she should avoid using the older terminology for the income approach so that the users of this information will not be confused. See, you knew there was a reason that you bought the newest edition of this book. Terminology has, in fact, changed over the years, and it is a good idea to make sure that your library contains the current editions of the business valuation treatises.

The income approach is based on the assumption that an investor could invest in a property with similar investment characteristics, but not necessarily the same business. This approach looks to the earnings power, or cash generation capabilities, of the enterprise being appraised.

Very often, closely held businesses are so unique that the valuation analyst cannot find good information about market multiples or capitalization rates to apply to the company's benefit stream. Instead, the valuation analyst tries to compare the risk associated with the benefit stream to alternative types of investments in the marketplace. This becomes another form of the principle of substitution at work. The valuation analyst will go a long way by having knowledge about the rates of return available in the marketplace.

Although this approach can be difficult to apply at times, it is frequently the best approach for estimating the value of a business. Intuitively, if you can put together a reasonable forecast and you can determine a reasonable rate of return from other, similar investment alternatives, the estimate of value may be a much more reasonable approach than attempting to find guideline companies that may or may not be similar enough to the subject company to make a good comparison. If you are lucky enough to find good guideline companies, you then have the feat of subjectively choosing how to adjust the multiples that will be applied to the subject company. While the income approach also has its own degree of subjectivity, a well grounded forecast is sometimes easier to achieve. Some valuation analysts reading this may not agree with me, but if you really start to think about companies that are acquiring other companies, most of them are using some form of discounting model (usually cash flow) as a primary method of determining the value of the target company. Of course, they may not ignore the market multiples, but it will usually come down to the forecasted cash flow.

## THE INCOME APPROACH

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As to be expected, the income approach has both advantages and disadvantages. By now you should realize that this valuation stuff is not perfect. Let's discuss the good, the bad, and the ugly!

### ADVANTAGES

The income approach has some definite advantages, including the following:

- It values an enterprise based on its earnings or cash flow generating abilities. Therefore, there is a relationship between the value of the enterprise and the earnings or cash flow it produces.
- It requires a simple mathematical application that is frequently performed more quickly relative to the other approaches.
- At times, it is the only approach that can be used to value intangible assets.
- Financial markets frequently use the income approach in the decision making process.

## DISADVANTAGES

As you would expect, there are also disadvantages to the income approach:

- It is frequently difficult to determine the correct level of the sustainable benefits stream that will be used in the application of this approach. This is especially true for most smaller companies (some of our clients are lucky if they can file their current year's tax returns, let alone forecast the future!).
- It is extremely difficult to choose the correct capitalization or discount rate that will be used to capitalize or discount the benefit stream. This requires the valuation analyst to exercise judgment, which is subjective. At times (most), it is a difficult number to defend on its own merits.

## SELECTING BENEFIT STREAMS

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The benefit stream(s) to be used in the application of the income approach depends on many factors. These factors are somewhat similar to those factors that were discussed in chapter 7 in determining pricing multiples. Special attention should be paid to the following factors: (1) the nature of the business and its capital structure, (2) the purpose and function of the appraisal, and (3) the particular subject of the valuation (for example, whether the valuation involves a controlling interest or a minority interest).

### THE NATURE OF THE BUSINESS AND ITS CAPITAL STRUCTURE

The benefits stream used by the valuation analyst will frequently depend on the nature of the business and its capital structure. For example, net income (after tax) may be the appropriate income stream in certain valuation assignments involving larger companies. Net income may be used to achieve comparability with the guideline companies that report their earnings on an after tax basis. A pretax income stream may be warranted for smaller appraisal subjects that operate the business to minimize taxes. Chances are that the willing buyer will operate the business in a manner similar to that of the willing seller.

The capital structure of the subject business will also be a factor in the determination of the benefit stream to be used by the valuation analyst. Companies that are heavily leveraged, compared with guideline companies or industry composite figures, may be more appropriately valued on an invested capital basis. Earnings before interest and taxes may prove to be a more meaningful comparison than net income. Of course, if the goal is to value equity, the liabilities will be subtracted from the value of the invested capital.

### THE PURPOSE AND FUNCTION OF THE APPRAISAL

The purpose and function of the appraisal assignment will also play a role in the benefit stream that the valuation analyst will select. As a refresher, the purpose and function of the appraisal relates to why you are doing the job and what it will be used for. An appraisal assignment for a merger or acquisition will most likely have more of an emphasis on pro forma earnings than on historic earnings. If the valuation analyst is representing the buyer, the investment value to that buyer may require certain adjustments to be made that would not normally exist in a fair market value appraisal (for example, removal of certain expenses that will go away because of the synergies between the companies).

In certain jurisdictions, particularly for divorce assignments, future earnings are not allowed to be used in valuations submitted to the courts. In these jurisdictions, the primary emphasis becomes the historic figures. Since when does a willing buyer purchase history? These jurisdictions may be misguided, but I am not going to be the one to tell them that.

### THE PARTICULAR SUBJECT OF THE VALUATION

The particular subject of the valuation makes a big difference in the benefit stream that can be used in an appraisal. When a valuation analyst values a controlling interest, adjustments are commonly made, as discussed in chapter 6. For minority appraisals, however, many of the adjustments that would have been made for control are not made. The valuation analyst will use a normalized benefit stream for both valuations, but the minority valuation will most likely not contain the adjustments related to discretionary items.



Another consideration in this process is the fact that the minority shareholder cannot control the balance sheet of the company. Therefore, valuing the minority shares by assuming a normalized debt-to-equity relationship would not make sense. A small, closely held company with a considerable amount of debt on the balance sheet is going to be paying a lot of interest expense. Valuing this company for the minority shareholder on an invested capital basis would result in an overvaluation of the company's true worth to that individual. The fact that the controlling shareholder has elected to put the company in debt reduces the value of the company.

## USING PRETAX OR AFTER TAX INFORMATION

In general, it should not really matter whether the valuation analyst is working with pretax or after tax information. The key is to be consistent. The use of either pretax or after tax information has advantages and disadvantages. Remember that you are trying to perform an analysis using "comparable" information from either guideline companies or industry information. You must be able to compare similar information to reach a meaningful conclusion concerning value. Box 10.2 outlines the advantages of using pretax and after tax information as key components in a valuation assessment.

### Box 10.2 Advantages of Pretax and After Tax Valuation Information

#### Pretax Advantages

The form of ownership of the appraisal subject will not make a difference. This will allow you to compare C corporations with S corporations with partnerships with sole proprietorships. Varying tax rates will affect neither your analysis nor its conclusion.\*

Noncorporate entities can be valued without considering the tax effect of, for example, itemized deductions or personal exemptions.

Small businesses generally operate to minimize income taxes. The willing buyer would probably run the business in a similar manner as the willing seller in that regard. Because "comparable" data will rarely be found, you will find yourself using industry composite data, which is often made up of companies such as the one you are appraising.

\*It is also acceptable to tax effect pass through entities and value these entities on an after tax basis. In these circumstances, many valuation analysts will use the corporation tax rates for C corporations on the premise that the willing buyer could be a C corporation. This will also avoid getting involved with personal income tax rates, itemized deductions, personal exemptions, the self-employment tax, and other items that vary greatly between taxpayers. There is a new section discussing this issue at the end of this chapter.

#### After Tax Advantages

Most data derived from the public market is reported on an after tax basis. This makes the comparison more meaningful if guideline companies from the public market are used.

After tax information more appropriately reflects the amount that is available to the stockholders for dividends. Other items affecting cash flow are also considered.

Larger company valuations will frequently be performed this way for mergers and acquisitions, employee stock ownership plans, and initial public offerings because of the available information being reported in this manner.

The big controversy in the appraisal field regarding the valuation of non-tax-paying entities such as S corporations and limited liability companies has been addressed frequently. There is a growing body of knowledge about this topic. The general consensus is that tax effecting depends on the facts and circumstances of each situation. There are no hard and fast rules. Now the valuation analyst must ask the question, "to tax effect or to not tax effect, that is the question." I feel like Shakespeare. Let's save this discussion until the end of the chapter.

For the nonaccountants reading this book, a C corporation is a typical, tax paying corporation. An S corporation is a legal corporation that, for tax purposes, is treated like a partnership. This means that the shareholders pay personal taxes on the profit instead of corporate taxes being paid by the entity.

## VALUING INVESTED CAPITAL INSTEAD OF EQUITY

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This is also like Shakespeare. “To be or not to be. . . .” Should the valuation analyst consider using an invested capital or an equity benefit stream? The same rules apply as we discussed under the market approach (invested capital, remember?). Regardless of which you use, the answer should ultimately be the same. The choice of one over the other will frequently be based on comparability with the guideline companies, industry composite data, or the source of the capitalization or discount rates used in the application of this approach.

## USING CASH FLOW INSTEAD OF EARNINGS

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A valuation analyst will frequently find that using cash flow is a better measure of the company’s earnings capacity. This is particularly true when a more realistic picture is being sought of the amount of money that will be available to pay to the owners of the business as a return on their investment. Many profitable companies go out of business, but it is rare that we see a business with solid cash flow go under. Therefore, cash flow is the name of the game. Similar to pricing multiples (discussed in chapter 7), cash flow, as opposed to earnings, may be a better measure for the business when the net earnings are low compared with depreciation and amortization. The use of cash flow will depend on the facts and circumstances of each case. If the valuation subject is a controlling interest, it can be assumed that the controlling interest is able to effectuate changes in the balance sheet of a company. Management must decide what they want to do with respect to the company’s cash flow. They can distribute all of the available cash and have no funds for growth, or they may reinvest all or part of the available cash into the company and provide for growth.

An operating business must have a sufficient amount of net working capital, a reasonable amount of fixed asset reinvestment, and available cash flow to pay its long-term obligations as they come due. The growth of the company results from investing more than is required to just maintain the existing assets. Growth is funded from internally generated cash flow, new equity, new debt, or a combination of these items.

## DEFINING CASH FLOW

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The definition of cash flow, as used in a valuation context, differs from the traditional accounting definitions as described in the Financial Accounting Standards Board (FASB) Statement of Financial Accounting Standards No. 95, *Statement of Cash Flows*. Understanding valuation terminology is an important part of the education process so that the valuation analyst can be conversant in business valuation jargon. The following definitions of cash flow have been used by valuation analysts and, therefore, users of business valuation services may already be familiar with the terminology. Even if the users are not terribly familiar with this terminology, there is no point in recreating the wheel with another set of terminology. Figure 10.3 depicts the basic net cash flow model.

**FIGURE 10.3**  
**THE BASIC NET CASH FLOW MODEL**

	Normalized net income
+	Normalized noncash charges
=	Gross cash flow
–	Anticipated capital expenditures
+ or –	Working capital necessary to support growth (or generated due to negative growth)
+ or –	Debt borrowings or repayments
–	Preferred stock dividends
=	<u>Net cash flow to common equity</u>

The net cash flow illustrated in Figure 10.3 would be the amount that is available to the common stockholders of the company. This could be thought of as the dividend paying capacity. It is the amount that is left over after

the company reinvests in itself to continue its operations while providing for growth. After investing in capital expenditures, reinvesting the amount of working capital to allow the company to grow and taking care of changes in debt, the company is in a position to begin making distributions to the stockholders or owners. Granted, small businesses do not generally pay dividends, but this would be the amount that would be available if they did.

Gross cash flow is the measure of cash flow that we often see in the pricing multiples in the guideline company method. Net cash flow can't be used in that situation because it is rare that a valuation analyst will have access to the public company's working capital requirements, fixed asset requirements, and other assorted information needed to get from gross cash flow to net cash flow. However, the income approach concentrates on the subject company's cash generation ability. The more information included in deriving the cash flow available to the stockholders, the less risky the cash flow is usually perceived as being because more factors went into its derivation. Of course, this could also result in more errors regarding these factors. It's not a perfect world!

The manner in which net cash flow is derived will depend on whether the valuation analyst is valuing the equity or the invested capital of the company. As a reminder, valuing the invested capital involves appraising the company on a debt free basis. The net cash flow model illustrated previously is used by a valuation analyst when he or she is valuing the equity of the company. If the goal is to value the invested capital of the company, certain modifications must be made to get there. Interest expense is added back, net of taxes, to restate the net income on a debt free basis. Because interest expense gives rise to a tax benefit, the add-back must be reduced by the corresponding tax benefit.

Another modification is that there will be no addition or subtraction for new borrowings or repayment of old borrowings. Logically, if we are attempting to derive a debt free result, debt should be eliminated from the model. This results in the net cash flow model for invested capital (figure 10.4).

#### FIGURE 10.4 NET CASH FLOW MODEL FOR INVESTED CAPITAL

	Normalized net income
+	Interest expense (net of taxes)
+	Normalized noncash charges
=	Gross cash flow
-	Anticipated capital expenditures
+ or -	Working capital necessary to support growth (or generated due to negative growth)
-	Preferred stock dividends
=	<u>Net cash flow to invested capital</u>

There must be a clear distinction made between short-term cash flow, specific to a particular year, and long-term sustainable cash flow. It is the long-term sustainable cash flow that generally is of interest to the business valuation analyst. Short-term cash flows may be the result of peaks or valleys in the business cycle or the manner in which management operates the business. The projected net cash flow should be a normalized cash flow. It assumes a required reinvestment into the business each year in an amount sufficient to finance projected operations, as opposed to a discretionary short-term excess reinvestment or deficiency that is not sustainable in the long run. This also implies that the willing buyer would have control of the cash flow. If a minority valuation is being performed, the valuation analyst will generally not make changes to what the minority investor cannot control. By now, I have emphasized this point enough times that you should realize that it is important!

## PROJECTING FUTURE BENEFIT STREAMS

One of the most important parts of the valuation process is the projection of the future benefits stream that will be used in the income approach. Because cash flow is frequently used in business valuation, the discussion about the projection of benefit streams will primarily concentrate on net cash flow, unless otherwise indicated.

The starting point of the projection process is that historical income statements must be analyzed and adjusted (normalized if you are valuing a controlling interest) to reflect the economic income of the business being appraised. Some of the more common adjustments that have been previously discussed are as follows:

- The inventory accounting method may be adjusted to conform to industry practice or expected future treatment. This could include a change in inventory accounting from last in, first out (LIFO) to first in, first out (FIFO).
- Depreciation may be adjusted to reflect current economic write-offs more accurately, based on the value determined by the machinery and equipment appraisers or real estate appraisers.
- Nonrecurring items should be removed.
- Nonoperating income or expense items may be eliminated, if appropriate.
- The effect of the nonoperating assets on the income statement must be removed if a control position is being appraised, and the assets are to be separately treated in the valuation.
- Related party transactions may need to be adjusted if the results are other than those that would be negotiated at arm's length.

Some of the normalization adjustments will be made regardless of whether the appraisal subject is a controlling interest or a minority interest. These types of adjustments would be those that affect the future benefit stream, particularly when the historical operations are expected to be different from the future operations. For example, a company may have incurred a hurricane loss in the past year that would not be expected to occur again in the foreseeable future. Certainly, as a valuation analyst, we do not want to start trying to forecast hurricanes. However, in certain parts of the world, this may be somewhat predictable.

Historical operating results should also be analyzed to gain an understanding of the quality of the earnings reported. Box 10.3 includes a list of basic questions the valuation analyst should ask and receive answers to.

### **Box 10.3** Commonly Asked Questions to Understand About the Quality of Earnings

- Are sales concentrated in few customers (risky), or are they spread out among many customers?
- Is the business trendy? Is its popularity only temporary, or is the business expected to be around for a while?
- To what extent is the business able to control its own destiny? Is it dependent on another industry? For example, the retail furniture industry has about a six-month lag behind the residential housing market. If new home sales go down, retail furniture will follow soon thereafter.
- Is the business subject to seasonal or cyclical fluctuations? If so, where in the cycle is the business?
- Does the company have any problem with its suppliers or source of supply? What if the company imports a product from a particular country and the government imposes a trade restriction?
- Is the business dependent on technology, and if so, is the company keeping up with the industry?

The valuation analyst should also look for trends that may help predict the future with respect to the direction in which the company is headed. These trends may indicate growing, declining, flat, or volatile income streams. If a company has been growing at an exceptionally high rate, the likelihood is slim that the same rate will continue into the future. Because this rate cannot be maintained, the valuation analyst must compensate in the projection by reducing the growth going forward.

If the company is in a declining mode, the terminal value may be calculated on the basis of liquidation, as opposed to that of a going concern. If a decline is forecast indefinitely into the future, the valuation analyst should consider whether the highest and best use of the business is in liquidation. If so, the business should be valued in this manner.

If the company's future appears to be flat, there is no reason to use a multiperiod valuation model; in this situation, a single period capitalization model will suffice. When a company's results are erratic, projections become extremely difficult and may have little value in the appraisal process. An averaging of history may prove to be beneficial, but this should be done only as a last resort.

Don't forget to use other information that was gathered from the company or through your own research. Customer contracts can help you forecast expected changes as a result of a customer's growth. For example, if you were valuing a trucking firm that had major contracts with large retail customers, your economic and industry analysis would become important in helping to forecast the trucking firm's growth.

The next question that the valuation analyst asks is, how far out into the future should the projections go? The projections should go out far enough into the future that they represent sustainable future levels of income for the company. If the company has been showing losses, the projections should go out far enough to allow the company to return to a level of normal sustainable profitability. The same is true if the company has been making large profits. Go out far enough to reflect the normal conditions for the company. The overall idea is to go out beyond periods that contain the peaks and valleys that may be short-term. The willing buyer is going to be looking for the income stream that he or she can count on beyond the near term.

Another consideration related to the projection period is that the projections should go out far enough so that the business can get through a period of significant plant construction or expansion. If new products are being introduced, the projections should extend to the point that the results of the new product's introduction can be understood. If a merger or acquisition is expected to take place or is in the process of taking place, the projections should extend to the period after the combination is completed.

The anticipated rate of growth is the primary factor to be considered in how far the projections should be continued. Stabilization is the goal to be achieved in the projection period. This is frequently much more difficult than it seems. You will have to conduct a thorough analysis of the subject company, the economy, and the industry if you hope to get reasonably close. Keep in mind that during the earlier years of the projection, year-to-year growth can exceed the discount rate selected, but that cannot continue beyond the terminal year because the discount rate minus growth (capitalization rate) cannot logically be less than zero. Can you imagine a willing seller paying the willing buyer to take the business off his or her hands? A negative discount rate would create this result. This is explained more fully in chapter 11.

A common error made among inexperienced valuation analysts who rely on computer software to assist with (or do) the projections is to allow these programs to determine the period to be used in the projection. Most software programs allow either a 5-year or 10-year period to be used for a projection. This may not be the correct period for a particular appraisal assignment. The facts and circumstances of each situation will be different and require a different projection period. Do not depend on a software program to make decisions that require judgment!

In practice, the most common projection period is five years. Some valuation analysts consider this period to be a normal business cycle, while others focus on Revenue Ruling 59-60, which suggests five years. There is no magic about five years. The period used can be two years, three years, seven years, or even longer. It is almost always difficult to forecast the future, especially if the future is many years forward.

## THE ACCEPTANCE OF FORECASTS AND PROJECTIONS

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In tax related appraisals, Revenue Ruling 59-60 discusses the fact that, "valuation is a prophecy of the future." This is an indication that the future is an important component of the valuation process. In *Central Trust v. United States*,<sup>2</sup> the court found that "past earnings are important only insofar as they reasonably forecast the future earnings."

In the *Estate of Kirkpatrick*,<sup>3</sup> the court emphasized the fact that a potential investor would analyze the business enterprise from the viewpoint of its prospects as a money making enterprise. In some nontax related appraisals (divorce appraisals), the courts are still uncertain about using forecasts. However, more and more courts are beginning to accept this methodology if a well thought out and well presented forecast is used in an appraisal. Some judges are uncomfortable with projections and discount their value.

It is up to the valuation analyst to be able to explain the importance of the future in the context of an appraisal. Who buys history? Many divorce related appraisals refer to Revenue Rulings 59-60 and 68-609, in which case the valuation analyst should remember that these rulings emphasize "probable future earnings." The problem is that the judge gets an uncomfortable feeling because the projections are usually poorly done. This makes the

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<sup>2</sup> 305 E.2d 383 (1962).

<sup>3</sup> T.C. Memo. 1975-344.

projections seem highly speculative. Performing a forecast is not a guarantee that the company will actually achieve the forecast results, but not doing a forecast is like not really doing an appraisal. Even if you use historical data, you are effectively saying that the future is expected to resemble the past.

The key to having your forecast accepted is to document your assumptions. Do not just blindly ask your client for a forecast and accept it as if it is objective. Clients have desired end results, and despite what they say about not understanding the business valuation process, they almost always know if they need a good forecast or a doom and gloom forecast. Don't get caught up in being an advocate for your client, particularly in a litigation assignment, because it will come back to get you in your tail. Exhibit 10.1 reflects a forecast from an actual assignment. The client was a trucking firm with large retail customers. While this may be larger than some of the companies that you may appraise on a regular basis, the principles are the same.

### EXHIBIT 10.1 SAMPLE FORECAST SECTION

In this valuation, we will use a debt free analysis (invested capital) because the capital structure of the company is considerably different from the industry peer group. By removing the effect of the debt from the balance sheet, this will allow a more meaningful analysis to be made when comparing the Smith Entities to the industry. After deriving the value of the total invested capital of the Smith Entities, actual debt will be subtracted to derive an estimate of the equity of the company.

Under normal circumstances, we would be provided with a forecast from a company the size of Smith. However, throughout this litigation, we have been told over and over again that the company does not forecast its financial results. In the absence of management's forecasts, it is appropriate for the appraiser to create his or her own forecast for use in an appraisal. As a result, we have performed a forecast based on the extensive amount of information that was provided to us as part of the discovery in this matter, as well as the information that we researched about the Smith customers and its industry.

Appraisers have prepared forecasts for use in valuation analyses for many years. The fact that management does not provide a forecast does not relieve the appraiser of the responsibility to consider the necessity of preparing a forecast on his or her own. In fact, corroborating this practice, the American Society of Appraisers includes the following statement in its course materials:

Practitioner—If the subject company does not prepare forecasts or the prepared forecasts are unreliable, **the appraiser should prepare a forecast independently** or consider a capitalization model\* (emphasis added).

Using the adjusted historical financial statements as a starting point, the appraiser performed a forecast based on the information that was known or knowable at the valuation date.

The forecasted income statement appears in table 1.

<b>TABLE 1</b>					
<b>FORECASTED DEBT FREE INCOME STATEMENT</b>					
	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Sales	\$175,278	\$186,040	\$196,802	\$207,564	\$218,326
Operating expenses	140,328	148,702	157,048	165,366	173,678
Earnings before depreciation, interest, and taxes	\$ 34,950	\$ 37,338	\$ 39,754	\$ 42,198	\$ 44,648
Depreciation and amortization	11,393	12,093	12,792	13,492	14,191
Debt free income before taxes	\$ 23,557	\$ 25,245	\$ 26,962	\$ 28,706	\$ 30,457
Taxes	7,852	8,414	8,986	9,568	10,151
<b>DEBT FREE NET INCOME</b>	<b>\$ 15,705</b>	<b>\$ 16,831</b>	<b>\$ 17,975</b>	<b>\$ 19,139</b>	<b>\$ 20,306</b>

\*BV202N: *The Income Approach to Value*, Chapter 5, "Forecasting Financial Statements," p. 29.



**EXHIBIT 10.1**

Assumptions entering into the forecasted income statement include the following:

- Sales: Sales were forecast based on the historical financial statement trends of the company, as well as the anticipated growth that Smith's major customers were forecasting on or before the valuation date.

The industry section of this report contains a discussion about Smith's major customers. Anticipated growth rates were as follows:

K-Mart	0.0%
TJX Group	8.5%
Federated	2.0%
Best Buy	12.5%
Dayton (Target)	5.0%
Others	5.6%

Applying these growth rates to the amount of business generated by these customers to Smith results in a forecast for the following period as follows:

	<b>2000 Sales</b>	<b>Growth</b>	<b>2001 Sales</b>
K-Mart	\$ 42,807,075	0.00%	\$ 42,807,075
TJX Group	36,311,358	8.50%	39,397,823
Federated	30,116,268	2.00%	30,718,593
Best Buy	12,630,330	12.50%	14,209,121
Dayton Group	11,120,324	5.00%	11,676,340
Others	33,187,645	5.60%	35,046,153
<b>Total Sales</b>	<b>\$166,173,000</b>		<b>\$173,855,106</b>

We also used a trend analysis to forecast the future sales based on the historical financial statements of the company. This trend analysis uses statistical techniques to forecast the future results based on the actual history of Smith. The customer analysis, shown previously, helps support the trend analysis and shows the reasonableness of the forecast.

The trend analysis results in the following level of revenues:

	<b>Revenues</b>	<b>Growth</b>
1995 (H)	\$109,812,000	
1996 (H)	123,381,000	12.4%
1997 (H)	133,835,000	8.5%
1998 (H)	139,272,000	4.1%
1999 (H)	153,191,000	10.0%
2000 (H)	166,173,000	8.5%
2001 (F)	175,277,867	5.5%
2002 (F)	186,039,924	6.1%
2003 (F)	196,801,981	5.8%
2004 (F)	207,564,038	5.5%
2005 (F)	218,326,095	5.2%
(H) = actual historical results		
(F) = forecasted by appraiser		

(Continued)



**EXHIBIT 10.1** *(Continued)*

- Operating expenses: Through 2000, the Smith Entities were growing at a reasonable pace. As such, expenses started to grow as well. Total operating expenses, including depreciation expense, were as follows:

1996	90.15%
1997	84.96%
1998	84.60%
1999	86.02%
2000	88.98%
5-Year average	86.95%
Latest 3-year average	86.53%

Over the past three years, depreciation expense has been approximately 6.5 percent of revenues. Therefore, operating expenses will be reduced by this amount so that we can segregate depreciation from the operating expenses.

While the operating expenses grew during 2000, certain expenses were also changing, partially due to the growth of the company, but also due to the changing of the management of the company. There were some expenses that were duplicative in nature as a result of the management transition in the company. Therefore, the future operating expenses of the company would not be expected to rise with revenues at the same pace as during 2000.

As a company grows, fixed costs, such as rent, are spread over more revenues. Also, administrative employees and management costs are spread over a greater revenue base until the need arises for additional personnel.

Taking Smith's historical expenses into consideration, as well as the manner in which fixed and variable expenses relate to sales growth, we believe that the historical trend can be forecast as follows:

	<b>Operating expenses (with depreciation)</b>	<b>Growth</b>
1996 (H)	90.15%	-5.8%
1997 (H)	84.96%	-0.4%
1998 (H)	84.60%	1.7%
1999 (H)	86.02%	3.4%
2000 (H)	88.98%	-2.7%
2001 (F)	86.56%	-0.1%
2002 (F)	86.43%	-0.1%
2003 (F)	86.30%	-0.1%
2004 (F)	86.17%	-0.1%
2005 (F)	86.05%	-0.1%
(H) = actual historical results		
(F) = forecasted by appraiser		

Depreciation of 6.5 percent will be subtracted from operating expenses, with the 2000 expenses being maintained as a percentage of sales based on 1999.

## EXHIBIT 10.1

- Depreciation: Historic depreciation has been approximately 6.5 percent of revenues. We are assuming that this trend will continue.
- Taxes: Assumed to be 33.33 percent. This is the same rate that was discussed earlier in the report. It is the S corporation equivalent tax rate.

The forecasted balance sheet appears in table 2.

	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
<b>Current assets</b>					
Cash	\$ 15,042	\$ 15,965	\$ 16,889	\$ 17,812	\$ 18,736
Accounts receivable	18,999	20,166	21,333	22,499	23,666
Other current assets	4,307	4,572	4,836	5,100	5,365
<b>Total current assets</b>	<b>\$ 38,348</b>	<b>\$ 40,703</b>	<b>\$ 43,058</b>	<b>\$ 45,411</b>	<b>\$ 47,767</b>
<b>Fixed assets</b>					
Gross fixed assets	\$116,353	\$ 127,746	\$ 139,838	\$ 152,630	\$ 166,122
Capital expenditures	11,393	12,093	12,792	13,492	14,191
Accumulated depreciation	76,246	88,338	101,130	114,622	128,813
<b>Net fixed assets</b>	<b>\$ 51,500</b>	<b>\$ 51,500</b>	<b>\$ 51,500</b>	<b>\$ 51,500</b>	<b>\$ 51,500</b>
Other assets	\$ 2,639	\$ 2,801	\$ 2,963	\$ 3,125	\$ 3,288
<b>TOTAL ASSETS</b>	<b>\$ 92,487</b>	<b>\$ 95,004</b>	<b>\$ 97,521</b>	<b>\$ 100,036</b>	<b>\$ 102,555</b>
<b>Current liabilities</b>					
Accounts payable	\$ 5,322	\$ 5,507	\$ 5,699	\$ 5,897	\$ 6,102
Income taxes payable	372	399	426	454	481
Other current liabilities	14,899	15,814	16,729	17,643	18,558
<b>TOTAL LIABILITIES</b>	<b>\$ 20,593</b>	<b>\$ 21,720</b>	<b>\$ 22,854</b>	<b>\$ 23,994</b>	<b>\$ 25,141</b>
<b>TOTAL INVESTED CAPITAL</b>	<b>71,894</b>	<b>73,284</b>	<b>74,667</b>	<b>76,042</b>	<b>77,414</b>
<b>TOTAL LIABILITIES AND INVESTED CAPITAL</b>	<b>\$ 92,487</b>	<b>\$ 95,004</b>	<b>\$ 97,521</b>	<b>\$ 100,036</b>	<b>\$ 102,555</b>

Assumptions entering into the forecasted balance sheet include the following:

- Cash: Assumes the cash turnover ratio from 2000.
- Accounts receivable: Assumes the same days receivables from 2000.
- Other current assets: Kept as a percent of the relationship of adjusted 2000 other current assets to sales.
- Fixed asset additions: Assumed to increase in a consistent manner with depreciation.
- Other assets: Kept as a percent of the relationship of adjusted 2000 other assets to sales.
- Accounts payable: Assumes the same relationship as adjusted 2000 accounts payable to operating expenses.
- Income taxes payable: Kept as the same percentage of the relationship of adjusted 2000 income tax payable to sales.
- Other current liabilities: Kept as a percent of the relationship of adjusted 2000 other current liabilities to sales.

(Continued)

**EXHIBIT 10.1** (Continued)

As a result of the forecasted financial statements, the debt free net cash flow is as follows:

	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Net income	\$ 15,705	\$ 16,831	\$ 17,975	\$ 19,139	\$ 20,306
+ Depreciation	11,393	12,093	12,792	13,492	14,191
– Capital expenditures	(11,393)	(12,093)	(12,792)	(13,492)	(14,191)
– Increase in working capital	829	(1,228)	(1,221)	(1,213)	(1,209)
– Increase in other assets (Liabilities)	(136)	(162)	(162)	(162)	(163)
<b>NET CASH FLOW</b>	<b>\$ 16,398</b>	<b>\$ 15,441</b>	<b>\$ 16,592</b>	<b>\$ 17,764</b>	<b>\$ 18,934</b>

What if the forecast is incorrect? You can be absolutely certain that your valuation will be wrong (except for the one that I did above—only kidding)! But don't worry, potential investors are frequently wrong also. If I were right every time that I made an investment, I would probably be retired and paying someone to write this book for me! The concept of fair market value requires the valuation analyst to put himself or herself in the position of the willing buyer on the valuation date and to make an informed judgment, based on all information known at that time, on what the future will be like. That is what is really being purchased. But don't forget about the willing seller also. Any knowledge that the willing seller has would also be known and factored into the selling price. So if your forecast turns out to be wrong, your valuation may still be correct based on what was known at the time.

One of the real world difficulties that will take place regarding your projections, especially if the valuation analyst is testifying in a court proceeding, is when the opposing attorney gives the valuation analyst financial data beyond the valuation date to prove that the forecast was wrong. This is where the cross-examining attorney watched too many episodes of *Law and Order* and expects to have a "gotcha" moment.

The valuation analyst should emphasize that the concept of fair market value would be violated if subsequent information was used. A willing buyer cannot know what is in store for the future, other than by performing the same level of due diligence that the valuation analyst attempts to perform. The analysis of the company's historical results, economy and industry forecasts, and other similar information should be used to project the future results of the appraisal subject. All of the information gathered during this analysis will assist the valuation analyst in making reasonable forecasts. Work with management to get the forecast to a reasonable level.<sup>4</sup> Understand, however, that what management wants to accomplish with the appraisal may be a factor in the type of information that you will be given.

The valuation analyst frequently obtains forecasts from the company's management. If these forecasts are to be used, the valuation analyst should attempt to compare previous forecasts against actual results (even budget versus actual). This will give the valuation analyst a comfort level regarding management's ability to forecast the future of the business. If the valuation analyst is not comfortable with management's forecasts, there are several options on how to proceed as outlined in box 10.4.

<sup>4</sup> Unlike any other class of valuation analysts, the CPA must consider the standards promulgated by the AICPA on prospective financial reporting. See the AICPA Statements on Standards for Accounting and Review Services.

### Box 10.4 Possible Valuation Analyst Options in Dealing With a Management Forecast

- Discuss with management any items that might need to be changed.
- Adjust the discount rate for the additional element of risk by increasing the rate used.
- Do not use the multiperiod benefit stream discounting method in favor of the single period income capitalization method or other valuation approaches suitable to the circumstances of the particular assignment.
- Withdraw from the engagement. Although most valuation analysts do not wish to turn away an assignment, there are times when the forecast is so critical in the valuation process that it becomes impossible to proceed with the job. An example would be when the valuation is being performed for the purpose of obtaining financing.
- If the forecasted operations are expected to be stable, do not use a multiperiod model if a single period model will suffice. A single period model is easier to understand, and there are fewer variables to be attacked, especially if the valuation might be used in a litigation.

Avoid accepting management's forecast without doing a reasonableness check. I have seen the following scenario too often. The subject business has normalized earnings for the last five years as follows:

2002	\$178,000
2003	170,000
2004	180,000
2005	175,000
2006	200,000

Now, the client provides us with the projection. Going through a divorce, the client project that business is terrible, the industry is falling apart, and the business will never be the same. Therefore, the next five years look like this:

2007	\$180,000
2008	170,000
2009	150,000
2010	135,000
2011	125,000

That poor, poor client! Now let's look at the information that the same client might give us if he or she were trying to sell the business. In this case, the projections might be the following:

2007	\$225,000
2008	250,000
2009	275,000
2010	300,000
2011	350,000

Don't you just love this business? Where else can the same client give you such nonsense? Part of the role of being a good valuation analyst is to maintain an objective attitude, which includes recognizing that your own client may try to help you get to his or her desired end result by giving you bad numbers. Sometimes you will not be able to use this information, and you will be required to consider other valuation methods. However, don't roll over and play dead just because the job is difficult. That is why they pay us the big bucks!

## INCOME APPROACH METHODS

The value derived under the income approach represents the value of the operating assets less liabilities of the enterprise. The value of the nonoperating assets less the nonoperating liabilities is then added to the value of the operating entity to obtain the value of the total enterprise. The valuation methods included in the income approach are (1) the capitalization of benefits method and (2) the discounted future benefits method. Although not truly an income approach method, I am also going to cover the excess earnings method in this group of methods. As you will see, the excess earnings method is really a method used to determine the value of the unidentifiable intangible assets (goodwill). When added to the adjusted book value method, the result is really closer to an asset approach than an income approach. However, because capitalization of a benefit stream is required in this method, I chose to cover it here. After all, it's my book!

### CAPITALIZATION OF BENEFITS METHOD

The theoretical value of a business is the present value of all of the benefits that can reasonably be expected to be generated to the owners in the future. This concept can be mathematically displayed. If you are anything like me, you will not be happy trying to remember all of the mathematics of finance that you took in school and forgot shortly thereafter. But this stuff is important, so I am going to give you what I consider to be the minimum of math to demonstrate what we will be doing in the application of these models. The mathematical model to express this concept is as follows:

$$PV = \frac{E_1}{(1+k)^1} + \frac{E_2}{(1+k)^2} + \frac{E_3}{(1+k)^3} + \dots + \frac{E_\infty}{(1+k)^\infty}$$

$E$  = Benefit stream  
 $k$  = Discount rate

If you do not like long equations, this one can be reduced to the following:

$$PV = \sum_{n=1}^{n=\infty} \frac{E_n}{(1+k)^n}$$

$E$  = Benefit stream  
 $k$  = Discount rate  
 $n$  = Time period 1 to infinity

For those mathematical neophytes (like myself), the symbol  $\Sigma$  stands for “summation.” Therefore, this formula means the sum of the expected benefit streams from period 1 to period infinity, discounted to present value. Even more simply stated, it is the sum of the present values of the forecasted benefit streams going out for a long, long time (you can't get much longer than infinity).

If the growth of the benefit stream (the numerator) is assumed to be constant over time, the equation can be reduced again to the following:

$$PV = \frac{E_1}{k-g}$$

$E$  = Benefit stream expected in the next period  
 $k$  = Discount rate  
 $g$  = Growth rate from time  $t = 0$  to time  $t = \text{infinity}$

Now that we got the math stuff out of the way, let's restate what we just did in English. The equation for the single period benefit stream capitalization method is:

$$\text{Value} = \text{Benefit stream} \div \text{Capitalization rate}$$

If you think about what we just did, you will realize that we took the growth out of the numerator (we assumed it to be constant), and we removed the growth from the discount rate ( $k - g$ ). Because this capitalization model assumes a continued benefit stream into perpetuity, the growth that is removed from the discount rate must be the long-term sustainable growth. We will cover this in more detail in the next chapter. The mathematics, however, can be demonstrated with a simple example. Let's assume that the following information is available to you:

This year's cash flow	\$ 909
Next year's forecast cash flow	\$1,000
Forecast growth	10%
Required rate of return	35%

Forecasting the future cash flows and discounting them back to present value would result in the following calculation:

Forecast	Present value	Forecast	Present value
\$1,000	\$741	5,560	19
1,100	604	6,116	15
1,210	492	6,727	12
1,331	401	7,400	10
1,464	327	8,140	8
1,611	266	8,954	7
1,772	217	9,850	5
1,949	177	10,835	4
2,144	144	11,918	4
2,358	117	13,110	3
2,594	96	14,421	2
2,853	78	15,863	2
3,138	63	17,449	2
3,452	52	19,194	1
3,797	42	21,114	1
4,177	34	23,225	1
4,595	28	25,548	1
5,054	23	Total	<u>\$4,000 (Rounded)</u>

Instead of forecasting constant growth in each period and discounting it for the 35 periods in the table above, the mathematics of removing growth from the numerator and the denominator of the equation allows us to capitalize a single stream as follows:

$$\$1,000 \div (.35 - .10) = \$4,000$$

Much easier, isn't it? What this example actually proves is that the single period capitalization model should derive the same answer as the multi period discounting model if you have constant growth. I will explain further in a little while, but the reason for using one model as opposed to the other has to do with the stability of the income stream that is being forecast.

To apply the single period capitalization of benefits model correctly, the benefit stream to be capitalized must be from stabilized operating conditions. Combining this with anticipated growth, the stabilized benefit stream should reflect the future expectations of the business or of the investment. Each benefit stream calls for a different capitalization rate. The risk associated with a particular benefit stream will cause the difference in the rates. Exhibit 10.2 illustrates this point.

## EXHIBIT 10.2

**MATCHING THE BENEFIT STREAM WITH CAPITALIZATION RATES: AN EXAMPLE**

Let's assume that Doodles, Inc. was valued by a valuation analyst as having an equity value of \$1 million. Based on Doodles's income statement used for the valuation, the following capitalization rates would apply:

	<b>Benefit stream</b>		<b>Cap. rate</b>		<b>Value (\$)</b>
Revenues	\$10,000,000	÷	1,000%	=	1,000,000
Cost of sales	9,000,000				
Gross profit	\$ 1,000,000	÷	100%	=	1,000,000
Operating expenses	600,000				
EBIT	\$ 400,000	÷	40%	=	1,000,000
Interest expense	50,000				
Pretax income	\$ 350,000	÷	35%	=	1,000,000
Taxes	100,000				
Net income	\$ 250,000	÷	25%	=	1,000,000

For right now, don't worry about how I calculated the capitalization rates. Obviously, a capitalization rate of 1,000 percent does not make sense. However, the point of this example is that regardless of the benefit stream that is capitalized, the answer should be the same. This does not mean that you can come up with the answer using one benefit stream and force all of the other elements to fit. That would be cheating!

The benefit stream will be capitalized by a rate that reflects the risk of the benefit stream being capitalized. The valuation analyst should apply a sensitivity analysis to the capitalization process since relatively minor variations in either the benefit stream or the capitalization rate being considered can result in significant differences in the end result. This can be illustrated as follows:

<b>Benefits stream (\$)</b>	<b>Cap. rate (%)</b>	<b>Value (\$)</b>
100,000	20	500,000
100,000	25	400,000
100,000	30	333,333
100,000	35	285,714
100,000	40	250,000

Alternatively, this can be shown as follows:

<b>Benefits stream (\$)</b>	<b>Cap. rate (%)</b>	<b>Value (\$)</b>
100,000	25	400,000
120,000	25	480,000
140,000	25	560,000
160,000	25	640,000
180,000	25	720,000
200,000	25	800,000



Relatively small changes in the capitalization rate or benefit stream can have a major impact on the conclusion. Now if the benefit stream is wrong and the capitalization rate is wrong, but you got the right answer, count your blessings. Also, pay your malpractice premiums, since you may not be that lucky the next time.

The objective in a single period capitalization method is to determine through analysis—and if necessary, adjustments—the level of benefits that are reflective of a *sustainable* level for the appraisal subject. As discussed previously, the purpose and function of the appraisal influence the nature of the benefit stream to be capitalized.

In valuing a minority interest in a closely held business, the appraiser generally does not make discretionary adjustments to the benefit stream. Nonrecurring items and generally accepted accounting principles (GAAP) adjustments might be made when these items are considered to affect the benefit stream available to the minority interest in the future. Because the minority interest does not have the ability to effectuate change in the discretionary items, it is generally considered to be inappropriate to modify the benefit stream for items that cannot be changed by the minority.

In certain instances, adjustments to the benefit stream may be required, even in a minority situation. Adjustments may be appropriate when there are nonrecurring items or when the controlling party is abusing control to the detriment of the minority owner (in this instance, an oppressed shareholder action may be lurking in the wings). Another situation where you may need to make certain adjustments is when you are valuing a family business, particularly for estate and gift tax purposes. Although the standard is the *hypothetical willing buyer and willing seller*, a reality check needs to be made when the parent is taking an above market salary or perquisites in comparison to the minority interest being valued. Use discretion and do the right thing. If the business is expected to be sold, pro forma earnings or cash flow will be more important to the willing buyer. Appropriate adjustments should be made to accommodate this situation.

Service businesses with few fixed assets are generally valued based on net income (pretax or after tax) or sometimes on a multiple of revenues. The multiple is another form of capitalization rate. Mathematically, a capitalization rate is the inverse of a multiple (a multiple of 5 equals a capitalization rate of 1/5, or 20 percent).

If a business tends to be cyclical in nature, an average of historical data is sometimes used to approximate the stable earnings base that can be capitalized. Once again, as a reminder, any time that historical data is used, it should represent probable future earnings. Do not rely purely on historical data! Willing buyers do not buy history!

When a business is growing, a multi period method (soon to be discussed) should be considered because the benefit stream is not expected to be stable. A weighted average of historical data—or more preferably, forecasted data—should be used as a basis for discounting. When a business's operations have changed, the valuation analyst should ignore the historical data that is no longer representative of the current business. This means that even though the revenue rulings suggest that a period of five or more years be used as the basis of the valuation, it is perfectly acceptable to ignore the historical information if the future is expected to be different. (Don't worry about not following the revenue rulings. You will still be in compliance with the intent of these rulings.)

Adjustments made to the benefit stream to be capitalized are generally made only when a majority/control interest in the business is being appraised. In the real world, just before the closing, willing sellers and willing buyers will adjust the sales or purchase price for certain items that may be known. Box 10.5 includes additional adjustments that can be made to the sales or purchase price.

### Box 10.5 Additional Items That May Require an Adjustment

**An excess or deficiency of net working capital.** An abundance of working capital may be considered to be a non-operating asset and may be added to the ending value determined for the operations. In addition, if a willing buyer is aware that he or she will have to infuse additional capital into the business immediately, a reduction in the sales price is likely to occur. For example, assume that a willing buyer knows that the widget machine must immediately be replaced upon purchase to keep the business running. What is the likelihood that the price will not be adjusted if the cash flow used to calculate value did not have the replacement of this asset in it?

(Continued)

### Box 10.5 Additional Items That May Require an Adjustment

**The existence of nonoperating assets.** The value of these assets, net of nonoperating liabilities, will be added to the operating value of the enterprise.

**Evidence of underutilized capacity.** Underutilized capacity has value if the buyer has the ability to use it properly. The business may be worth more in someone else's hands than in the hands of the current owner for this reason. Although a willing buyer will not want to pay for what he or she will bring to the company after the acquisition, the willing seller will want compensation for the ability to increase capacity. Negotiations will probably result in a compromise value. This is frequently a very tough adjustment to make because it requires the valuation of the company to be made based on a different set of assumptions than the business actually operates under. If the calculations are performed as if in the hands of a particular buyer, the result may be investment value and not fair market value. However, if all willing buyers would most likely make the same changes, it may be fair market value after all.

**The need to invest in additional productive capacity to meet future operational demands.** This should be considered in the cash flow requirements of the business.

**Insufficient management or employee skills or capacity.** Poor management increases the risk of the business and, therefore, decreases its value. More often, this is reflected in poor earnings capacity or a higher discount or capitalization rate due to the increased risk of having a buffoon run the company. Just don't double-count and put it in both places.

On occasion, but not always, there may be times when adjustments that will affect both the balance sheet and the income statement are required. For example, a balance sheet adjustment from LIFO to FIFO inventory does not necessarily require a corresponding adjustment to the cost of goods sold because a better matching has been accomplished in the income statement. On the other hand, an adjustment to the value of the fixed assets on the balance sheet may require a corresponding adjustment to the depreciation expense on the income statement. This is the part that drives many accountants nuts! The debits do not equal the credits.

Revenue Ruling 59-60 states that "determination of the proper capitalization rate presents one of the most difficult problems in valuation" (no kidding!). Capitalization of the total benefit stream results in an indication of value for the entire operating enterprise (shareholder's equity or invested capital); partial benefit streams can also be capitalized to estimate the value of portions of the enterprise (excess earnings can be used to estimate the value of the intangibles).

Exhibit 10.3 shows the mechanics of the capitalization of benefits method without valuation discounts or premiums.

#### EXHIBIT 10.3 EXAMPLE OF SINGLE-PERIOD CAPITALIZATION METHOD

Adjusted net income	\$1,000,000
Forecasted growth	× 1.05
Estimated future income	\$1,050,000
Capitalization rate	÷ 25%
Indicated value from operations	\$4,200,000
Add: Net nonoperating assets	350,000
<b>Total enterprise value</b>	<b>\$4,550,000</b>

In this example, you will notice that the estimated future income is being capitalized. Discount rates and capitalization rates that are determined from the market are considered to be prospective in nature. To match the income stream and the capitalization rate appropriately, both must be on a prospective basis. Historical income and rates could have been used as well, but it is not preferable. If historical data were used, the results would look like this:

Adjusted net income	\$1,000,000
Capitalization rate (25.0 ÷ 1.05 = 23.81)	÷ 23.81%
Indicated value from operations (rounded)	\$4,200,000
Add: Net non-operating assets	350,000
Total enterprise value	<u>\$4,550,000</u>

In this instance, the capitalization rate has been adjusted by the anticipated growth into the next year (5 percent). By removing the growth, an historical capitalization rate can be applied to the adjusted historical net income. Note that the answer is the same in both examples.

## DISCOUNTED FUTURE BENEFITS METHOD

Founded on the principle of future benefits, the value of a business is the present value of all of the “benefits” it can reasonably be expected to generate in the future. These “benefits” are generally considered to be the future cash flows available to the owners from the business or investment (dividends and ultimate sale). In theory, if the holding period is expected to go into perpetuity, the future dividend stream discounted to the appraisal date, at an appropriate discount rate, should represent the value of the investment. Because investments rarely go to perpetuity, a long time horizon is generally substituted as the holding period for most investments in closely held businesses.

Although distributions to the owners are the main consideration, the application of this method can also be applied to earnings, cash flow (gross or net), and other benefit streams. Regardless of the benefit stream being discounted, the basic concept is the same. This methodology generally involves two steps: First, calculate the sum of the present values of the benefit stream for each of a number of periods (normally years) in the future, and second, add to that amount the present value of a “terminal” value.

The terminal value is generally calculated under a benefit stream residual method or an asset residual method, soon to be discussed. The benefit stream residual method assumes that the benefit stream being discounted will eventually stabilize and, therefore, the stabilized benefit stream can then be capitalized into perpetuity and discounted back to the valuation date. The asset residual method assumes that the benefit stream being discounted will stop at some point in the future as a result of the business coming to an end and being disposed of either through a sale or a liquidation. This method tends to be popular if the business is expected to have a limited life.

What did I just say? The terminal value assumes that the benefit stream of the business will eventually stabilize. This is similar to the assumption about single period capitalization models. Don’t panic; later, I hope to clear this up for you with some examples.

Because we had so much fun with the last mathematical equations, I thought that we should do it again. The mathematical equation for multiperiod discounting is derived as follows:

$$\sum_{n=1}^{n=\infty} \frac{E_n}{(1+k)^n}$$

$E$  = Benefit stream  
 $k$  = Discount rate  
 $n$  = Time period 1 to infinity

The equation just illustrated can be changed. If we use a definite period of time instead of infinity, we can add another component to the equation that would represent the “terminal” value. Let’s change “n” to a finite period of time ending with period “t.” Let’s also allow for the inclusion of all future value beyond the end of period t as a terminal value. The equation then becomes:

$$\sum_{n=0}^{n=t} \frac{E_n}{(1+k)^n} + \frac{FV_{t+1}}{(1+K)^1}$$

*E* = Benefit stream  
*k* = Discount rate  
*n* = Time period 0 through time period *t*  
*FV* = Future value or terminal period benefits stream

In simple language, value is estimated as the sum of the present values of the benefit stream for the projection period plus the present value of the terminal value. The terminal value will be the present value of the stabilized benefit stream capitalized into the future. The terminal value may also be the present value of the sale or liquidation proceeds of the company. Use one or the other, but not both!

Table 10.1 illustrates the mechanics of the discounted future benefits method. In the example in table 10.1, it is assumed that the first five years of the projection are “unstable,” and that stability takes place at the end of year 5. Two calculations require an explanation. The first is the calculation of the terminal value (TV) of \$350,000. This is achieved by starting with the year 5 forecasted net income of \$70,000 and growing it by the next year’s rate of growth that will result in the stable income stream of the company into the future (in this case, we assumed 5 percent). This means that the next year’s (year 6) net income is assumed to be \$73,500 ( $\$70,000 \times 1.05$ ).

The next step is to capitalize the stable benefit stream by using a capitalization rate equal to the discount rate used in the present value computations and subtracting the assumed long-term growth rate (in this case, 5 percent). Therefore, the capitalization rate in this example would be 21 percent (26% – 5%). (Note: Don’t worry yet about where these rates come from because we will spend more time on this subject in the next chapter.)

The TV is, therefore, calculated as follows:

$$\$73,500 \div 0.21 = \$350,000$$

The second item needing an explanation is the fact that the discount factor used to discount the terminal value is the same factor that was applied to the year 5 forecasted net income. Because stability is reached at the end of year 5, we are capitalizing the future income (year 5 plus growth), but it is being done at the end of year 5. Because year 5 is used for both the forecasted cash flow for that year and the terminal value, both years should have the same present value factor used. This is assuming that the income stream is being received on the last day of the year during the forecast period, say December 31. Then, the terminal period begins on the first day of the next year, January 1. This is the reason why we use the same present value factor.

This example assumes that discounting is being performed at the end of each year. If a mid-year convention is assumed, the present value factor that would be used for the terminal value would still be the same as the factor used for year 5. There used to be a debate in the appraisal profession on whether the year 5 factor should be used in a mid-year model. I believe that this debate has been closed by most valuation analysts. A mid-year convention would change the basic formula to the following:

Year	Forecast cash flow	26% Present value factors	Present value cash flows
2001	\$ 40,000	.79365	\$ 31,746
2002	49,000	.62988	30,864
2003	57,500	.49991	28,745
2004	64,300	.39675	25,511
2005	70,000	.31488	22,042
TV	350,000	.31488*	110,208
Total			<u>\$249,116</u>

\*The terminal value is discounted at the same rate as in the final year of the projection.

$$V = \frac{E_1}{(1+k)^{0.5}} + \frac{E_2}{(1+k)^{1.5}} + \frac{E_3}{(1+k)^{2.5}} + \frac{E_4}{(1+k)^{3.5}} + \frac{E_5}{(1+k)^{4.5}} + \frac{E_5 * (1+g) \div (k-g)}{(1+k)^{4.5}}$$

$E$  = Benefit stream  
 $TV$  = Terminal value  
 $k$  = Discount rate  
 $g$  = Rate of growth

The difference between these two formulas is the period used to discount the terminal value back to present value. The vast majority of valuation analysts agree that the same factor should be used for the final forecast period and the terminal period. The minority opinion says that because the terminal period is intended to begin on the first day after the forecast period, the factor should be as of the first day of that terminal period or, conversely, the last day of the forecast period. Using 4.5 instead of 5 in the preceding formula would move the income stream up six months. This would result in a higher value. The income stream is considered to be a continuous stream and, therefore, there really is no gap at the end of a forecast period and the beginning of the terminal period.

There may not be one correct answer for which model the valuation analyst should use, but the model chosen should be properly explained. Keep in mind that a mid-month convention could be used if you really want that income stream to be more representative of how the income stream is received throughout the year. This would close the gap to only one-half of one month.

Some additional considerations about the terminal value are worth pointing out. If no growth is anticipated after the projection period, the capitalization rate used will be the same as the discount rate. Many finance textbooks estimate that long-term growth for most businesses tends to be somewhat modest, generally in the 3 to 5 percent range (inflation plus population growth). Because capitalization into perpetuity is a long time into the future, sustainable growth may not reflect too much more than the rate of inflation. However, the facts of each valuation may warrant different growth rates to be used. If a company has a greater rate of growth in the near term, the present value of the future growth can easily exceed the 3 to 5 percent range.

## Calculating the Terminal Value

In the discounted future benefits method, the terminal value can represent a significant portion of the overall value of the business and, therefore, care must be exercised in its derivation. The terminal value should represent the value at the point in time in which the business is in a stabilized and sustainable condition. It is frequently calculated using a single period capitalization methodology. The benefit stream capitalized is the projected stream for the year after stabilization (time period  $t + 1$ ). The capitalization rate used to convert the benefit stream into an indication of the value of the business at that point is calculated by subtracting the long-term sustainable growth rate from the discount rate used to discount the annual projections.

Other acceptable methods to determine a capitalization rate may also be used for the derivation of the terminal value, but there should be some correlation between the discount rate used and the capitalization rate applied to the terminal benefit stream. After the terminal benefit stream is capitalized, it must then be discounted to its present value (at the valuation date). Exhibit 10.4 demonstrates the basic mechanics of this methodology. Exhibit 10.4 contains a portion of an actual valuation using this methodology. In this valuation, the subject company manufactured a product that started being marketed by two very large public companies that virtually took away that component of the subject company's sales. After our analysis of the historical financial information, we requested that management provide us with a forecast for the business. We actually received a pretty reasonable forecast. The exhibit illustrates what we did with it.

## THE EXCESS EARNINGS (FORMULA) METHOD

An argument can easily be made that the excess earnings method is more of an asset based approach than it is an income approach. Actually, it is a hybrid of both approaches. The excess earnings method, which is also known as the formula approach, is probably the most widely used method of appraisal, particularly for small businesses and professional practices. This hybrid of the asset based approach and the income approach is based on Revenue

### EXHIBIT 10.4

#### DISCOUNTED FUTURE BENEFITS METHOD—REPORT EXCERPT

The next step in this analysis is to determine how the historic performance of the company will compare with what is expected in the future. At the request of the valuation analyst, management has provided an estimate of what it expects future sales to be. This forecast appears in the following table.

#### Management's Forecast (\$000)

	Historic		Forecast		
	2001	2002	2003	2004	2005
<b>Total company</b>					
Sales	\$ 2,498	\$ 1,614	\$ 910	\$ 700	\$ 800
Cost of sales	1,174	697	320	196	224
Gross profit	\$ 1,324	\$ 917	\$ 590	\$ 504	\$ 576
Expenses	1,206	934	500	500	500
Operating profit	\$ 118	\$ (17)	\$ 90	\$ 4	\$ 76
Normalized profit	\$ 767	\$ 341	\$ 90	\$ 4	\$ 76
<b>Product A</b>					
Sales	\$ 2,054	\$ 1,149	\$ 310	\$ 0	\$ 0
Cost of sales	1,050	567	152	0	0
Gross profit	\$ 1,004	\$ 582	\$ 158	\$ 0	\$ 0
<b>Other products</b>					
Sales	\$ 444	\$ 465	\$ 600	\$ 700	\$ 800
Cost of sales	124	130	168	196	224
Gross profit	\$ 320	\$ 335	\$ 432	\$ 504	\$ 576

The table reflects the decreased sales in the product A business, while the sales of other products increase. Management recognizes the fact that they must make a concerted effort to increase the sales of the other products of the company to compensate for the loss of the product A business. Based on our discussions with management, this forecast appears reasonable. Although we cannot guarantee that the actual results will be achieved, the underlying assumptions are consistent and are well thought out. Projected income is significantly reduced from the 2001 and 2002 banner years. Even when allowing for a compound growth rate of about 20 percent in the continuing segment of the business, profits in 2003–2005 are projected to average \$57,000 per year. This forecast also includes a reduction in expenses, which appears to bring the company's historic expenses in line with those on a normalized basis.

A willing buyer will clearly be much more concerned with the expectation of future profitability than with historic results. Historic results are generally used as a basis of forecasting the future, but reliance purely on history will often result in an incorrect conclusion of value. Revenue Ruling 59-60 discusses the future in at least 15 different instances, and it is clear from the guidance provided in this treatise that the future is of greater importance than the past. This will be discussed further in the following section.

#### VALUATION CALCULATIONS—DISCOUNTED FUTURE EARNINGS METHOD

The discounted future earnings method is one of the most theoretically correct methods of appraisal. It is premised on the concept that value is based on the present value of all future benefits that flow to an owner of a property. These future benefits can consist of current income distributions, appreciation in the property, or a combination of the two. The formula for the discounted future earnings method is as follows:

## EXHIBIT 10.4

$$\sum_{n=0}^{n=t} \frac{E_n}{(1+k)^n} + \frac{TV_{t+1}}{(1+k)^1}$$

$E$  = Forecasted benefit stream

$n$  = Year in which the benefit stream is achieved

$k$  = Required rate of return

$TV$  = Terminal value, which is the estimated benefit stream during a stabilized period

$t$  = Year of stabilization

The formula appears much more complicated than it is. In essence, this valuation method requires a forecast to be made of future earnings, going out far enough into the future until an assumed stabilization occurs for the property being appraised. In this instance, XYZ Company, Inc. is expected to incur a substantial fluctuation in its earnings over the short term due to the change in the company's product mix.

The previously discussed table shows an operating profit for this business estimated at \$90,000 in 2003, \$4,000 in 2004, and \$76,000 in 2005. When a fluctuation of this type takes place, a multiperiod model, such as this one, is generally deemed appropriate for valuing the entity. A single period capitalization method would be appropriate only if projected earnings are relatively stable and predictable into the future.

The company should experience modest growth, but over the long term, the company is not expected to grow at much more than the rate of inflation. Factoring in the maturity of the company and the shifting of the product mix, the high end of inflation, or 6 percent, will be used for the calculation of the terminal value.

The earnings stream being discounted in this model represents the return on investment to the stockholders. In this instance, there are employment contracts with two nonowner employees that require the company to pay them each 2 percent of all dividends that are paid to the company's shareholders. In this valuation, we have assumed that the company will not be paying dividends and, therefore, no reduction will be made to the earnings stream reflected in the table.

Once the earnings stream has been forecasted, the selection of a proper discount rate becomes necessary. Because the income being estimated will not occur until some time in the future, the future income must be discounted to its present value. In this instance, a discount rate of 32 percent has been deemed applicable. This results in the value estimate of XYZ Company, Inc. being calculated as follows:

$$PV = \frac{90,000}{(1+.32)^1} + \frac{4,000}{(1+.32)^2} + \frac{76,000}{(1+.32)^3} + \frac{TV}{(1+.32)^3}$$

In this instance, the terminal value is determined by growing the last year's forecast income by a stabilized growth rate. The result is then capitalized and discounted to its present value. Once again, this appears to be much more complicated than necessary, but it is consistent with the Gordon Growth Model used in the securities market.

Although long-term growth is forecast to be no greater than the long-term rate of inflation, the growth from 2000–2001 is still expected to be a bit higher than that rate in the short-term. Therefore, a 6 percent growth rate has been used to determine the stabilized income after 2005. The capitalization rate applied in this instance is based on the selected discount rate less long-term growth, as opposed to next year's growth. The terminal value is therefore calculated as follows:

$$TV = \frac{76,000 \times 1.06}{.32 - .06} = \frac{80,560}{.32 - .06}$$

$$TV = \$309,846$$

The insertion of the terminal value into the equation indicated results in the present value of the future earnings of XYZ Company, Inc. to be determined as follows:

(Continued)



**EXHIBIT 10.4** (Continued)

$$PV = \frac{90,000}{(1+.32)^1} + \frac{4,000}{(1+.32)^2} + \frac{76,000}{(1+.32)^3} + \frac{309,846}{(1+.32)^3}$$

$$PV = 68,132 + 2,299 + 134,714$$

$$PV = \$238,238$$

The present value of the future benefits of XYZ Company, Inc. results in an estimate of value of \$238,238, or \$238,000 rounded.

Ruling 68-609, which provides a method for valuing intangible assets. Note that I said, “valuing intangible assets,” not entire companies.

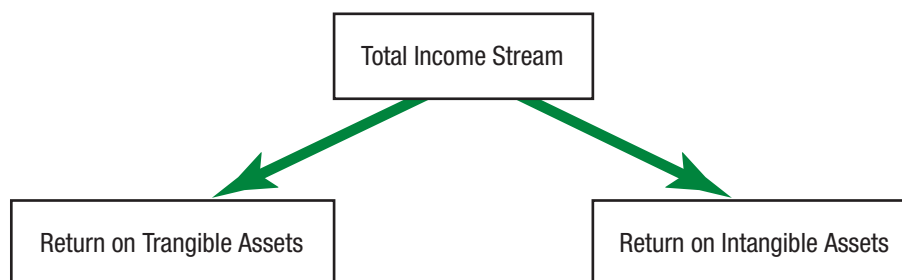
A variation of this method has become popular among valuation analysts who perform allocations of purchase price in accordance with FASB Statement No. 141, *Business Combinations*. For many years, when I taught this method in courses, individuals from the large accounting firms used to wonder what this was, and why was I teaching it. Today, they all are familiar with it and use it regularly. Boy, how times have changed!

The excess earnings method involves valuing the subject company’s tangible assets and liabilities at fair market value using the adjusted book value method, which was discussed in chapter 9. The capitalization of excess earnings is used to value the intangibles. This is a single period capitalization model that is similar to what was discussed at the beginning of this chapter.

Excess earnings—rather than net income, cash flow, EBIT, or EBITDA—becomes the numerator in the capitalization model. These excess earnings are derived by forecasting the normalized annual net income (after tax or pretax) for the entity in the same manner as in the other income approach methods. Then, a reasonable return on the net tangible assets is subtracted from the normalized net income to determine the excess earnings. These excess earnings are then capitalized to arrive at the intangible value of the enterprise.

The underlying theory behind this method is logical, but is often misapplied. The theory is that a company’s earnings stream results from the company’s investment in both tangible and intangible assets. All of those machines that make widgets allow the company to have products to sell. Combined with the other operating assets and liabilities, a return on investment is produced that is attributable to those net tangible assets. If you subtract this return on the net assets from the total earnings stream produced by the company, the balance would be attributable to the intangible assets of the company. Logical, isn’t it? Figure 10.5 graphically depicts this concept.

**FIGURE 10.5**  
**EXCESS EARNINGS METHOD MODEL**



The valuation analyst needs to understand the theoretical basis of this method to avoid many of the common errors that are made in practice. The following are important guidelines for using this method:

- Because valuation is a “prophecy of the future,” the valuation analyst should estimate the normalized future annual income. A common error is to calculate a weighted average net income for the five prior years or some measure of historical data. The revenue rulings emphasize that using a weighted average of history is incorrect unless it reasonably reflects “probable future earnings.”
- The reasonable return on the net tangible assets should be based on the level of risk associated with these assets, as well as on the returns available in the market. The theory behind this assumption is that if a business owner invested in an investment other than the business assets, a return would be received. Therefore, the investment in assets should also generate a return on investment that is unrelated to the intangible value of the enterprise.
- The return on the net tangible assets should be based on the market value of the net assets and not the book value. Frequently, I see valuation analysts use book value in the calculation. That is just plain wrong!
- The return on investment can be determined by reviewing what other investments are paying. For example, if an investor can buy government securities and receive a 6 percent return, the return on, for example, accounts receivable or fixed assets should be higher to reflect the amount of risk related to an investment in these assets. Obviously, a balance sheet with all cash would be considerably less risky than a balance sheet that contains only highly technical specialty machinery.
- A common error is to consider the return of 8 percent to 10 percent given as an example in Revenue Ruling 68-609 as gospel. The rate must reflect risk and will generally differ from the rate in the revenue ruling, which was promulgated in 1968. Even the revenue ruling states that “the above rates are used as examples and are not appropriate in all cases. In applying the ‘formula’ approach, the average earnings period and the capitalization rates are dependent upon the facts pertinent thereto in each case.”
- The capitalization rate chosen must reflect the appropriate amount of risk relating to intangible assets. The example of 15 percent to 20 percent in Revenue Ruling 68-609 will, in most cases, be far too low for the average business’s unidentifiable intangible assets (for example, goodwill). Recognizing the riskiness of the intangible assets will be one of the most difficult jobs for the valuation analyst. The capitalization rate chosen will depend on how much of the earnings stream is attributable to the tangibles versus the intangibles. This will be explained further in chapter 11.
- The excess earnings method should be used only if no better method is available to determine the value of the intangibles. The enterprise can frequently be valued using other methodologies. This is not just my opinion. Reread the revenue ruling!

Exhibit 10.5 shows the basic calculations of the excess earnings method. The mechanics are simple, which is probably why judges like this method so much. Unfortunately, this method is frequently applied incorrectly, and the result is a poor valuation.

### EXHIBIT 10.5 CAPITALIZATION OF EXCESS EARNINGS

Estimated future income (normalized)	\$1,000,000
Less: Return on net tangible assets ( $\$800,000 \times 15\%$ )	(120,000)
Excess earnings	\$880,000
Capitalization rate	$\div 40\%$
Intangible value	\$2,200,000
Plus: Adjusted book value	800,000
Total entity value	<u>\$3,000,000</u>

Nonoperating assets are usually excluded from this calculation so that the total entity value reflects the value of the operations of the subject company. Any net nonoperating assets are added to the end result to value the total equity of the subject.

In using the excess earnings method, rules similar to those discussed in the single period capitalization model apply. Because a single income stream is being used, that income stream should reflect “stability.” If the forecasted earnings are not expected to be relatively stable, a different method should be used. Furthermore, because the assets and liabilities are adjusted to their fair market values, this method implies a control valuation. This method may not be appropriate for minority interests because they cannot liquidate the assets. Of course, you can always subtract a discount for lack of control (discussed in chapter 12) from the control value to get to a minority value. Quite frankly, I would rather use a different method.

There are frequently better methods to use in valuing businesses and, therefore, the excess earnings method is not always appropriate. Still, it continues to be used by many valuation analysts. As mentioned previously, the excess earnings method is commonly applied in the valuation of professional practices and small, owner operated businesses. In essence, the valuation of these entities is an asset based approach, with the goodwill (unidentifiable intangibles) being valued this way.

To use the excess earnings method for intangibles, all of the operating assets and liabilities of the business must first be appraised. This is frequently accomplished using the adjusted book value method. There are many valuation analysts who believe that because small companies and professional practices are usually sold as asset sales as opposed to stock sales, a more appropriate way to apply this method is on an invested capital basis. This would change the rates of return used in the method from equity rates to weighted average costs of capital or invested capital rates (this will make more sense after you read the next chapter). Personally, I like to apply this method the old fashioned way, based on equity. If you do it correctly, you should get similar answers (particularly if you are lucky!).

The next step is to calculate the normalized sustainable (stable) earnings of the business. Be careful to remove any nonoperating income or expenses during the normalization process. Also remove any items on the balance sheet that may be attributable to nonoperating assets or liabilities. The valuation analyst must then determine the appropriate rates of return on the net operating tangible assets (other than goodwill) owned by the company.

## Required Rate of Return on Net Tangible Assets

There are several acceptable ways to determine the required rate of return on the net tangible assets of the business. There are no hard and fast rules, but there is no substitute for common sense in choosing appropriate rates. One method of determining the rate of return on the net tangible assets is to review the assets and liabilities that make

<b>Tangible assets</b>	<b>FMV</b>	<b>Loan %</b>	<b>Loan amount</b>
Accounts receivable	\$150,000	× 80%	= \$120,000
Inventory	80,000	× 60%	= 48,000
Fixed assets	200,000	× 50%	= 100,000
Borrowing capacity	\$430,000	62.3%	\$268,000
Existing debt			100,000
Remaining capacity	\$430,000	39.0%	\$168,000
Market borrowing rate	10%		
1—Effective tax rate	65%		
After tax borrowing rate	6.5%	39%	2.54%
Required equity rate of return on tangible assets	28%*	61%	17.08%
Required rate of return on net tangible assets			19.62%

\*Net earnings discount rate.

up the balance sheet to assess the amount of risk attributable to these assets. I said it before, and I will say it again: A balance sheet with all cash will be considerably less risky than a balance sheet that is heavy in special technology equipment. The difference in the rates in this instance would be the difference between what a certificate of deposit pays, as opposed to the cost of leasing the equipment. The principle of substitution should be considered in weighing alternative returns.

Another method used to determine the rate of return on the net tangible assets is to calculate a weighted average rate based on the borrowing power of the company. This calculation appears in table 10.2. The idea behind this calculation is that the return should be based, in one part, as a return on the equity investment and, in another part,

as a return on the borrowed funds. The return on the debt portion will generally be lower than the return on equity because the latter is considered to be more risky.

Another source of rates of return on net tangible assets is the market itself. The valuation analyst cannot necessarily use public companies because the returns measured also include intangible assets, but sources such as trade associations, Integra Information's *Business Profiler*, and Risk Management Association's *Annual Statement Studies* may help provide information about returns on tangible net worth. The problem with using this data is that the returns presented are based on book value and not fair market value. Regardless of which method is used to determine the reasonable return on the net tangible assets, it is generally accepted in the appraisal community that this rate should not be below the subject company's cost of borrowing money.

The return on the net assets is then subtracted from the normalized earnings, resulting in "excess earnings" subject to capitalization. The capitalization rate applied to the excess earnings must be sufficiently high because the excess earnings represent the return from intangibles, which are considered to be more risky. Logically, if the rate of return on tangible assets is 15 percent, and the required rate of return on the company's earnings (which includes a return on the net tangible and intangible assets) was determined to be 33 percent, then the rate of return for only the intangibles has to be higher than 33 percent, so that on a weighted basis, the 15 percent plus the intangibles return equals 33 percent. This concept is illustrated in exhibit 10.6.

### EXHIBIT 10.6 EXCESS EARNINGS METHOD—RATES OF RETURN PROOF

Assume that the following calculation was deemed appropriate by the valuation analyst.

Estimated future income (normalized)	\$1,000,000
Less: Return on net tangible assets (\$800,000 × 15%)	120,000
Excess earnings	\$ 880,000
Capitalization rate	÷ 40%
Intangible value	\$2,200,000
Plus: Adjusted book value	800,000
Total entity value	<u>\$3,000,000</u>

The capitalization of benefits method applied to the estimated future income, instead of the excess earnings, would necessitate a capitalization rate as follows:

$$\text{\$1,000,000 income} \div \text{\$3,000,000 value} = 33.33\% \text{ capitalization rate}$$

This means that the valuation analyst would have had to determine a capitalization rate of 33.33 percent for a single period model to be consistent with the results of the excess earnings method. The mathematical proof is the weighted average return on the tangible and intangible components of the value as follows:

Tangible component	$\text{\$ 800,000/\$3,000,000} \times 15\% = 4.00\%$
Intangible component	$\text{\$2,200,000/\$3,000,000} \times 40\% = 29.33\%$
Weighted average capitalization rate	<u>33.33%</u>

The example in exhibit 10.6 demonstrates that on a weighted average basis, the returns on the tangible and intangible portions of the income stream must result in the return for the entire income stream. This makes sense if you think about it. However, the proof requires circular logic because you need to know the value of the enterprise in order to perform the mathematical calculation. If we know the value, why would we go any further? This is an excellent sanity check on the soundness of the rates of return used in the various methods.

## Background and Drawbacks

If used correctly, the excess earnings method can be a good method to use. However, the answer is only as good as the information that the valuation analyst uses to calculate it. There are many negatives with regard to the excess earnings method. The discussion that follows is intended to provide you with more background about this method, as well as show the problems that can result by using it incorrectly.

The excess earnings method was promulgated in Appellate Review Memorandum (ARM) 34 in 1920. The purpose of ARM 34 was to provide a formula to be used in determining the proper amount of compensation for the owners of breweries and distilleries for the loss of goodwill that resulted from prohibition. To assist in this task, ARM 34 included rates of return on the investment in assets employed in these types of businesses. This was supposed to allow a separation of the tangible and intangible portion of the taxpayer's income stream to be used in the formula. As the formula method became more popular and started being used for other types of businesses, it became apparent that the rates included in the memorandum may not have been appropriate in every situation or appropriate over time.

Revenue Ruling 68-609 was issued to correct the misinterpretations regarding the use of the excess earnings method in the valuation of goodwill. This revenue ruling suggested higher rates of return, but also led valuation analysts to the belief that this methodology is appropriate for all types of businesses. As time went by, the IRS began to recognize that the excess earnings approach was being misapplied in practice. It had been used to value entire businesses, when it was intended to value only the intangible assets.

In Revenue Ruling 68-609, the IRS has gone on record to state, "The (excess earnings) approach may be used only if there is no better basis available for estimating the value of intangible assets." There are frequently better methods to use in valuing businesses and, therefore, the excess earnings method is not always appropriate. Still, it continues to be used by many valuation analysts.

The basic formula in applying this methodology is to restate the balance sheet at fair market value. The next step is to calculate the probable future earnings of the business. A reasonable return on the net tangible assets is subtracted from the probable future earnings, resulting in the excess earnings that are attributable to the intangible value of the entity. The excess earnings are then capitalized to determine the value of the intangibles.

The problems with this methodology are plentiful. The most basic problem is the false assumption that the earnings of a business can easily be divided between the amounts attributable to the tangibles and intangibles. The valuation analyst must determine the appropriate rates of return on the net tangible assets and identifiable intangible assets (other than goodwill) owned by the company. There is no empirical data to support these rates of return.

Errors are also frequently committed because of a lack of understanding of the theoretical background and application of the method. Therefore, because this method is so easily misapplied, it is not widely favored by experienced valuation analysts.

In *Business Valuation News*, Shannon Pratt states

The excess earnings method of valuation actually is another version of a capitalized earnings approach. It is the most widely used and misused of all methods for valuing small businesses and professional practices. It is widely written about, and more than half the business and professional practice brokers that I know use some version of it. It is widely used in divorce proceedings by courts for determining the value of goodwill in professional practices. Yet the Internal Revenue Service, who spawned the method back in 1920, now roundly denounces it.<sup>5</sup>

Discussing the methodology further, Pratt quotes *How to Buy or Sell a Business: Small Business Reporter Series*, in which it is stated that because each business and sales transaction is different, the formula should be used only to indicate some of the major considerations in pricing a business.<sup>6</sup>

In an article titled, "Closely Held Business Valuations: The Uninformed Use of the 'Excess Earnings/Formula' Method," Jeffrey Fox, ASA, indicates that "to mechanically cite the excess earnings/formula method as the authority for a closely held business valuation will leave an appraiser very vulnerable to criticism."<sup>7</sup>

<sup>5</sup> Shannon Pratt, "The Excess Earnings Method," *Business Valuation News* (September 1985), 4-12 (now known as *Business Valuation Review*, published by the Business Valuation Committee of the American Society of Appraisers).

<sup>6</sup> Ibid. (quoting Bank of America, *How to Buy or Sell a Small Business: Small Business Reporter Series* [San Francisco: Bank of America, 1982], 8-9).

<sup>7</sup> *Business Valuation News* (September 1984).

Fox indicates that this method should be used only as a last resort. All of the difficulties in the application of this method are discussed in the article, but the author sums up the use of this method when he states, “the utility of the excess earnings/formula method is definitely in doubt when the creator of the method has its own questions concerning its validity.” Despite the overall dislike of the excess earnings method, it has its use in business valuation. For professional practices and small, owner operated businesses, information is difficult, if not impossible, to obtain, and the valuation analyst has no other choice of method. Care must be exercised in its application, however, because the end result does not always make sense. A blind application of this method without sanity checks and tests for reasonableness will frequently result in a serious misstatement of the value of the subject business.

Although there is wide acceptance of the excess earnings methodology, the mechanics of the method make it a method of last resort. First and foremost among its many deficiencies is that unless the valuation analyst is extremely lucky, the excess earnings method will rarely reflect the market. In a fair market value appraisal, there is nothing more important than the market.

Another problem with the excess earnings method is having to determine two rates of return (return on net tangibles and capitalization rate for excess earnings) instead of one. We have enough trouble supporting our capitalization rates for small businesses because of the lack of empirical data, and now proponents of the excess earnings method have to determine a capitalization rate for excess earnings, for which there is absolutely no empirical data.

As we will discuss in chapter 11, we are taught as valuation analysts to build up a capitalization rate by starting with a discount rate developed for cash flow (assuming we use Morningstar or Duff & Phelps data). We add a subjective element called the specific company risk premium to reflect the added element of risk that is associated with the appraisal subject as compared to other companies or with industry data that we obtain. Now we are being asked to add an additional subjective element for only the unidentifiable intangibles portion of the income stream. Where is this supposed to come from? Is this one of those “leaps of faith” that experienced valuation analysts refer to as a *common error* in many valuation reports?

Another reason to avoid the excess earnings method is that it violates the spirit of Revenue Ruling 59-60, in which the IRS has stated

In general, the appraiser will accord primary consideration to earnings when valuing stocks of companies which sell products or services to the public; conversely, in the investment or holding type of company, the appraiser may accord the greatest weight to the assets underlying the security to be valued.

It is commonly accepted in the appraisal community that a business valued as a going concern will generally be appraised based on the earnings or cash flow capacity of the business. Only in limited circumstances would primary weight be afforded to an asset based approach. The excess earnings method places a great emphasis on net asset values to determine the value of the intangibles. This is contradictory.

If a company had to be valued by separately stating the tangible and intangible assets, the excess earnings method could possibly be used in limited situations. However, the subtraction method can also be used to determine the value of the intangibles. Using this method, the company is valued in its entirety, and then the valuation analyst subtracts the value of the net tangibles to determine the value of the remainder, the intangibles.

Now let's look at the modern day thinking of the IRS. According to the *IRS Valuation Guide for Income, Estate and Gift Taxes*.<sup>8</sup>

Intangibles, for purposes of valuation, are divided into two categories:

1. Intangibles with a determinable useful life
2. Intangibles with a nondeterminable useful life

This publication points out that for a taxpayer to be entitled to a depreciation deduction under Sec. 167, three requirements must be met:

1. The assets must be separate from goodwill or going concern value, or both.
2. The assets must be susceptible to valuation.
3. The assets must have a determinable, limited useful life.

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<sup>8</sup> January 1994 edition.



Discussing separability, the IRS notes

The qualities that make intangibles so attractive to a buyer, such as providing a competitive advantage and/or the ability to achieve excess earnings, are the same qualities that make the intangible assets so difficult to identify and value. As noted by Nicholas Fiore in the article "Valuing Intangibles," intangibles may be so interrelated that they are viewed as a single, indivisible asset, rather than in terms of separate parts.<sup>9</sup> The mass asset doctrine, in the case of indivisible intangibles, treats all intangible assets as goodwill. This indivisible asset ensures that intangible assets in the nature of goodwill, with indeterminable lives, will not be depreciated.

Several court cases dealing with intangibles are discussed, but the conclusion is the following:

The Courts continue to hold, however, that the burden of proof remains upon the taxpayer to provide sufficient and reasonable evidence to support a claim that an acquired intangible asset exists, has *value separate and distinct* from goodwill, and a *limited useful life*.

The discussion about the capitalization method of valuing intangibles states the following:

The capitalization method supposes that the value of the business is based on its ability to generate profits.

This method is computed as follows:

1. Determine net value of tangible assets.
2. Determine a capitalization period and whether to use a straight line or weighted average.
3. Determine a capitalization rate and apply it to the average determined above.
4. If the earnings, once capitalized, are greater than the net tangible assets, the difference represents goodwill.

Because goodwill has generally been described in terms of earning capacity, one method to calculate its existence is based upon a capitalization of earnings approach. One of the early attempts to arrive at the value of goodwill by capitalizing earnings was set forth by the IRS in ARM 34.

An example of the form of the computation prescribed by ARM 34 is as follows:

**Example**

Welch Company, a low risk company, had net tangible assets as of the appraisal date of \$100,000. In addition, its earnings record was as follows:

Preceding Years Earnings	
1st yr. earnings	\$ 20,000
2nd yr. earnings	30,000
3rd yr. earnings	15,000
4th yr. earnings	40,000
5th yr. earnings	<u>25,000</u>
Total	\$130,000

Average annual earnings for 5 preceding years:

$$\frac{130,000}{5 \text{ years}} = \$26,000$$

ARM 34 uses a rate of return for low risk companies of 8 percent. In this case, the earnings attributable to tangible assets are 8 percent of the net tangible asset value:

$$\$100,000 \times .08 = \$8,000$$

The balance of earnings attributable to intangible assets is:

Average earnings	\$26,000
Less earnings attributable to tangible assets	<u>8,000</u>
Earnings attributable to intangible assets	\$18,000

ARM 34 then recommends, for low risk companies, a capitalization rate of 15 percent. The value of the intangible assets is as follows:

<sup>9</sup> Nicholas Fiore, "Valuing Intangibles," *Journal of Accountancy* 162 (Sept. 1986): 12.



Earnings attributable to intangible assets	\$18,000
Divided by capitalization rate	÷ .15
Equals value of intangible assets	\$120,000

Initially, this formula was interpreted as providing set rates of return on tangible and intangible assets. This resulted in many improper valuations since the use of arbitrary capitalization rates has no relationship to the financial marketplace at the time of valuation. *The IRS has clarified its position by stating that the appropriate average earnings period and capitalization rates are dependent upon pertinent facts of each case.*

In making the calculation, the following factors should be considered:

1. The period of past earnings should fairly represent probable future earnings. Ordinarily, this will not be less than five years.
2. Abnormal years, whether above or below average, should be eliminated.

Factors that influence the capitalization rate include

- nature of the business.
- risk involved.
- stability or irregularity of earnings.

*The formula approach may be used for determining the fair market value of intangible assets of a business only if there is not better basis [sic] available [emphasis added].* A recent Tax Court decision used the formula approach to calculate going concern value in a situation where it was determined that no goodwill existed.

The valuation guide indicates that even though the excess earnings method is discussed in Revenue Ruling 68-609

- the IRS has stated that a taxpayer may use the capitalization of excess earnings method only if there is no better basis for determining the value of intangibles; and
- the Tax Court has, on occasion, rejected the taxpayer's use of the capitalization of excess earnings method for valuing intangible assets (for example, core deposit intangible in *Banc One*, 84 T.C. 506);
- The Court, in *Banc One*, criticized the basic assumptions made in the capitalization of excess earnings method, noting that the “[d]etermination of the ‘normal’ earnings of business, the ‘average’ return on the tangible assets, and the ‘appropriate’ capitalization rate is a highly subjective task.”
- The Court even rejected the theory supporting the capitalization of excess earnings method, finding that “there is no goodwill unless there is also an expectancy of continuing excess earnings capacity,” and noted also that goodwill may be present in the absence of excess earnings capacity.

To make a long story short, the promulgator of the methodology is not too thrilled with its own invention. Clearly, fair market value is supposed to come from the market. It is not to be conceived from formula methodologies that often fail to reflect the market value of a business. Because good appraisal practice dictates that the valuation analyst should use multiple methods of valuation in any assignment, and there are other methods of valuation that can be used in any given assignment, we should learn from the IRS when they tell us, “The formula approach may be used for determining the fair market value of intangible assets of a business only if there is not a better basis available.” Any experienced valuation analyst should understand that there is always a better basis for valuing an entire enterprise and almost always a better method for valuing only the intangibles.

As you probably realize, the foregoing discussion was extremely critical of the excess earnings method. I would have liked to highlight a positive side of this method, but I could not think of one. The excess earnings method should be used only if all else fails. You can use this method when you know that you are going in front of a judge who will throw your report out of court if you do not use it. Whatever you do, do not use only this method. Use other methods that may be applicable to the assignment at hand, so that you can have a feeling of comfort about the estimate of value that you come up with.

## AND FINALLY—WHAT TO DO ABOUT S CORPS AND FLOW THROUGH ENTITIES

Flow through entities come in many shapes and sizes, whether an S corporation, limited liability company, or partnership. This section of the book will primarily focus on S corporations, but the same economic theory can be applied to other flow through entities as well. This section is not intended to cover everything that you need to

know about valuing these types of entities because this subject would take up a book, not just a chapter. In fact, Nancy Fannon, CPA/ABV, MCBA, ASA, wrote a book on this topic entitled *Fannon's Guide to the Valuation of Subchapter S Corporations*, published by Business Valuation Resources, LLC.

During the past decade, several Tax Court cases were decided that significantly changed the landscape of how S corporations are valued. Box 10.6 includes quick snapshots about each of the Tax Court cases.

### Box 10.6 Summary of Key Tax Court Cases Since 1999

*Gross v. Commissioner*, T.C. Memo. 1999-254, affd. 272 F.3d 333 (6th Cir. 2001). In this case, the taxpayer's expert argued that the S corporation earnings of G&J Pepsi-Cola Bottlers, Inc. (G&J) should be tax effected, and that its C corporation equivalent earnings should be capitalized with an after tax discount rate based on the Capital Asset Pricing Model. The expert for the IRS argued that G&J's earnings were after corporate taxes, particularly because an S corporation does not pay any taxes, and before personal taxes of the shareholders. Consequently, according to this expert, the appropriate discount rate applicable to the S corporation's earnings was an after tax discount rate. The Court agreed with this argument in its written opinion. The valuation subject consisted of small, minority interests of G&J.

*Wall v. Commissioner*, T.C. Memo 2001-75, March 27, 2001. This case involved several small gifts of S corporation stock. Both experts tax effected the income stream in the application of the income approach, although at different rates. The Tax Court cited *Gross* and determined that the income stream should not be tax effected.

*Heck v. Commissioner*, T.C. Memo. 2002-34, Filed February 5, 2002. In this case, the expert for the taxpayer used a discounted cash flow method in which the pretax, flow through earnings of F. Korbel & Bros., Inc. (Korbel) were considered. The discount rate that he used was an after tax weighted average cost of capital. The expert for the IRS used a similar discounted cash flow methodology and an after tax weighted average cost of capital. The Court's opinion cited *Gross* on the issue of the cost of capital. The finding of The Court in this case was based on discounting the pre tax earnings of Korbel with an after tax cost of capital. In this instance, a 39.6 percent minority interest was being valued.

*Adams v Commissioner*, T.C. Memo. 2002-80, Filed March 28, 2002. In this case, the tax effecting issue became extremely important. In this case, the taxpayer's expert, rather than proposing that the S corporation earnings of Waddel Sluder Adams & Co., Inc. (WSA) be tax effected, developed an after tax discount rate using a build up method and converted the corresponding capitalization rate (after subtraction of expected growth) to a pretax capitalization rate. He deemed this discount rate applicable to the S corporation earnings of WSA. This stream of income was before corporate taxes and any distributions that may have been distributed to the shareholders to pay their personal income taxes. The IRS expert argued that an after tax discount rate was applicable to the S corporation earnings of WSA. While this seems to be consistent with *Gross* and *Heck*, with respect to the issue of pretax earnings and an after tax discount rate, the appraisal subject in *Adams* was a 61.6 percent, controlling interest.

*Dallas v. Commissioner*, T.C. Memo 2006-212, September 28, 2006. After a long hiatus in cases involving S corporations, this case hit our radar. In this case involving Dallas Group of America, Inc. (DGA), one of the issues related to the tax effecting of the income. The first taxpayer valuation analyst tax effected S corporation earnings using a 40 percent tax rate and the second taxpayer valuation analyst used a 35 percent tax rate. According to the Court, the testimony of the taxpayer's analysts was that they tax effected under the assumption that DGA would lose its S corporation status after or as a result of the hypothetical sale of its stock. The Court said there was no evidence that DGA expected to lose its S corporation status. The Court also noted that DGA had a history of distributing sufficient cash for the shareholders to pay their taxes on their share of S corporation earnings, and there was no evidence that this practice would change. The Court gave little weight to the taxpayer's valuation analysts' testimony. The bottom line is that The Court said, "We conclude there is insufficient evidence to establish that a hypothetical buyer and seller would tax effect DGA's earnings and that tax effecting DGA's earnings is not appropriate."

Most of these cases found in box 10.6 caused an absolute uproar in the valuation community. Almost everyone thought that the Tax Court was crazy. After the dust settled, an entire new way of thinking was born. Relying on the same old theory of always tax effecting earnings doesn't fly anymore.

However, with that being said, the above cases could result in bad law if all valuation analysts assume that the Tax Court was correct in its rulings, and that the same rules should apply to a different set of circumstances. In fact, as a result of the rulings, it would appear that an S corporation election has value. Why should it have value to the entity? This would make an S corporation worth more than an equivalent C corporation. Besides defying basic economic theory, this lacks the common sense that Revenue Ruling 59-60 suggests that we apply in the valuation process.

There have been numerous articles published over the past several years in *Business Valuation Update*, *Business Valuation Review*, *Business Appraisal Practice*, and *Financial Valuation and Litigation Expert*. Furthermore, there have been an abundance of conference presentations on this topic as well. In order to save space, I am not going to repeat the information included in all of that other stuff. However, what seems to be abundantly clear is that the empirical data does not support the notion that an S Corporation sells for more than a C corporation.<sup>10</sup>

## SO WHERE DO WE GO FROM HERE?

Every valuation analyst faces the question of what to do about taxes when valuing an entity that has elected to be treated as an S corporation under the Internal Revenue Code (IRC). Some analysts believe that being an S corporation adds value to the entity because it does not pay income taxes. Others believe that making an S election reduces the value of an ownership interest because of personal taxes that will be paid on profits that are allocated to the shareholder, without the benefit of receiving distributions that enable the individual to pay personal taxes when they come due. In this section, we will explore the never ending question of, does an S election increase or decrease value?

## WHAT IS AN S CORPORATION?

Although this is not a treatise on income tax laws, a good place to begin a discussion about the value of an S corporation is to understand the rules regarding this type of entity. The term *S corporation* means a small business corporation for which an election to be taxed under Subchapter S of the IRC is in effect for that year.<sup>11</sup> Once made, this election remains in effect until it is revoked. To be classified as a small business corporation for purposes of Subchapter S, a corporation must meet all of the following requirements:

- The corporation must be a domestic corporation.
- It must not be an ineligible corporation.
- It must not have more than 100 shareholders.
- Only individuals, decedents' estates, estates of individuals in bankruptcy, and certain trusts may be shareholders. Partnerships, corporations, and many types of trusts may not be shareholders.
- No shareholder may be a nonresident alien.
- The corporation may have only one class of stock, but different voting rights are allowed.<sup>12</sup>

A corporation can elect to become an S corporation by filing the appropriate form with the Commissioner of the Internal Revenue. This election can also be revoked, voluntarily or involuntarily, under certain circumstances. Once elected, a corporation will remain an S corporation until such time as a revocation takes place. One thing worth noting is that the election is free. Therefore, why would a willing buyer pay more for the S election if he or she could elect it for free?

Keeping this discussion of the tax law simple, an S corporation is a pass through entity. This means that the profits and losses are passed through to the shareholders, and any tax that is payable will be paid by the shareholders and not the corporation. The original purpose of an S election was to allow these small business corporations to be treated as if they were a partnership, while continuing to provide the shareholders with the legal protection of operating in a corporate form.

Being an S corporation provides the shareholders with certain tax benefits. These include, but are not limited to, the following:

- Not being questioned by the IRS about reasonable compensation for shareholder/employees (this pertains to excess compensation and not payroll taxes)
- Not being subjected to the accumulated earnings tax if dividends are not paid to the shareholders
- Avoids double taxation upon sale of the corporation's assets (other than those assets that may be subject to the built in gains tax—see discussion below)

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<sup>10</sup> John Phillips wrote a terrific article in *Business Valuation Update*, March 2004, summarizing several other articles including a discussion of empirical data.

<sup>11</sup> Code Sec. 1361(a)(1)

<sup>12</sup> Code Sec. 1361(b)

While there are certain tax advantages to electing S corporation status, there are also disadvantages. The major disadvantage relates to C corporations that convert to S corporations. Any gain that the corporation recognizes within the 10 years after the election is made to convert a C corporation to an S corporation is taxed as if the asset was owned at the time of the conversion to S status. This is known as the *built in gains tax*. Not only does the corporation pay tax on these items, but the shareholders will also be taxed on the income that is flowed through after corporate taxes are paid. This constitutes double taxation. Some folks say that this is really not a disadvantage, but merely defers the advantage for 10 years to escape the built in gains tax. I guess they have a point.

Another tax consideration relating to the S election is the shareholder's income tax basis in the corporation's stock. Whereas in a C corporation, the income tax basis is generally the purchase price of the stock, an S corporation's shareholders will constantly be adjusting the income tax basis of their shares. The S corporation's shareholders will increase their basis for all earnings reported by the company that are not distributed. A simplified basis calculation is as follows:

Original Investment	\$1,000
+ Profit—Year 1	500
– Distributions—Year 1	<u>(200)</u>
Basis—End of Year 1	\$1,300
+ Profit—Year 2	800
– Distributions—Year 2	<u>(400)</u>
Basis—End of Year 2	<u>\$1,700</u>

The tax implication of the adjusted basis is that the amount of tax that is paid by the shareholder upon the eventual sale of the corporate stock will depend on whether the sale is for a greater or lesser amount than the tax basis. While a tax basis adjustment, in and of itself, does not affect the value of the corporate stock, the shareholder's return will be affected. Investment decisions may vary depending upon the shareholders' goals relating to a particular investment. This will be discussed later.

## VALUATION ISSUES

In the valuation of an interest in an S corporation, two main issues arise. First, do the income tax advantages of the S election create value? This gets carried one step further by raising the questions of value to whom, and how do we account for the incremental value in the valuation process? The second issue is, if we value an S corporation by comparing this entity to non-S corporation entities, what adjustments are necessary in the valuation process?

Many appraisers feel that an S corporation should be valued in the same fashion as they would value a C corporation. This is because

1. C corporations are, in substance, nearly identical to S corporations.
2. S corporations may lose their S status in the future and convert to C corporations.
3. Most measures of corporate performance used in valuation models, such as growth and discount rates, are derived from C corporations; therefore, S corporations should be valued as C corporations to maintain consistency with these measures.<sup>13</sup>

According to the IRS:

S Corporations lend themselves readily to valuation approaches comparable to those used in valuing closely held corporations (C corporations). You need only to adjust the earnings from the business to reflect estimated corporate income taxes that would have been payable had the Subchapter S election not been made.<sup>14</sup> (Added for clarification).

Some appraisers believe that the tax benefits of having made an S election should increase the value of the entity. Many of the fundamental issues that affect the appraisal process must be considered, as well, for the determination of whether or not an S corporation election adds value. Some of these factors include the following:

- Standard of value
- Control vs. minority

<sup>13</sup> Simpson, William E. and Peter D. Wrobel, "Income Tax Issues in Valuing S Corporations," *CPA Expert* (Spring 1996).

<sup>14</sup> *IRS Valuation Guide for Income, Estate and Gift Taxes*, Commerce Clearing House

- Distributing vs. nondistributing
- Holding period of the investment
- Time value of S corporation benefits

## STANDARD OF VALUE

The standard of value in any business valuation assignment can have a significant effect on the final estimate of value. We have discussed this earlier in the book. Valuing an entity that has elected S status is no different. Probably the more significant differences will arise between fair market value and investment value. We discussed this in the beginning of the book.

If the purpose of the valuation assignment is to determine the fair market value of a controlling interest in an S corporation for purchasing, selling, or merging the corporation, the corporation's tax structure may have little or no effect on value. If the most probable "willing buyer" is an ineligible shareholder (that is, a C corporation), then that shareholder will not pay for income tax benefits that it cannot take advantage of. Therefore, corporate income taxes should be a part of the valuation calculations. Conversely, if the "willing buyer" can qualify for the S election, that buyer may pay for the benefits that will be received, and no corporate income taxes may be appropriate in the determination of the benefit stream to the investor.

An important component of determining fair market value is the determination of who will be the "willing buyer." This became evident in the *Estate of Samuel Newhouse*,<sup>15</sup> where it was demonstrated that different classes of investors would pay different amounts under a fair market value scenario. Following this logical foundation, an appraiser must make certain assumptions about who the most likely purchaser will be. However, care must be exercised not to fall into a tax trap by identifying a specific buyer. The Tax Court has gone on record to state:

We need not identify directly who the buyer would be or even what class of investors the buyer would belong to. The "willing buyer" is supposed to be a hypothetical amalgam of potential buyers in the marketplace. Although we have, in prior opinions, identified types of hypothetical buyers, we did so only to determine which valuation approach, among several reasonable approaches, would result in the highest bid, and therefore the one most acceptable to a willing seller. The question is not so much "who" but "how."<sup>16</sup>

The issue of who the most likely purchaser of the property will be is an essential element of the determination of the "highest price" that would be offered to a prudent seller. During periods of industry consolidation, companies are offered greater amounts (higher premiums) than they might get from "nonsynergistic" buyers. If there is the expectation by the seller that his or her company will sell to one of the industry players, then it seems that fair market value warrants the valuation to be performed in this fashion. This argument can be carried one step further by stating that when an appraiser reviews market data, a determination is generally made as to who is buying up these companies. Therefore, the issue of whom the willing buyer is most likely to be needs to be addressed.

For smaller appraisal subjects, this determination will be more easily made. Small businesses are frequently purchased by an individual, or a group of a few individuals, who will continue to qualify as S corporation shareholders. For these types of businesses, the continuity of an S election appears to be a reasonable assumption. However, even small businesses may not qualify to be an S corporation if they are purchased. As the melting pot of the United States continues to grow, a large influx of nonresident aliens (no, not Martians) are entering the marketplace as possible purchasers of these businesses. It may no longer be a reasonable assumption that the S election will continue after the acquisition.

Larger corporations are even more problematic than small corporations when the valuation analyst must make assumptions about the willing buyer. Larger entities are more likely to be purchased by a C corporation, which would immediately negate the S election. Therefore, it may not be reasonable to assume that the target company will be able to continue in its present tax status.

<sup>15</sup> *Estate of Samuel Newhouse*, 94 T.C. 193

<sup>16</sup> *Estate of Mueller v. Commissioner*, TC Memo. No. 1992-284 at 1415, 63 TCM 3027-16 (citations omitted).

## PURPOSE OF THE ASSIGNMENT

In addition to the standard of value, the purpose of the assignment may also cause the valuation analyst to make certain assumptions. For example, if the appraisal is being performed for the determination of fair market value to be used in a matrimonial litigation, it may be considered unfair to the nonbusiness owner spouse to make the assumption that the S election will be lost. However, since matrimonial courts are courts of equity, it may be equally unfair to the business owner not to assume taxes will be paid because they are paid at the personal level even if no distributions are made.

With that said, in *Judith E. Bernier v. Stephen A. Bernier*,<sup>17</sup> the Massachusetts Supreme Court addressed the issue of tax-effecting an S corporation. I truly commend the court for taking on this controversial issue. Following the methodology in *Delaware Open MRI Radiology Associates, P.A. v. Howard B. Kessler, et al.*,<sup>18</sup> (a case that is discussed in chapter 20), the court applied a methodology to determine the tax effect that I really like.

When the standard of value is investment value, consideration should be given as to whether the specific buyer will qualify as an S corporation. The specific buyer's goals regarding rates of return, or whether he or she wants current cash flow or capital appreciation must be considered when deciding on an S election. More often than not, valuations performed for transaction purposes use pretax earning streams because it is the buyer's expected tax status that should be considered in place of the seller's historical tax structure.

## CONTROL VS. MINORITY

If the business interest being appraised is a minority ownership interest—that is, the appraisal of the ownership interest not having the prerogatives of control—then a direct comparison with values of other minority interests is the most appropriate method of valuation. In essence, if the minority interest cannot effectuate a change in the company's tax structure, no such change should be assumed.

An argument could be made that a minority shareholder could, in fact, cause a change to an S election by selling the shares to a nonqualified shareholder of the S corporation. This violation of the rules regarding ownership could kill the election, therefore, changing the status involuntarily. However, a valuation analyst should also consider the likeliness of the shareholders' actions. It would seem that the shareholder would have to have special motivations to intentionally kill the S election for the balance of the shareholders. These special motivations may be enough to violate the definition of fair market value.

The S election may have been made by the shareholders for reasons that have nothing to do with value. For example, an S election may be made so that the issue of reasonable compensation may be avoided upon audit by the IRS. Another reason for an S election may be to avoid double taxation at the time that the company is sold. For a shareholder to want to intentionally violate the S election, the company could be exposed to greater risk of loss, thus reducing its value. The prudent shareholder would not want to diminish the value of the investment.

Although the minority shareholder can cause the S election to be involuntarily terminated, it does not seem logical to assume that this will occur. However, the facts and circumstances of the situation must dictate whether or not to make such an assumption.

## DISTRIBUTING VS. NONDISTRIBUTING

An S corporation may be favorable or unfavorable depending upon whether the corporation has the ability to distribute its earnings to its shareholders. If only some, or possibly none, of the earnings can be distributed, the result can be extremely unfavorable to the investor. Let me illustrate this point by using a real example. This appears as exhibit 10.7. Our firm did a critique of another valuation analyst's work for a litigation. One of the many issues was that we tax effected the earnings, and he did not. This is an excerpt from our critique (names have been changed to protect the guilty!)

<sup>17</sup> *Bernier v. Bernier*, 2007 Mass. LEXIS 598 (May 7, 2007).

<sup>18</sup> *Delaware Open MRI Radiology Associates, P.A., Petitioner, v. Howard B. Kessler, et al., Respondents, and Howard B. Kessler, et al., Plaintiffs, v. George J. Broder, et al., Defendants*, in the Court of Chancery of the State of Delaware, in and for Newcastle County, Consolidated, C.A. No. 275-N.



## EXHIBIT 10.7

### TO TAX OR NOT TO TAX—CRITIQUING ANOTHER'S REPORT

#### TAX EFFECTING EARNINGS

The issue of tax effecting the earnings of S corporations or other pass through entities such as general partnerships, limited partnerships, or limited liability companies, is a highly debated issue in business valuation. The conventional wisdom used to be that you would tax effect the earnings of a pass through entity because the willing buyer may not be able to avail itself of the nontaxable status of the seller. Appraisal theory has stated that it is essential to match the earnings stream being capitalized, when using the income approach, with the correct capitalization rate. Because publicly traded companies report their earnings on an after tax basis, sources that compile this data for use by appraisers in determining discount and capitalization rates consider these rates to be applicable to after tax earnings streams (or cash flow). The most widely used source in the appraisal field is data published by Ibbotson Associates. Ibbotson data is clearly after tax at the entity level.

The argument first started to be raised about after taxes to the entity in the Tax Court case *Estate of Gross*. I will address this shortly. It is not uncommon for an appraiser to tax effect the earnings of S corporations by applying marginal C corporation tax rates to their earnings. This is consistent with the approach employed in our reports.

Contrary to Mr. Smith's assertion that we reduce available cash flow by a "hypothetical" corporate income tax, this adjustment does not assume that the companies will indeed incur a tax, but rather is a necessary adjustment when applying historical Ibbotson return data (which is presented on an after tax basis) to the subject earnings stream. The following are additional reasons for tax effecting S corporation earnings:

1. The S election has no effect on the operating cash flows of the business.
2. The benefits of the S election are shareholder benefits and, therefore, capitalizing these benefits would overstate the value of the enterprise because the benefits can be taken away involuntarily if the S election is broken.
3. S corporations usually pass through a sufficient portion of their earnings to their shareholders to allow them to pay their taxes, which leaves the S corporation in almost the same position after taxes as if it were a C corporation.
4. The public stock markets tend to price the earnings of publicly traded partnerships on a basis equivalent to the after tax earnings of publicly traded C corporations in the same lines of business.
5. Most of the likely buyers of S corporations are C corporations or groups of investors who may need to organize as C corporations. There is no apparent advantage for S corporation buyers to C corporation buyers.
6. Every C corporation (with eligible shareholders) would either make the S election or would have the option to convert if this was desirable. If a higher value is attainable following the S election, corporate sales of companies would reflect this value. There is no logic for the existence of two levels of corporate value for eligible entities when there are no logical or practical barriers prohibiting election to obtain the higher value.
7. It has been suggested that buyers will pay no more for an S corporation than an equivalent C corporation; therefore, there are no S corporation premiums.

To address the tax treatment of pass through entities from an independent perspective, we consulted textbooks and articles written and published by some of the leading practitioners in the business valuation field. In general, well known business valuation authorities, including Shannon Pratt, Christopher Mercer, and Roger Grabowski, all agree that there is no hard-and-fast rule that applies to treatment of pass through entities in all cases. There is a general consensus among these individuals that the issue of whether or not to tax effect the earnings of a pass through entity is one that must be addressed on a case-by-case basis.

This debate has also been highlighted in four recent Tax Court cases:

1. *Gross v. Commissioner*, T.C. Memo. 1999-254, aff'd. 272 F.3d 333 (6th Cir. 2001)
2. *Wall v. Commissioner*, T.C. Memo. 2001-75, filed March 27, 2001
3. *Heck v. Commissioner*, T.C. Memo. 2002-34, filed Feb. 5, 2002
4. *Adams v. Commissioner*, T.C. Memo. 2002-80, filed March 28, 2002

In all four of these cases, the court ultimately determined that it was appropriate to capitalize S corporation earnings using an after tax rate. In each case, the valuation conclusion was reached without tax effecting earnings, which is consistent with Mr. Smith's approach.

(Continued)



**EXHIBIT 10.7** (Continued)

However, in response to the Tax Court rulings, Christopher Mercer argues that in *Gross, Heck and Adams*, "The Tax Court has rendered opinions based on unsound economic and financial theory." Mercer, with agreement from Dr. Shannon Pratt, concludes that

- S corporations are worth the same as otherwise identical C corporations at the level of the enterprise. Their operating cash flows are identical, and there is no rationale that suggests that their enterprise values should be anything but identical.
- interests in S corporations may be worth more or less than otherwise identical interests in otherwise identical C corporations. The cash flows to shareholders may be different between S and C corporations, and these differences, considered in the context of the riskiness of their receipt, can create differences in value.

In determining the appropriate discount rate for capitalizing pretax earnings, an analogous situation may be drawn to municipal bonds. Yields on municipal bonds are significantly lower than yields on taxable bonds. This is due to the favorable tax treatment received by investors holding municipal bonds (that is, no federal taxes and, in some cases, no state or municipal taxes). In order to convert the yield on a municipal bond to its taxable equivalent for comparison purposes, analysts divide the tax free yield by  $(1 - \text{tax rate})$ , where the tax rate is the investor's effective personal rate for both state and federal taxes. The term  $(1 - \text{tax rate})$  is simply the factor used to convert pretax dollars to after tax dollars.

Upon issuance, both municipal bonds and taxable bonds are issued at par value. Thus, the trading price (or par value) of a municipal bond is a function of its tax free yield, as investors discount the present value of future cash flows at the tax free rate. In essence, the investment community prices municipal bonds as if taxes have been prepaid on interest and principal payments received by investors. Thus, if a business is valued using pretax earnings as the applied earnings measure rather than after tax earnings, then an additional adjustment is also necessary to the discount or capitalization rate. Accordingly, the future cash flows of the business should be discounted or capitalized at a pretax rate, which is calculated by dividing the after tax discount rate by  $(1 - \text{tax rate})$ . Mr. Smith does not make any such adjustment.

In addressing the issue of taxation in light of recent tax legislation, we conducted our own analysis of the differences between holding stock in the companies under a tax effecting scenario (C corporation assumption) versus the current pass through taxation of the entities. The argument against tax effecting the earnings of an S corporation or other pass through entity is predicated upon the belief that the shareholder of an otherwise identical C corporation is burdened by "double-layer" taxation at both the entity and the shareholder levels. Mr. Smith claims that because the ABC Organization will end up owning the companies, the S corporation assumption should be continued into the future. The argument, here, is that although the ABC Organization may be an S corporation, there is no guarantee that it will ultimately be sold to a buyer that can qualify as an S corporation and, therefore, it is a flawed assumption to think that a buyer will pay for a benefit that it will not realize.

Another argument, going forward, pursuant to the Jobs and Growth Tax Relief Reconciliation Act of 2003, effective January 1, 2003, dividend income to C corporation shareholders is taxed at the same rate as capital gains (for a maximum rate of 15 percent), while shareholders in pass through entities continue to be taxed at personal tax rates on S corporation earnings,\* thus minimizing differences in tax liabilities at the shareholder level regardless of the level of earnings distributed to shareholders. Although this reduction was not in effect as of the valuation date in this case, given the ongoing litigation associated with this assignment and the anticipated transfer of ownership interests in the companies, we believe this factor is particularly relevant.

For each company, we incorporated the recent decline in dividend tax rates and examined the cash flows available to a shareholder or member under the two scenarios. For taxable income, we used the adjusted income from our reports before taxes, while the assumed payout ratio of distributions is based on actual distribution levels for each entity.

The importance of this calculation is that distributions make a big difference in determining the difference in value of these two types of entities. In this case, the level of indebtedness, and the need for reinvestment into new assets, does not enable the shareholders to receive significant distributions. It is important to note that in the Estate of Gross, distributions to shareholders were at about 100 percent.

\*Anthony J. DeChellis, CPA, CFP and Sheila Owen, CPA, "A Closer Look at Qualified Dividends under the 2003 Act," *PPC National Tax Advisory*, September 9, 2003.

## EXHIBIT 10.7

 **Author's Note**

The tax scenarios that you are about to review address the issue of whether the various entities that were the subject of the appraisal would be a benefit to the shareholders after considering the level of distributions that the companies were able to make as well as the taxes that would be paid at both, corporate and personal levels.

<b>Company One, Inc.</b>		
<b>Comparison of tax scenarios</b>		
	<b>C Corporation</b>	<b>S Corporation</b>
Debt free pretax income	\$ 84,166	\$ 84,166
Corporate income tax	26% (21,866)	0
Net income available to shareholders	\$ 62,300	\$ 84,166
Less: Addition to retained earnings	(62,300)	(62,300)
Distributions	0% \$ 0	26% \$ 21,866
Less: Personal taxes	15% 0	40% (33,666)
Net cash flow to shareholders	\$ 0	\$ (11,800)
<b>Net disadvantage to Company One's shareholders</b>		<b>\$ (11,800)</b>
<b>Company Two, LLC</b>		
<b>Comparison of tax scenarios</b>		
	<b>C Corporation</b>	<b>S Corporation</b>
Debt free Pretax income	\$ 73,046	\$ 73,046
Corporate income tax	25% (18,192)	0
Net income available to members	\$ 54,854	\$ 73,046
Less: Addition to retained earnings	0	0
Distributions	100% \$ 54,854	100% \$ 73,046
Less: Personal taxes	15% (8,228)	40% (29,218)
Net cash flow to members	\$ 46,626	\$ 43,828
<b>Net disadvantage to Company Two's members</b>		<b>\$ (2,798)</b>
<b>Company Three, LLC</b>		
<b>Comparison of tax scenarios</b>		
	<b>C Corporation</b>	<b>S Corporation</b>
Debt free Pretax income	\$244,353	\$244,353
Corporate income tax	38% (91,963)	0
Net income available to members	152,390	\$244,353
Less: Addition to retained earnings	0	0
Distributions	100% \$152,390	100% \$244,353
Less: Personal taxes	15% (22,859)	40% (97,741)
Net cash flow to members	\$129,532	\$146,612
<b>Net advantage to Company Three's members</b>		<b>\$ 17,080</b>

(Continued)

## EXHIBIT 10.7

<b>Company Four, LLC</b>				
<b>Comparison of tax scenarios</b>				
		<b>C Corporation</b>		<b>S Corporation</b>
Debt free Pretax income		\$ 68,813		\$ 68,813
Corporate income tax	24%	(16,848)		0
Net income available to members		\$ 51,965		\$ 68,813
Less: Addition to retained earnings		0		0
Distributions	100%	\$ 51,965	100%	\$ 68,813
Less: Personal taxes	15%	(7,795)	40%	(27,525)
Net cash flow to members		\$ 44,170		\$ 41,288
<b>Net disadvantage to Company Four's members</b>				<b>\$ (2,882)</b>

As shown, in three out of the four scenarios, the shareholders actually would receive less cash assuming that the company was not taxed at the entity level. By tax effecting the earnings of the companies, cash flow to owners is not reduced on an aggregate basis. In fact, cash flow to owners is higher after tax effecting earnings. Mr. Smith fails to consider this in his analysis by ignoring the effect of personal taxes on the shareholders and by ignoring the recent reduction in tax rates on C corporation dividends, which has seriously weakened the argument that double layer taxation is a detriment to C corporation shareholders.

In the preceding example, the analyst on the other side of the case thought that by not tax effecting the earnings, he could support a higher value for his clients. By the way, the difference in our valuations due to the taxes was \$14 million.

It is readily accepted that an investor in common stock of any corporation makes an economic investment for three reasons. They are as follows:

1. Immediate cash flow (dividends)
2. Future cash flow (capital appreciation)
3. A combination of 1 and 2 above.

The total expected return to the shareholder consists of a part that is currently taxable and a part that is tax deferred until the time of sale. Under the current tax law, the deferred portion may be subject to favorable capital gains tax rates. Although the discount rate used in the application of a discounting model ignores personal tax rates, the investor does not.

If the shareholders have control of the company, they will generally do everything possible to insure that distributions are made in sufficient amounts to cover personal taxes. They do not want to reach into their own pockets to pay taxes on profits that they did not receive. However, shareholders of a C corporation will usually take the opposite position, as they generally want to avoid paying tax on dividend distributions. However, the new tax law favors the tax treatment of dividends out of a C Corporation over the distributions from an S Corporation.

Because shareholders of an S corporation will frequently attempt to pass through dividends to themselves in an amount at least equal to the estimated tax obligation, the actual dividend distributions may appear to be attractive. This could give the appearance of a company that is a "great" dividend payer. It makes the investment appear as if it has excellent liquidity. The opposite is true with the shareholders of a C corporation. They will generally do

everything possible to avoid dividends. This would give the appearance of an investment with far less liquidity. This contrasting position of the shareholders makes dividend paying capacity a more attractive manner in which to assess value.

David C. Dufendach raises an interesting point about these returns.<sup>19</sup> He states

Research has shown that the slope of the actual security market line is less than predicted by the CAPM.<sup>20</sup> Riskier stocks have lower required returns than predicted, whereas less risky stocks suffer from higher required returns. One possible explanation is that riskier stocks provide relatively more of their return in the form of nontaxable price appreciation. One study suggests that this is the case.<sup>21</sup> If true, then investors who wish to avoid current tax liability on dividend income would prefer higher risk/lower dividend stocks, driving down their required return below that predicted by the CAPM. Another study supported this view, implying that dividends are undesirable (presumably because of their immediate taxability), and that stocks with higher dividends are penalized in the form of higher required returns.<sup>22</sup>

The various studies cited by Dufendach lead to the conclusion that given all other risk factors being equal, a stock that pays a dividend, causing an immediate tax consequence, is worth less than a stock that provides capital appreciation, which is tax deferred and then possibly taxed at more favorable rates. The factor that causes the difference in value is apparently personal taxes. Because we accept the premise that a prudent investor considers personal income taxes in investment decisions (otherwise, if all else were equal, why would anyone buy tax free bonds?), we should not ignore the personal tax effect of the investment. The difficulty is determining which tax rates to use.

## CORPORATE OR PERSONAL INCOME TAX RATES

One of the difficulties that faces the appraiser is the determination of which set of income taxes is appropriate to use in valuing the S corporation. This will most likely depend on the standard of value. However, this can be more trouble than its worth.

If the standard of value is fair market value, the appropriate income tax rates should be those rates that will be applicable in the hands of the willing buyer. The problem is that we do not know who that specific buyer will be. Will it be an individual, another S corporation, or a C corporation? Once again, there is no distinct answer. Depending upon the facts and circumstances, the appraiser may be able to make an assumption about the most probable willing buyer (or category of buyer).

If the standard of value is investment value, the appraiser should consider the tax rates of the specific buyer. In this instance, the appraiser is estimating value to a particular buyer. This makes this task a little bit easier.

Once the standard of value has been identified, the appraiser is still faced with the choice of which rates to use. If corporate tax rates are used, the valuation analyst, with or without the help of the local CPA, can calculate the taxes based on the sliding rates applicable at the time. However, if personal rates are to be used, this calculation can become even more complicated due to factors such as personal exemptions, itemized deductions, phaseout rules, and other income or losses from unrelated activities that could affect the income tax rates that may be applicable. This could be a nightmare.

The practical application of income tax rates is up to the valuation analyst. If the rates can be calculated in a relatively straight forward manner, the analyst should do so. If personal tax rates are involved, most analysts believe that there is little to be gained by factoring in personal exemptions and itemized deductions. If the valuation analyst represents a specific individual, these items may be taken into consideration if they are material. Common sense and reasonableness should prevail.

## HOLDING PERIOD OF THE INVESTMENT

Many valuation analysts feel that both S and C corporations should be valued on an after tax basis. Many subscribe to the premise that the “after tax” is to the corporation and not the individual. Because capitalization rates are determined

<sup>19</sup> Dufendach, David C., “Valuation of Closely Held Corporations: ‘C’ v. ‘S’ Differentials”, *Business Valuation Review* (1996): 176–179.

<sup>20</sup> Brigham, Eugene F. and Louis C. Gapenski, *Financial Management: Theory and Practice*, Sixth Edition, pp. 156–157.

<sup>21</sup> Copeland, Thomas E. and J. Fred Weston, *Financial Theory and Corporate Policy*, Second Edition, p. 513. Refers to a study by I. Friend and M. Puckett, “Dividends and Stock Prices,” *American Economic Review*, (1964): 656–682.

<sup>22</sup> *Ibid*, pp. 515–516. Refers to a study by R. Litzenger and K. Ramaswamy, “The Effect of Personal Taxes and Dividends on Capital Asset Prices: Theory and Empirical Evidence,” *Journal of Financial Economics* (1979): 163–196.

from market evidence, usually on a pretax basis to the individual, more comparability can be achieved in the selection of these rates. Adjusting the income returns for personal taxes would make the discount rate selection more difficult, particularly because rates of return reported in the empirical literature are based on pretax returns to the investor.

Some analysts adjust the benefit stream of an S corporation for the amount of distribution needed to make the shareholders whole after paying the personal taxes. It is fairly common to see distributions being made in at least the amount necessary to pay the personal taxes so that the shareholders do not pay taxes from monies that they have not received. The problem with this approach is that the tax law provides that the shareholders of an S corporation can increase their income tax basis in the S corporation for monies that are taxed and not distributed. Therefore, comparability cannot truly be achieved between the S corporation shareholders and the C corporation shareholders.

Another consideration related to this is that S corporation shareholders are permitted to take subsequent distributions from the S corporation without current tax implications. Shareholders' undistributed taxable income from previous years is available for distribution because the shareholders have already paid tax on the profits in the year that it was earned. This also causes a significant difference in the timing of the cash flows between the shareholders of these different types of entities.

An argument can be made that the difference between a perpetual S corporation and a C corporation is the present value of the annual corporate tax savings. The analyst must face the question in each appraisal assignment regarding an S corporation of what the holding period of the investment will be while the corporation keeps its S election. Some authors believe that a corporation will lose its S election at some point.<sup>23</sup> This means that the interest in the corporation being valued will be an S corporation for certain years and then a C corporation for its remaining life.

When a valuation analyst is requested to determine the fair market value of an enterprise, one of the factors to be determined by the analyst is who, or what group of investors, would be the most likely "willing buyer." Another factor to be considered in the "willing buyer" scenario is will the willing buyer qualify to be an S corporation. Once it is determined that the willing buyer can be an S corporation, the next question to be answered is for how long? As with many other decisions confronting the valuation analyst, there is no clear cut answer.

## TIMING OF THE VALUATION

Conventional wisdom dictates that when a business valuation is performed for an interest in a corporation, the value determined is based on the value of the interest without regard to the investor. This means that when we value shares of stock in a corporation, it does not matter who the shareholder is, nor do we consider the tax implications of a sale of the interest by that shareholder. Personal taxes generally have no effect in the valuation of corporate stock (assuming that the shareholder is an individual). Obviously, not all shareholders are individuals, and not all shareholders are tax paying entities. Pension plans, for example, do not pay taxes. Therefore, should the value of a share of IBM be different if an individual owns it or if a pension plan owns it?

## SO, WHAT DO WE DO?

At this point, we have come almost full circle in our discussion about willing buyers. The investing public calculates rates of return on an after tax basis. Because different classes of investors have different tax structures, the required rates of return will vary among the classes. In determining an appropriate discount rate for the net cash flow of an S corporation versus a C corporation, it is reasonable to assume that there is an increased risk relative to the net cash flow of the S corporation that the enterprise may, at some point in time, pay taxes and have a lower cash flow. This could be justification for a different discount rate for the two entities. The question to be raised is, by how much?

Without empirical data in the marketplace, it becomes difficult, if not impossible, to quantify the exact level of adjustment. Mathematical quantification cannot be used as readily as it is for the conversion of pretax and after tax discount rates. Valuation analysts continue to struggle with the notion of whether the corporate cash flows from an S corporation are after tax. Authors have argued that there should be a tax equivalency made to reflect the personal taxes that will have to be paid by S corporation shareholders.<sup>24</sup> The reality of the situation is that personal taxes will

<sup>23</sup> Duffy, Robert E. and George L. Johnson, "Valuation of 'S' Corporations Revisited: The Impact of the Life of an 'S' Election Under Varying Growth and Discount Rates", *Business Valuation Review* (1993): 155–167.

<sup>24</sup> See Cassiere, George G., "The Value of S-Corp Election—The C-Corp Equivalency Model", *Business Valuation Review* (1994): 84–91.

be paid whether or not distributions are made to the shareholder. It seems reasonable to consider these taxes in a similar fashion as corporate taxes. Either way, the government is going to get paid. There is not going to be a benefit to the shareholder other than as an adjustment to his or her basis in the corporate stock.

Arguments have been raised for years regarding the built in gains tax. For a long time, the position of the Tax Court has been that no discount would be permitted for a built in gains tax, even though investors in the real world consider them in making investment decisions. In the *Estate of Artemus D. Davis v. Commissioner*,<sup>25</sup> part of the discount for lack of marketability was attributed to the built in gains tax. This could influence future valuations of S corporations, particularly those that have exposure to the built in gains tax in the postconversion period. This raises the issue of the S election having a possible discount associated with it because of the taxes that potentially could be paid at the corporate level.

Valuation in the hands of the owner of the investment in an S corporation may result in a more realistic valuation. However, that is clearly not fair market value. Personal tax rates may vary depending upon too many factors that have nothing to do with the investment. A valuation analyst cannot be expected to consider items such as personal exemptions and itemized deductions. Certainly, the smaller S corporations can be affected by these items. Larger S corporations may not be influenced by these items because the shareholders are more likely to be in higher tax brackets where these items do not matter. Does this mean that valuation analysts should have two standards, one for small companies and one for large companies?

## BACK TO THE FUTURE

Now that we have gone through numerous illustrations that tell us to look at the facts and circumstances of each situation on its own, let's step back to where the Tax Court has taken us and where the future needs to be. In *Adams*, The Court stated, "The net cashflow and the capitalization rate used to compute the fair market value of the WSA stock should have the same tax character; i.e., before corporate tax or after corporate tax."<sup>26</sup> The opinion stated:

We disagree that Shriner (the taxpayer's expert) properly converted the capitalization rate because there was no need to do so. The parties agree that Shriner's estimated capitalization rate (before he converted it to before corporate tax) is an after tax corporate tax rate. Thus, as in *Gross*, the tax character of Shriner's estimate of WSA's prospective net cashflows matches that of the unconverted capitalization rate because both are after corporate tax. It follows that Shriner should not have converted the capitalization rate from after corporate tax to before corporate tax because the tax character of both his estimated net cashflows for WSA and unconverted capitalization rates is after corporate tax.<sup>27</sup>

Every valuation treatise or course that I have ever read discusses the importance of properly matching the benefit stream with the discount or capitalization rate. In fact, I will discuss this very fact in the next chapter. The reason for this, simply stated is for consistency. If the numerator is changed in a capitalization model, the denominator must also change in order to maintain the same value. Clearly, the value should not change as a result of using a different benefit stream to be capitalized.

The Tax Court has now taken the position through these opinions that while they are not disputing our theory, they find that the benefit stream of an S corporation is higher than the benefit stream of a similar C corporation due to the nonpayment of taxes at the entity level. Because we are attempting to reach an economic value, shouldn't we consider all economic activities that affect value? In almost every case, S corporations distribute at least enough of their earnings so that their shareholders can pay their taxes based on the amount of profits that flow through to the shareholders. This can almost be thought of as entity related taxes. Therefore, if S corporations did not distribute cash flow to pay individual income taxes, the shareholders would most likely revoke the S election, assuming that they had the ability to do so.

If you have learned anything as a result of reading this section of the book, it is probably that the question of an S election adding a premium or a discount to the value of an investment does not have an easy answer. While there appears to be a possible benefit if the willing buyer can continue the S election into the future, there is no guarantee that this will happen. Consideration should be given to all of the factors that influence value in making a

<sup>25</sup> *Estate of Artemus D. Davis v. Commissioner*, 110 T.C. 35

<sup>26</sup> *Adams*, p. 13.

<sup>27</sup> *Ibid.*, pp. 14–15.



determination. The premium or discount issue must be examined on a case by case basis because there is no other way to do it. In many instances, the increase or decrease in value will be based on the manner in which the benefit stream is taxed.

## S CORPORATION MODELS

Over the past several years, various S corporation models have surfaced. The purpose of these models is to calculate the tax differential relating to the S corporation. Valuation analysts seem to agree that there is little or no difference in the market values of controlling interests between S and C corporations under most circumstances. If there is a difference in the values, it depends on finding a buyer that can take advantage of the potential tax savings. However, the valuation community also seems to agree that there may be differences in value at the shareholder level for noncontrolling interests. All of the models appear to have been constructed to address the valuation of noncontrolling shareholder interests in S corporations.

The four models that I have seen include those that were designed by Roger Grabowski, Chris Mercer, Dan Van Vleet, and Chris Treharne. Because of space limitations, I cannot possibly cover all of these models in the detail that they deserve. Each is solid in its quest to determine the tax effect of an S election. Some are much more complicated than others.

The model that I like the most, probably because it is the most simple, is Chris Treharne's model. I used that model in the critique that was included in exhibit 10.7. It was also the model that was referenced in *Delaware Open MRI Radiology Associates*. The judge in that case did a fabulous job in explaining what he did. I like this case so much that I have included it in chapter 20, *My Favorite Court Cases*.

The only complaint that I have heard other analysts make about the Treharne model is that it does not take into consideration the potential value that is attributable to the reduced taxes that the shareholder will pay due to the build up in the tax basis of the stock. My attitude about that is—does it really matter when the underlying assumption is that the willing buyer has a long-term horizon for the investment? The present value of the tax savings 20 or 30 years from now will be relatively small. I really do not believe that this is a major concern, but who am I to decide that?

The two things that jump out at me about the S corporation issue is that distributions make a world of difference as to whether or not there is a shareholder benefit in an S corporation, and the change in the tax law in 2003 brought the tax rates so much closer that there is no longer as much of a difference as there was when the *Gross* decision was issued.

## CONCLUSION

I hope that you now understand the income approach. You should have learned various methodologies, the advantages and disadvantages of each method, various pretax or after tax considerations, and the derivation of net cash flow from the appraisal point of view. I have even confused you further with respect to S corporations. Be honest, you didn't really expect me to make it that easy for you, did you? If you thought this stuff was fun, let's go to the next chapter and discuss discount and capitalization rates. Before you do that, take your heart medication!



## CHAPTER 11

# Discount and Capitalization Rates

### CHAPTER GOALS

In this chapter, I will attempt to explain:

- Discount and capitalization rates in general
- The use of pre-tax or after tax rates
- Discount rates
- The factors that affect the selection of a discount rate
- The components of a discount rate
- The build up model
- The capital asset pricing model (in English, no subtitles)
- Alternatives to the build up and capital asset pricing models
- Capitalization rates
- The factors that affect the selection of a capitalization rate
- The data sources for discount and capitalization rates

Pretty optimistic, huh?

### INTRODUCTION

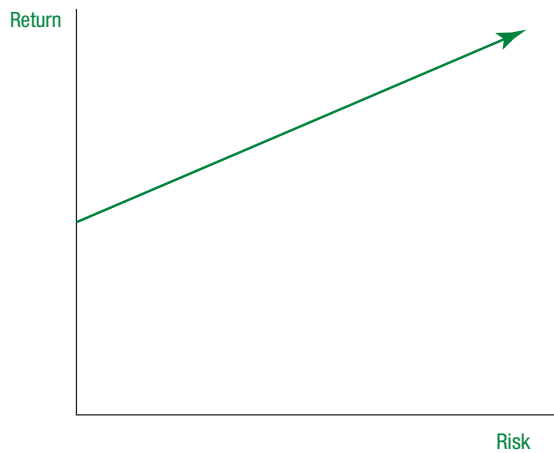
Here comes the good stuff! This is the chapter that you have been waiting for. If you are dangling on the edge, this is the chapter that is sure to push you over. Hold on tight because here we go! One of the most difficult tasks that the valuation analyst faces is selecting an appropriate discount or capitalization rate. For many years, I went to seminars waiting for some business valuation guru to give me the formula for developing the “right” discount rate. When I realized that no one could do it, I started teaching and writing about this stuff myself. The theory behind discount rates is quite simple. The amount of risk that is perceived by the market must generally be balanced by the rate of return that is offered for the investment in order to entice investors to take the risk of making the investment. Stated differently, if a willing buyer wants to make an investment in a closely held company, the rate of return being offered, based on the price to be paid for the investment, must be high enough to justify taking the risk with his or her money. This can be illustrated by figure 11.1, The Rate of Return Department Store.

As you go from the ground floor to the roof of the rate of return department store, the risk of the investment increases. When you examine the rates of return in the market, you will find that the rates of return increase in the same direction. This shows the correlation between risk and reward. There is a positive relationship between these two items. Figure 11.2 shows this relationship. It even looks like something that you would see in a finance textbook.

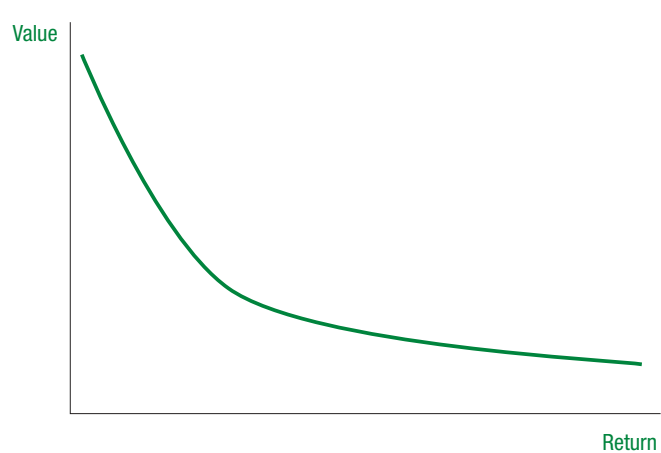
**FIGURE 11.1**  
**THE RATE OF RETURN**  
**DEPARTMENT STORE**

Venture Capital
Junk Bonds
Small Cap Stocks
Large Cap Stocks
AAA Corporate Bonds
Certificate of Deposits
Treasury Bonds
Treasury Bills

**FIGURE 11.2**  
**RELATIONSHIP OF RISK AND RETURN**



**FIGURE 11.3**  
**RELATIONSHIP OF RETURN AND VALUE**



The opposite relationship exists between returns and value. These are negatively related. Greater risk means lower value. This is illustrated in figure 11.3.

As you read the rest of this chapter, and as you practice in the field of business valuation, always remember that what you are really trying to do is figure out which floor in the rate of return department store you need to get off based on the risk of the benefit stream that is going to be discounted. You may even choose to get off between floors. What you are ultimately trying to do is use the principle of substitution that I told you about in chapter 3. No reasonable investor would accept a lower rate of return, given the risk of the investment, than they could get in another investment in the market.

As long as we are still in the introduction section, let's get another goody out of the way up front. Discount and capitalization rates are not the same. A discount rate is a required rate of return, a yield rate used to convert expected future receipts into present value. The rate of return represents the total rate of return expected by the market, the rate necessary to attract capital to the subject investment.

A capitalization rate is not a rate of return; it is a divisor used to convert a future return into an indication of value. The capitalization rate plus the long term sustainable rate of growth in the selected return combine to provide the rate of return. The rate of return is market driven. It is the rate determined to be available on alternative investments of comparable risk and with similar characteristics—an opportunity cost. And, of course, risk represents uncertainty. If there is no uncertainty, there is no risk. Therefore, risk is the degree of uncertainty associated with a given investment.

The discount and capitalization rates used will depend on what is being discounted or capitalized. Some possibilities include the following:

- Net income (after tax)
- Net income (pre-tax)
- Gross cash flow
- Net cash flow
- Excess earnings
- Dividends or dividend paying capacity, or both
- Earning before income and taxes (EBIT)
- Earnings before income, taxes, deductions, and amortization (EBITDA)

The determination of which benefit stream will be discounted or capitalized will depend on various factors, including the availability and reliability of data. This data can relate either to market information about discount or capitalization rates or to the subject company's information. The valuation analyst may have better information to work with in certain assignments and may not feel comfortable with financial information in others (cash businesses). The amount of risk associated with the valuation subject should be a major consideration in determining an appropriate rate. The valuation analyst also considers alternative rates of return on comparable investments available to the willing buyer. This is the principle of substitution at work.

## DISCOUNT RATES

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If this were a finance text, I would probably include a rather complex explanation of discount rates. Be grateful for little things because it's not one! In simple terms, a discount rate is the required rate of return that an investor would demand—based on the risks associated with the benefit stream under consideration—to induce him or her to make the investment. What do I mean by risk? Risk is uncertainty. The greater the amount of uncertainty, the greater amount of risk. The greater the risk, the less someone is willing to pay for something. The lower purchase price is used to provide a greater potential return to the buyer. For example, assume that ABC Company has an expected income of \$100,000 that is sustainable into the future. To keep the example simple, let's assume there is no growth anticipated. This would make the discount rate and the capitalization rate equal to each other. If the required rate of return was 20 percent, the value of ABC would be calculated as follows:

$$\$100,000 \div 20\% = \$500,000$$

If the perceived risk was greater than what would warrant a 20 percent rate of return, the buyer might offer only \$400,000 for ABC. This would provide a 25 percent rate of return to the buyer, calculated as follows:

$$\$100,000 \div \$400,000 = 25\%$$

Lowering the price provides a greater return for the buyer. However, if the risk related to an investment in ABC is not really lower, the seller would insist on a greater price for the business. A \$600,000 price would provide the buyer with a lower rate of return. In the real world, a negotiation will go forward between the buyer and the seller based on the perceived risk of the investment. The buyer will think it is very risky and the seller will tell the buyer that there is no risk. Who would ever figure this could happen?

The discount rate represents the rate of return that an investor requires to justify his or her investment in an asset, depending on the amount of risk associated with the investment. For example, an investor may expect a 5 percent return on a certificate of deposit from a bank, a 10 percent return on a corporate bond, and a 20 percent return on junk bonds. Usually, the higher the risk, the higher the required rate of return. That is the exact nature of the rate of return department store example provided in figure 11.1. The discount rate is the basis for present value factors, which are used to discount a stream of future benefits to their present value.

On occasion, valuation analysts use other terms of art (such as opportunity cost of capital, alternative cost of capital, or weighted average cost of capital) instead of the term discount rate. Regardless of what term is used, discount rates are supposed to reflect the required rate of return on the benefit stream being discounted given the risks associated with the benefit stream. One such risk element is the ability of the investor to receive the benefit stream that is being forecast as part of the valuation. A company with a steady track record of earnings and distributions will generally be considered less risky than a company that has had a volatile past.

Discount rates are determined by the market. They will vary with time, even for the same investment. This is easily illustrated through an explanation of why the interest rates paid on 30 year Treasury bonds vary. Discount rates take into consideration the inflationary expectations of the future benefit stream being used. If constant dollar

projections are made, the discount rate should not include an inflationary element. The valuation analyst must be consistent!

Discount rates take into consideration the risks in the marketplace and must also include an element that is specific to the appraisal subject. These rates are based on the yields available for alternative investments. If an investor can get a 16 percent rate of return on a type of investment that is less risky than the appraisal subject, why would he or she accept less than 16 percent? Logically, the investor would not. The discount rate will also depend on the nature of the future benefit stream being reduced to the present value.

## FACTORS THAT AFFECT THE SELECTION OF A DISCOUNT RATE

Factors that affect the selection of a discount rate are considered to be external (noncontrollable) and internal (controllable) to the appraisal subject. The external factors are those over which the owners or managers of the business have no control. For example, general economic conditions and the economic outlook at the valuation date are considered to be external factors that affect the selection of the appropriate rate. The nature and economic condition of the industry within which the business operates, as well as the market served by the enterprise, are also considered to be external factors.

Market perceptions regarding similar investment opportunities are another example of external factors that are beyond the control of the owners. The sources and availability of capital to finance operations are other examples. These items are important to the willing buyer and, therefore, should be considered by the valuation analyst.

Internal factors are those that the owner or owners of the business have some control over. The financial condition of the appraisal subject is one example. The earning capacity of the company is another. This includes the level and quality of the earnings or cash flow of the company. The ability of the company to obtain the goods and services it needs to produce its products is also considered an internal factor; this is clearly within the control of management. The ability to bring the products to an available market is also a burden that rests with management. The quality of the management team running the company is another factor that should be considered by the valuation analyst.

Another internal factor is the quality of the available data. High-quality data is usually the result of a good accounting system with proper controls. The ability of management to meet its budgets, forecasts, and projections reflects on the quality of management.

Regardless of internal or external factors, discount rates are driven by risk. In the discussion that is about to take place, I will be telling you more about discount rates. Keep one important point in mind—discount rates are derived from the market based on the risk associated with comparable types of investments. You can apply all of the fancy formulas or methodologies that I will discuss, and even others, but the bottom line is that the result has to make sense. If you are a finance nerd, you may choose to use some extravagant formulas from a finance textbook and calculate the discount rate properly but end up with the wrong answer. Don't try to impress your client, the attorney, or the judge with your ability to develop discount rates. It's the value that counts!

## COMPONENTS OF A DISCOUNT RATE

There are many different ways to derive a discount rate. In this book, I will attempt to address several of them, but you must recognize that these are not all inclusive. The most common methods used to develop discount rates include the following basic components: (1) the risk free rate of return, (2) the equity risk premium, (3) the size premium, and (4) the specific company risk premium. Sometimes the size premium is considered to be part of the specific company risk premium. Table 11.1 provides an example of the components of a discount rate.

**TABLE 11.1**  
**COMPONENTS OF A DISCOUNT RATE**

Risk-free rate	5.0%
Equity risk premium	7.0%
Size premium	6.0%
Specific company risk premium	3.0%
Discount rate	21.0%

Each of these components will be discussed. It is important to recognize the concept that we are trying to understand, and not get caught up on plugging numbers into a formula. Each of the following components will be used to build up to the required rate of return that is applicable for the benefit stream that is going to be discounted to present value.

## Risk Free Rate of Return

The risk free rate of return is sometimes known as the *safe rate* or the *cost of money*. In theory, this is the minimum return that an investor would accept for an investment that is virtually risk free. It is the pure cost of money plus the rate of inflation anticipated by those who deal in these types of transactions. What this really represents is the minimum rate of return that an investor should accept, because he or she can earn this amount with reasonable safety instead of risking an investment in a closely held company.

Sources of risk free rates of return include U.S. Treasury securities. The theory says that U.S. Treasury securities are about as close as we can get to an investment that is risk free. Obviously, there is no such thing as a risk free security, but the chance of a default by the U.S. government is pretty slim. If our government defaults, we are in more trouble than just the business valuation theory!

The alternatives available in the treasury securities are short term, intermediate term, and long term securities. The longer term bonds are considered to have an inflationary risk built into them, which explains why long term bonds pay a higher rate of interest than short term investments. So in a perfect world, we might want to use short term treasury bills for a risk free security. However, this is not a perfect world. The problem with using short term bills is that over the long term, the rate of return that an investor would get is unknown because of the constant changing of interest rates. Therefore, we tend not to use the short term bills as the proxy for the risk free rate.

More often than not, long term rates are used to simulate the long term holding period of a closely held business. The 20 year bond (actually, it is a composite rate for bonds that have 20 years to maturity) is frequently used, although the 30 year bond has been used as well. While the difference between the 20 and 30 year bond yields have been pretty small, the 20 year bond yield is most often used. The 20 year bond has become popular among valuation analysts because of the fact that many valuation analysts use the equity risk premium data provided by Morningstar (formerly Ibbotson Associates), and these are based on 20 year bonds. I will explain more about this in a little while.

Other sources of risk free rates can be used as well, although few can give the true feeling of being risk free. Making the assumption that our government is risk free is as much of a leap of faith as I am generally willing to take. Some valuation analysts believe that they can use high quality corporate bonds as a risk free rate, but they are usually not considered to be as good as Treasury bonds.

Intermediate term rates (from one to 10 years) are sometimes used when the expected holding period of the investment is short. Treasury notes can be used in this instance. Others prefer short term rates (one year or less), such as those on U.S. Treasury bills. These are considered to be the safest of the investments, because the nature of a short term vehicle is that it is less affected by inflationary expectations and the risk associated with the investment. However, short term rates tend to have a greater degree of volatility than long term investments. If you really want more of an explanation about this stuff, read a finance textbook. It is guaranteed to put you to sleep at night (unless, of course, if you have a finance background)!

The selection of a long term, intermediate term, or short term rate will depend on the investment horizon implicit in the asset being appraised. Closely held businesses are generally purchased with the intent of a longer holding period and, therefore, should involve longer term rates in deriving the discount rate. On the other hand, a contract right with a life of three years must be properly matched with the proper risk free rate.

## Equity Risk Premium

The *equity risk premium* (ERP) is the rate of return investors receive as compensation for the risk of common stocks *in excess of* the rate of return received on the risk free security. The general formula for the ERP is:

$$ERP = E(R_m) - R_f$$

$R_m$  = Return on the stock market  
 $E(R_m)$  = Expected return on the stock market  
 $R_f$  = Risk free rate of return

The ERP is supposed to be forward looking. However, the most commonly used methods to determine the ERP rely on historical data. Using historical data, as compared to forecasted data, has certain advantages and disadvantages. This is also true about forecasted data. Some of the more obvious advantages and disadvantages of each are included in box 11.1.

### Box 11.1 Advantages and Disadvantages of Historical and Forecasted Data

#### Historical Data:

- *Advantage:* The Data is objective and easy to find.
- *Disadvantage:* The past may not reflect the future. Different measurement periods produce significantly different results. Research suggests that what actually happened in the past differed from the expectations at the starting point.

#### Forecasted Data:

- *Advantage:* Theoretically, this is closer to what we are actually trying to determine, investment *expectations* as of a particular point in time.
- *Disadvantage:* Forecasts are clearly more subjective. Different forecasters and different models produce a wide range for the equity risk premium.

The ERP takes into consideration market perceptions and the expectations of a broad measure of the market. For example, if the appraisal subject's industry is returning 17 percent on equity, an investor in the subject company would expect to receive the same 17 percent, all other factors being equal. After all, why would someone be willing to accept less than what they could get from an equally desirable substitute? We have already discussed this point, so let's keep going.

Valuation analysts have been attempting to develop alternative ways to determine the ERP. Some methods look at the entire market, while others look at only segments of the market. Standard & Poor's industry studies include indexes that show how different industries have performed. These and other studies are being used to differentiate between returns on equity, which are calculated based on the book value of companies (primarily tangible assets), and hypothetical returns, as if the intangible value of the companies were included in the calculation. Direct market comparison methods are used to suggest that other investments in the marketplace may provide an indication of the risk associated with a closely held business. Some valuation analysts believe that comparing low quality bonds with stocks may better equate the risk of a closely held stock.

The ERP for corporate equity securities can be obtained from various sources. Historically, the most commonly used source was *Stocks, Bonds, Bills and Inflation Annual Yearbook, Valuation Edition (SBBI)*.<sup>1</sup> Morningstar data is a compilation of investment returns for several types of financial assets since 1926. Business valuation analysts are generally interested in the information relating to risk free returns, market equity returns, small company stock premiums, and the calculated differentials between them.

The Morningstar studies have been considered to be a comprehensive compilation of data relating to the ERP. The historical ERP is measured as the arithmetic mean of the total return on stocks less the arithmetic mean of the income only return on long term government bonds. So what does this mean? Morningstar measures the returns in the market from 1926 through the end of the most recent year of its publication. For example, the 2008

<sup>1</sup> Roger Ibbston: *Stocks, Bonds, Bills and Inflation Annual Yearbook, Valuation Edition (SBBI)*, Chicago: Morningstar, 2008



edition of *SBBI* measures the returns through the end of 2007. So in this case, the average returns will be calculated for an 82 year period.

Morningstar uses the S&P 500 as a basis for the return on the entire market. The general feeling is that these large cap stocks make up the bulk of the market and serve as a good proxy for the overall market. Historically, these returns have been about 12.3 percent. However, Morningstar also points out that the S&P 500 is not the only basis for this return. Morningstar also reflects the Total Value Weighted NYSE and the NYSE Deciles 1-2 as alternatives for the S&P 500. To put this into perspective, the 2008 edition of *SBBI* reflects a long horizon ERP of 6.35 percent, 6.83 percent, and 7.05 percent, depending on which index is used. The S&P 500 provides the highest. The income returns from long term treasury bonds for the same 82 year period have been about 5.2 percent. Therefore, the calculation of the ERP would be  $12.3\% - 5.2\% = 7.1\%$ .

With that being said, the ERP has come under attack in the past several years as being too high. I do not plan to go into the various articles that have been written on this subject, but you need to be aware of the controversy. Even Roger Ibbotson, the founder of Ibbotson Associates (past publisher of *SBBI*) has written articles stating that the historical ERP data is overstated. Imagine that, Ibbotson criticizing Ibbotson data! Ibbotson wrote an article<sup>2</sup> with Peng Chen where the authors applied a new methodology that divided the returns into various economic components including inflation, earnings, dividends, price to earnings ratios, dividend payout rates, book value, return on equity, and per capita gross domestic product. What they determined is that a portion of the historical returns in the stocks was attributable to the price to earnings ratios, which was unlikely to recur in the future. This is referred to as the *supply side equity risk premium*. To make a long story short, the most recent calculation of the supply side equity risk premium is 6.23 percent, compared to 7.05 percent based on the historical ERP. These rates cover the period 1926–2007.<sup>3</sup>

O.K., so what does this mean to us? Not much! So let's get this stuff straight. Ibbotson woke up one morning, coauthored an article, and decided that the ERP was overstated. Therefore, the discount rate would be lower if you lower one of the component parts of it. As a result, the value of businesses just went up. I don't think so. With all of the academics dancing around the issue that the ERP, on a historical basis, is overstated, the rates of return in the market for a particular investment have not changed. Earlier, I told you to stay focused on what we are really trying to achieve. The principle of substitution and alternative rates of return for similar types of investments is what we are trying to get to. Did that hardware store's value change because the academics have decided that the ERP should be lower? No. Something else would have had to go up to offset this component of the discount rate.

In addition to the supply side equity risk premium reflecting a lower ERP, other controversies have also arisen about this component of the discount rate. Several individuals have questioned whether the use of a geometric mean instead of the arithmetic mean would be more appropriate in determining the ERP. The arithmetic mean tends to be higher than the geometric mean. Some folks think that this is significant. I keep going back to the question of what is the required rate of return given alternatives in the market. Again, who cares? There are many analysts that do care. Morningstar (Ibbotson) recommends using the arithmetic mean for expected returns and the geometric mean for past returns.

Another debate is which time period should be used to best measure the ERP. Morningstar's data begins at 1926, and every year the average returns are recalculated by adding another year of data. So, the 2008 *SBBI* contains returns from 1926–2007 (82 years for those that like math). Ironically, shorter and longer time periods result in lower ERPs than the current premium based on 82 years. The range is approximately 4–6 percent, rather than 7 percent. Numerous articles seem to support this range.

One more very important point should be added here. The ERP does not represent a minority or control position. This has been a constant error for those uninitiated in the field of business valuation. According to Morningstar:

Since most companies in the S&P 500 and the NYSE are minority held, some assume that the risk premia derived from these return data represent minority returns and, therefore, have a minority discount implicit within them. However, this assumption is not correct. The returns that are generated by the S&P 500 and the

<sup>2</sup> "Long Run Stock Returns, Participating in the Real Economy," *Financial Analysts Journal* (January/February 2003): 88–98.

<sup>3</sup> *SBBI*, 2008.



NYSE represent returns to equity holders. While most of these companies are minority held, there is no evidence that higher rates of return could be earned if these companies were suddenly acquired by majority shareholders. The equity risk premium represents expected premiums that holders of securities of a similar nature can expect to achieve on average into the future. There is no distinction between minority owners and controlling owners.<sup>4</sup>

So we now know that the ERP, and, therefore, the discount rates are neutral with respect to minority or control. O.K., enough of this techno-premium babble. It is killing me. The value of the local hardware store has still not changed because of the ERP, so let's move on to other exciting stuff.

## Size Premium

In addition to the overall ERP, a type of premium that is generally considered by the valuation analyst is the size premium (also known as the small company risk premium). This is frequently considered part of the specific company risk premium, but very often separately stated. The Morningstar data provides information about returns for small company stocks. Morningstar breaks down the premium based on the market capitalization of the equity of public companies.

The Morningstar data indicates that the returns for these smaller companies have been greater than those of the larger companies. This means that an investor that makes an investment in a smaller company should look for a higher return based on this market data. Size may have something to do with it. Obviously, there are many other factors that also cause smaller companies to be at greater risk than larger companies.

Morningstar breaks up the reported data into 10 deciles based on the market value of equity. The 9th and 10th deciles are used to measure the *small* companies in the market. The market capitalization of public companies in these deciles through September 30, 2007, was \$486,243,740,000. With 2,416 companies included in this group, the average company market capitalization in this group is \$201,259,826. Clearly, these companies are still much larger than many of the companies that we appraise on a routine basis.

Beginning a few years ago, *SBBI* broke down the 10th decile into a 10a and 10b category. Some valuation analysts prefer to use the 10th decile, while others have tried to use the 10b portion. In many informal polls (where people such as Jim Hitchner or myself were giving speeches and asked a question of the audience), the vast majority of the practitioners seem to agree that using the 10b data is not very good. These companies seem to be very volatile and the returns may reflect many things besides size as a reason for the higher returns.

*SBBI* explains that the use of the size premium, calculated in the manner in which it is, assumes that the subject company has the same *systematic risk* (I have not explained systematic risk yet, so let's keep it simple at this point to say that it is the volatility of the company's stock in relationship to movements in the stock market overall.) as the broad portfolio of small companies in the public market. This is highly unlikely because a particular company's industry alone may make that company more or less risky than the broad composite of small companies.

Another factor that could cause the return data for the small public companies to be skewed is a low trading volume. Remember a long time ago when you read Revenue Ruling 59-60 and the eighth factor had to do with using the market price of stocks that were *actively traded*? Thinly traded stocks may not provide good data for measuring stock market returns either.

One word of caution—if you are using *SBBI* for calculating a size premium, make sure you read the materials in the book. You need to make sure that you understand what data you should be using. *SBBI* provides data that is beta-adjusted or nonbeta-adjusted. The results are different depending on which data you use. Morningstar states:

Some assert that a small stock premium that has not been adjusted for beta would be more appropriate for use in the buildup method. This nonbeta-adjusted small stock premium can be calculated by subtracting the arithmetic mean of the large company stock return from the arithmetic mean of the small company stock return.<sup>5</sup>

However, Morningstar also states:

The problem with using a nonbeta-adjusted small stock premium is that in doing so one assumes that the company being valued has the same systematic risk (or beta) as the portfolio of small stocks used in the

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<sup>4</sup> Ibid., 87.

<sup>5</sup> Ibid., 38.

calculation of the size premium. This ignores much of the information that we have regarding market returns. Primarily, different industries tend to have different levels of systematic risk. For example, companies within health services industries tend to have less systematic risk than the market as a whole. Because the beta-adjusted size premium isolates the excess return due to size, it can be applied to a company without making any assumptions regarding the company's systematic risk.<sup>6</sup>

As the small company returns have come under attack in the recent years, another study has gained in popularity. It is the *Duff & Phelps LLC Risk Premium Report* (D&P).<sup>7</sup> This study has also been called the Grabowski-King Study (named after the original authors), the Pricewaterhouse Coopers (PWC) Study (because Grabowski and King worked for PWC), and the Standards & Poor (S&P) Study (because Grabowski went there when PWC sold its valuation practice to S&P). The D&P studies have expanded the Morningstar analysis into more subsets of the market. By the way, guess where Grabowski works now?

This study has been a terrific addition to the cost of capital data used by valuation analysts. The authors have made a valuable contribution to the profession. Box 11.2 reflects a comparison between the Morningstar and D&P studies.

### Box 11.2 Comparison of the Morningstar and Duff & Phelps Study

#### Morningstar

Addresses returns on investments in publicly traded securities based on size.  
Segments NYSE securities<sup>1</sup> into deciles based on equity capitalization.  
Analyzes arithmetic returns, betas, and real returns in excess of risk-free rate.

#### Duff & Phelps

Addresses returns on investments in publicly traded securities based on size.  
25 size groups.  
D&P utilizes NYSE, AMEX and NASDAQ data<sup>2</sup> starting in 1963.  
"High financial risk" securities analyzed in a separate portfolio.  
Seven size metrics in addition to equity capitalization.

<sup>1</sup> NYSE Companies back to 1926 excluding closed-end mutual funds, American Depository Notes, unit investment trusts, and Americus Trusts.

<sup>2</sup> Excludes American Depository Notes and nonoperating holding companies.

According to the D&P study, *high financial risk* has been defined as companies

1. that are in bankruptcy or liquidation,
2. that have 5 year average net income of less than zero,
3. that have negative book value of equity, or
4. that have debt to total capital greater than 80 percent.

D&P segregates the returns from this group of companies in an attempt to better reflect the market.

Rather than solely relying on market capitalization as Morningstar does, D&P breaks down its analysis by the following metrics:

- Book value of invested capital
- Five year average EBITDA
- Sales
- Number of employees

<sup>6</sup> Ibid.

<sup>7</sup> Roger Grabowski and David King: *Duff & Phelps LLC Risk Premium Report*. Portland: Duff & Phelps, 2008.

- Market value of equity
- Book value of equity
- Five year average net income
- Market value of invested capital

The trend line of the Morningstar and D&P ERPs look fairly similar. They clearly move in the same direction, indicating that smaller companies have larger premiums. Even if all of the other metrics in the D&P study are graphed, the trend is in the same direction.

The D&P study provides a variety of tables with data that can be used by the analyst in the application of the build up method or the capital asset pricing model (both methods will be discussed later in this chapter). An example of a D&P table appears in table 11.2.

**TABLE 11.2**  
**SELECT DATA FROM THE DUFF & PHELPS STUDY**

<b>Portfolio Rank By Size</b>	<b>Average Market Value (\$ Million)</b>	<b>Log of Average Market Value</b>	<b>Number As of 2006</b>	<b>Beta (SumBeta) Since '63</b>	<b>Standard Deviation of Returns</b>	<b>Geometric Average Return</b>	<b>Arithmetic Average Return</b>	<b>Arithmetic Equity Risk Premium</b>	<b>Smoothed Average Equity Risk Premium</b>	<b>Average Debt/MVIC</b>
1	96,796.0	4.99	46	0.90	16.73%	10.58%	11.87%	4.67%	2.35%	16.24%
2	26,818.0	4.43	36	0.93	16.65%	10.87%	12.13%	4.93%	4.40%	22.74%
3	14,912.0	4.17	40	0.97	16.36%	9.61%	10.83%	3.63%	5.33%	24.97%
4	10,930.0	4.04	39	0.98	16.32%	11.66%	12.84%	5.64%	5.83%	25.96%
5	8,014.0	3.90	45	0.96	16.13%	12.12%	13.28%	6.08%	6.32%	26.92%
6	5,996.0	3.78	41	1.03	16.81%	12.94%	14.19%	6.99%	6.79%	26.86%
7	4,872.0	3.69	44	1.02	18.19%	13.52%	14.93%	7.73%	7.12%	27.51%
8	3,745.0	3.57	45	1.09	19.53%	12.65%	14.34%	7.14%	7.54%	26.00%
9	3,185.0	3.50	48	1.09	18.50%	13.79%	15.28%	8.08%	7.80%	25.31%
10	2,758.0	3.44	41	1.10	18.89%	12.96%	14.52%	7.32%	8.02%	24.96%
11	2,441.0	3.39	42	1.09	18.40%	13.82%	15.33%	8.13%	8.22%	24.98%
12	2,121.0	3.33	41	1.11	19.14%	13.51%	15.07%	7.87%	8.44%	25.48%
13	1,845.0	3.27	47	1.09	20.90%	11.92%	13.84%	6.64%	8.67%	26.50%
14	1,588.0	3.20	51	1.14	19.45%	14.42%	16.08%	8.88%	8.90%	26.98%
15	1,382.0	3.14	58	1.14	20.45%	13.77%	15.65%	8.45%	9.13%	26.56%
16	1,117.0	3.05	52	1.14	22.00%	15.47%	17.56%	10.36%	9.47%	25.82%
17	1,025.0	3.01	53	1.21	23.53%	15.19%	17.47%	10.27%	9.60%	26.46%
18	870.0	2.94	61	1.20	22.77%	14.62%	16.88%	9.68%	9.86%	26.97%
19	736.0	2.87	57	1.24	24.33%	14.34%	16.81%	9.61%	10.13%	26.36%
20	626.0	2.80	77	1.27	23.93%	15.32%	17.80%	10.60%	10.39%	27.19%
21	541.0	2.73	64	1.26	23.68%	15.74%	18.03%	10.83%	10.62%	27.29%
22	436.0	2.64	80	1.27	24.23%	15.11%	17.64%	10.44%	10.97%	27.67%
23	326.0	2.51	90	1.24	24.61%	15.48%	18.04%	10.84%	11.43%	28.04%
24	225.0	2.35	162	1.28	25.01%	16.80%	19.37%	12.17%	12.02%	28.74%
25	76.0	1.88	332	1.30	31.28%	19.53%	23.32%	16.12%	13.74%	30.99%

(Source: Duff & Phelps Risk Premium Report 2006. Copyright © 2006 Duff & Phelps, LLC. Derived from data from the Center for Research in Security Prices, Graduate School of Business, The University of Chicago. All rights reserved. Reprinted with permission.)

I am not going to try to explain every column in this table, but this is a sample based on the market capitalization of equity for the 25 percentiles of the market. Besides providing us with average returns (arithmetic and geometric—or in English, simple and compounded averages), this study also provides us with the ERP, which the authors also provide on a smoothed basis.

In order to properly use the data, the authors of the D&P study recommend using the smoothed average ERP. The smoothing process uses the arithmetic ERP, and through mathematical regression, takes the noise out. Using 25 data points in the smoothing process provides more statistically reliable results. With these results, we are able to regress for companies smaller than the ones presented in the data. The tables included in exhibit A of this study allow us to calculate a size adjusted ERP specific to a subject company.

The manner in which the D&P study is used is to obtain data for as many of the metrics as possible and simply average them to determine the results. This becomes the size adjusted ERP for the subject company.

Recognizing that even those companies that are in the lowest 25th percentile of the market are still larger than the subject company in many instances, we are able to use this data and build on it to make it relevant to the subject of a particular valuation assignment. I will demonstrate the use of the D&P data from a real assignment. To save room (because this book is too heavy already), I am only going to show you two of the metrics used rather than all eight.

Exhibits 11.1 and 11.2 show summary data for companies ranked by the market value and book value of equity, along with the regressed ERP specific to our smaller subject company. We performed the same calculations for all of the metrics available in the D&P study. Exhibit 11.3 reflects our summary conclusions.

**EXHIBIT 11.1**  
**COMPANIES RANKED BY MARKET VALUE OF EQUITY**

<b>Portfolio Rank By Size</b>	<b>Average Market Value (\$ Million)</b>	<b>Arithmetic Average Return</b>	<b>Arithmetic Equity Risk Premium</b>	<b>Smoothed Average Equity Risk Premium</b>
1	96,796.0	11.87%	4.67%	2.35%
2	26,818.0	12.13%	4.93%	4.40%
3	14,912.0	10.83%	3.63%	5.33%
4	10,930.0	12.84%	5.64%	5.83%
5	8,014.0	13.28%	6.08%	6.32%
6	5,996.0	14.19%	6.99%	6.79%
7	4,872.0	14.93%	7.73%	7.12%
8	3,745.0	14.34%	7.14%	7.54%
9	3,185.0	15.28%	8.08%	7.80%
10	2,758.0	14.52%	7.32%	8.02%
11	2,441.0	15.33%	8.13%	8.22%
12	2,121.0	15.07%	7.87%	8.44%
13	1,845.0	13.84%	6.64%	8.67%
14	1,588.0	16.08%	8.88%	8.90%
15	1,382.0	15.65%	8.45%	9.13%

*(Continued)*

## EXHIBIT 11.1 (Continued)

Portfolio Rank By Size	Average Market Value (\$ Million)	Arithmetic Average Return	Arithmetic Equity Risk Premium	Smoothed Average Equity Risk Premium
16	1,117.0	17.56%	10.36%	9.47%
17	1,025.0	17.47%	10.27%	9.60%
18	870.0	16.88%	9.68%	9.86%
19	736.0	16.81%	9.61%	10.13%
20	626.0	17.80%	10.60%	10.39%
21	541.0	18.03%	10.83%	10.62%
22	436.0	17.64%	10.44%	10.97%
23	326.0	18.04%	10.84%	11.43%
24	225.0	19.37%	12.17%	12.02%
25	76.0	23.32%	16.12%	13.74%
<b>XYZ Company</b>	<b>1.5</b>			<b>20.00%</b>

In order to calculate a size adjusted equity risk premium specific to XYZ Company using the market value of equity, we would first need to know what the market value of equity is. Since market value of equity is what we are trying to determine, the process could be considered circular. In order to compensate for this point, we used an estimate of value reached under a different approach, namely the asset approach. Using 1.5 million as an indicator of the market value of equity, the smoothed equity risk premium specific to XYZ Company equals 20 percent (be patient and I will show you the calculations).

(Source: Duff & Phelps *Risk Premium Report* 2006. Copyright © 2006 Duff & Phelps, LLC. Derived from data from the Center for Research in Security Prices, Graduate School of Business, The University of Chicago. All rights reserved. Reprinted with permission. XYZ Company data calculated by analyst.)

## EXHIBIT 11.2

## COMPANIES RANKED BY BOOK VALUE OF EQUITY

Portfolio Rank By Size	Average Market Value (\$ Million)	Arithmetic Average Return	Arithmetic Equity Risk Premium	Smoothed Average Equity Risk Premium
1	26,924.0	12.32%	5.12%	3.85%
2	8,688.0	12.34%	5.14%	5.38%
3	5,700.0	14.50%	7.30%	5.95%

## EXHIBIT 11.2

Portfolio Rank By Size	Average Market Value (\$ Million)	Arithmetic Average Return	Arithmetic Equity Risk Premium	Smoothed Average Equity Risk Premium
4	4,019.0	13.21%	6.01%	6.42%
5	2,828.0	13.67%	6.47%	6.90%
6	2,177.0	13.90%	6.70%	7.25%
7	1,854.0	13.92%	6.72%	7.47%
8	1,533.0	14.44%	7.24%	7.73%
9	1,236.0	15.54%	8.34%	8.02%
10	1,123.0	15.05%	7.85%	8.15%
11	995.0	14.58%	7.38%	8.31%
12	890.0	16.49%	9.29%	8.46%
13	760.0	15.25%	8.05%	8.68%
14	687.0	15.59%	8.39%	8.81%
15	562.0	16.39%	9.19%	9.09%
16	529.0	16.57%	9.37%	9.17%
17	441.0	16.96%	9.76%	9.41%
18	402.0	15.73%	8.53%	9.54%
19	347.0	16.65%	9.45%	9.74%
20	302.0	17.63%	10.43%	9.93%
21	248.0	16.66%	9.46%	10.19%
22	206.0	18.92%	11.72%	10.45%
23	169.0	17.76%	10.56%	10.71%
24	123.0	18.02%	10.82%	11.14%
25	51.0	20.98%	13.78%	12.34%
<b>XYZ Company</b>	<b>1.4</b>			<b>17.20%</b>

The book value of XYZ Company was used to extrapolate an equity risk premium of 17.20 percent.

The total equity risk premium used in the build up of the discount rate reflects the average premium of those smallest portfolios (Rank #25), plus that portion that is specific to XYZ Company. The equity risk premium is calculated in Exhibit 11.3.

(Source: Duff & Phelps Risk Premium Report 2006. Copyright © 2006 Duff & Phelps, LLC. Derived from data from the Center for Research in Security Prices, Graduate School of Business, The University of Chicago. All rights reserved. Reprinted with permission. XYZ Data calculated by analyst.)

**EXHIBIT 11.3**  
**EQUITY RISK PREMIUM SPECIFIC TO XYZ COMPANY**

Market value of equity	20.00%
Book value	17.20%
Net income	17.11%
MVIC	18.91%
Assets	16.43%
EBITDA	17.79%
Sales	14.19%
Number of employees	14.72%
<b>Average</b>	<b>17.04%</b>

As a sanity check, we turned to *Stocks, Bonds, Bills and Inflation, Valuation Edition*, published by Morningstar Associates in 2006. The equity risk premium and the size premium included in this publication amounts to 13.58 percent. However, the equity risk premium published by Morningstar is the difference between the total returns on common stocks and the income returns of long-term government bonds from 1926–2005 (based on the 2006 book). Size is not taken into consideration. Morningstar's size premium is the difference between the total returns on small company stocks and large company stocks based on micro-capitalization (micro-cap) sized companies. These micro-cap stocks include companies with average market capitalizations of about \$198,881,980, which are considerably larger than XYZ Company. As a result, Morningstar's size premium data does not reflect the added risk associated with an investment in a company as small as XYZ Company.

The difference of about 4 percent in the size adjusted equity risk premium is the regressed difference of the average of the 25th percentile and XYZ Company's equity risk premiums as calculated.

Using the more detailed D&P Report data instead of the Morningstar data allowed us to "drill down" the equity risk premium to a company the size of XYZ Company. In light of the fact that a major difference between the D&P Report and Morningstar is the ability to extrapolate these premiums for smaller companies, it is no surprise that without this company specific equity risk premium, the discount rates are very similar. As such, the Morningstar data supports the D&P Report data, rather than refutes it.

**TABLE 11.3**  
**SAMPLE SUBJECT COMPANY VALUE**  
**CALCULATIONS**

Portfolio Rank By Size	Average Market Value (\$ Million)	(Col. C) Log of Average Market Value	(Col. J) Smoothed Average Equity Risk Premium
23	389.0	2.59	11.62%
24	277.0	2.44	12.18%
25	105.0	2.02	13.78%
Specific Company	VALUE		See below*

\*=IF(C31="n/a","n/a",FORECAST(C31,J6:J30,C6:C30))

The beauty of being able to perform these calculations is that there will be no need to include an additional size adjustment in the specific company risk premium. This is the one part of a discount rate that truly is challenged more than any other part. I will discuss this in greater detail soon, but for now, consider the fact that the D&P study allows us to have a smaller specific company risk premium. That is an excellent thing!

I promised you that I would tell you how to calculate the values for the subject company, so here it is. Excel is a wonderful program that allows even me to put together table 11.3 (but let me confess, Excel and my statistics guru, Bill Kennedy should get equal credit).

If you look at table 11.2, you can see the columns more fully. The first percentile is in row 6



and they are sequential thereafter. Now you have the answer. Plug these formulas into your Excel table and you are ready to go!

Another part of the D&P study that I really like is the separation of the ERPs for high risk companies. This data can be used for valuations of troubled companies or companies that have filed for bankruptcy protection. The ERP ends up being about twice the range of the *S&P* data for the overall market.

The D&P exhibit A tables are applicable to the build up method. The exhibit B tables are applicable to developing a size premium when using the capital asset pricing model (CAPM). In the CAPM, the size premium is completely separated from the ERP. I will explain more about this when I discuss CAPM. Note, however, that in the build up method, you are actually calculating a size adjusted ERP. In CAPM, the ERP and the size premium are separate and must remain that way.

## Specific Company Risk Premium

This component of the discount rate provides for the specific risk characteristics of the appraisal subject. These risk elements are not covered by the ERP. The specific company risk premium can increase considerably depending on the risk associated with the appraisal subject. The specific company risk premium can also be negative. This occurs if the appraisal subject is considered to be less risky than its peer group.

This is another part of the book that makes auditors cringe. There is no objective source of data to properly reflect or quantify the specific company risk premium. It is a matter of judgment and experience. There are no mystical tables that a valuation analyst can turn to, nor can the valuation analyst be totally comfortable with this portion of the assignment.

Many of the risk factors that are considered in determining an appropriate discount rate are the same factors that a valuation analyst uses to adjust multiples from guideline companies under the market approach. Although they are a little different, a review is worthwhile. Once valuation multiples are determined for the guideline companies, it becomes necessary for the valuation analyst to adjust these multiples for the qualitative differences between the guideline companies and the appraisal subject. These qualitative differences will most likely relate to factors such as expected growth and different risks attributable to the appraisal subject as compared with the guideline companies. Remember this stuff from a few chapters ago?

To briefly review, box 7.3 lists the different risk factors considered by the valuation analyst that will generally include, but will not be limited to, the following:

- Economic risk
- Business risk
- Operating risk
- Financial risk
- Asset risk
- Product risk
- Market risk
- Technological risk
- Regulatory risk
- Legal risk

There are many other risk factors to be considered as well, but these are some of the more important items that a valuation analyst must think about in the application not only of the market approach but of the income approach as well. In the market approach, each of these risk factors should be analyzed from the point of view of how the appraisal subject differs from the guideline companies. In the income approach, these factors are considered in relationship to the source of the market derived rates. For example, because guideline companies tend to be in the same industry as the appraisal subject, an economic risk such as rising interest rates will probably have the same impact on the appraisal subject as the guideline companies. But if the appraisal subject operates in a smaller geographic area, the risk could be different if that part of the country is doing better or worse than the rest of the country, because a larger, more diversified company could reduce its risk by not being concentrated in one area.

## COMPARING THE SUBJECT COMPANY

Being a valuation analyst is similar to being a risk assessor. Because business valuation theory is so closely related to risk-reward theory, an analyst must spend a considerable amount of time analyzing the subject company to determine how much risk the income stream is subject to. Whether a single period capitalization model or a multi-period discounting model is going to be used in the valuation assignment, the valuation analyst must determine the degree of risk for the earnings, cash flow, or other income stream being considered.

How does the valuation analyst do this? The answer is simple. He or she compares the subject company to either guideline companies or, in their absence, other forms of industry or investment information. For example, if good guideline companies do not allow the market approach to be used, the income approach is frequently the alternative. Sometimes, the income approach is the preferred approach. Trade association data or industry composite data, such as information available in *Business Profiler*, can be used for this comparison. Information in this type of

### Box 11.3 Common Nonfinancial Factor Considerations for Analysis

The following are nonfinancial factor considerations common in risk analysis:

- Economic conditions
- Industry conditions
- Location of business
- Competition
- Depth of management
- Quality of management
- Barriers to entry into market

product allows the analyst to perform a financial analysis of the subject company and compare the results against industry information. This comparison allows the analyst to determine whether the subject company is stronger or weaker than the industry group.

The financial analysis is probably the easier part of the analysis. Frequently, the nonfinancial analysis is the more difficult part of the assignment. Basic contributing factors to this difficulty are listed in box 11.3 and discussed further below.

Most of these factors should not come as any great surprise. There must be a reason why

every appraisal textbook and educational course suggests that a valuation analyst look into these items. Revenue Ruling 59-60 addresses many of these items.

## Economic Conditions

I previously discussed economic risk, so there is little reason to repeat the discussion. However, Revenue Ruling 59-60 emphasizes the economic conditions by discussing the risk associated with “boom” economies. The outlook for the economy should be considered, as it will affect most businesses in one way or another.

## Industry Conditions

Industry conditions are also important because the subject company will probably be affected by changes in their industry. In some instances where the subject company’s customers are in another industry, they may be affected by the other industry instead. We valued a printing company that specialized in the pharmaceutical industry. The printing industry was doing great at that time, but the pharmaceutical industry had to be our main focus because there was a reliance on this industry for business.

## Location of Business

In real estate appraisal, the value of property is greatly affected by the three L’s: location, location, location. Certain businesses are highly dependent on their location, while others are not. Imagine valuing a retail business that is located on a road about to undergo major construction and that this construction is expected to last several years. Because of the construction, traffic flow will be diverted away from that road. How does the location of the business affect its value?

## Competition

At a management interview, valuation analysts always ask for information about the company’s competitors. The reason for this is obvious. If a business suffers from the risk of competition, value is affected. If you were valuing a local hardware store and found out that The Home Depot was about to move in less than a mile down the road, wouldn’t this suggest that the appraisal subject has a great risk of business loss?

## Depth of Management

Certainly, most smaller businesses have no depth in management. In fact, they are usually highly dependent on one key person. Revenue Ruling 59-60 discusses the possible loss of a key person as being a risk element. Several questions need to be considered by the valuation analyst. What is the likelihood of the loss of the key person? Sometimes the key person may not be the owner of the business. It may be a key salesperson. If the key person is lost, can a replacement be found? How long would it take to replace this person? At what cost? For many small businesses, the business may die with the owner. Frequently, we see businesses where the owner is also the highly technical person whose knowledge is in his or her head.

## Quality of Management

Along with the depth in management the analyst must consider the quality of management. Does the business have adequate management to properly achieve the business goals, or does management have no control over its own destiny? What if the business is being run by a good technical person, but that individual cannot manage people? Or what if the management cannot see what the future has in store for the company?

## Barriers to Entry Into Market

Another risk element is the difficulty that others may encounter in entering into the market. If the barriers to entry are nonexistent, competition may become fierce, creating serious risk. If it is difficult to enter the market, the company may be in a better position. This can hold true in situations where the company holds patents, copyrights, and other types of intangibles.

## The Bottom Line

The bottom line in the determination of the specific company risk premium is to consider what the total rate of return would have to be, given the risk of the income stream being discounted. Though we use various methods to help quantify a discount rate, these are only tools in our toolbox; these methods do not help us quantify these rates. If nothing else, the final answer has to make sense. Remember, an analyst's responsibility is to determine an estimate of value that makes sense. It is not to develop rates of return.

A valuation analyst can look to market evidence to support the specific company risk premium, but the process becomes somewhat circular in logic. For example, a few years ago, we appraised a business and determined that the discount rate should be 80 percent. Everyone involved in the litigation thought exactly what you are now thinking—we must be crazy. I began to testify at the trial and started describing all of the factors that we have been discussing in this book. Obviously, I could not quantify every one of these factors, but I explained that the risk was substantial, and I felt that a rate higher than venture capital returns was appropriate. If venture capital was on the top floor of the rate of return department store, then my client was on the roof!

Over lunch, the client, the attorney, and I were discussing the testimony, preparing me to go back on the witness stand after lunch. The conversation led to the client telling me that business was really pretty tough. In fact, the only thing that was keeping him alive was the fact that his major supplier was financing his payables for 90 days at 19 percent interest. In fact, I think he called the guy a shylock (some of the other words could not be printed in this book). Because 19 percent for 90 days adds up to approximately 76 percent for the year, I went back to the courtroom feeling pretty good about my 80 percent rate. In this instance, the proof of the rate of return for an unsecured creditor justified the rate used in the valuation assignment. Thereafter, we regularly ask the business owner if there is any kind of financing other than the conventional type.

Logically, if we can determine a rate of return using outside empirical evidence, why would we need to determine a specific company rate? Any time that you can avoid having to quantify the unquantifiable, I would suggest that you do it.

Discussing specific company risk (*unsystematic risk*), Pratt, Reilly, and Schweih's state the following:

The estimation of the effect of investment-specific (unsystematic) risk is often a matter for the analyst's professional judgment. These risk factors will be developed as part of the quantitative and qualitative analyses discussed in Part II of this book, and the significant positive and negative factors related to these analyses should be noted in the valuation report. These analyses will reveal many things that will affect the economic income projections, as well as the risk of achieving those projections. The analyst should be careful to

distinguish between those factors that influence the *magnitude* of the projection (the numerator in the model) and those factors that affect the *degree of uncertainty* of achieving the mathematical expectation projection (that is, the *risk*, which determines the discount rate, the denominator in the model).

There is no specific model or formula for quantifying the exact effect of all the investment-specific risk factors on the discount rate. This is ultimately based on the analyst's experience and judgment.<sup>8</sup>

And, Jim Hitchner adds:

The final component of the discount rate is the risk specific to the company being valued and/or the industry in which it operates. This is one of the most subjective areas of business valuation.<sup>9</sup>

Despite the agreement among these experts about the subjective nature of specific company risk, several authors have discussed methods to quantify this aspect of the discount rate.

In the September 1999 issue of *Business Valuation Review*, Frank C. Evans wrote an article entitled "How Do You Handle It?" In this article, Evans discusses assigning values to various risk factors, adding them up and using the calculated number as an indication of the specific company risk. Figure 11.4 illustrates a recreation of his company risk evaluation example in a chart format.

**FIGURE 11.4**  
**SAMPLE RISK FACTOR VALUE CHART TO INDICATE**  
**SPECIFIC COMPANY RISK**

<b>Incremental Risk (Ex. Only)</b>		
<b>Specific Company Risk Factors for XYZ Corporation</b>		
1.	Operating history, volatility of revenues and earnings	3.5
2.	Lack of management depth	1.0
3.	Lack of access to capital resources	0.5
4.	Over reliance on key persons	1.0
5.	Lack of size and geographic diversification	0.5
6.	Lack of customer diversification	0.0
7.	Lack of marketing resources in light of competition	0.5
8.	Lack of purchasing power and other economies of scale	0.0
9.	Lack of product and market development resources	0.5
10.	Over reliance on vendors or suppliers	0.0
11.	Limitations on distribution systems	0.0
12.	Limitations on financial reporting and controls	0.5
<b>Positive Attributes</b>		
1.	Long term contracts with customers or unique product or market niche	0.0
2.	Patents, copyrights, franchise rights, proprietary products	-1.0
<b>Net increase to discount rate</b>		<b>7.0</b>

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Although intuitively this process looks quantifiable and supportable, it is still highly subjective. First of all, anyone looking at figure 11.4 can probably think of at least another six items that could be added to it. In addition, there is no empirical support for any given number shown in the chart above. In a litigation environment, a good cross-examining attorney could spend hours leading the expert through an analysis of these factors. Before the expert was finished testifying, he would have explained the difference in value that would be derived from a .25 or .50 point difference, either positive or negative, of any one of these factors, and what the addition of another six factors could have on the discount rate.

<sup>8</sup> Shannon P. Pratt, Robert F. Reilly, and Robert P. Schweihs, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, 4th ed. (New York: McGraw-Hill), 181.

<sup>9</sup> James R. Hitchner, *Financial Valuation: Applications and Models*, 1st ed. (New Jersey: John Wiley & Sons), 144.

Other writings on the subject of specific company risk discuss the factors to be considered but do not assign a specific weight to them. Some authors discuss using a system of +, −, or neutral or high, low, neutral for each factor. In the working papers, there would be a list of factors that affect the discount rate. For each of these factors, the analyst would determine whether the factor would increase or decrease the discount rate, or whether it would have no effect, and how important the factor is. After going through all of these factors, though, it still takes professional judgment to convert these factors into a risk premium. No one has written anything that empirically describes the amount of additional risk (or the deduction from risk) that any factor should have in numeric terms.

Most recently, Peter Butler, ASA, CFA, and Keith Pinkerton, ASA, CFA, of Hooper Cornell, a CPA firm in Boise, Idaho, published two articles regarding the quantification of specific company risk.<sup>10,11</sup> The abstract of the *Business Valuation Review* article read as follows:

Even though, according to traditional financial theory, public markets do not price company-specific risk, it does not mean that it does not exist or is not quantifiable for public comparables. In all instances, the company-specific risk premium for publicly traded companies is greater than 0%—yet appraisers start their benchmark analysis at 0% to determine an appropriate company-specific risk premium for privately held companies. Is this a flaw in our collective thinking?

In the article in *Business Valuation Update*, the editor states:

In this article, the authors have refined their earlier work by providing a detailed example of how to select a company-specific risk premium (CSRP) for a privately held company using benchmark CSRPs derived from publicly traded companies.

The concept behind the analysis performed by Messrs. Butler and Pinkerton is that although the marketplace does not price specific company risk into its rates of return, every company has specific company risk that can be quantified through the use of *total beta*. Total beta, which is a concept derived by Aswath Damadoran, Ph.D., measures a stock's riskiness relative to the market, which has a total beta of 1.0. It captures total risk, including systematic risk as well as size and specific company risk.<sup>12</sup>

The two articles go on to discuss the quantification of specific company risk for a privately held company. The authors use publicly traded guideline companies and calculate their total betas in order to calculate the guideline companies' specific company risk premium. This is followed by a comparison of the subject company to the guideline companies to determine the appropriate starting point for the specific company risk premium. Once the analyst has determined the strengths and weaknesses of the analysis, he determines the starting point for the quantification of the specific company risk for the subject company.

However, this appears to be similar to the use of the industry risk premium (soon to be discussed) from *SBBI*. It provides the analyst with a starting point for the specific company risk premium, but does not necessarily quantify all of the specific company risk. Therefore, some of the quantification will remain subjective. In support of this method, the authors state:

Moreover, if you do not consider any companies as appropriate guidelines, you must still perform some analysis (whether using this technique or the more subjective analyses) in quantifying company-specific risk. At least this method permits an appraiser to retrieve a Form 10-K from companies in the pertinent industry and analyze them for company-specific risk, since by definition, the risk is just that: company-specific and not incorporated in Beta (systematic risk) or the size premium. With this technique, we have created an empirical approach to benchmark company-specific risk.

Some of Butler and Pinkerton's conclusions from their analysis are as follows:

1. All companies have specific company risk (including large publicly traded companies, such as General Electric that has a specific company risk premium in the range of 3 percent to 4 percent). Therefore, starting at a specific company risk premium of 0 percent underestimates a company's cost of capital.

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<sup>10</sup> Peter Butler and Keith Pinkerton, "Company-Specific Risk—A Different Paradigm: A New Benchmark," *Business Valuation Review* (Spring 2006): 22–28.

<sup>11</sup> Peter Butler and Keith Pinkerton, "Quantifying Company-Specific Risk: A New, Empirical Framework With Practical Applications," *Business Valuation Update* (February 2007): 1.

<sup>12</sup> In Butler and Pinkerton, "Quantifying Company-Specific Risk."

2. Due to their research indicating that companies such as Exxon Mobil and General Electric have specific company risk greater than 0 percent, Messrs. Butler and Pinkerton believe that most valuation analysts have probably underestimated the discount rate, and, therefore, overvalued the companies they have valued.
3. The methodology derived does not work for all industries or all companies.

After seeing this presentation a number of times, I think I finally understand what Messrs. Butler and Pinkerton are doing. It is actually really good. However, they are not explaining it as well as they could. The Butler-Pinkerton model, which is now available from Business Valuation Resources ([www.bvresources.com](http://www.bvresources.com)), is not really addressing quantifying the company specific risk, but rather it is allowing the analyst to determine the rate of return that is applicable to companies in the public market as a starting benchmark for the determination of the discount rate. This model will allow us to determine the total cost of equity for our guideline companies. Similar to the application of the guideline company method, the analyst can then adjust the cost of equity for the differences between the subject company and the guideline companies. This is clearly a great addition to what we have done in the past. We used to use *Cost of Capital Quarterly*<sup>13</sup> to get an idea of the cost of equity by standard industrial classification code. We would adjust from there. Now, instead of using the entire industry, we can choose better guideline data as a starting point. This model is illustrated in figure 11.5.

**FIGURE 11.5**  
**BUTLER-PINKERTON MODEL SAMPLE DATA**

Business Valuation Market Data | HC BPM CSRC

**Butler Pinkerton Model™**  
Company-Specific Risk Calculator™

Ticker	BUD	PMID	HOOK
Company Name	Anheuser-Busch Companies, Inc.	Pyramid Breweries, Inc.	Redhook Ale Brewery, Incorporated
Size Premium	-0.36%	6.36%	6.36%
Standard Deviation	1.80%	4.64%	5.27%
Levered Beta	0.43	0.29	0.16
Correlation Coefficient (R)	0.40	0.11	0.05
Total Beta	1.08	2.79	3.17
<b>Total Cost of Equity</b>	<b>11.48%</b>	<b>21.72%</b>	<b>23.99%</b>
<b>Company Specific Risk Premium</b>	<b>4.24%</b>	<b>8.60%</b>	<b>11.69%</b>
Additional Regression Statistics:			
Constant	-0.001	0.001	0.005
Coefficient of Determination (R <sup>2</sup> )	0.16	0.01	0.00
T-Stat	7.03	1.70	0.80
Level of Statistical Significance	99.0%	90.0%	57.0%
Degrees of Freedom	258	258	258

Summary Statistics for Sample	Beta	Total Beta	Total Cost of Equity	CSRP
Count	3	3	3	3
Minimum	0.16	1.08	11.48%	4.24%
25th Percentile	0.23	1.93	16.60%	6.42%
Median	0.29	2.79	21.72%	8.60%
Mean	0.29	2.34	19.06%	8.18%
75th Percentile	0.36	2.98	22.86%	10.15%
Maximum	0.43	3.17	23.99%	11.69%
Standard Deviation	0.14	1.11	6.67%	3.74%
Mean plus 2 Standard Deviations	0.57	4.57	32.40%	15.66%
Mean minus 2 Standard Deviations	0.02	0.12	5.73%	0.69%

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<sup>13</sup> *Ibbotson Cost of Capital Quarterly*. Chicago: Morningstar, 2007



In this illustration, the size premium, based on either Duff & Phelps or Morningstar, is entered for each of the guideline companies, and the model produces the *company specific risk premium* for the guideline company. Perhaps more importantly, the total cost of equity (TCOE) is calculated for each of the guideline companies as well. In this example, Anheuser-Busch is probably too large to compare to a micro brewery that is the appraisal subject, and TCOE is much lower than the other two companies. The other two companies provide a TCOE of about 22 percent to 23 percent, which can then be used as a starting point to determine the TCOE for the subject company. You can use a similar analysis that you would perform under a market approach to adjust pricing multiples up or down.

Notice that the data provided includes all types of statistical calculations including the level of statistical significance. This field is highlighted in red if it falls below 80 percent. While this book cannot address the actual calculations performed in the model, the valuation analyst should familiarize himself or herself with the calculations to make certain that they are understood. As I learn more and more about this model, and particularly the statistical stuff that supports the calculations, I am getting more excited about this great contribution to our toolbox.

Keep in mind though, that the true success behind using this model will come if you have good guideline companies. However, if good guideline companies cannot be located, the analyst can still use the Butler-Pinkerton model to calculate the cost of equity for all of the companies in the subject's industry. I think this model has great potential. There is more that can be done with the model, but it is brand new and will probably be refined a few times.

## Industry Risk—A Component of Specific Company Risk in a Build Up Method

Over the past few years, *SBBI* started to include data on industry risk premiums. As of December 2007, Morningstar now publishes a total of 477 industry risk premia. Some are positive and others are negative. In a build up methodology, the industry risk is generally captured as part of the specific company risk premium, whereas in the CAPM, the industry risk is captured in the beta (take my word for it until we discuss betas—soon).

The manner in which *SBBI* calculates the industry risk premium transforms the build up method into a modified CAPM. Morningstar uses the following formula to calculate the industry risk premium:

$$IRP = (RI * ERP) - ERP$$

$IRP$  = Industry risk premium  
 $RI$  = The risk index or industry I  
 $ERP$  = Equity risk premium

Many valuation analysts do not use this as a separate component because many industries have little data. In order to perform these calculations, Morningstar requires that there be at least five companies in the industry, each company must have at least 36 months of return data, sales for the company must be greater than \$1 million in the most recent year, and the market capitalization must be equal to or at least \$10,000 in the most recent month. Be careful not to use this data if there are very few companies included in the calculations. I would be cautious in hanging my hat on five companies. It is also important to note that the IRP as developed by Morningstar cannot be applied to a discount rate developed using the D&P study. They have conflicting methodologies that would result in an error.

Morningstar states:

Please note that the size premium to use should be the beta-adjusted size premium found in Appendix C or Table 7-5, and not the small stock premium, which is the simple difference in returns of large and small company stocks.<sup>14</sup>

As I said before, you need to make certain that you are using the correct information. *SBBI* is so full of tables and charts that it is easy to pick up numbers from the wrong table. If you are going to use this data, be careful!

<sup>14</sup> Ibid., 42.



## APPLICATION OF THE DISCOUNT RATE

The rates of return appearing in Morningstar and D&P are after tax with respect to the corporate entities but pre-tax to the investor. I am not sure why, but this seems to confuse a lot of people. Because public companies report their results on an after tax basis, Morningstar and D&P data is logically after tax to the corporations. However, what should we consider the Treasury bonds to be? These returns are actually pre-tax to the government, or after tax when you consider that the government does not pay taxes. A source of confusion is that the rates of return are pre-tax to the investor. Because we are normally being asked to value the business enterprise, personal taxes have no relevance.

Total stock returns, as used in the Morningstar and D&P data, are defined as dividends plus unrecognized capital gains. The unrecognized capital gains are measured from the beginning of the year to the end of the year. Therefore, the returns reflected by these studies are considered to be cash returns, and the data used in determining discount rates from these studies should be applied to net cash flow and not earnings. An adjustment would be required to derive the appropriate discount rate to use for earnings. The reason for this adjustment is that earnings are considered to be more risky than cash flow, because other factors (capital expenditures, working capital needs, and net borrowings) are not taken into consideration.

## WHEN ALL ELSE FAILS, GO BACK TO THE THEORY

When you get to the point where you cannot get as lucky as I was when I found out that there was another way to determine a rate of return for the subject company, you need to go back to good old appraisal theory. Let's spend some time discussing some of the more popular methods for calculating discount rates. This discussion will include the following:

- The build up method
- CAPM
- Price to earnings reciprocal plus growth
- Factor rating method
- Weighted average cost of capital (a method of calculating a discount rate for invested capital, which may include the other methods just mentioned)

## THE BUILD UP METHOD

Many valuation analysts, especially those who work with smaller closely held companies, use the *build up method*

"Safe" rate	5.00%
Equity risk premium	7.20%
Size premium	4.20%
Specific company risk premium	3.00%
Discount rate	<u>19.40%</u>

for developing a discount rate. The build up method embodies all of the elements of the discount rate previously described, including (1) a risk free rate, (2) an ERP, and (3) a specific company risk premium, which would also consider a size premium, an industry premium and anything else that will cause a premium. Table 11.4 contains a demonstration of the build up method.

If the Duff & Phelps study had been used, the size premium would have been combined with the ERP into a *size adjusted equity risk premium*.

## CAPITAL ASSET PRICING MODEL (CAPM)

CAPM was originally developed by William F. Sharpe. He published his theory in an article entitled "Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk."<sup>15</sup> While you are probably thinking that this is a real sleeper, this guy won a Nobel Prize in Economics—now, have I gotten your attention? The model was originally developed in the context of portfolio theory, as a way to measure the risk an individual stock contributes to a well-diversified portfolio. Remember the efficient market hypothesis stuff from school? That is what this relates to. It actually suggests that the price of securities in the public markets will not depart for any real length of time from their true values (based on the economics).

<sup>15</sup> William F. Sharpe, "Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk," *Journal of Finance* 19(3): 425–442.

So why is this in a business valuation book? CAPM has been modified to be used as a method of determining a discount rate, commonly used in the appraisal of larger companies. It has little, if any, applicability to small and medium sized businesses, but no discussion about discount rates would be complete without mentioning its existence. If the valuation analyst uses the CAPM to develop a discount rate to be used in the valuation of a smaller business, the valuation analyst has probably lost his or her mind.

As a valuation analyst, you should be familiar with all of the tools available in the profession, because there is a good possibility that CAPM will be used against you at some point in the future. That's how I found out about it! The discussion that follows is not intended to be a highly technical discussion about CAPM, but rather, it is intended to explain, in English, what this model is all about. Finance textbooks can be consulted if you want to learn more about this subject or doze off while reading.

The theoretical basis for the CAPM comes from the application of the *efficient market theory*. In short, this states that the expected returns on investment portfolios are related to the expected risk of the investments included in the portfolios. The relationship between risk and reward becomes apparent in its truest form under the efficient market theory. Because investors are said to be risk averse, portfolios are structured to diversify away the risk. Right away, you should realize the limited applicability of this method for smaller companies, because the owners do not have diversified portfolios and can't diversify away the enormous risk associated with owning the closely held business.

The theory behind the CAPM is that we assume that in the marketplace there are a fixed number of securities in which we can invest. Each of the securities has its own expected return (based on its level of risk) and standard deviation. The investor will select the security that offers the highest return and the lowest standard deviation. What does this mean? Investors don't like to take chances if they can avoid them! They look to minimize their risk and, at the same time, maximize the return available to them.

I hate to do this to you, but the mathematical equation for the CAPM is as follows:

$$k_e = R_f + \beta^*(R_m - R_f)$$

$k_e$  = Expected return (also known as the discount rate for equity)  
 $R_f$  = Risk free rate  
 $\beta$  = Systematic risk (volatility explained in the following section)  
 $R_m - R_f$  = Long term average risk premium of the market as a whole  
 minus the long term average risk free rate (also known as the ERP)

The CAPM provides a discount rate that is applicable to the equity of the company (not invested capital). The formula looks a lot worse than it really is because the CAPM is similar to the build up method, which is more commonly used by valuation analysts of smaller businesses. Always keep in mind that the three main components of a discount rate include a risk free rate, an ERP, and a specific company risk premium. If you notice, there is no specific company risk in the above formula. Therefore, it needs to be adapted for use in the valuation of a closely held company. In the discussion that follows, I will demonstrate that the CAPM has similarities with the much simpler build up method.

## Components of the CAPM

There are two different methods that are commonly used to determine the risk free rate. Long term U.S. Treasury bond rates are generally used, as discussed earlier in this chapter. The other method is more technically consistent with the CAPM assumption. In this approach, the risk free rate is determined by taking the long term Treasury bond rate minus Morningstar's horizon premium. The horizon premium represents maturity risk. This compensates for the fact that longer term Treasury securities are considered to be more risky because of their long term nature.

Capital market theory segregates risk into two types: systematic and unsystematic. Systematic risk represents the uncertainty of future returns because of the sensitivity in the subject security to changes in the market as a whole. Unsystematic risk is a function of everything else. According to *Valuing A Business*, "The fundamental assumption of the capital asset pricing model is that the risk premium portion of the expected return of a security is a function of that security's systematic risk." In essence, because an underlying assumption of this model is that investors hold large, diversified portfolios, they are able to eliminate the unsystematic risk. Therefore, the CAPM only addresses systematic risk.

The systematic risk, beta, is the measure of the volatility of the stock market as a whole. It is a measurement that predicts how a stock will react to the movement of the stock market. The purpose of using a beta is to measure

the expected return of the market based on the volatility that takes place when one uses guideline companies as a surrogate for the appraisal subject. Because this is the expected return for a diversified portfolio, it is assumed that there is no specific risk relative to the company being appraised. What this means is that a company's beta will predict what will happen to the price of the stock as the stock market goes up and down. A beta of 1.0 indicates that a company will move with the market (market up 10 percent, company up 10 percent). The use of public guideline data allows the valuation analyst to compare the median beta of these similar companies in order to predict the volatility of the appraisal subject as if it were a public company.

Various sources can be used to determine betas. First of all, a beta can be calculated by the analyst (this procedure will not be discussed in this book, but more information can be found in Pratt's *Valuing a Business* or Morningstar's *Cost of Capital Quarterly*). The most common sources for finding betas are Standard & Poor's tear sheets, the Media General computer database ([www.mediageneral.com](http://www.mediageneral.com)), Value Line ([www.valueline.com](http://www.valueline.com)), and Wilshire Associates ([www.wilshire.com](http://www.wilshire.com)).

#### Author's Note

Different sources of betas vary in the manner in which they are calculated. It is important that you be consistent when you use published betas. It is preferable to get them all from the same source or calculate your own.

Because betas are calculated with respect to the entire market, the ERP ( $R_m - R_f$ ) should be calculated using an  $R_m$  that is representative of the return from the entire market. Some valuation analysts mistakenly use only the bottom part of the market to compensate for the size of the appraisal subject. The fundamental assumption in the CAPM is that the risk premium portion of the expected return of a security is a function of that security's systematic risk. Capital market theory assumes that investors hold or can hold common stocks in large, well-diversified portfolios. Therefore, unsystematic risk is eliminated because of the diversification in the portfolio. (Can you believe this stuff?)

*SBI* is the most commonly used source for  $R_m$ . It is derived from a study of long term returns from the stock market. It is incorrect to include the return on small stocks in the  $R_m$  term in the CAPM equation. Because betas are calculated with regard to the entire market,  $R_m$  must be the return on the entire market, not just that portion in the bottom of the market. When beta equals 1.0 in the CAPM equation, the indicated return is the return on the market as a whole.

It should also be noted that the  $R_f$  at the beginning of the equation is the risk free rate at the appraisal date, whereas the  $R_f$  in parentheses is a long term average  $R_f$ . Although  $R_f$  is assumed to be the rate of return on a long term U.S. Treasury bond, the rate on a short term Treasury note might make more sense in certain instances. This may be the case when a shorter holding period (such as a self-liquidating investment of 10 years) is expected.

The ERP can be determined as discussed previously. However, you cannot use the D&P study to calculate a size-adjusted ERP for all of the same reasons that I have been discussing. The entire market must be used. That does not mean, however, that a size premium from the D&P study cannot be used. In fact, it is a great resource. I will discuss this some more in a little while.

Another source for ERPs is *Quantitative Profiles*, published by Merrill Lynch. This is a source of estimated forward-looking ERPs. Another source is *Cost of Capital Quarterly* and, although this publication is a bit pricey (\$395 for the annual edition and \$995 with quarterly updates), it contains some really good stuff.

There have been several articles written about the merits of using forward-looking ERPs over a reliance on the historical data published by Morningstar. It seems logical to use forward-looking data, because valuation is a prospective process. The real question to ask yourself over and over again is: How will this get us to be more accurate in determining the value of the subject company? If you believe that the forward-looking ERPs will allow you to do a better job, then use them. I have found that the small businesses that we appraise are relatively unaffected by all of this stuff. Rarely, if ever, will the CAPM be applicable to small companies. (Can you imagine trying to explain this stuff to a jury?) In reality, betas cannot be calculated for the small closely held company for which guideline company information is unavailable. The CAPM assumes that the market is efficient. (Talk about big assumptions!) An inefficient market will create distortions in the model. Computerized trading and insider information (among other factors) can cause the market to be less efficient than it could be. I have included an annotated list of underlying assumptions (box 11.4) that the model is largely based upon (my comments are in parenthesis).

**Box 11.4 CAPM Underlying Assumptions**

CAPM assumes the following:

- Investors are risk adverse. (No kidding!)
- Rational investors seek to hold efficient portfolios; that is, portfolios that are well diversified. (That's great, but how many of our clients have enough money to fully diversify? So while they may want to diversify, they cannot.)
- All investors have identical investment time horizons, that is, expected holding periods. (All investors expect to hold their investments for the same time period. This means that there is no distinction among investors between day traders, short term investors, or long term investors.)
- All investors have identical expectations about such variables as expected rates of return and how capitalization factors are generated. (Every investor expects the same rate of return—give me a break!)
- There are no investment related taxes or transaction costs. (Come on—Uncle Sam is not going to tax us and Merrill Lynch is not going to charge for the transactions. Does this sound like? Or what?)
- Relative price volatility (beta) is a modifier of equity market risk and required return. (And this means what?)
- The rate received from lending money is the same as the cost of borrowing money. (Tell that to Big Tony on the Sopranos, or even more ridiculous, tell it to Chase Manhattan Bank!)
- The market has perfect divisibility and liquidity. (And I believe in the tooth fairy and Santa Claus.)

Obviously, the underlying assumptions that enter into CAPM can be considered to be somewhat silly. In a litigation situation, have your client's attorney cross examine the opposing expert about these assumptions. The judge or jury can always use a good laugh.

The CAPM is used to derive an equity discount rate that is attributable to net cash flow. It is not intended to be applied to invested capital (debt and equity), nor is it intended to be applied to earnings. Because future returns and betas cannot be measured, historical data must be used as a surrogate.

To add a little bit more uncertainty to your life, betas can be unlevered and relevered. Because public companies may have different capital structures than the private company being appraised, better comparability can be achieved by jumping through hoops. This is done for reasons similar to why we value invested capital rather than equity. In case you are going through withdrawal and need a formula fix, you can unlever a beta using what has been called the *Hamada formula* as follows:

$$\text{Unlevered Beta} = \frac{\text{Levered Beta}}{1 + ([\text{Debt/Equity}] * [1 - \text{Tax Rate}])}$$

The levered beta is the beta that you would look up. This means that it is based on the public company's actual capital structure, which includes both debt and equity. After you unlever the beta, you then get to relever it using a different capital structure. The formula to relever the beta is as follows:

$$\text{Levered Beta} = \text{Unlevered Beta} * (1 + [\text{Debt/Equity}] * [1 - \text{Tax Rate}])$$

As with any theory, even the Hamada formula has come under scrutiny during the last few years. According to Roger Grabowski and Shannon Pratt:

The Hamada formulas are consistent with theory that:

- Discount rate used to calculate the tax shield equals the cost of debt capital (i.e., the tax shield has same risk as debt).
- Debt capital has negligible risk that interest payments and principal repayments will not be made when owed which infers tax deductions on the interest expense will be realized in the period in which the interest is paid (i.e., beta of debt capital equals zero).
- Value of the tax shield is proportionate to the value of the market value of debt capital (i.e., value of tax shield).

- But the Hamada formulas are based upon Modigliani and Miller's formulation of the tax shield values for constant debt. The formula is not correct if the assumption is that debt capital remains at a constant percentage of equity capital (equivalent to debt increasing in proportion to net cash flow to the firm in every period).<sup>16</sup> The formulas are often wrongly assumed to hold in general.<sup>17</sup>

This is starting to get too complicated. I suggest that you buy the 3rd edition of *Cost of Capital: Estimation and Applications* to read more about this topic. The authors discuss alternatives to the Hamada formula.

Before we write off this method, it should be noted that many valuation analysts still use it in practice. Therefore, because little of this stuff makes sense without an example, let's do one.

XYZ Corp. has interest-bearing debt that represents 25 percent of the market value of invested capital for the company. The primary competition in the public world has levered betas that average 1.2. Their average debt-to-equity relationship (considered optimal) is 0.6. The unlevered beta can be calculated as follows:

$$\begin{aligned}\beta_U &= \beta_L / (1 + [(Debt/Equity)]*[1 - Tax Rate]) \\ \beta_U &= 1.2 / (1 + [0.6]*[1 - .40]) \\ \beta_U &= 0.88\end{aligned}$$

Now that we have unlevered the beta, the next step is to relever the beta. Why do we do this? We relever the beta to capture the debt-to-equity relationship of the subject company. This allows a better calculation of the volatility risk (beta) taken from the public guideline companies by incorporating the closely held company's capital structure into the determination of the discount rate. Relevering the beta for the subject company is done as follows:

$$\begin{aligned}\beta_L &= \beta_U*(1 + [Debt/Equity]*[1 - Tax Rate]) \\ \beta_L &= 0.88*(1 + [.25/.75]*[1 - 0.40]) \\ \beta_L &= 1.06\end{aligned}$$

Now, hold that thought and we will use this stuff some more when we talk about the weighted average cost of capital.

## Adapting CAPM for the Closely Held Business

Getting back to the real world requires a valuation analyst to modify the CAPM if it is to be used for the valuation of a closely held company. Remember that this model was developed for use in portfolio analysis and not business valuation. The assumption of a well-diversified portfolio that eliminates unsystematic risk is a poor assumption. The owner of a closely held company can rarely diversify away the risk element of the closely held business being the major investment in his or her portfolio. Therefore, the CAPM formula is generally modified for the valuation of closely held companies as follows:

$$\begin{aligned}k_e &= R_f + \beta(R_m - R_f) + \alpha \\ \alpha &= \text{Alpha, unsystematic risk (specific company)}\end{aligned}$$

The alpha may be a specific company risk adjustment or an adjustment for size, or both. Because the CAPM assumes a diversified portfolio, an additional factor that is specific to the investor in a closely held company should be considered. For that investor, the closely held company may be the largest investment of his or her lifetime, and there may not be any diversification. Therefore, unsystematic risk, which was assumed to be diversified away in the original CAPM equation, may be a factor in the discount rates of closely held companies.

<sup>16</sup> Enrique R. Arzac and Lawrence R. Glisten. "A Reconsideration of Tax Shield Valuation." *European Financial Management* (2005): 453–461

<sup>17</sup> Shannon Pratt and Roger Grabowski. *Cost of Capital: Estimation and Applications*, 3rd edition (New York: Wiley, 2008).

The size premium should vary depending upon the size of the appraisal subject. The discount rates for small companies are generally higher than those for large ones, despite the fact that the betas of smaller companies are often lower than those of larger companies. Smaller companies tend to trade less often, which ultimately leads to lower betas. However, many smaller companies can have tremendous illiquidity premiums.

Before we go any further, let's spend some time on the D&P study, particularly applying it to the size premium for use in CAPM. Table 11.5 provides an example of a table in the *B* category from the D&P study.

**TABLE 11.5**  
**EXHIBIT B-1 D&P STUDY**

<b>Portfolio Rank By Size</b>	<b>Average Market Value (\$ Million)</b>	<b>Log of Size</b>	<b>Beta (SumBeta) Since '63</b>	<b>Arithmetic Average Return</b>	<b>Arithmetic Equity Risk Premium</b>	<b>Indicated CAPM Premium</b>	<b>Premium Over CAPM</b>	<b>Smoothed Premium Over CAPM</b>
1	96,796	4.99	0.90	11.87%	4.67%	4.33%	0.34%	-1.69%
2	26,818	4.43	0.93	12.13%	4.93%	4.46%	0.46%	-0.09%
3	14,912	4.17	0.97	10.83%	3.63%	4.67%	-1.04%	0.64%
4	10,930	4.04	0.98	12.84%	5.64%	4.69%	0.94%	1.02%
5	8,014	3.90	0.96	13.28%	6.08%	4.64%	1.45%	1.41%
6	5,996	3.78	1.03	14.19%	6.99%	4.94%	2.05%	1.77%
7	4,872	3.69	1.02	14.93%	7.73%	4.91%	2.83%	2.03%
8	3,745	3.57	1.09	14.34%	7.14%	5.23%	1.90%	2.36%
9	3,185	3.50	1.09	15.28%	8.08%	5.23%	2.85%	2.56%
10	2,758	3.44	1.10	14.52%	7.32%	5.28%	2.04%	2.74%
11	2,441	3.39	1.09	15.33%	8.13%	5.26%	2.87%	2.89%
12	2,121	3.33	1.11	15.07%	7.87%	5.33%	2.54%	3.06%
13	1,845	3.27	1.09	13.84%	6.64%	5.26%	1.39%	3.24%
14	1,588	3.20	1.14	16.08%	8.88%	5.46%	3.41%	3.42%
15	1,382	3.14	1.14	15.65%	8.45%	5.50%	2.95%	3.60%
16	1,117	3.05	1.14	17.56%	10.36%	5.46%	4.90%	3.86%
17	1,025	3.01	1.21	17.47%	10.27%	5.82%	4.45%	3.97%
18	870	2.94	1.20	16.88%	9.68%	5.78%	3.90%	4.17%
19	736	2.87	1.24	16.81%	9.61%	5.98%	3.63%	4.38%
20	626	2.80	1.27	17.80%	10.60%	6.12%	4.48%	4.58%
21	541	2.73	1.26	18.03%	10.83%	6.08%	4.75%	4.76%
22	436	2.64	1.27	17.64%	10.44%	6.12%	4.32%	5.03%
23	326	2.51	1.24	18.04%	10.84%	5.97%	4.86%	5.39%
24	225	2.35	1.28	19.37%	12.17%	6.15%	6.02%	5.86%
25	76	1.88	1.30	23.32%	16.12%	6.25%	9.87%	7.20%
High Financial Risk			1.62	21.73%	14.53%	7.81%	6.73%	
Large Stocks ( <i>SBB</i> / Data)				12.01%	4.81%			
Small Stocks ( <i>SBB</i> / Data)				17.67%	10.47%			
Long-Term Treasury Income (Ibbotson SBBI Data)					7.20%			

(Source: Duff & Phelps *Risk Premium Report 2006*. Copyright ©2006 Duff & Phelps, LLC. Derived from data from the Center for Research in Security Prices, Graduate School of Business, The University of Chicago. All rights reserved. Reprinted with permission.)



Table 11.5 reflects a sample of the eight metrics that are contained in the D&P study. If you notice, CAPM is used to help determine the size premium for each of the percentiles. This means that the size premium, as determined in this table, is the excess over the CAPM. D&P also provides data from *SBB* on these tables so that you can use them in applying CAPM. Let's do an example and try to make sense out of this stuff.

Let's assume the following:

$$\begin{aligned} R_f &= 5.00\% \text{ at valuation date} \\ \beta &= 0.90 \text{ (median of guideline companies)} \\ \text{ERP} &= 4.81\% \text{ (12.01\% - 7.20\% from D\&P table)} \\ \alpha &= 2.00\% \end{aligned}$$

Further, assume that the smoothed premium over CAPM for the 25th percentile for each of the eight metrics results in an average of 7.30%. Calculate the cost of equity using CAPM.

$$\begin{aligned} k_e &= R_f + \beta(R_m - R_f) + \alpha \\ k_e &= 5.00\% + [0.90 \times 4.81\%] + 7.30\% + 2.00\% \\ k_e &= 18.63\% \end{aligned}$$

What did we just do? We multiplied the ERP, calculated as the difference between the large company stocks and the income returns from long term treasury bonds, by the median beta, determined from guideline companies. We added the risk free rate to this at the valuation date, the average size premium from the D&P study, and the specific company risk premium. If the subject company is smaller than the 25th percentile, you can apply the same type of analysis as presented earlier in this chapter to get a more applicable size premium. Notice, however, that this is only applicable to size in this instance, because the ERP is handled separately.

The specific company adjustment is based on the valuation analyst's judgment. The factors used to make this adjustment are similar to those that are used for selecting market multiples. The difficulty with this adjustment is determining how much weight to put on the risk of achieving the forecasted growth. In the market approach, you can at least look at the guideline companies' earnings estimates to get an idea of short term growth rates. In the derivation of a discount rate, particularly from the overall market, it is considerably more difficult.

## OTHER METHODS FOR ESTIMATING A DISCOUNT RATE

There are several alternatives to the build up and CAPM methods. I like the dart board approach: throw a dart and pick a discount rate. Although this book cannot possibly cover every alternative, I want to discuss some of the more common methods of deriving a discount rate. More often than not, the same methods are used to develop capitalization rates. I will get to capitalization rates soon. Remember that the difference between discount rates and capitalization rates is the long term sustainable growth factor. Some of the alternatives include the following:

- Price to earnings reciprocal plus growth
- Factor rating method
- Weighted average cost of capital

### Price to Earnings Reciprocal Plus Growth

One of the methods used to calculate a discount rate is to take the reciprocal of an industry-specific price to earnings ratio from the market (this provides a capitalization rate) and add the expected growth rate of the returns attributable to the guideline companies. This is said to be a market-derived rate, because the price to earnings ratios will be determined from guideline companies. Because an earnings to price ratio is the same as a capitalization rate, the long term sustainable growth must be added to the result to move from a capitalization rate to a discount rate. Mathematically, the formulas would look like this:



$$k - g = c$$

$k$  = Discount rate  
 $g$  = Growth (long term sustainable)  
 $c$  = Capitalization rate

Therefore, moving around the components of this formula results in the following:

$$c + g = k$$

If the valuation analyst uses this method, please remember that the result is a discount rate that is applicable to net income and not cash flow. Because the price to earnings ratio uses earnings and not cash flow, the result will be an earnings-based capitalization rate that is then converted to an earnings-based discount rate. Be careful to remain consistent (apples to apples, not apples to bananas—we do not want a fruit salad).

The difficulty in applying this method is figuring out what the market's expectations are for long term sustainable growth and this growth is reflected in the market price of the stocks, but it is not published anywhere. Some valuation analysts will turn to industry data to come up with this expected growth rate. In practice, I have found that the rates published for industries are short term (maybe a few years), not long term. This makes this method difficult to use.

Let me give you an example. Let's assume you find public companies that are in the industry of the subject company. The average or median (for those who want to be statistically better) price to earnings multiple of these companies is 25 to 1. This means that these public companies are currently trading at 25 times earnings. The mathematical inverse, or capitalization rate, implied by the market can be stated as follows:

$$1/25 = .04 \text{ or } 4\%$$

If you refer to *Cost of Capital Quarterly*, you can find out what they have reported as the median discount rate for the specific two- or three-digit Standard Industrial Classification code based on the different methods they use to calculate it. More often than not, the discount rate for equity will fall in the range of  $\pm 15$  percent. If this were the case, the implied growth rate, which would be the difference between the discount rate and the capitalization rate, would be about 11 percent. The problem with this picture is a simple one. A company cannot possibly grow at an 11 percent rate into perpetuity or it will eventually exceed the gross domestic product of the world. Long term sustainable growth cannot exceed the rate of inflation and population growth. Even if short term growth is high, the present value of this growth into perpetuity cannot be that high.

## Factor Rating Method

Another way of determining a discount rate is known as the factor rating method. This is very similar to what was described earlier from the Frank Evans article. This method tends to be more popular among business brokers than among valuation analysts. However, this method is not much different from the build up method. In the factor rating method, the specific company risk premium is broken down into numerous factors. Each factor is given a weighting. These weightings will vary depending upon the valuation analyst, but they generally range from zero to three. The factors may include the location of the business, financial performance, management, liquidity, and so forth. In case you have not recognized these factors, they are all of the items that the valuation analyst should be considering in the risk analysis of the company. Frequently, the use of this method is for the determination of a capitalization rate (not a discount rate) to be applied against seller's discretionary cash flow.

There is nothing empirical about the zero to three range for the factors. It is judgment. That's right, judgment. As a matter of fact, it is subjective judgment. As valuation analysts, it is our job to be objectively subjective. Be very careful if you plan to use this method. I personally do not think that it is very good to use for anything more than factors to consider in determining specific company risk.

## Weighted Average Cost of Capital

The next method for determining a discount rate is known as the weighted average cost of capital (WACC). (I used to think that this business was wacky! I do not think that anymore. Now I know it! But before you quote me out of context, this is a generally accepted methodology for determining a discount rate to be applied to an invested capital benefit stream.) The WACC is a combination of (1) the required rate of return on the equity of the company and (2) the required rate of return on the debt of the company. The WACC is used when the valuation analyst values the invested capital of the appraisal subject (invested capital = debt plus equity).

The theory behind a WACC is simple. Because a company is financed partly with debt and partly with equity, the return on investment should consider the risk of each element. Because the business owner is not directly responsible for the debt (assume no personal guarantee), the bank, not the business owner, is the one that is at risk for that portion of the invested capital. Therefore, if the benefit stream comprises part debt and part equity, it would seem logical that the risk is reduced on the overall capital for the investors.

However, the business owner is completely at risk for the money that he or she invests in the business. This money should command a higher return because of the increased risk associated with that portion of the invested capital. So what does this all mean?

The WACC is determined using the following formula:

$$(k_e \times W_e) + (k_d[1 - t] \times W_d)$$

$k_e$  = Required rate of return for the company's equity capital (discount rate)

$k_d$  = Company's cost of debt capital (borrowing)

$W_e$  = Percentage of equity capital in the company's capital structure

$W_d$  = Percentage of debt capital in the company's capital structure

$t$  = Company's effective income tax rate

Pretty ugly, isn't it? Once again, this looks more complicated than it really is. Exhibit 11.4 contains a demonstration of the calculations.

### EXHIBIT 11.4 APPLICATION OF THE WACC

Assume that after the valuation analyst analyzes the company, its industry, and other pertinent factors, it is determined that the company's required rate of return on equity is 20 percent. The company is borrowing money from its bank at 9 percent. The company's effective tax rate is 40 percent. The company's condensed balance sheet looks like this:

Assets		Liabilities and Equity	
Current assets	\$ 500,000	Current liabilities	\$ 200,000
Fixed assets (net)	725,000	Long-term debt*	300,000
Other assets	175,000	Equity	900,000
<b>Total</b>	<b>\$1,400,000</b>	<b>Total</b>	<b>\$1,400,000</b>

\*Long term debt contains all of the debt on the balance sheet. The short-term portion of the long term debt would also be included in the calculation below.

Based on these facts, the weighted average cost of capital would be calculated as follows:

$$\begin{aligned} & (k_e \times W_e) + (k_d[1 - t] \times W_d) \\ & (.20 \times .75) + (.09[1 - .40] \times .25) \\ & .15 + .01 = .16 \end{aligned}$$

Capital structure:

$$\text{Debt: } \$300,000 + \text{Equity: } \$900,000 = \text{Total: } \$1,200,000$$

Exhibit 11.4 contains a technical error. The WACC calculation is generally based on the market value of the debt and equity. For closely held companies, we are generally valuing the equity. Therefore, this contains circular logic. We need to know the answer to get the answer! For the WACC to truly work, the theory indicates that we should allocate the cost of capital for the invested capital based on the market value of the debt and equity. If we knew the answer to these questions, why would we need to do any other calculations? We would already have the value of the subject company. For guideline companies, this works. For closely held companies, we make assumptions.

If the company has preferred stock, as well as common, the formula would be modified to include the preferred stock as part of the capital structure. The formula would look something like this:

$$(k_e \times W_e) + (k_p \times W_p) + (k_d[1 - t] \times W_d)$$

$k_p$  = Cost of capital for the preferred stock  
 $W_p$  = Weight of the preferred stock in the capital structure

Now imagine if you have class A common and class B common, among others. You can have one heck of an equation if you choose to!

Regardless of the number of classes and types of stock in the capital structure, one of the questions that arises time and time again is—what capital structure should be used in the WACC equation? Should it be the actual capital structure of the subject company, or should it be the normal capital structure of the industry? There are valid arguments for both alternatives if the interest being valued is a controlling interest. A minority interest cannot change the capital structure of the business, whereas the controlling interest can. This means that consideration should be given to the ability of the willing buyer to change things.

In a smaller business, it is not unusual to see much more debt as a percentage of the capital structure. This is usually because the small company is undercapitalized and depends on debt to make up the difference. However, the small business owner frequently must guarantee this debt and must possibly use his or her residence or other belongings as additional security for the lender. In this instance, the debt starts to take on the attributes of equity because of the risk of personal loss to the owner. This could be justification for using a discount rate that is higher than the conventional WACC but lower than the discount rate for pure equity. Once again, common sense and good judgment must be applied on a case-by-case basis.

Because I promised you that we would use the levering and unlevering example again, let's do it. Assume that the controlling stockholder of XYZ Corporation is planning to gift a minority interest to his child. Let's calculate a WACC using CAPM with the information from the previous example along with the following: 20 year risk free rate = 6%; ERP = 7%; size premium = 5%; tax rate = 40%; borrowing rate = 10%; company-specific risk = 4%.

$$(k_e \times W_e) + (k_d[1 - t] \times W_d)$$

Let's calculate the discount rate ( $k_e$ ) = 6% + (7% × 1.06) + 5% + 4% = 22.42%. The 1.06 is the levered beta from the earlier example. A minority interest cannot change the capital structure, so the actual levered beta is used along with the actual capital structure for XYZ Corporation, which provides a WACC as follows:

$$(22.42 \times 75\%) + (10.00[1 - .40] \times 25\%)$$

$$16.82 + 1.5 = 18.32\%$$

The weights of 75 percent and 25 percent were based on the company's actual capital structure, which was given as 25 percent interest-bearing debt. If a control buyer came along, the WACC would be calculated as follows:

$$(22.42 \times 40\%) + (10.00[1 - .40] \times 60\%)$$

$$8.97 + 3.60 = 12.57\%$$

The weights given to the debt and equity are now based on the optimal capital structure that was given earlier based on the guideline companies.

## Blended Methods

Another method of determining a discount rate is to create a blending of the rates of return that would be required on the various assets employed in the business (cash, accounts receivable, inventory, plant property and equipment, and intangible assets, among others). Liabilities would have to be considered as well in this analysis. The concept is similar to the WACC.

Investment return requirements can also be used, but generally by inference only. An example of this would be what a venture capitalist may require in a given situation. Venture capitalists base their rates on the risk associated with the venture capital, but they generally also consider an exit strategy in a reasonable number of years. This exit strategy may include a public offering or a management buyout.

Other methods that result in a discount rate for net cash flow include the arbitrage pricing model and the dividend yield plus growth model. Because neither of these models will be used in the valuation of small and medium sized businesses, this discussion ends here.

Regardless of the rate of return selected, it must be correlated with the risk inherent in the subject and, most important, produce a result that makes sense.

## CAPITALIZATION RATES

A capitalization rate is the rate used to convert a benefit stream for a single period into an indication of the fair market value of the property that is its source. This rate is the required rate of return for an income-generating asset from which anticipated growth has been subtracted. As discussed previously, a capitalization rate is a discount rate minus growth. This is expressed as follows:

$$c = k - g$$

In this equation,  $g$  represents long term sustainable growth (not next year's growth). Capitalization rates, similar to discount rates, are determined by the market based on the duration and risk of the investment. They vary with time, even for the same investment, and are sensitive to, and incorporate, long term inflationary expectations.

Capitalization rates also consider the risk that generally resides in the market, and they must be adjusted to allow for the risk that is specific to the appraisal subject. Capitalization rates are founded on the principle of substitution, because they are based on the yields available on alternative investments. They will also depend on the nature of the benefit stream being capitalized (operating income, income before taxes, net income after taxes, dividends, or cash flow).

A capitalization rate is frequently derived from the appraisal subject's discount rate. It is used primarily as a divisor to determine value. The basis of the relationship between the discount rate and the capitalization rate is the assumption that the business has a perpetual life and its annual growth will be constant. The relationship is expressed as follows:

$$\text{Discount rate} - \text{Growth rate} = \text{Capitalization rate}$$

Mathematically, the discount and capitalization rates used in the multi-period and single period models discussed in chapter 10 will result in the same conclusion. What is effectively being done in these models is the removal of growth from the numerator (top) and denominator (bottom) of the equations. I also discussed this math stuff in the last chapter.

A simple mathematical proof follows. Assume that during an appraisal, the forecast benefit stream for next year was \$110 and was expected to grow each year by 10 percent. Assume a 25 percent discount rate. A multi-period model would result in the present value being calculated for the earlier years as follows:

$$PV = \frac{110}{(1+.25)^1} + \frac{\frac{[110 \times 1.10]}{[.25 - .10]}}{(1+.25)^1}$$

$$PV = 88 + 645$$

$$PV = 733$$

As a reminder, the terminal value grows the last year of the forecast period to the following year ( $110 \times 1.10$ ). This result is then capitalized by the discount rate minus long term sustainable growth ( $.25 - .10$ ). That result is then discounted to present value using the same present value factor as the last year of the forecast period  $(1 + .25)^1$ . (Assume end-of-year convention.)

If the 10 percent sustainable growth were taken out of the numerator and the denominator, we would have a single period capitalization model, as follows:

$$PV = \frac{110}{.15}$$

$$PV = 733$$

Capitalization rates can also be directly derived from the market without calculating a discount rate. Methods of calculating this rate will be discussed later in this chapter. For the time being, let's concentrate on the basic formula. The valuation analyst must use informed judgment in selecting the appropriate growth rate. The company's historical growth, the projected growth of the industry, and many other factors (including, but not limited to, management goals, the ability to achieve desired growth, and borrowing power) should be considered in the determination of the growth rate. The rate should reflect long term, sustainable growth rather than what is projected for the short term.

An exceptionally high growth rate may not be achievable over the long run. Experts in finance generally expect the long term growth of a company to average from 3 percent to 5 percent, generally not much more than the rate of inflation. A company can only grow so much. However, the long term growth rate should reflect the present value of the growth. This means that if short term growth is expected to be higher, the long term growth rate's present value may be greater than the 3 percent to 5 percent mentioned in the books.

The selection of growth rates is a part of the appraisal that requires the valuation analyst to tie several other parts of the valuation assignment together. The valuation analyst should consider the economic environment and industry outlook in determining the impact of the macro environment of the company on future growth in addition to historic growth and management's expectations of future growth. Finally, do not forget that a company can only grow so much before competitive forces enter to partake of the future growth.

## FACTORS AFFECTING THE SELECTION OF THE CAPITALIZATION RATE

The factors considered for the determination of capitalization rates should be similar to those considered for the determination of discount rates. These include the external factors (those that management has no control over) and the internal factors (those that management has the ability to control). There is little need to go over these factors again. However, do not minimize their importance.

Because capitalization rates are used in a single period model, the rate of growth assumed must be one that could reasonably be expected to be sustained indefinitely. The investment horizon for a closely held business is generally presumed to be long term in nature, and, therefore, the assumption to be made is that the single benefit stream being capitalized will continue forever. What is the likelihood of a business growing at 25 percent per year indefinitely? Pretty slim! A small business would become a large business in no time at all if that were the case. With such rapid growth, the local hardware store would become The Home Depot. I don't think so! All businesses are subject to cycles, as is life (rapid growth, slow growth, stagnation, and death). Therefore, the growth rate assumed in any valuation must take into consideration the existing state of maturity of the subject company.

## SOURCES OF DATA ON CAPITALIZATION RATES

The ideal source of data for capitalization rates is the public (or private) market for corporate securities. However, if the valuation analyst is able to locate transactions that can be used in the determination of capitalization rates, the market approach, and not the income approach, would be used. For example, assume that the following transactions were located from the public market:

Sales price	\$10,000,000	\$5,000,000	\$20,000,000
Net income	2,500,000	750,000	4,000,000
Cash flow (net)	2,000,000	500,000	3,000,000
Revenues	20,000,000	15,000,000	48,000,000

This information could be used to calculate the implied capitalization rates that were the results of actual transactions. This makes merger and acquisition data useful. The implied capitalization rate is as follows:

Net income	25%	15%	20%
Cash flow (net)	20%	10%	15%
Revenues	200%	300%	240%

In chapter 8, I discussed the calculation of pricing multiples using this data, which can also be used in the determination of capitalization rates for the income approach. However, merger and acquisition transaction data must be carefully scrutinized, because it may embody elements of control as a result of the acquisition. The prices paid for the acquisition may also include a premium based on the expected synergies for the acquirer.

The transaction data derived from the public market is generally an indication of the value of stockholders' equity. This means that capitalization rates for use with invested capital benefit streams must incorporate assumptions regarding typical capital structures (debt and equity), not necessarily the actual structure of the subject company, because the public companies are more likely to have a better debt-to-equity relationship than the smaller, closely held company. This could require the valuation analyst to make certain adjustments to compensate for the different risk of the appraisal subject because of its particular capital structure. This problem is reduced if the merger and acquisition data come from private company transactions of similarly sized companies.

On occasion, the valuation analyst will locate transactions in an industry that has a considerable amount of merger and acquisition activity. When transactions occur in an industry that is "hot," the capitalization rates reflected in the prices paid may have limited applicability. There may be so much anticipated growth in this industry that the capitalization rates may not make any sense. For example, if high price to earnings multiples are being paid for companies (say, 105 times the earnings), the implied capitalization rate would be less than 1 percent. We could rarely, if ever, use this type of information for the closely held company.

The opinions of authors, experts, and others with special insight into the market may be used to develop capitalization rates. This is a dangerous practice, however, because the rates referred to in the writings are usually based on the individuals' own experiences. Without knowing the facts and circumstances of the particular situations, it is impossible to rely on someone else's experience.

The valuation analyst should also be aware of current and evolving case law, particularly if the appraisal will be used in a litigation. However, it is a common error to try to apply an old case to a current situation (sort of like putting a square peg in a round hole), because the times and facts are different.

The information maintained in the market data file of the Institute of Business Appraisers, BizComps, Pratt's Stats, Done Deals, and even possibly Thomson Financial M&A are other sources for determining capitalization rates. This information can allow the valuation analyst to determine the capitalization rates for various levels of benefit streams based on the available information in the databases. The same caution must be applied as was discussed in chapter 8, but this information is considerably better than trying to create your own capitalization rate from scratch.

Other, less sophisticated methods for determining capitalization rates include variations on the build up method. These methods assign a factor to various risk elements in order to derive a capitalization rate. This is similar to the factor rating method discussed previously.



The capitalization rate must be derived by a method that matches it to the benefit stream being used. Depending upon the method used to derive the capitalization rate, the result will be applicable to a particular benefit stream. For example, if the CAPM is used, the discount rate is applicable to net cash flow. Subtracting long term sustainable growth would result in a capitalization rate that is applicable to net cash flow.

The build up method will result in either a discount rate or a capitalization rate for numerous benefit streams, depending upon the source of the information used to perform the build up. Other benefit streams (such as net income) may be used, but the discount rate must be adjusted from what was derived by the cash flow methods. This is accomplished by adding a premium (not to be confused with a control premium) to the rate derived for cash flow in order to compensate for the additional risk related to the other benefit stream. A capitalization rate for earnings does not equal a capitalization rate for net cash flow, because earnings do not generally equal net cash flow.

The relationship of the discount rate derived for different benefit streams is based on the amount of risk that is implied in the benefit stream being used by the valuation analyst. In theory, net cash flow is the cash available to the common stockholders; therefore, it has taken into consideration items such as working capital needs, fixed asset requirements, and long term debt repayments and borrowings. The more confidence the valuation analyst has after considering all of these factors, the lower the discount rate.

Many experienced valuation analysts have written that the range most often seen in practice between the rate used for net cash flow and net earnings is approximately 3 percent to 6 percent. This does not mean, however, that this range is an absolute and should always be used. In a master's thesis titled "Empirical Research Study of Rates of Return on Earnings and Cash Flow,"<sup>18</sup> Joseph A. Agiato, CPA, CBA, ASA, indicates that his study confirms the 3 percent to 6 percent rule of thumb.

In general, the higher the net cash flow discount rate, the higher the net income discount rate premium, assuming all other factors are the same. A high cash flow discount rate indicates that there is a degree of risk driving the rate up. Because earnings consider fewer factors than cash flow does, there is a normal tendency to believe that the rate for earnings should be higher. The higher the forecast growth rate, the higher the net income discount rate premium, assuming all other factors are the same.

High growth reflects its own element of risk in the subject company's ability to remain profitable as it incurs new levels of fixed and variable costs that are attributable to growth. If the valuation analyst has derived a high net cash flow discount rate at the same time that there is expected high growth, then the net income discount rate premium would be pushed higher than the 3 percent to 6 percent range mentioned previously (sometimes much higher). Low growth would keep the net income discount rate premium above zero, but at the lower end of the 3 percent to 6 percent range.

## DERIVING DISCOUNT AND CAPITALIZATION RATES APPLICABLE TO NET INCOME DIRECTLY FROM THE MARKET

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The inverse of the price to earnings ratio is the earnings to price ratio, which is a capitalization rate applicable to net income (where "earnings" are defined as "net income"). To get a discount rate, the valuation analyst must approximate growth and add that growth to the earnings to price ratio. The difficult part is establishing the proper amount of growth based on the market price to earnings multiples. Rarely in the financial information about the guideline companies selected do we find growth rates other than those being forecast by the analysts. We would need the actual growth implicit in the price of the stock in order to be more accurate. Assuming that we could figure out the growth that is implied in the price to earnings multiples of the guideline companies, discount rates would be easier to calculate.

The earnings to price ratio is directly observable in the market, which provides the valuation analyst with solid empirical evidence about the capitalization rate, but we must still estimate the growth rates to achieve a discount rate for those same earnings. Expected growth rates for specific public companies appear in *Value Line Investment Survey* (available at [www.valueline.com](http://www.valueline.com)), but they are short term growth rates. We need a long term sustainable growth rate, which means that the Value Line growth rates will probably be of limited help.

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<sup>18</sup> This thesis is on file at Lindenwood College, St. Charles, MO.



A possible alternative to derive growth for the public companies requires us to assume that over the long term, the dividend payout equals the total cash return on an equity investment. This means that dividends would be growing at the same rate as earnings, indicating a constant payout ratio. In this instance, the capitalization rate for net cash flow would be equal to the dividend yield. If this were the case, the discount rate for net cash flow minus growth would equal dividend yield. Therefore, the discount rate for net cash flow based on the dividend yield would be available in newspapers.

## BACK TO THE REAL WORLD

In case you need a touch of reality, capitalization rates, like discount rates, are market driven. However, there is really very little information available to help valuation analysts determine the correct rate in valuing smaller companies. Let's keep in mind that our role as valuation analysts is not to determine discount and capitalization rates, but rather to provide a conclusion about the valuation of the appraisal subject. Regardless of the method used to derive these rates, the answer has to make sense. The principle of substitution alerts valuation analysts to the fact that the rates should be relevant to other rates in the marketplace, given the risk of the appraisal subject. But there are no tables, charts, or gurus to help ensure a correct rate.

What we do know is that the discount or capitalization rate selected by the valuation analyst should match the benefit stream being discounted or capitalized. It is theoretically incorrect to use the same rate for different streams, because each stream will have a different degree of risk. We also know that the rate will be risk driven. This means that a small closely held company with no depth in management, in poor financial condition, with no borrowing capacity, and with a high degree of dependence on a single customer has enough risk that the appropriate rate should be way up there.

As I have examined the transactions for smaller closely held companies, the general range of multiples that I have seen in the majority of cases is from one to three times owner's discretionary cash flow. Discretionary cash flow is the amount of money that the owner of the business has available for him or her before a deduction is made for owner's compensation. This equates to a capitalization rate ranging from 33 $\frac{1}{3}$  percent to 100 percent for this income stream. Therefore, if this is the market, shouldn't we, as valuation analysts, use this information? Subtracting a reasonable level of owner's compensation (and possibly either depreciation or a reserve for the replacement of assets) would result in a pre-tax income stream. This pre-tax stream would be capitalized at a rate that is less than the multiple used for the owner's discretionary cash flow, because the risk of the amount being capitalized is reduced by subtracting one or two additional items in deriving the pre-tax income. This is similar to the net cash flow model discussed in Chapter 10. Exhibit 11.5 illustrates this concept.

### EXHIBIT 11.5 DISCOUNT AND CAPITALIZATION RATES

Assume that ABC Corporation has the following forecast net cash flow:

Normalized net income	\$150,000
Plus: Non-cash charges	+ 25,000
Minus: Fixed asset additions	– 65,000
Minus: Working capital additions	– 10,000
Plus: Change in debt	+ 20,000
Net cash flow	<u>\$120,000</u>

**EXHIBIT 11.5**

Now assume that the discount rate for the equity of ABC Corporation was determined to be 24 percent using the build up method, based on Morningstar data. Also assume that the long term sustainable growth rate is assumed to be 5 percent. What is the discount rate for net cash flow? What is the capitalization rate for net cash flow? What about for net income?

Discount rate for net cash flow	24%*
Less: Long term growth	5%
Capitalization rate for net cash flow	19%

To convert the discount and capitalization rates for use with earnings instead of cash flow, the following mathematical calculations can be performed:

$$\begin{aligned} \text{Normalized net income} \div \text{Net cash flow} & (150,000 \div 120,000) = 1.25 \\ \text{Discount rate for earnings} & (24\% \times 1.25 = 30\%) \\ \text{Capitalization rate for earnings} & (19\% \times 1.25 = 23.75\%) \end{aligned}$$

\*Using Morningstar data results in a discount rate for net cash flow since the total return (dividends and capital appreciation) is measured in the Morningstar equity risk premium.

A few observations can be made about the example in exhibit 11.5. The first observation is that there is supposed to be a relationship between the rates used for the benefit streams capitalized or discounted. In this example, the discount rate for net cash flow was used as a basis to calculate the discount rate for net income. The mathematical relationship between these two elements was used to adjust the original rate that was determined. Wouldn't it be just grand if the world was this simple? Unfortunately, it is not.

The mathematical relationship does not always work in practice. If a multi-period model is going to be used by the valuation analyst, each year's net income and cash flow would have to be used to calculate a different discount rate for each year. Can you imagine making a discounting model more complicated than it already is? This example also does not work for the calculation of a capitalization rate for excess earnings. I know this because I have tried to use it!

The second observation is that the capitalization rate for net income was calculated by multiplying the mathematical factor against the capitalization rate for net cash flow. Those of you who really read this book are probably wondering why I did not just subtract the 5 percent long term growth from the discount rate for earnings (30 percent), resulting in a capitalization rate of 25 percent. This is because the long term growth rate must also change based on which benefit stream is being used. The 5 percent growth rate is applied to net cash flow, not net income. This is why the capitalization rate for net income was 23.75 percent instead of 25 percent.

Once again, what I am saying is that the process is not perfect. There are only two factors that you can use to determine the appropriate rates in any valuation: common sense and good judgment!

## USING PRETAX OR AFTER TAX RATES

Although the issue of whether to use pretax or after tax income streams and capitalization rates is one of the points that creates much confusion among lawyers and judges, the resulting value for the appraisal subject should be the same regardless of whether pretax or after tax income is used in the valuation. The capitalization rate will be adjusted depending on which income stream is used. Exhibit 11.6 contains an example that should illustrate this point.

### EXHIBIT 11.6 PRETAX OR AFTER TAX?

Assume that the value of Smith Corporation is being determined using a capitalization of income method. Smith has a forecast pretax income of \$100,000 and an after tax income of \$65,000 (assumes a 35 percent tax rate). If the valuation analyst has determined that the appropriate capitalization rate based on pretax information in the market was 20 percent, the valuation calculation would be as follows:

	<b>Pretax</b>	<b>After Tax</b>
Forecast income	\$100,000	\$ 65,000
Capitalization rate	÷ 20%	÷ 13%
<b>Estimated value</b>	<b>\$500,000</b>	<b>\$500,000</b>

If the value of the business was estimated to be \$500,000 using a 20 percent capitalization rate derived from the market on a pre-tax basis, then the value on an after tax basis should be the same. If the numerator is changed from \$100,000 (pre-tax) to \$65,000 (after tax), the denominator (capitalization rate) must be changed by the same methodology. Mathematically, this can be explained by the following formula:

$$C_p \times (1 - t) = C_a$$

where

$C_p$  = Pretax capitalization rate

$t$  = Effective tax rate

$C_a$  = After tax capitalization rate

This results in the following:

$$20\% \times (1 - 35\%) = 13\%$$

The example in exhibit 11.6 should help you to understand the fact that it does not matter if pre-tax or after-tax income is used as long as the capitalization rate correlates to the type of income being capitalized. This same premise holds true for cash flow, EBIT, EBITDA, or any other stream being capitalized or discounted. The capitalization rate or discount rate must correlate to the stream of income that is being capitalized or discounted.

There will be times that you will capitalize a benefit stream other than cash flow or earnings. In fact, there are times when you will use an income approach for a real estate holding company that makes distributions. The same may hold true when you value family limited partnerships that have securities or real estate, or both. On occasion, you may even choose to capitalize dividends in an operating company for a minority interest where there is a track record of payments being made. Exhibits 11.7–11.11 should provide you with some more ideas for your future reports. These sections came from actual reports.

### EXHIBIT 11.7 REAL ESTATE HOLDING COMPANY

Section 6 of Revenue Ruling 59-60 states the following:

In the application of certain fundamental valuation factors, such as earnings and dividends, it is necessary to capitalize the average or current results at some appropriate rate. A determination of the proper capitalization rate presents one of the most difficult problems in valuation.

## EXHIBIT 11.7

There are various methods of determining discount and capitalization rates. Using the build up method of determining these rates results in the following:

Appraisal date long term treasury bond yield	4.88 <sup>1</sup>
Real estate risk premium	
1994–2005 publicly held LP return	18.30 <sup>2</sup>
1994–2005 government bond income return	– 5.88 <sup>3</sup>
<b>Average market return</b>	<b>= 12.42</b>
Adjustments for other risk factors	+ 4.00 <sup>4</sup>
<b>Discount rate for net cash flow</b>	<b>= 21.30</b>
<b>CAPITALIZATION RATES</b>	
Discount rate for net cash flow	21.30
Growth rate	– 3.00
<b>Capitalization rate for net cash flow</b>	<b>= 18.30</b>
<b>Rounded</b>	<b>= 18.00</b>
<p><sup>1</sup> Federal Reserve, Market Yield on U.S. Treasury Securities at 20 year constant maturity as of October 27, 2006, <a href="http://www.federalreserve.gov/releases/h15/data/Business_Day/H15_TCMNON_Y20.txt">http://www.federalreserve.gov/releases/h15/data/Business_Day/H15_TCMNON_Y20.txt</a>.</p> <p><sup>2</sup> 2006 <i>Rate of Return Study</i>, Partnership Profiles, Inc. The expected return for publicly held limited partnerships traded in the informal secondary market for 1994–2005.</p> <p><sup>3</sup> Long Term Government Bonds: Income Returns, <i>Stocks, Bonds, Bills, and Inflation, Valuation Edition, 2006 Yearbook</i>. The average income returns for 1994–2005.</p> <p><sup>4</sup> Appraiser's judgment based on the analysis discussed throughout the report.</p>	

A capitalization rate has been derived from a discount rate, which has been calculated above. The components of the discount rate include a safe rate which indicates the fact that any investor would receive, at a bare minimum, an equivalent rate for a safe investment. In this particular instance, U.S. Treasury Bonds are used as an indication of a safe rate.

A real estate risk premium is added to the safe rate which represents the premium that investors receive in the secondary market for real estate limited partnerships over investors in long term government bonds. Since publicly traded limited partnerships are considered to be more risky by the investor, a higher rate of return is required over the period 1994–2005.

An adjustment has also been made for other risk factors specific to the valuation subject. In this instance, 4 percent has been added to reflect this additional level of risk. This additional level of risk is added to reflect the size of the entity in comparison to the limited partnerships, the lack of diversification (based on the number of holdings), and the lack of professional management. In addition, Standard & Poor's (S&P) historic earnings and cash flow have been extremely erratic. For these reasons, investors would expect a greater rate of return on an investment in S&P than in a publicly-traded limited partnership. Therefore, 4 percent has been added to the discount rate to reflect this additional level of risk.

The sum of all these items results in the derivation of a discount rate. The mathematical formula to distinguish between a discount rate and a capitalization rate is the subtraction of the present value of long term sustainable growth from the discount rate. The present value of the long term sustainable growth has been included at a rate of 3 percent. This rate has been determined based on an estimated increase of net cash flow at the approximate rate of inflation.

## EXHIBIT 11.8

### REAL ESTATE AND SECURITIES HOLDING COMPANY

Section 6 of Revenue Ruling 59-60 states the following:

In the application of certain fundamental valuation factors, such as earnings and dividends, it is necessary to capitalize the average or current results at some appropriate rate. A determination of the proper capitalization rate presents one of the most difficult problems in valuation.

There are various methods of determining discount and capitalization rates. In this valuation, we used the build up method. Using the principle of substitution, we looked to the market for rates of return relating to the type of investments owned by the LP. The calculation of the discount rate appears below.

Appraisal date long term treasury bond yield	5.17% <sup>1</sup>
<b>Average market return</b>	+ 11.80% <sup>2</sup>
Adjustments for other risk factors	+ 3.00% <sup>3</sup>
<b>Discount rate for net cash flow</b>	= <b>19.97%</b>
<b>Rounded</b>	<b>20.00%</b>
<b>CAPITALIZATION RATES</b>	
Discount rate for net cash flow	20.00%
Growth rate	– 3.00%
<b>Capitalization rate for net cash flow</b>	= <b>17.00%</b>
<p><sup>1</sup> Federal Reserve, Market Yield on U.S. Treasury Securities at 20 year constant maturity as of July 28, 2006, <a href="http://www.federalreserve.gov/releases/h15/data/Business_Day/H15_TCMNON_Y20.txt">http://www.federalreserve.gov/releases/h15/data/Business_Day/H15_TCMNON_Y20.txt</a>.</p> <p><sup>2</sup> We calculated a weighted average market return based on risk premiums appropriate for each asset class.</p> <p><sup>3</sup> For the real estate investments, we utilized the <i>2006 Rate of Return</i> study published by Partnership Profiles, Inc. The expected return for publicly held limited partnerships traded in the informal secondary market for 1994–2005 is 18.60 percent. From this we subtracted an average income return for the same period of 5.88 percent. Therefore, the average market return on the real estate is deemed to be 12.72 percent.</p>	

For the AmEx stock, we utilized a market return of 10.50 percent representing the expected long term return on stocks in the top decile of the NYSE for the period 1996–2005. From this we subtracted the long term income return for the same period of 5.63 percent. This results in a market return on the equities of 4.87 percent.

Therefore, the weighted market return is as follows:

	<u>Cash Flow</u>	<u>%</u>	<u>Rate</u>	<u>Weighted Return</u>
Real estate	\$508,711	88.4%	12.72%	11.2%
AmEx stock	66,830	11.6%	4.87%	0.6%
<b>Market Return</b>				<b>11.8%</b>

The mathematical formula to distinguish between a discount rate and a capitalization rate is the subtraction of the present value of long term sustainable growth from the discount rate. The present value of the long term sustainable growth has been included at a rate of 3 percent for the LP. This rate has been determined based on the normalized future earnings estimate.

## EXHIBIT 11.9

### CAPITALIZATION RATE—MIXED HOLDINGS

Section 6 of Revenue Ruling 59-60 states the following:

In the application of certain fundamental valuation factors, such as earnings and dividends, it is necessary to capitalize the average or current results at some appropriate rate. A determination of the proper capitalization rate presents one of the most difficult problems in valuation.

When using the income approach to value, the estimated future income stream generated by the ongoing operations of the partnership must be discounted at an appropriate risk rate to arrive at the present value of the future benefits of ownership. The discount factor or capitalization rate used to determine the present value of the future cash flow streams reflects both the business and financial risks of an investment in the partnership.

We have calculated a blended capitalization rate that reflects the risk inherent in the types of securities in the partnership's portfolio. The rate thus derived is adjusted to reflect the risks associated with the partnership itself. The blended capitalization rate calculation is presented in table 1.

**TABLE 1**  
**CAPITALIZATION RATE**

Type of Security	Dividend Yield	% of Portfolio	Weighted Amount
Cash <sup>1</sup>	6.25%	3.00%	0.19%
Equities <sup>2</sup>	2.13%	71.70%	1.53%
Bonds <sup>3</sup>	20.40%	16.00%	3.26%
Real estate <sup>4</sup>	9.00%	9.30%	0.84%
Total blended rate			5.82%
Rounded			6.00%

<sup>1</sup> Average of rates in the money market published in the *Wall Street Journal* prior to the valuation date: one month certificates of deposit, 6.6 percent; 13 week Treasury bills, 5.83 percent; overnight repurchase rate, 6.62 percent; Merrill Lynch Ready Asset Trust (a money market mutual fund), 5.94 percent.

<sup>2</sup> Weighted average dividend yield on the equities in the partnership's portfolio. Dividend yields are from Merrill Lynch Global Research Review, July 2000, and compared with the dividend yield on the Dow Jones Industrial Average of 1.7 percent on June 22, 2000.

<sup>3</sup> Weighted average current yield on the bonds held in the partnership's portfolio including corporate issues, many of which are in default. Current yield is the bond's coupon divided by its dollar price.

<sup>4</sup> Average dividend yield for equity real estate investment trusts (REITs) and real estate operating companies at June 16, 2000, was 8.8 percent; these ranged from 5.2 percent to 18.4 percent. Average dividend yield for the Morgan Stanley REIT Index at June 30, 2000, was 9.0 percent; these ranged from 0 percent to 16.6 percent.

Some upward adjustment must be made to the capitalization rate calculated in table 1 to reflect the uncertainty surrounding the outlook for equities in the next 12 months. In addition, the dividend yield attributed to the real estate portion of the partnership's portfolio is low considering that this real estate constitutes a one-third ownership in a property that produces no income. In this regard, a capitalization rate of 6 percent would appear to be reasonable.

## EXHIBIT 11.10

### CAPITALIZATION RATE—DIVIDEND YIELD

Section 6 of Revenue Ruling 59-60 states the following:

In the application of certain fundamental valuation factors, such as earnings and dividends, it is necessary to capitalize the average or current results at some appropriate rate. A determination of the proper capitalization rate presents one of the most difficult problems in valuation.

Capitalization rates are determined by the market. Using the capitalization of benefits method, the mathematical formula previously discussed was:

$$\text{Value} = \text{Benefits stream} \div \text{Capitalization rate}$$

By changing the variables in this formula, a capitalization rate can be determined by the following formula:

$$\text{Capitalization rate} = \text{Benefits stream} \div \text{Value}$$

In reviewing documentation from the public stock market, two of the variables above can be readily determined, and, therefore, can assist the valuation analyst in determining the third variable. The benefit stream analyzed was the actual dividends paid by public companies. The value indicated in the formula above can be the price per share of the publicly traded stocks.

The capitalization rate determined in this manner reflects the market rate of return for these companies. Since fair market value is supposed to come from the market, there is no better method for determining a capitalization rate. In order to determine an appropriate capitalization rate for dividends, several sources were reviewed. According to Value Line, the dividend yield for the 12 month estimate at October 28, 1994, was 2.8 percent. At approximately the same date, the actual dividend yield of the Standard & Poor's 500 was 2.9 percent.

There are considerable differences between the dividends paid to shareholders in public companies as opposed to those of private companies. The emotional side of the stock market and the public perception creates pressure on public companies to continue to pay dividends to its stockholders, even at times when there are losses.

The public stock market also contains companies that are considerably larger than many private companies and are subject to the continuing scrutiny of the Securities and Exchange Commission.

Dividend yields in the public market are calculated by comparing the dividend per share and the price per share of each company. As the price per share increases, the dividend yield will decrease. This explains why the dividend yields of these large companies are so low. As the price moves up, as the market has been doing, the yield has been declining. Companies do not generally increase dividend payouts in any manner that correlates with the price per share. If anything, the price may go up as a result of the dividend being increased.

Using dividend yields of public companies as a starting point allows the valuation analyst to understand the lowest rates that would be expected by the investor if the same degree of risk is involved with the appraisal subject.

Jansen's has had a fairly solid track record with respect to its profitability. However, the company has experienced some liquidity problems. Payables are much higher than the industry norm, resulting in poor liquidity ratios and a low turnover ratio. These are significant negative factors.

Furthermore, the company has limited growth potential, not only because of the market, but because of the lead time that it takes for the company to produce its product. Jansen's would require a significant capital infusion to expand its production capacity by opening another location. This would restrict cash flow even more and possibly cause the company to stop paying dividends at all.

At the valuation date, yields on various instruments in the money and capital markets were as follows:

6-month certificates of deposit U.S. Treasuries	5.9%
1-year	6.2%
5-year	7.6%
10-year	7.9%
20-year	8.2%
30-year	8.0%



**EXHIBIT 11.10**

Corporate bonds	
Aaa	8.7%
Aa	8.8%
A	8.9%
Baa	9.3%

After considering the size, liquidity, and other available returns in the market, we believe that a reasonable capitalization rate for dividends should be no less than 12 percent. Anything less would indicate that an investor should purchase U.S. Treasury bonds, which are a much safer investment.

**EXHIBIT 11.11****DISCOUNT AND CAPITALIZATION RATES—ALL IN ONE**

Section 6 of Revenue Ruling 59-60 states the following:

In the application of certain fundamental valuation factors, such as earnings and dividends, it is necessary to capitalize the average or current results at some appropriate rate. A determination of the proper capitalization rate presents one of the most difficult problems in valuation.

In the text of Revenue Ruling 68-609, capitalization rates of 15 percent to 20 percent were mentioned as an example. Many valuation analysts are under the misconception that the capitalization rate must stay within this range. In reality, the capitalization rate must be consistent with the rate of return currently needed to attract capital to the type of investment in question.

There are various methods of determining capitalization rates. Using the build up method of determining the capitalization rate results in a capitalization rate as follows:

Safe rate	5.95% <sup>1</sup>
Equity risk premium	7.00% <sup>2</sup>
Small company risk premium	3.30% <sup>3</sup>
Specific company risk premium	(1.00%) <sup>4</sup>
Discount rate	16.05%
Less: Long term growth	6.00%
Capitalization rate	10.05%
Rounded	10.00%

<sup>1</sup> Information obtained from the Federal Reserve Board's Web site located at [www.bog.frb.us](http://www.bog.frb.us).

<sup>2</sup> *Stocks, Bonds, Bills, and Inflation 1998 Yearbook*, Ibbotson Associates, difference between total returns on common stocks and long term government bond income returns from 1926–1997.

<sup>3</sup> *Stocks, Bonds, Bills, and Inflation 1998 Yearbook*, Ibbotson Associates, difference between total returns on small company stocks and large company stocks from 1926–1997.

<sup>4</sup> Analyst's judgment based on the analysis discussed throughout this report.

(Continued)

**EXHIBIT 11.11** *(Continued)*

A capitalization rate has been derived from a discount rate, which has been calculated above. The components of the discount rate include a safe rate, which indicates that any investor would receive, at a bare minimum, an equivalent rate for a safe investment. In this particular instance, U.S. Treasury bonds are used as an indication of a safe rate.

An equity risk premium is added to the safe rate, which represents the premium that common stockholders required in the public marketplace over investors in long term government bonds. This indicates that since equity securities are considered to be more risky by the investor, a higher rate of return has been required over the period of time indicated in the calculation of this premium.

The third component of the discount rate is a small company risk premium. This is a risk premium that is measured in the public marketplace for companies that are in the ninth and tenth deciles, indicating that smaller companies require a larger return due to the risk associated with size. The tenth decile of the public marketplace has been measured by companies that are capitalized at an average capitalization of \$68,400,000. (Just for the record, today this figure is almost \$200 million).

A fourth component, known as a specific company risk premium, has been considered to determine an appropriate discount rate. This specific company risk premium takes into consideration the detailed analysis performed by the valuation analyst, including the company's performance, the company's management structure, the size of the company, the ability of the company to raise capital, and the many other factors that must be considered in assessing the risk relating to an investment in company PDQ. In this instance, we have subtracted 1 percent from our build up because, as mentioned in the section of this report titled "Financial Analysis," Acme is very strong financially and has produced excellent returns to shareholders. This is in stark contrast to the returns generated by small public companies in Acme's industry. According to Morningstar Associates, equity returns over the last five years for Standard Industry Code (SIC) code 2834 were negative 21.5 percent. This fact is partially offset by Acme's lack of succession planning and its heavy reliance on two products for its sales.

In addition to the build up rate, we have looked at industry specific rates of return for SIC code 2834. Based on our review, cost of equity capital for the industry has been 15.9 percent and 21.94 percent for small companies. As discussed previously, Acme has produced much better returns than the small companies in the industry. Therefore, we have chosen to use the industry composite of 15.9 percent, rounded to 16.00 percent, as our discount rate even though Acme is much smaller than many of these companies.

Subtracting a long term growth rate of 6 percent results in a capitalization rate of 10 percent.

**DIVIDEND CAPITALIZATION RATE**

To estimate a dividend capitalization rate, we again went to Morningstar Associates for industry specific information. For companies in SIC code 2834, the five-year average dividend yield was 2.65 percent. Since we have estimated that Acme will grow at rates slower than the industry, and dividend growth has been low, we have added a small company specific risk premium of 0.35 percent, resulting in a capitalization rate for dividends of 3.00 percent.

## CONCLUSION

Wow. This chapter is finally done. If I didn't do a very good job, you are probably lost. If I did an O.K. job, you are still fumbling with your GPS system. I'm sorry. I never promised you a rose garden. In fact, this is a thorny topic. O.K., so I won't give up my day job anytime soon! I hope that despite the uncertainty, you now have more of an idea about discount and capitalization rates. What you have really learned is that these rates come from the market. If you stayed focused, as I suggested at the start of the chapter, you should have realized that no matter what method you use to develop these rates, and regardless of the components that make up that method, you have to measure the risk of what is being discounted or capitalized. Getting lucky is O.K., too, but don't solely rely on the luck factor. That can get you in trouble!

## CHAPTER 12

# *Premiums and Discounts*

### CHAPTER GOALS

In this chapter, I will attempt to explain the following:

- Valuation premiums and discounts, in general
- Control premiums
- Lack of control (minority) discounts
- Discounts for lack of marketability
- Small company discounts
- Discounts from net asset value
- Key person discounts
- Other discounts and premiums

### INTRODUCTION

The final value reached in the appraisal of a closely held business may be more or less than the value that was calculated using the methods previously discussed in this book. Valuation discounts, premiums, or both may or may not be appropriate in every business valuation. The type and size of the discount(s) or premium(s) will vary depending on the starting point. The starting point will depend on which methods of valuation were used during the appraisal, as well as on other factors, such as normalization adjustments and the sources of the information used to derive multiples or discount rates.

The following are some of the common premiums and discounts that we see in business valuations:

- Control premium
- Lack of control (minority) discount
- Discount for lack of marketability (illiquidity)
- Small company discount
- Discount from net asset value
- Key person discount
- Blockage discount
- Nonvoting stock discount

Table 12.1 shows the type of value derived from the various methods discussed throughout this book. The valuation analyst needs to understand the type of value estimate that each of these methods yields in order to know what type of discounts and premiums may be appropriate in any given situation. For example, if the guideline company method is used to value a controlling interest in a closely held company, the valuation analyst must consider that the result from this method is generally considered to be a marketable, minority interest. This means that a control premium may be added to bring the minority value to a control value. Then the valuation analyst might take a discount for lack of marketability to bring the value from a marketable control value to a nonmarketable control value. It's not as bad as it seems! However, while the conventional wisdom says that the result of the guideline company method is a marketable, minority interest, there are many appraisers that do not agree with the conventional wisdom. If you believe that this method results in a control value, adding a control premium would result in double counting. More and more valuation analysts now believe that the issue of control versus minority

depends on the benefit stream being used. Just because the multiples come from the public market, this does not mean that the result is minority. This is the same principle as why discount rates that also come from the same public market do not result in a control or minority value.

**TABLE 12.1**  
**TYPES OF VALUE**

<u>Method</u>	<u>Control/Minority</u>	<u>Marketable/Nonmarketable</u>
<i>Market approach</i>		
Guideline public company method	Control or minority	Marketable
Acquisition method—public cos.	Control	Marketable
Acquisition method—private cos.	Control	Nonmarketable
<i>Asset-based approach</i>		
Adjusted book value method	Control	Marketable
Liquidation method	Control	Marketable
Cost to create method	Control	Marketable
<i>Income approach</i>		
Capitalization of benefits method	Control or minority	Marketable or nonmarketable
Discounted future benefits method	Control or minority	Marketable or nonmarketable
Excess earnings method	Control	Marketable or nonmarketable

Many valuation analysts look to court decisions to support the premiums or discounts that are used in their appraisals. These are not a form of market evidence. Court decisions are generally subjective decisions of a particular court in a particular case. Valuation analysts must apply correct methodology, whether it is supported by court decisions or not. The benefit of looking at court decisions is to learn when you will have more of a burden of proof because the position being taken is outside the range of prior court decisions. Judge David Laro of the United States Tax Court has suggested to participants at various business valuation conferences that they read his opinions before coming into his court so that they will understand what he expects from the valuation analyst. Court decisions generally follow the conclusions that valuation analysts reach from their own valuation research, but often with time delay. Therefore, by using court decisions, we are generally following decisions that were made in the past. So, let's be clear about this. It is okay to know about the court decisions, but you do not want to quote opinions and use them to support your position.

Court decisions are very useful in understanding how the courts have dealt with certain issues. If you plan to deviate from a position taken by the court, I strongly suggest that you do the following:

- Acknowledge in your report (and testimony) the decision of the court.
- Explain why you believe the court's position is not applicable in the case at hand. Do not say that the court made a mistake!
- Provide strong support for your position in order to demonstrate why your position is more theoretically correct than the court precedent.
- Make sure that your client's attorney is aware (and blesses) the fact that you are deviating from the case law.
- Make certain that the client understands that you are taking a contrary position to the position in the case law, and that you have the attorney's blessing.
- Pray a lot.

Don't get me wrong. I am not suggesting that you cannot deviate from case law. I am saying that you need a strong argument that is well supported because if a judge is going to go against legal precedent, the case may be appealed to a higher court. The higher court will need strong evidence (usually testimony because most reports are not admitted as evidence) to base its opinion upon.

It is a mistake to put court case references in your report boilerplate because you are writing a valuation report and not a legal brief. There are some valuation analysts who start citing court cases, and I am willing to bet that they never read the case that they are citing. Either they paid someone to perform research for them, they have boilerplate from a computer software program, or they lifted the citations from a sample report included in a business valuation textbook. Don't do that. If you are questioned about the relevancy of the case, you better be able to answer the questions.

## CONTROL PREMIUM

The pro rata value of a controlling interest in a closely held company is said to be worth more than the value of a minority interest because of the prerogatives of control that generally follow the controlling shares. An investor will generally pay more (a premium) for the rights that are considered to be part of the controlling interest. These rights must be considered in assessing the size of the control premium, including the list of rights found in box 12.1.

### Box 12.1 Prerogatives of Control

- Appoint or change operational management
- Appoint or change members of the board of directors
- Determine management compensation and perquisites
- Set operational and strategic policy and change the course of the business
- Acquire, lease, or liquidate business assets, including plant, property, and equipment
- Select suppliers, vendors, and subcontractors to do business with and award contracts to
- Negotiate and consummate mergers and acquisitions
- Liquidate, dissolve, sell out, or recapitalize the company
- Sell or acquire treasury shares
- Register the company's equity securities for an initial or secondary public offering
- Register the company's debt securities for an initial or secondary public offering
- Declare and pay cash or stock dividends, or both
- Change the articles of incorporation or bylaws
- Set one's own compensation (and perquisites) and the compensation (and perquisites) of related party employees
- Select joint ventures and enter into joint venture and partnership agreements
- Decide what products or services, or both, to offer and how to price those products and services
- Decide what markets and locations to serve, to enter into, and to discontinue serving
- Decide which customer categories to market to and which not to market to
- Enter into inbound and outbound license or sharing agreements regarding intellectual properties
- Block any or all of the above actions\*

\*Pratt, Shannon P., Robert F. Reilly, and Robert P. Schweihs, *Valuing a Business*, 4th ed. (New York: McGraw-Hill, 2000): 365–366.

A control premium is the opposite of the minority discount. The control premium is used to determine the control value of a closely held business when its freely traded minority value has been determined. This is generally true when the valuation analyst uses information from the public stock market as the starting point of the valuation.

In most jurisdictions, majority control is not absolute. A majority shareholder may have certain duties to other shareholders, including a fiduciary responsibility to manage the company in a way that provides for the benefit of all shareholders. Officers and directors may have a duty of loyalty and, therefore, a duty not to deprive the corpor-

ation of favorable business opportunities. States also vary in the way they define control. In some supermajority states, certain corporate decisions may require a shareholder vote of more than 51 percent. Greater than two-thirds, or even in some instances 80 percent, may be required to accomplish certain corporate actions. In California, 30 percent may give a shareholder the right to some actions. In New York, it is only 20 percent.

## PROTECTING THE MINORITY OWNER WITH RIGHTS AND RESTRICTIONS THROUGH AGREEMENTS

There are various ways to protect a minority owner from the risk of being in a minority position, thereby reducing the amount of the discount for lack of control. Protecting a minority owner can be accomplished through several avenues. Some of them include the following:

- Articles of incorporation (formation documents)
- Cumulative voting
- Preemptive rights
- Supermajority
- Shareholder or partnership agreements
- Employment agreements
- Right of first refusal
- Other agreements

### Articles of Incorporation

The articles of incorporation may include provisions that allocate certain rights, such as the creation of multiple classes of stock, with each class entitled to elect certain directors. Also, in certain transactions such as the sale of substantially all of the company's assets, a majority of each class of stock may be required to approve corporate actions.

### Cumulative Voting

Bylaws may provide for cumulative voting that may allow minority shareholders to elect some of the board of directors.

### Preemptive Rights

Preemptive rights in the bylaws would allow all shareholders the opportunity to keep their pro rata share of the ownership upon the issuance of additional stock in the company, as opposed to having their interest diluted by the controlling shareholder(s) who may issue additional shares to herself at a favorable price.

### Supermajority

There could be requirements for a supermajority for certain corporate actions. For example, instead of requiring a 51 percent approval to issue new shares in the company, an 80 percent approval might be required, thereby giving a 25 percent shareholder effective veto power in that situation. Some states have supermajority voting requirements for certain major corporate actions, such as mergers and liquidations.

### Shareholder or Partnership Agreements

Shareholder or partnership agreements can set forth the rights and responsibilities of each of the shareholders under various circumstances. For example, a buy-sell agreement could require either the controlling shareholder or the corporation to buy back the minority shareholder's stock at a set price or set formula upon some triggering event, such as death or retirement of the shareholder. Another real example of this is when we merged with a friend of ours a number of years ago, and he was concerned that he would be outvoted "two to one" if we wanted to take a corporate action that he did not agree with. He did not think about the fact that my partner (my wife) would probably have voted with him more than me, so he really had little to worry about anyway. However, in order to protect him, we agreed that my wife and I would have one-half of a vote each and he would be entitled to a full vote on actions requiring a vote. This way he could block actions that he did not agree with.

## Employment Agreements

Employment agreements may give further protection to a minority shareholder who also works for the corporation to ensure that she will not be discharged and, therefore, lose the expectation of continued employment.

## Right of First Refusal

If the controlling shareholder has a right of first refusal, minority shareholders are free to sell their stock to anyone they choose at any price they choose, but the controlling shareholder would have the right to match the price and buy the stock as opposed to having a third party buy the stock. However, a buy-sell agreement and right of first refusal also can give the minority shareholder an opportunity to buy out the controlling shareholder upon certain events, such as death or disability.

## Other Agreements

Other agreements can restrict or combine voting rights. For example, a group of shareholders, typically minority shareholders, may form a voting trust, agreeing to vote their stock as a block and thereby achieving a controlling position.

## LEGAL REMEDIES

There are certain legal remedies that are afforded to the minority owners of a closely held business. While this is certainly not a legal treatise, valuation analysts sometimes have to consult with attorneys as to the rights associated with the interest being valued. These should be taken into consideration by the analyst. This is discussed further in chapter 19.

## MORE CONTROL PREMIUM ISSUES

A control premium may be appropriate for an interest that is less than 100 percent. In this instance, the size of the premium will depend on various factors relating to the amount of control available to the controlling interest.

Some of these factors include the following:

- Cumulative versus noncumulative voting rights
- Contractual restrictions (stockholder agreements)
- The financial condition of the business
- State statutes
- The distribution of ownership

Let me give you an illustration of where less than a 50 percent interest could have a control premium associated with it. Although the dates in this real example are older, I really liked this assignment, and because this type of situation does not arise regularly in our practice, I am still going to use the dated example. The concepts are much more important than the dates. Part of this assignment required us to value a 47.3 percent block of a public company. We determined that this block should have a premium attached to it. Exhibit 12.1 reflects a portion of our report.

**EXHIBIT 12.1**  
**SELECTED PORTION OF CONTROL PREMIUM DISCUSSION**  
**(FOOTNOTES OMITTED FROM EXHIBIT)**

The valuation of John Q. Smith & Company, an investment holding company, is based on the value of the underlying assets held in the investment portfolio. The methodology employed will be similar to that used by Adam's Trust Company, as outlined in a memo dated January 14, 1993, from Chuck Jackson to Rebecca Harding. This memo outlined the procedure as follows:

*(Continued)*



**EXHIBIT 12.1** *(Continued)*

To establish the fair market value of Smith & Company's stock holdings, we generally utilized the average price of the individual securities on December 16, 1992 (as determined by referencing the *Wall Street Journal*). An exception to this is the value established for the company's equity position in the Public Corporation.

According to the Jackson memo, the condensed balance sheet of John Q. Smith & Company as of November 30, 1992, was as follows:

<b>John Q. Smith &amp; Co.</b>		
<b>Condensed Balance Sheet</b>		
<b>As of November 30, 1992</b>		
<b>Assets</b>		
Current assets		
Cash & equivalents	\$ 271,583	
Short-term investments	2,387,627	
Receivables	3,838	
Total current assets		\$2,663,048
Investments in capital stock		
Public corp.	\$ 876,726	
Others	2,157,886	
Total stock		3,034,612
Investments in oil & gas interests (net)		18,061
Total assets		<u>\$5,715,721</u>
<b>Liabilities</b>		
	\$ 218,266	
Stockholders' equity	5,497,455	
Total liabilities & stockholders' equity		<u>\$5,715,721</u>

According to the Jackson memo, the adjusted net asset value of John Q. Smith & Company as of December 16, 1992, was \$202,983,073. The other party to the litigation accepted the methodology used to value most of the underlying assets and, therefore, we will also accept the asset values that were agreed to by the parties as the starting point in our valuation. The major point of contention between the parties is the value of the interest in Public Corporation. We will value this asset separately. Accordingly, subtracting the value of this stock from the total results in the following:

Net asset value	\$202,983,073
Public corporation stock	160,721,253
All other assets & liabilities	<u>\$ 42,261,820</u>

On December 16, 1992, John Q. Smith & Company owned 5,337,360 shares of Public Corporation common stock. This represents approximately 47 percent of the outstanding shares of Public Corp. The underlying asset values did not present a problem for the valuation of the Public stock because the high and low valuation as of the valuation date is proper. However, consideration must be given to the fact that a 47 percent block of stock of a publicly traded corporation frequently constitutes a control position in the stock.

In our opinion, a 35 percent premium is appropriate in determining the value of the public holdings of John Q. Smith & Company. The pro rata value of a controlling interest in a company is said to be worth more than the value of a minority interest, due to the prerogatives of control that generally follow the controlling shares. An investor will generally pay more (a premium) for the rights that are considered to be part of the controlling interest. Valuation

**EXHIBIT 12.1**

professionals recognize these prerogatives of control and consider them in the assessment of control premiums. Some of the prerogatives include the following:

- Elect the board of directors
- Appoint the management team
- Determine compensation and perquisites
- Set business policy
- Acquire or liquidate assets
- Make acquisitions or divestitures
- Sell or acquire treasury stock
- Declare dividends
- Change the articles of incorporation or bylaws of the corporation

Control is demonstrated in the public market as publicly traded companies are purchased at prices above the value at which the shares are trading in the open market. Empirical data is available about these transactions, and measuring the control premium allows the valuation analyst to use this data as a benchmark in the valuation of other companies.

Generally, the issue that the valuation analyst faces is the valuation of a closely held company. In this instance, the valuation subject is a controlling interest in a publicly traded company, Public Corp. Control premium data is tracked by several sources. The most widely used source is *Mergerstat Review*, which was published annually by Merrill Lynch Business Brokerage and Valuation, Schaumburg, IL (today, it is published by Factset, LLC). Another widely used source is *Control Premium Study*, published by Houlihan, Lokey, Howard, and Zukin.

 **Author's Note**

This is now known as the *Mergerstat Control Premium Study*.

A summary of the *Mergerstat Review* data appears in table 1.

<b>Year of buyout</b>	<b>Number of transactions</b>	<b>Average premium paid over market (%)</b>	<b>Median premium paid (%)</b>
1980	169	49.9	44.6
1981	166	48.0	41.9
1982	176	47.4	43.5
1983	168	37.7	34.0
1984	199	37.9	34.4
1985	331	37.1	27.7
1986	333	38.2	29.9
1987	237	38.3	30.8
1988	410	41.9	30.9
1989	303	41.0	29.0
1990	175	42.0	32.0
1991	137	35.1	29.4
1992	142	41.0	34.7
Mean		41.2	34.1
Median		41.0	32.0

(Continued)

**EXHIBIT 12.1** (Continued)

The mean and median premiums since 1980 have varied with the economy and stock market activity. In the early 1980s, interest rates were at an all time high, possibly pushing the control premiums paid for companies even higher. As rates came down in the mid-1980s, the premiums followed. By 1992, the year of the valuation, the average and median control premiums were 41.0 percent and 34.7 percent, respectively, for the entire market.

In order to more closely assess the applicability of this data to the control premium that is warranted for the public holdings, we further analyzed the *Mergerstat Review* data. Information summarized from this publication appears below.

<b>Average premium offered</b>	<b>41.00%</b>
Controlling interest	41.30%
Minority interest	38.30%
Industry classification of seller	
Chemicals, paints & coatings	34.00%
<b>Median premium offered</b>	<b>34.70%</b>
Purchase price \$100 million or more	39.00%
Method of payment	
Cash	29.60%
Stock	36.80%
Combination	41.90%
Seller's market price five days before announcement	
Over \$25.00 through \$50.00	25.80%
Seller's P/E ratio five days before announcement	
Over 15.0	34.00%

Dissecting the information included in *Mergerstat Review* illustrates that while the average control premium offered in 1992 was 41.0 percent, the average for controlling interests was slightly higher, at 41.3 percent. However, even minority interests were being bought at a premium of about 38.3 percent. Attempting to get more industry specific, we reviewed the data for transactions in the chemicals, paints, & coatings category. The average control premium in this industry was 34.0 percent.

In addition to the averages, the median premiums paid were also reviewed. The median tends to provide a better indication than the average because the average can be skewed by extremely high or low data. The median is the central point when ranked by size.

The median premium offered was 34.7 percent during 1992. When the purchase price was \$100 million or more, the premium jumped to 39.0 percent. This is consistent with current studies that indicate larger companies frequently sell for higher multiples. Combination deals involving stock and cash resulted in a premium of 41.9 percent, but even when the deal was all cash, the premium was still 29.6 percent.

Reviewing this data based on the per-share price of the public stock indicates that companies whose shares were trading between \$25 and \$50 sold at the lowest control premium of only 25.8 percent. Finally, companies whose price-to-earnings multiples were over 15 reflected premiums of 34.0 percent.

Additional analysis was performed of the data appearing in the *Control Premium Study*. The major difference in this study from *Mergerstat Review* is that the premiums are measured differently. Furthermore, this study only includes cash transactions. Data observed from this study includes the following:

## EXHIBIT 12.1

By industry (SIC) (trailing 12 months)	
SIC 28 (Chemicals and Allied Products) (2 transactions)	
Median	70.50%
Mean	70.50%
SIC 38 (Controlling Instruments; etc.) (3 transactions)	
Median	27.00%
Mean	45.50%
Domestic transactions—4th quarter (18 total transactions)	
Median	44.50%
Mean	47.40%
12-month figures (1/1/92–12/31/92) (94 total transactions)	
Median	42.40%
Mean	50.40%
3-month median premium	
First quarter	34.60%
Second quarter	42.40%
Third quarter	49.20%
Fourth quarter	33.50%
12-month median premium	
First quarter	45.30%
Second quarter	45.10%
Third quarter	44.30%
Fourth quarter	42.40%

The data presented above divides the control premiums differently than the data presented from *Mergerstat Review*. This information reflects that the control premiums paid within SIC category 28 were 70.5 percent, while the mean and median premiums for SIC category 38 were 45.5 percent and 27.00 percent, respectively.

However, this data reflects considerably greater premiums for the transactions that are tracked. The specific data for the industry includes only two transactions and, therefore, is considered to be of little significance. These two transactions reflect control premiums of 12.9 percent and 128.1 percent, too large a spread to be meaningful.

A review of the additional control premium data broken down by domestic transactions and by time periods tends to provide premium data in the range of the mid-40s. During 1992, the median of the 94 transactions tracked by this study was 42.4 percent. Although slightly higher than the *Mergerstat* data, a conclusion can be reached that the median premium during 1992 was approximately 35–40 percent.

The question to be addressed by the valuation analyst concerns the appropriate level of premium to be applied to the public holdings. The economic and industry mood should also be considered when looking at this issue.

In the early 1990s, the U.S. economy was in the midst of a recession. The Persian Gulf War added to the problems and was followed by the election of President Clinton. It was during this period that unemployment levels began to rise, consumer spending declined, and consumer confidence drifted downward. During 1992, the state of the economy in the nation began to show some signs of improvement, as the real Gross Domestic Product grew by 2.9 percent. However, the unemployment rate increased from 6.8 percent in 1991 to 7.5 percent in 1992. The sluggishness of the economy at the conclusion of the Bush administration's term was expected to improve in the year ahead with the election of a Democratic president. The feeling in the nation at the end of 1992 was that

(Continued)

**EXHIBIT 12.1** (*Continued*)

1993, it seemed, could not come fast enough. Wall Street investors know the feeling well. For much of 1992, their sights have been fixed firmly on what the next 12 months may bring. There is, of course, nothing unusual about stock markets anticipating the future. But the presidential election, dominated by its cries of change and transition, and the turning point reached in the domestic economic cycle, have given investors a fixation with tomorrow's joys, obscuring the drearier realities of today.

America had been through tough economic times during the early stages of the decade, resulting in mixed feelings for the nation's consumers, employees, and investors. Optimism about the economy began to lift toward the end of 1992, with the consumer confidence index gaining 12.7 points in December, as reported by the New York-based Conference Board. The real estate market in the United States also began to show some signs of improvement, which indicated a positive attitude about the economy. However, fears of interest rate hikes were also apparent.

Investors, on the other hand, had mixed feelings about the future of the nation's economy.

This spate of encouraging economic data failed to translate into a traditional year-end rally on Wall Street, largely because investors were also trying to anticipate the tax changes which may take effect in 1993. The Clinton administration, which runs the thinking, will almost certainly increase the income tax burden on high-earning individuals. Accordingly, such investors had every incentive to lock into stock market profits before 1992 ended. Tax-centered concerns have already led to the early payments of bonuses by some Wall Street investment firms. Last week, these told on share prices, as dealers reported confusing "cross-currents" in trading activity. Some investment clients, they suggested, were still buying on the economic news, but others were busily selling on tax fears.

Furthermore, the nation's unsettled economy had an effect on the mood of investors. *Chemical Week's* monthly stock report made the following statement regarding investors:

Investor confidence was also hurt by disappointing economic data, leading analysts to trim earnings projections for the second half of this year, and for 1993. Although selling pressure centered on industrial cyclical groups like autos, airlines, and steels, none of the S&P 500 composite's 88 industry groups eked out a gain. The S&P 500 fell 2.4% in August, giving back more than half its July rise, while the more cyclically oriented DJIA sank 4%.

Aside from reporting on the overall stock market, *Chemical Week* also reports on the performance of chemical stocks. During the third quarter of 1992, major chemical firms' earnings declined, while the outlook for specialty chemicals looked bright. Unlike the major chemical firms, specialty chemical companies do not depend on commodity chemicals, as they generally produce "smaller batches of a wider variety of chemicals that command premium prices. These companies as a group are likely to see year over year quarterly earnings increases of about 10% to 15%," claims Jeffrey Cianci, a securities analyst with Bear, Stearns & Co.

While there are some reports of a positive outlook for the specialty chemical industry, a market report of the specialties segment by *Chemical Week* magazine paints a contrasting picture.

In the specialties sector, losers outpaced winners by a three-to-one margin. Only the Dexter Corp. touched a new 12-month high. Seven issues advanced, with thinly traded LeaRonal, up 9%, posting the biggest rise. Among the biggest losers were Public, -10%; M.A. Hanna, -9%; and Ferro, -9%.

Overall, however, the specialty segment performed better than the large chemical companies. "The S&P chemicals and diversified chemicals indexes fell 6% and 5.8%, respectively, while the specialty chemicals index dropped only 1%." During the third quarter of 1992, specialty chemical makers saw higher returns, despite the weak U.S. economy.

Looking at the performance of specialty chemical firms during 1992, the industry displayed mixed results. During the first half of 1992, major chemical company stock prices increased 11 percent, while specialty chemical company prices fell 1 percent. Despite the differences in the performance of the two chemical sectors, specialty chemical stocks appear to be attractive investments.

The major, or commodity, chemical companies are highly sensitive to the economic cycle. To judge by the strong performance of these and other cyclical stocks, investors are expecting a sharp recovery. They are likely to be

**EXHIBIT 12.1**

disappointed. Restructuring in the service sector, restrained fiscal policy, high real long-term interest rates, and the slowdown in Japan and Europe are all working against a strong recovery. Real growth of 5% to 6% has been typical of recoveries in the postwar period. The current cycle is more likely to show growth of 2.5% to 3%.

In this sluggish environment, specialty chemical companies look particularly attractive. They have some cyclical exposure but are not dependent on a strong recovery. In the best of times, the major chemical companies price their products on a cost-plus basis, expecting, or rather hoping, to cover production costs, with a little profit left over. These are highly competitive businesses where price is virtually all that distinguishes one company's product from another's. Profit growth is dependent on sales increases and high capacity utilization rates.

The dynamics of the markets for specialty chemicals are quite different. Prices are driven by the added value each product brings to its customer. A significant amount of research goes into each product, and companies expend considerable resources on marketing.

Not surprisingly, specialty chemical firms tend to be smaller than commodity chemical companies. They typically dominate the markets in which they operate, and they enjoy wider profit margins, stronger growth, and higher returns on equity.

There are at least 70 good size, publicly traded specialty chemical companies. Broadly speaking, these firms produce chemical solutions to a host of different problems.

Public's primary business operations are in the specialty chemicals industry. The three major product groupings within this segment include oil field chemicals, industrial chemicals, and industrial polymers and waxes.

The chemical industry in the United States is highly competitive. During the early 1990s, the industry experienced market erosion.

Merger and acquisition activity has also become increasingly important in the oil field chemical industry in recent years due mainly to the declining U.S. market. Consolidation has continued to be a way that companies survive in the increasingly competitive industry. Baker Hughes became the leading U.S. producer and a major worldwide producer of oil field chemicals by making several important acquisitions in the early 1990s. These purchases, which also made Baker Hughes a more balanced chemical supplier, included ChemLink Incorporated (specialty production chemicals); BP's OFRIC business (UK oil field chemicals); the oil field chemical operations of CEDA Reactor in Canada, and the environmental chemical operations of Wen-Don Incorporated.

During the early 1990s, specialty chemical companies took steps toward increasing their market share. "For example, Public Corporation, a leading producer of specialty production chemicals, is working to increase the company's market share by emphasizing technology and value-added services." While Public was taking measures toward improving their market share and future position in the market during the early 1990s, the oil field chemical industry had been experiencing declining sales during the previous two years. "Due to industry consolidation there are also fewer customers for these products."

"Within the oil field chemical industry are numerous product segments. Public is concentrated in the area of production chemicals. There are five companies within this segment, which accounted for over 75 percent of the market share. The five companies are Public, Baker Performance Chemicals, Nalco, Exxon, and Champion Technologies."

Aside from the increase in competition, environmental concerns throughout the global economy placed even more pressure on the \$200 billion-per-year industry, which has "matured considerably during the past 10 years." The increased awareness of the protection of the environment has resulted in increased costs of operations for specialty chemical producers. Due to the rising costs of operations, many of the industry's small players have been acquired by larger companies. While environmental pressures have had an effect on the cost of doing business, some industry participants view the pressures as an opportunity to capitalize on a new environmentally conscious market.

The industry has seen many changes during the late 1980s and early 1990s, due in part to environmental pressures. The financial aspect of the industry has also changed. Chem Listner, senior V.P. at Kline, stated, "What has been described as a frenzy of purchases in the 1980s has settled down to a period of extreme caution. Deals are made strictly on the basis of strategic synergies with existing business units." It is the consolidation that occurred during the 1980s that has increased competition so dramatically.

*(Continued)*

**EXHIBIT 12.1** *(Continued)*

Toward the close of 1992 and looking forward to 1993, productivity appears to be the focus of chemical firms.

The economic chorus praises the U.S. chemical industry as well positioned for a productivity-driven future. The restructuring charges for layoffs and plant closures in the U.S. were taken in 1992, and the benefits will be seen on bottom lines in 1993, although some further charges are likely in Europe and will affect the profits of U.S. based multinationals in 1993. "The restructuring is over," says Amoco's Eck. "Everyone has done a tremendous job of cutting costs. We're ready to grow, and grow profitably." "The chemical industry has a very high value-added," Professor Smith concurs. "If the whole country were in the shape the chemical industry is in," he says, "George Bush would be the one being inaugurated on Jan. 20."

According to Form 10-K, filed with the Securities and Exchange Commission for the year ended October 31, 1992, Public was about to acquire Target, Inc., a subsidiary of AAA Chemical Company. This is a positive sign for the company. Making acquisitions of this type is one of the prerogatives of control discussed previously.

Public is a leader in their niche of the market. This factor, along with a favorable outlook for the specialty chemical industry, makes the company more likely to be acquired at a higher premium. In fact, because of the consolidation occurring in the industry, Public could be postured for a sale to an attractive suitor.

Considering the size of the premiums being paid in the marketplace, the industry outlook for Public, and the niche position that Public has filled in the industry, we believe that a control premium of 35 percent is appropriate.

By the way, the public company was acquired. It is definitely better to be lucky than good. In preparing to further explain why a control premium was applicable, we performed a simple analysis. Only 300,000 shares of stock were required for ownership greater than 50 percent. If the management bought these shares at a reasonable premium, control of the entire company would have provided them with an asset that was worth much more money. Also, when a 47 percent shareholder shows up at the annual shareholder meeting, does anyone believe that he or she would not control the vote? What is the likelihood of all of the other stockholders of this public company showing up at the annual meeting to vote? Not likely—the remaining shares were very small blocks in the hands of a lot of other shareholders.

Because I may not have made this statement enough already, be careful to avoid double counting! Certain valuation methods result in a control value for the company. Adding a control premium in that situation would result in double counting and should be avoided. For example, using merger and acquisition data would result in a control value because the merger and acquisition data generally comes from the sale of entire companies. The excess earnings method is also considered to be a control valuation method because the valuation analyst is required to adjust the balance sheet items to fair market value. Minority interests could not benefit from this because they cannot sell off these assets.

Control premium studies, such as the ones discussed in exhibit 12.1, are regularly used to assist the valuation analyst in determining the premium that is paid in the marketplace for control. I will discuss these studies in more detail shortly. However, are companies on Wall Street really buying control? Part of what they are buying is control, but there are many motivational factors that extend far beyond the control issue and that cause acquirers to pay considerably more for a company. When IBM purchased Lotus Development Corp. for about \$66 per share, Lotus' shares were trading at \$33. This would be a 100 percent premium! What about when MFS Communications bought UU Net? The acquired company had \$94.5 million in revenues, a \$63 million net loss, and negative \$21 million in cash flow, but it sold for \$2 billion (that's right, billion with a "b").

Large companies purchase other companies for a variety of reasons besides control. Some of these reasons may include the synergies between the two companies, the ability of the acquirer to enter a new market without starting from scratch, or the ability of the acquirer to enter a completely new line of business that it had not been in before and that complements its existing business. Sometimes, it may just be to eliminate a competitor. In fact, if you examine many of the Wall Street megadeals of the past several years, the acquirer frequently begins selling off parts



of the target company immediately to help pay for the acquisition. How does this factor into the control premium studies? It doesn't! So much for the perfect world!

Assume that a company reports a deal for \$57 per share. However, after the acquisition is completed, certain subsidiaries are sold, and the acquirer gets back the equivalent of \$2 per share. The control premium studies would measure the premium as \$57 over the trading price. Wouldn't it be more accurate to reflect \$55 because that is the net number? Unfortunately, this is the best that we have to work with. It also explains why the courts are not willing to accept a blind application of these studies. The valuation analyst must think through and support the conclusions reached.

## LACK OF CONTROL (MINORITY) DISCOUNTS

A lack of control discount is a reduction in the control value of the appraisal subject that is intended to reflect the fact that a minority stockholder cannot control the daily activities or policy decisions of an enterprise, leading to a reduction in value. The size of the discount will depend on the size of the interest being appraised, the amount of control, the stockholder's ability to liquidate the company, and other factors.

A lack of control discount is basically the opposite of a premium for control. This type of discount is used to obtain the value of a noncontrolling interest in the appraisal subject when a control value is the starting point. Conversely, a control premium is used to determine the control value when the freely traded minority value is the starting point. The starting point is determined based on the method of valuation, the normalization adjustments made, and the source of the discount or capitalization rates.

Lack of control discounts can be mathematically determined using control premiums that are measured in the public market. The formula to determine the minority interest is as follows:

$$1 - \left( \frac{1}{1 + \text{Control premium}} \right)$$

Box 12.2 illustrates this concept.

If you have ever done this stuff before, you probably know that a valuation analyst is supposed to be able to support the size of the discount taken. If you have never done this before, you know now. A discount does not get plucked from the air (or maybe I should say that the discount should not be plucked from the air). In addition to supporting discount rates, capitalization rates, and forecasts, the greatest problem that a valuation analyst faces is supporting the size of the valuation discounts and premiums. It is really pretty humorous to see a valuation analyst write a 100-page valuation report in which he or she spends all of one paragraph to "whack" the value by 35 percent for various discounts. So, where does one go to look for support for the minority discount?

Before we discuss specific sources that are used as a starting point in the process, let's discuss what a minority discount really is. This might best be shown with an example. This is also a good time to illustrate the concept of using the normalization adjustments to assist the valuation analyst in determining control or minority values. Let's assume that ABC Company has a reported net income of \$100,000. Let's also assume that the only normalization adjustment for control is excess rent paid to the stockholder, requiring a \$50,000 adjustment. To keep things simple, let's ignore taxes. Assuming a capitalization rate of 20 percent, value can be estimated as follows:

### Box 12.2 Calculating the Lack of Control Discount

If the control value equals \$120 per share and the control premium equals 20 percent, the minority value would be calculated as follows:

$$1 - [1 \div (1 + 0.2)] = 16.67\% \text{ lack of control discount}$$

The 16.67 percent lack of control discount would be subtracted from the control value to derive the freely traded minority value. This is calculated as follows:

$$\$120 \times 16.67\% = \$20 \text{ discount}$$

$$\$120 - \$20 = \$100 \text{ freely traded minority value}$$

	<u>Control</u>	<u>Minority</u>
Reported net income	\$100,000	\$100,000
Normalization:		
Excess rent	<u>50,000</u>	<u>—</u>
Adjusted net income	\$150,000	\$100,000
Capitalization rate	<u>÷ 20%</u>	<u>÷ 20%</u>
Estimated value	<u>\$750,000</u>	<u>\$500,000</u>

The difference in value of \$250,000 is effectively the lack of control discount. By having control, an owner could create an additional \$250,000 of value by adjusting the excess rent to market levels. Conversely, the minority owner loses this value by not being able to make control adjustments.

The implied lack of control discount in this example is 33⅓ percent ( $\$250,000 \div \$750,000$ ). The nice part about valuing the minority interest in this fashion is that the valuation analyst does not have to support a lack of control discount, which is difficult to do.

There is a problem, however, in relying solely on the normalization adjustments to represent the difference in value between control and minority. There are certain attributes of control that may add value but may not impact measurable cash flow or earnings. For example, having the ability to sell the company is an attribute of control that adds value. However, just having a right, which intuitively should add value, may not be measurable. What about the well run company with no normalization adjustments? Clearly, I would rather have control, even if the cash flow is the same. The question is how much is that right worth?

A couple of the more common sources of information used to measure the lack of control discount include *Mergerstat Review* and the *Mergerstat Control Premium Study*. An online version of the *Mergerstat/Shannon Pratt's Control Premium Study* is available from Business Valuation Resources, LLC.

Each of these sources is referenced in chapter 5 and measures control premiums. Because control premiums are used to calculate the lack of control discount, these sources are the most widely used. Unfortunately, there are no sources that measure lack of control discounts directly. One of the problems the valuation analyst faces is that these studies measure the control premiums differently and, therefore, the implied lack of control discount may be different depending on the source used to calculate the discount. The other major problem is that it may be very difficult to use these references and associate them with a minority interest in a closely held business.

*Mergerstat Review* defines *premium offered* as “calculated by dividing the offer price per share by the seller’s closing market price five business days prior to the announcement of the transaction. May include foreign sellers, publicly traded sellers, and divestitures. Excludes privately owned sellers.”<sup>1</sup> The benefit of this method is that it is a consistent and objective way of measuring the premium. The drawback of this method is that the public price may have already started to climb based on rumors of a deal, which may understate the premium. You also have to be careful if you use composite data because of the foreign sellers.

The *Mergerstat Control Premium Study* defines the control premium differently. According to this publication, “In this study, the premium is expressed as a percentage of the unaffected marketable minority price per share or the *Mergerstat Unaffected Price*. This is the price just prior to the point of change in the representative normal pricing of a given security.”<sup>2</sup> The analysts who publish this study attempt to select a price unaffected by pre-announcement speculation of the transaction. There is a lot to be said for tracking the price changes and daily trading volume as far back as necessary until an apparently “unaffected” minority price is reached because it eliminates most of the price climb resulting from acquisition rumors. The drawbacks are twofold: First, it can be a subjective standard of measurement, subject to bias, unless price change and volume data are consistently analyzed;

<sup>1</sup> *Mergerstat Review*, FactSet Mergerstat, LLC, 2007, page 362.

<sup>2</sup> *Control Premium Study*, FactSet Mergerstat, LLC, 2007, page ii.

and second, if the unaffected price is too far back in time, other factors in the stock market, and not the specific transaction, could have caused the changes.

Another problem that exists in using the control premium data is that we cannot determine if there is a true premium being paid for control or if the acquiring company is paying for synergies that cannot be separately measured. We also do not know how many of the Wall Street megadeals resulted in spin-offs after the acquisition. If a company makes an acquisition for \$100 million but intends to sell a subsidiary as soon after the acquisition as possible—for, let's say, \$10 million—isn't this really a \$90 million net acquisition? However, the control premium data used by the studies would be based on the \$100 million. Unfortunately, it is the best that we have to work with.

In case you are not nervous about this yet, one of the difficulties in properly measuring the control premium that was paid is that it must be in a cash equivalent price to help the valuation analyst determine the fair market value of the appraisal subject. Business transactions are frequently consummated using various payment options, including all cash, cash and noncash, or all noncash consideration.

It is essential to know the value of the noncash consideration in relation to the face amount of the consideration. Most control premium studies that include purchases using noncash consideration report only the price calculated using the face value of the noncash consideration, not its cash equivalent.

Table 12.2 illustrates part of the typical table that appears in many valuation textbooks. It demonstrates how the control premium data can be used in the calculation of the lack of control discount.

**TABLE 12.2**  
**PERCENT PREMIUM PAID OVER MARKET PRICE**

<u>Year of buyout</u>	<u>Number of transactions</u>	<u>Average premium paid over market (%)</u>	<u>Median premium paid (%)</u>	<u>Implied minority interest discount</u>
2000	574	49.2	41.1	29.1
2001	439	57.2	40.5	28.8
2002	326	59.7	34.4	25.6
2003	371	62.3	31.6	24.0
2004	322	30.7	23.4	19.0
2005	392	34.5	24.1	19.4
2006	454	31.5	23.1	18.8

(Source: *Mergerstat Review 2007*. [Santa Monica, CA: FactSet Mergerstat, LLC.] Discount calculated by the analyst.)

Table 12.2 reflects part of the table that many of us have seen over and over again. What many of us ignored is the fact that the *Mergerstat* data includes only premiums. However, companies are not only purchased at a premium. Sometimes companies are purchased at a discount from the market price.

Our firm performed an analysis using *Mergerstat* data located on the [bvmarketdata.com](http://bvmarketdata.com) Web site taking the negative premiums into consideration in addition to the positive ones. The results were frightening. The results of the average and median premiums from 2000–2006 are presented in table 12.3.<sup>3</sup>

<sup>3</sup> The number of transactions is different in this information than the data that was presented in table 12.2. This was partially due to the foreign transactions. While the premiums are different, do not compare the previous exhibit to this information. The positive and negative premiums in our calculated data will demonstrate the differentials.

**TABLE 12.3**  
**EXAMPLE *MERGERSTAT* AVERAGE AND MEDIAN PREMIUMS FROM**  
**2000–2006**

<b>Based on Average Premiums</b>				
<b>Year of buyout</b>	<b>Positive premiums only</b>		<b>Positive and negative premiums</b>	
	<b>Paid over market (%)</b>	<b>Implied lack of control discount (%)</b>	<b>Paid over market (%)</b>	<b>Implied lack of control discount (%)</b>
2000	48.50%	32.66%	35.28%	26.08%
2001	51.97%	34.20%	34.03%	25.39%
2002	49.14%	32.95%	33.05%	24.84%
2003	55.58%	35.72%	47.76%	32.32%
2004	36.28%	26.62%	28.55%	22.21%
2005	32.62%	24.60%	23.09%	18.76%
2006	28.75%	22.33%	23.51%	19.04%
<b>Based on Median Premiums</b>				
<b>Year of buyout</b>	<b>Positive premiums only</b>		<b>Positive and negative premiums</b>	
	<b>Paid over market (%)</b>	<b>Implied lack of control discount (%)</b>	<b>Paid over market (%)</b>	<b>Implied lack of control discount (%)</b>
2000	37.00%	27.01%	29.00%	22.48%
2001	36.00%	26.47%	26.00%	20.63%
2002	34.00%	25.37%	25.00%	20.00%
2003	38.00%	27.54%	33.50%	25.09%
2004	26.00%	20.63%	22.50%	18.37%
2005	24.00%	19.35%	17.00%	14.53%
2006	20.00%	16.67%	17.00%	14.53%

Putting this data into perspective, if a valuation analyst was to base the control premium or discount for lack of control merely on the data included in the table that we are used to seeing, the premium or discount, or both, would be significantly overstated. This means that the control premium that might be added to the freely traded value would be too high. Conversely, if a discount for lack of control was calculated from the normally used data, the discount would be overstated, and the minority interest would be undervalued. So what does all of this mean? It means that we have to be aware of the data that we use and its impact on our conclusions. Merely accepting data without understanding what is included in it is a bad practice.

## **DISCOUNT FOR LACK OF MARKETABILITY (ILLIQUIDITY)**

A discount for lack of marketability (DLOM) is used to compensate for the difficulty of selling shares of stock that are not traded on a stock exchange compared with those that can be traded publicly. If an investor owns shares in a public company, he or she can pick up the telephone, call a broker, and generally convert the investment into cash within

three days. That is not the case with an investment in a closely held business. Therefore, publicly traded stocks frequently have an element of liquidity that closely held shares do not. This is the reason that a DLOM may be applied. It is intended to reflect the market's perceived reduction in value for not providing liquidity to the shareholder.

A DLOM may also be appropriate when the shares have either legal or contractual restrictions placed upon them. These may be in the form of restricted stock, restrictions resulting from buy-sell agreements, bank loan restrictions, or other types of contracts that restrict the sale of the shares. Even when the valuation subject is a 100 percent interest, a DLOM may be appropriate if the owner cannot change the restrictions on the stock. However, most valuation analysts agree that a DLOM for a controlling interest will generally be lower than a DLOM for a minority interest.

## RESTRICTED STOCK STUDIES

The most common sources of data for determining an appropriate level of a DLOM are studies involving restricted stock purchases or initial public offerings. Revenue Ruling 77-287 refers to the Institutional Investor Study Report of the Securities and Exchange Commission, which addresses restricted stock issues.<sup>4</sup> Many studies have updated this one.

Restricted stock (or *letter stock*, as it is sometimes called) is stock issued by a corporation that is not registered with the Securities and Exchange Commission (SEC) and cannot be readily sold into the public market. The stock is usually issued when a corporation is first going public, making an acquisition, or raising capital. Corporations issue restricted stock rather than tradable stock mainly (1) to avoid dilution of their stock price when an excessive number of shares are available for sale at any one time, and (2) to avoid the costs of registering the securities with the SEC.

The registration exemption on restricted stocks is granted under Section 4(2) of the 1933 Securities Act. The intent of Section 4(2) is to provide "small" corporations with the ability to raise capital without incurring the costs of a public offering. Regulation D, a safe harbor regulation that became effective in 1982, falls under Section 4(2) of the Securities Act and provides uniformity in federal and state securities laws regarding private placements of securities. Securities bought under Regulation D are subject to restrictions, the most important being that the securities cannot be resold without either registration under the act or an exemption.<sup>5</sup> The exemptions for these securities are granted under Rule 144.

Rule 144 (17C.F.R. 230.144 1980) allows the limited resale of unregistered securities after a minimum holding period of two years. Resale is limited to the higher of 1 percent of outstanding stock or average weekly volume over a 4 week period prior to the sale, during any three month period. There is no quantity limitation after a four year holding period.<sup>6</sup>

Therefore, to sell their stock on the public market, holders of restricted stock must either register their securities with the SEC or qualify for a Rule 144 exemption. A holder of restricted stock can, however, trade the stock in a private transaction. Historically, when traded privately, the restricted stock transaction was usually required to be registered with the SEC. However, in 1990, the SEC adopted Rule 144a, which relaxed the SEC filing restrictions on private transactions. The rule allows qualified institutional investors to trade unregistered securities among themselves without filing registration statements.<sup>7</sup> In 1997, this rule was changed again, shortening the required holding period for these stocks to one year. In 2007, this rule was revised again, further shortening the holding period to six months. The overall effect of these regulations on restricted stock is that when the stocks are issued, the corporation is not required to disclose a price, and on some occasions, even when they are traded, the value of restricted securities is still not a matter of public record.

Various studies have been performed relating to restricted stocks. Each of these studies attempts to quantify the discount taken against the freely traded price of minority shares in the public market. The following are some of the more frequently cited studies:

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<sup>4</sup> "Discounts Involved in Purchases of Common Stock (1966–1969)," Institutional Investor Study Report of the Securities and Exchange Commission, H.R. Doc. No. 64, pt. 5, 92d Cong., 1st Sess. 1971, 2444–2456.

<sup>5</sup> Alli, Kasim L. and Donald J. Thompson, "The Value of the Resale Limitation on Restricted Stock: An Option Theory Approach," *Valuation* (1991), 22–33.

<sup>6</sup> *Ibid.*, 23.

<sup>7</sup> Brealey, Richard A. and Stewart C. Myers, "How Corporations Issue Securities," in Richard A. Brealey and Stewart C. Myers, eds., *Principles of Corporate Finance*, 4th ed. (New York: McGraw-Hill, 1991), 354–356.

- SEC Institutional Investor study
- Gelman study
- Moroney study
- Maher study
- Trout study
- Standard Research Consultants study
- Willamette Management Associates study
- Silber study
- FMV study
- Management Planning study
- Bruce Johnson study
- Columbia Financial Advisors study

Let's discuss some of these studies. Too often, valuation analysts use the average discounts that are cited in business valuation publications and textbooks without reading the actual studies. This is both dangerous and negligent. You should understand these studies before using them.

## SEC Institutional Investor Study

As part of a major study of institutional investor actions performed by the SEC, the amount of discount at which transactions in restricted stock take place, compared with the prices of otherwise identical but unrestricted stock on the open market, was addressed. The report introduced the study with the following discussion about restricted stock:

Restricted securities are usually sold at a discount from their coeval market price, if any, primarily because of the restrictions on their resale. With the information supplied by the respondents on the purchase prices of the common stock and the dates of transaction, the Study computed the implied discounts in all cases in which it was able to locate a market price for the respective security on the date of the transaction.<sup>8</sup>

Table 12.4 contains a reproduction of Table XIV-45 of the SEC *Institutional Investor Study*, which shows the size of the discounts at which restricted stock transactions took place compared with the prices, as of the same date, of the freely traded but otherwise identical stocks. The table shows that about half of the transactions (in terms of real dollars) took place at discounts ranging from 20–40 percent.

The discounts were lowest for those stocks that would be tradable when the restrictions expired on the New York Stock Exchange and were highest for those stocks that could be traded in the over-the-counter market when the restrictions expired. The overall average discount in this study was 25.8 percent. For stocks whose market would be nonreporting, over-the-counter companies when the restrictions expired, the average discount was approximately 32.6 percent. Think about the closely held company whose shares have no prospect of any market. The discount would have to be higher.

The research from the SEC *Institutional Investor Study* was the foundation for SEC Accounting Series Release No. 113 (October 13, 1969) and No. 1–18 (December 23, 1970), which require investment companies registered under the Investment Company Act of 1940 to disclose their policies about the cost and valuation of their restricted securities. As a result of the study, there is now an ongoing body of data about the relationship between restricted stock prices and their freely tradable counterparts. This body of data can provide empirical benchmarks for quantifying marketability discounts.

## Gelman Study

In 1972, Milton Gelman of National Economic Research Associates, Inc. published the results of his study of the prices paid for restricted securities by four closed end investment companies specializing in restricted securities investments.<sup>9</sup> Gelman used data from 89 transactions between 1968 and 1970, and found that both the average and median discounts were 33 percent and that almost 60 percent of the purchases were at discounts of 30 percent and higher. This data is consistent with the SEC study.

<sup>8</sup> Institutional Investor Study Report of the Securities and Exchange Commission, 2444.

<sup>9</sup> Milton Gelman, "An Economist-Financial Analyst's Approach to Valuing Stock of a Closely Held Company," *Journal of Taxation* (1972): 353–354.

TABLE 12.4  
SEC INSTITUTIONAL INVESTOR STUDY

Trading market	Discount											
	-15.0% to 0.0%			0.1% to 10.0%			10.1% to 20.0%			20.1% to 30.0%		
	No. of transactions	Value of purchases	No. of transactions	Value of purchases	No. of transactions	Value of purchases	No. of transactions	Value of purchases	No. of transactions	Value of purchases	No. of transactions	Value of purchases
Unknown	1	\$ 1,500,000	2	\$ 2,496,583	1	\$ 205,000	0	\$	0	\$	0	\$
New York Stock Exchange	7	3,760,663	13	15,111,798	13	24,503,988	10	17,954,085				
American Stock Exchange	2	7,263,060	4	15,850,000	11	14,548,750	20	46,200,677				
Over-the-counter (Reporting companies)	11	13,828,757	39	13,613,676	35	38,585,259	30	35,479,946				
Over-the-counter (Nonreporting companies)	5	8,329,369	9	5,265,925	18	25,122,024	17	11,229,155				
<b>TOTAL</b>	<b>26</b>	<b>\$ 34,681,849</b>	<b>67</b>	<b>\$52,337,982</b>	<b>78</b>	<b>\$102,965,021</b>	<b>77</b>	<b>\$110,863,863</b>				
	<b>30.1% to 40.0%</b>		<b>40.1% to 50.0%</b>		<b>50.1% to 80.0%</b>		<b>Total</b>					
Unknown	2	\$ 3,332,000	0	\$	1	\$ 1,259,995	7	\$ 8,793,578				
New York Stock Exchange	3	11,102,501	1	1,400,000	4	5,005,068	51	78,838,103				
American Stock Exchange	7	21,074,298	1	44,250	4	4,802,404	49	109,783,439				
Over-the-counter (Reporting companies)	30	58,689,328	13	9,284,047	21	8,996,406	179	178,477,419				
Over-the-counter (Nonreporting Companies)	25	29,423,584	20	11,377,431	18	13,505,545	112	104,253,033				
<b>TOTAL</b>	<b>67</b>	<b>\$ 123,621,711</b>	<b>35</b>	<b>\$22,105,728</b>	<b>48</b>	<b>\$ 33,569,418</b>	<b>398</b>	<b>\$480,145,572</b>				

(Source: Institutional Investor Study Report of the Securities and Exchange Commission, H.R. Doc. No. 64, Part 5, 92nd Cong., 1st Session 1971, Table XIV-45.)



## Moroney Study

An article by Robert E. Moroney of the investment banking firm Moroney, Beissner & Co. contained the results of a study of the prices paid for restricted securities by 10 registered investment companies.<sup>10</sup> The study included 146 purchases at discounts ranging from 3 percent to 90 percent. The average discount was approximately 35.6 percent. Despite the pretty broad range, the average discount was, once again, in line with the other studies.

In this article, Moroney compared the evidence of actual cash transactions with the lower, average discounts for lack of marketability determined in some previous estate and gift tax cases. He stated that at the times of these other cases, there was no available evidence about the prices of restricted stocks that could have been used as a benchmark to help quantify these discounts. However, he suggested that higher discounts for lack of marketability should be allowed in the future as more relevant data becomes available. He stated

Obviously the courts in the past have overvalued minority interests in closely held companies for federal tax purposes. But most (probably all) of those decisions were handed down without benefit of the facts of life recently made available for all to see. Some appraisers have, for years, had a strong gut feeling that they should use far greater discounts for non-marketability than the courts had allowed. From now on those appraisers need not stop at 35 percent merely because it's perhaps the largest discount clearly approved in a court decision. Appraisers can now cite a number of known arm's-length transactions in which the discount ranged up to 90 percent.<sup>11</sup>

Approximately four years later, Moroney wrote another article in which he stated that courts had started to recognize higher discounts for lack of marketability:

The thousands and thousands of minority holders in closely held corporations throughout the United States have good reason to rejoice because the courts in recent years have upheld illiquidity discounts in the 50 percent area.<sup>12</sup>

Despite Moroney's writings, the courts have not willingly accepted large discounts. We have witnessed some discounts that were larger than the average, but overall, the courts are still somewhat reluctant to recognize the difficulty in liquidating an illiquid asset.

## Maher Study

J. Michael Maher of Connecticut General Life Insurance Co. conducted another interesting study on lack of marketability discounts for closely held business interests.<sup>13</sup> The results of this well documented study were published in the September 1976 issue of *Taxes*. Using an approach similar to Moroney's, Maher compared the prices paid for restricted stocks with the market prices of their unrestricted counterparts. The data covered the five-year period from 1969–1973. The study showed that “the mean discount for lack of marketability for the years 1969 to 1973 amounted to 35.43 percent.”<sup>14</sup> In an attempt to eliminate abnormally high and low discounts, Maher eliminated the top and bottom 10 percent of the purchases. Guess what? The resulting average discount was 34.73 percent, almost the exact same discount that was derived without the top and bottom items removed.

Maher's remarks are a good learning tool because he distinguishes between a discount for lack of marketability and a lack of control discount:

The result I have reached is that most appraisers underestimate the proper discount for lack of marketability. The results seem to indicate that this discount should be about 35 percent. Perhaps this makes sense because by committing funds to restricted common stock, the willing buyer (a) would be denied the opportunity to take advantage of other investments, and (b) would continue to have his investment at the risk of the business until the shares could be offered to the public or another buyer is found.

<sup>10</sup> Robert E. Moroney, “Most Courts Overvalue Closely Held Stocks,” *Taxes* (1973): 144–154.

<sup>11</sup> *Ibid.*, 154.

<sup>12</sup> Robert E. Moroney, “Why 25% Discount for Nonmarketability in One Valuation, 100% in Another,” *Taxes* (1977): 316–320. Edwin A. Gallun, 33 T.C.M. 1316 (1974), allowed 55 percent. Estate of Maurice Gustave Heckscher, 63 T.C. 485 (1975), allowed 48 percent. Although Estate of Ernest E. Kirkpatrick, 34 T.C.M. 1490 (1975), found per share values without mentioning discount, expert witnesses for both sides used 50 percent the first time a government witness recommended 50 percent. A historic event, indeed!

<sup>13</sup> J. Michael Maher, “Discounts for Lack of Marketability for Closely Held Business Interests,” *Taxes* (1976): 562–571.

<sup>14</sup> *Ibid.*, 571.

The 35 percent discount would not contain elements of a discount for a minority interest because it is measured against the current fair market value of securities actively traded (other minority interests). Consequently, appraisers should also consider a discount for a minority interest in those closely held corporations where a discount is applicable.<sup>15</sup>

Now the plot thickens. Not only are we seeing larger discounts, but we are now starting to see opinions, other than mine, that more than one discount could be applicable. This could mean that smaller, closely held company values should be discounted quite a bit when they are compared with publicly traded guideline companies.

## Trout Study

The next study that we learned about was performed by Robert R. Trout.<sup>16</sup> Trout was with the Graduate School of Administration, University of California Irvine, and Trout, Shulman & Associates. Trout's study of restricted stocks covered the period 1968–1972 and addressed the purchases of these securities by mutual funds. Trout attempted to construct a financial model that would provide an estimate of the discount appropriate for a private company's stock. Creating a multiple regression model involving 60 purchases, Trout measured an average discount of 33.45 percent for restricted stock from freely traded stock. Either this was quite a coincidence, or these guys were in cahoots!

## Standard Research Consultants Study

In 1983, Standard Research Consultants analyzed private placements of common stock to test the current applicability of the SEC *Institutional Investor Study*.<sup>17</sup> Standard Research studied 28 private placements of restricted common stock from October 1978 through June 1982. The discounts ranged from 7 percent to 91 percent, with a median of 45 percent, a bit higher than seen in the other studies. During this period, however, the economy experienced extraordinarily high interest rates.

Only 4 of the 28 companies studied had unrestricted common shares traded on either the American Stock Exchange or the New York Stock Exchange, and their discounts ranged from 25 percent to 58 percent with a median of 47 percent—not significantly different from the 45 percent median of the remaining companies that traded in the over-the-counter market.

## Willamette Management Associates, Inc. Study

Willamette Management Associates analyzed private placements of restricted stocks for the period of January 1, 1981, through May 31, 1984.<sup>18</sup> In discussing this unpublished study, Willamette states that the early part of it overlapped with the last part of the Standard Research study, but there were very few transactions that took place during the period of overlap. According to the discussion of the study in Pratt, Reilly, and Schweih's *Valuing a Business*, most of the transactions in the study took place in 1983.

For this time period, Willamette identified 33 transactions that could be classified with reasonable confidence as arm's-length transactions and for which the price of the restricted shares could be compared directly with the price of trades in otherwise identical but unrestricted shares of the same company at the same time. The median discount for the 33 restricted stock transactions compared with the prices of their freely tradable counterparts was 31.2 percent, a little bit lower than the other studies but substantially lower than the study by Standard Research.

In *Valuing a Business*, Pratt et al. attribute the slightly lower average percentage discounts for private placements during this time to the somewhat depressed prices in the public stock market, which in turn were in response to the recessionary economic conditions prevalent during most of the period of the study (remember a prime rate of 21.5 percent?). Taking this into consideration, the study basically supports the long-term average discount of 35 percent for transactions in restricted stock compared with the prices of their freely tradable counterparts.

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<sup>15</sup> Ibid.

<sup>16</sup> Robert R. Trout, "Estimation of the Discount Associated With the Transfer of Restricted Securities," *Taxes* (1977): 381–385.

<sup>17</sup> "Revenue Ruling 77-287 Revisited," *SRC Quarterly Reports* (1983) 1–3.

<sup>18</sup> The Willamette Management Associates study is unpublished but is discussed in Shannon P. Pratt, Robert E. Reilly, and Robert P. Schweih's *Valuing a Business*, 4th ed., page 400.

## Silber Study

In 1991, another study of restricted stock was published, but it included transactions during the period of 1981–1988. This study, by William L. Silber, substantiated the earlier restricted stock studies and found an average price discount of 33.75 percent.<sup>19</sup> Silber identified 69 private placements involving the common stock of publicly traded companies. The restricted stock in this study could be sold under Rule 144 after a two-year holding period. Similar to Trout, Silber tried to develop a statistical model to explain the price differences between securities that differ in resale provisions. Silber concluded that the discount on restricted stock varies directly with the size of the block of restricted stock relative to the amount of publicly traded stock issued by the company. He found that the discounts were larger when the block of restricted stock was large compared with the total number of shares outstanding. Silber also noted that the size of the discount was inversely related to the creditworthiness of the issuing company.

## FMV Study

FMV Opinions, Inc. conducted a study from 1979 through April 1992.<sup>20</sup> In spite of the long time period covered, this study analyzed only a little over 100 transactions involving companies that were generally not the smallest capitalization companies. It supported the findings of the SEC *Institutional Investor Study* in finding that the DLOM was higher for smaller capitalization companies. This study, however, found an average discount of only about 23 percent.

## Management Planning Study

The last study that covered the period before the Rule 144a changes that took place in April 1997 was conducted by Management Planning, Inc. This study is discussed in *Quantifying Marketability Discounts*, by Z. Christopher Mercer, ASA, CFA. The Management Planning study includes restricted stock transactions for the period from 1980–1995.

The primary focus for the Management Planning study was to identify companies that had made private placements of unregistered common shares that would, except for the restrictions on trading, have similar characteristics to that company's publicly traded shares. Companies included in the study had to have in excess of \$3 million in annual sales and be profitable for the year immediately prior to the private placement. It was required that the company be a domestic corporation and not considered to be in a "development stage" and the common stock of the issuing company sell for at least \$2 per share.

Management Planning analyzed 200 private transactions involving companies with publicly traded shares. Of the 200, 49 met the base criteria described. Of these, the average mean discount was 27.7 percent, while the average median discount was 28.8 percent.<sup>21</sup>

A more detailed analysis of the Management Planning Study indicated a large range of discounts relative to the sample companies due to varying degrees of revenues, earnings, market share, price stability, and earnings stability. The average revenues for the companies selected for review were \$47.5 million; however, the median revenue figure was \$29.8 million, indicating that the average sales figure was impacted by a few companies that were significantly larger than the others studied. The average discount for companies with revenues under \$10 million was 32.9 percent.

Likewise, the average reported earnings of the study group were skewed by 20 companies in the study whose earnings exceeded \$1 million and that, in fact, had a median earnings figure of \$2.9 million. Twenty-nine of the companies studied earned less than \$1 million, while the median earnings of all of the companies in the sample was \$0.7 million. Table 12.5 indicates that fourth-quartile companies reflected private placement median discounts to the shares traded in the open markets ranging from 34.6 percent to 44.8 percent, based on the factors considered. The average discount of sample companies in the fourth quartile for the five factors considered was 39.3 percent.

## Bruce Johnson Study

Bruce Johnson studied 72 private placement transactions that occurred in 1991–1995. The range was a 10 percent premium to a 60 percent discount with an average discount for these 72 transactions of 28 percent. This study covered the first half decade after the Rule 144 restrictions were relaxed. The results seem to indicate that discounts are lower when the holding period is shorter.

<sup>19</sup> William L. Silber, "Discounts on Restricted Stock: The Impact of Illiquidity on Stock Prices," *Financial Analysts Journal* (1991): 60–64.

<sup>20</sup> Hall, Lance S. and Timothy C. Polacek, "Strategies for Obtaining the Largest Discount," *Estate Planning* (1994): 38–44.

<sup>21</sup> Z. Christopher Mercer, *Quantifying Marketability Discounts*, (Memphis: Peabody Publishing L.P., 1997), 345–363.

**TABLE 12.5**  
**SUMMARY DATA FROM MANAGEMENT PLANNING STUDY**

<b>Factors considered in the analysis</b>		<b>First quartile</b>	<b>Second quartile</b>	<b>Third quartile</b>	<b>Fourth quartile</b>	<b>Original expectations re: discounts</b>
<b>Restricted stock discounts</b>						
<b>Revenues</b>	Medians	18.7%	22.2%	31.5%	36.6%	Higher revenues, lower discounts
	Means	21.8%	23.9%	31.9%	34.7%	
<b>Earnings</b>	Medians	16.1%	30.5%	32.7%	39.4%	Higher earnings, lower discounts
	Means	18.0%	30.0%	30.1%	34.1%	
<b>Market Price/Share</b>	Medians	23.3%	22.2%	29.5%	41.0%	Higher the price, lower discounts
	Means	23.3%	24.5%	27.3%	37.3%	
<b>Price stability</b>	Medians	34.6%	31.6%	9.2%	19.4%	Lower stability, higher discounts
	Means	34.8%	33.3%	21.0%	22.0%	
<b>Earnings stability</b>	Medians	14.1%	26.2%	30.8%	44.8%	Higher earnings stability, lower discounts
	Means	16.4%	28.8%	27.8%	39.7%	

### Columbia Financial Advisors, Inc. Study

Columbia Financial Advisors, Inc. (CFAI) conducted two studies, the first, covering the period from January 1, 1996 to April 30, 1997, and the second, covering the period from 1997 to 1998. Their first analysis of restricted securities in the United States was of private common equity placements that were done from January 1, 1996 to April 30, 1997. Using 23 transactions (8 involving restricted securities, and 15 involving private placements with no registration rights), the average discount was 21 percent, with a median of 14 percent. The 1990 adoption of Rule 144A seems to have had an effect on these discounts.

CFAI conducted another restricted stock study to assess the effects of another alteration to Rule 144. Mandatory holding periods, as of April 29, 1997, were reduced from two years to one year. CFAI used 15 transactions whose stock was privately placed. The average discount for this group was 13 percent, with a median of 9 percent. These discounts are clearly impacted by the shorter holding period.

### MORE ABOUT THE DLDM

All of the studies about restricted stock deal with minority blocks of stock in public companies. Therefore, the restricted stock studies may be a useful guide in assessing a DLDM for a minority interest. However, a control value may also need to reflect a DLDM, although it probably would be smaller than a DLDM attributable to minority shares. Because a minority interest is more difficult to sell than a controlling interest, the DLDM is usually larger for minority interests. The average DLDM ranges between 25 percent and 45 percent based on the studies previously discussed. Larger discounts may be appropriate if the starting point is a marketable, minority interest value based on public guideline company methods. This is due to the fact that a minority investor in the public market measures liquidity as three days to cash.

But what about entire closely held companies? Clearly, it will take more than three days to sell. In fact, over the years, the business brokers that I have spoken with have told me repeatedly that it generally takes six to nine months to sell a closely held company. The question that the valuation analyst must ask is "Should the comparison be made to freely traded stocks at the minority level from the public market?" The answer should be obvious. Absolutely not! In fact, think about how long it takes to sell an entire public company. By the time that the due diligence is done and the regulatory agencies bless the transaction, more than a year can go by. Entire closely held companies may be more marketable than their public counterparts. Unfortunately, we do not have any empirical data to base the discount on.

Many valuation analysts believe that a 100 percent control position is fully marketable. I think that it depends on the facts and circumstances and must be considered on a case by case basis. Certain businesses will be more difficult to sell than others. Keep in mind, however, that while the owner is attempting to sell the business, he or she continues to get the cash flow from the investment (assuming that there is some) to mitigate the loss incurred in the time it takes to sell the investment. This would reduce the discount.

## INITIAL PUBLIC OFFERING STUDIES

Another manner in which the business appraisal community and users of its services determine DLOMs is through the use of closely held companies that underwent an initial public offering (IPO) of their stock. In these instances, the value of the closely held stock is measured before and after the company went public.

John Emory, formerly of Robert Baird & Co., has conducted 10 studies over time periods ranging from 1980 through June 2000, comparing the prices in closely held stock transactions, when no public market existed, with the prices of subsequent IPOs in the same stocks. The study consisted of an analysis of 4,088 prospectuses in an attempt to determine the relationship between the IPO price and the price at which the latest private transaction occurred up to five months before the company went public. The average discount in these studies ranged between 42 and 60 percent, with the higher discounts occurring at the time that interest rates were high and low. The median discounts ranged from 40 percent to 66 percent. The results are presented in table 12.6.

**TABLE 12.6**  
**THE VALUE OF MARKETABILITY AS ILLUSTRATED IN**  
**INITIAL PUBLIC OFFERINGS OF COMMON STOCK**

Study	# of IPO prospectuses reviewed	# of qualifying transactions	Discount	
			Mean	Median
1997–2000 <sup>(a)</sup>	1,847	283	50%	52%
1997–2000 <sup>(b)</sup>	1,847	36	48%	44%
1997–2000 <sup>(c)</sup>	NA	53	54%	54%
1995–1997	732	91	43%	42%
1994–1995	318	46	45%	45%
1992–1993	443	54	45%	44%
1990–1992	266	35	42%	40%
1989–1990	157	23	45%	40%
1987–1989	98	27	45%	45%
1985–1986	130	21	43%	43%
1980–1981	97	13	60%	66%
Total			47%	48%

<sup>(a)</sup> Expanded study.

<sup>(b)</sup> Limited study.

<sup>(c)</sup> Dot-Com study.

(Source: John D. Emory, Sr., F.R. Dengel III, and John D. Emory, Jr., "Expanded Study of the Value of Marketability as Illustrated in Initial Public Offerings of Common Stock," *Business Valuation Review* [December 2001]. Copyright © 2001, American Society of Appraisers. Used with permission.)

Although these discounts seem slightly higher than those of the restricted stock studies, don't jump for joy yet. There are several thoughts that should enter your mind. Were many of the purchases that took place before the IPO (you know—make sure that Uncle Harry, Aunt Millie, and Cousin Gerry all end up with stock before the IPO) truly at arm's length? Furthermore, if the purchaser was aware of the IPO, he or she would also realize that there would soon be liquidity and, because of the new infusion of capital that would be coming into the company, the IPO price might be higher than it would have been had the company not gone public. All of these factors could have affected the IPO price, as well as the price that the purchaser was willing to pay for the shares. Therefore, these discounts may be overstated.

A similar private, unpublished study has been performed by Willamette Management Associates. Pratt explains the differences between the Baird studies and the Willamette studies and emphasizes that one of the main differences is that Willamette tried to identify only those transactions that were at arm's length.<sup>22</sup> Willamette also attempted to adjust the

<sup>22</sup> See *Valuing a Business*, 408.

data for changes in market conditions. The median discounts in the Willamette studies were considerably higher than the others, ranging from 31.8 percent to 73.1 percent. Their results are in the data presented in table 12.7.

**TABLE 12.7**  
**SUMMARY OF DISCOUNTS FOR PRIVATE TRANSACTION P/E MULTIPLES**  
**COMPARED TO PUBLIC OFFERING P/E MULTIPLES ADJUSTED**  
**FOR CHANGES IN INDUSTRY P/E MULTIPLES**

<b>Time Period</b>	<b>Number of Companies Analyzed</b>	<b>Number of Transactions Analyzed</b>	<b>Standard Mean Discount</b>	<b>Trimmed Mean Discount*</b>	<b>Median Discount</b>	<b>Standard Deviation</b>
1975–78	17	31	34.0%	43.4%	52.5%	58.6%
1979	9	17	55.6%	56.8%	62.7%	30.2%
1980–82	58	113	48.0%	51.9%	56.5%	29.8%
1983	85	214	50.1%	55.2%	60.7%	34.7%
1984	20	33	43.2%	52.9%	73.1%	63.9%
1985	18	25	41.3%	47.3%	42.6%	43.5%
1986	47	74	38.5%	44.7%	47.4%	44.2%
1987	25	40	36.9%	44.9%	43.8%	49.9%
1988	13	19	41.5%	42.5%	51.8%	29.5%
1989	9	19	47.3%	46.9%	50.3%	18.6%
1990	17	23	30.5%	33.0%	48.5%	42.7%
1991	27	34	24.2%	28.9%	31.8%	37.7%
1992	36	75	41.9%	47.0%	51.7%	42.6%
1993	51	110	46.9%	49.9%	53.3%	33.9%
1994	31	48	31.9%	38.4%	42.0%	49.6%
1995	42	66	32.2%	47.4%	58.7%	76.4%

\* Excludes the highest and lowest deciles of indicated discounts.  
(Source: Willamette Management Associates, as appearing in Shannon P. Pratt, Robert E. Reilly, and Robert P. Schweih, *Valuing a Business*, 4th ed. [New York, McGraw-Hill, 2000]: 410. **Reproduced with permission of The McGraw-Hill Companies.**)

In *Valuing a Business*, the authors respond to several of the criticisms that they have heard over the years regarding the use of their IPO studies. They state the following:

#### **Criticisms of Willamette Management Associates Study**

Over the years that Willamette Management Associates has used the pre-IPO study in support of the estimation of the lack of marketability discount, the work has been the subject of certain criticisms. In the following discussion, we will attempt to respond to some of these criticisms.

1. The results are impossible to verify because Willamette Management Associates will not provide the underlying data or calculation. The analyses are performed in response to individual client situations at great expense and are proprietary. However, (1) they are based entirely on publicly available data, and (2) all the calculations can be replicated when needed, as the methodology is set forth in detail in several books and articles published by Willamette Management Associates professional staff.
2. There is a self-selection bias in the determination of “qualifying transactions,” resulting in an over-estimation of the discount for lack of marketability by excluding “troubled” companies. The Willamette Management Associates study excludes, by definition, companies that fail or fail to go public. This is obvious because only companies that go public create a benchmark of liquidity for minority ownership



interest shares. Conversely, companies that do not go public are useless for the purpose of deriving a marketable stock price. In order to estimate the lack of marketability discount, one should have a benchmark for comparison (that is, a marketable price to compare with the nonmarketable price).

The fact that the Willamette Management Associates study includes only “successful” companies may actually bias the lack of marketability discount downward. One would expect a “troubled” company to be less liquid than a “successful” company, with fewer options for liquidity, resulting in a greater lack of marketability discount.

An argument has been made that the less successful company may trade at a price below the price realized in an earlier transaction (presumably resulting in a premium or negative lack of marketability discount). This may be true at first glance. However, because we adjust the pricing for changes in the price/earnings multiple, the resulting lack of marketability discount is more reliable. In other words, the exclusion of “troubled” companies, while necessary and logical, does not necessarily lead to an over-estimation of the lack of marketability discount.

3. Many of the transactions are not arm’s-length transactions. A comprehensive effort is made to eliminate non-arm’s-length transactions. Each of the transactions included in the database has also passed the scrutiny of the SEC. Although the level of effort we put forth to verify the validity of the arm’s-length nature of the pre-IPO transaction is subject to challenge, the number of non-arm’s-length transactions that may arguably have been included would not skew the results.<sup>23</sup>

Clearly, the authors seem to respond with an argument that makes sense. Just be careful. Whenever you rely on someone else’s work, you should try to understand the underlying data. If other articles are published, for example, try to get them. It will not hurt when you have to defend your position.

Another study that I really like is the Valuation Advisors’ Lack of Marketability Discount study. This study breaks down the discount for lack of marketability based on the amount of time that transactions occur prior to the IPO. This study is available from Business Valuation Resources, LLC. Table 12.8 summarizes data from this study.

<b>Time of Transaction Before IPO</b>	<b>1–90 Days</b>	<b>91–180 Days</b>	<b>181–270 Days</b>	<b>271–365 Days</b>	<b>1–2 Years</b>
<b>1999 Results</b>					
Number of transactions	149	175	103	92	175
Median discount	30.8%	53.9%	75.0%	76.9%	82.0%
<b>2000 Results</b>					
Number of transactions	129	176	116	91	141
Median discount	28.7%	45.1%	61.2%	68.9%	76.6%
<b>2001 Results</b>					
Number of transactions	15	17	18	17	48
Median discount	14.7%	33.2%	33.4%	52.1%	51.6%
<b>2002 Results</b>					
Number of transactions	9	12	7	16	36
Median discount	6.2%	17.3%	21.9%	39.5%	55.0%
<b>2003 Results</b>					
Number of transactions	12	22	24	21	44
Median discount	28.8%	22.2%	38.4%	39.7%	61.4%

<sup>23</sup> Shannon P. Pratt, Robert E. Reilly, and Robert P. Schweihs, *Valuing a Business*, 4th ed. (New York, McGraw-Hill, 2000), 410. Reproduced with permission of The McGraw-Hill Companies.



**TABLE 12.8**  
**VALUATION ADVISORS' LACK OF MARKETABILITY DISCOUNT STUDY—**  
**TRANSACTION SUMMARY RESULTS BY YEAR FROM 1999–2006**

Time of Transaction Before IPO	1–90 Days	91–180 Days	181–270 Days	271–365 Days	1–2 Years
<b>2004 Results</b>					
Number of transactions	37	74	63	59	101
Median discount	16.7%	22.7%	40.0%	56.3%	57.9%
<b>2005 Results</b>					
Number of transactions	18	59	58	62	99
Median discount	14.8%	26.1%	41.7%	46.1%	45.5%
<b>2006 Results</b>					
Number of transactions	25	76	69	72	106
Median Discount	20.7%	20.8%	40.2%	46.9%	57.2%
<b>2007 Results</b>					
Number of Transactions	46	76	92	79	124
Median Discount	11.1%	29.4%	36.3%	47.5%	53.1%
<b>1999–2007 Transaction Results</b>					
Number of Transactions	440	687	550	509	874
Median Discount	19.2%	30.1%	43.1%	52.7%	60.0%

(Source: The Valuation Advisors' *Discount for Lack of Marketability Database* [March 29, 2007]. Copyright © 2008. Valuation Advisors'. Used with permission.)

The data in table 12.8 clearly reflects that the longer the period of time before a liquidity event (the IPO), the greater the discount. The liquidity of a minority interest in a closely held company can take a considerable amount of time if a sale of the company is not planned. Therefore, it seems that the discounts from this study approximate 60 percent.

## QMDM MODEL

Another method that has been discussed in the valuation community is The Quantitative Marketability Discount Model (QMDM) developed by Mercer Capital. QMDM was published in 1997.<sup>24</sup> The QMDM is a shareholder-level discounted cash flow (DCF) model. The premise behind this model is that the value of a business today is the present value of the expected future benefits *from the enterprise* discounted to the present at an appropriate discount rate. Similarly, *the value of an interest in a business* is the present value of the expected future benefits of the enterprise which are *attributable to the interest* discounted to the present at an appropriate discount rate. The QMDM, a shareholder-level discounted cash flow model, values interests in businesses in the context of appraisals of entire enterprises.

The QMDM calculates the value of illiquid securities directly, based on their expected cash flows, which include the expectation of achieving liquidity at the marketable minority level of value over the estimated expected holding period. The difference between the illiquid value calculated by the QMDM and the marketable minority value defines the marketability discount. The QMDM has spawned the development of other quantitative models.<sup>25</sup> Such quantitative models can be useful in complying with recent changes in *Uniform Standards of Professional Appraisal Practice*, Standards Rule 9-4(d), which relates to the effect on value of elements such as ownership control and liquidity and/or marketability.<sup>26</sup>

<sup>24</sup> Mercer, Z. Christopher, *Quantifying Marketability Discounts* (Memphis, TN, Peabody Publishing, L.P., 1997)

<sup>25</sup> Dr. David Tabak, "A CAPM-Based Approach to Calculating Illiquidity Discounts," Nov. 11, 2002. A copy of which can be found at [www.nera.com](http://www.nera.com).

<sup>26</sup> *Uniform Standards of Professional Appraisal Practice 2006: Rule 9-4(d)* (Washington, D.C., Appraisal Standards Board, Appraisal Foundation, 2006)

This model essentially performs a discounted cash flow analysis as a means of quantifying the marketability discount. I have tried to use an older version of this model a number of times and did not consider it to be helpful because of the number of assumptions that I was required to make. Mercer Capital has informed me that the newer version is much improved. Therefore, consider looking at it yourself so that you can draw your own conclusion.

## COSTS OF FLOTATION

Another consideration in determining a DLOM is the cost of flotation of a public offering. These costs are generally significant and will frequently include payments to attorneys, accountants, and investment bankers. The costs associated with smaller offerings can be as much as 25 percent to 30 percent of a small company's equity, but these costs will probably be much less applicable to the small and medium sized companies that are appraised because many of these companies, because of their financial condition (among other reasons), could not go public. Exhibit 12.2 contains some older information that may still be useful to you in this regard. On occasion, we reference it in our reports.

### EXHIBIT 12.2 COSTS OF FLOTATION

The methods of liquidating an entire company are to execute an IPO of the stock or to sell the stock in a private transaction. There are several costs associated with executing an IPO, which include the following:

1. Auditing and accounting fees, to provide potential buyers or underwriters with the financial information and assurances they demand.
2. Legal costs, at a minimum to draft all of the necessary documents, and often to clear away potential perceived contingent liabilities or to negotiate warranties, or both.
3. Administrative costs on the part of management to deal with the accountants, lawyers, potential buyers, or their representatives.
4. Transaction and brokerage costs, if a business broker, investment banker, or other transactional intermediary is involved.

One of the most comprehensive studies on the costs of public flotation was published by the SEC in December 1974. It covered 1,599 initial public offerings. The breakdown of the study is presented in the following table.

<i>SEC Study on the Costs of Flotation</i>			
<b>Size of issue (Millions)</b>	<b>Number</b>	<b>Compensation (Percent of gross proceeds)</b>	<b>Other expense (Percent of gross proceeds)</b>
Under .5	43	13.24%	10.35%
.5-.99	227	12.48%	8.26%
1.0-1.99	271	10.50%	5.87%
2.0-4.99	450	8.19%	3.71%
5.0-9.99	287	6.70%	2.03%
10.0-19.99	170	5.52%	1.11%
20.0-49.99	109	4.41%	0.62%
50.0-99.99	30	3.94%	0.31%
100.0-499.99	12	3.03%	0.16%
Over 500.00	0	—	—
<b>Total/Averages</b>	<b>1,599</b>	<b>8.41%</b>	<b>4.02%</b>

The data shows a significant decline in the level of expense relative to the size of the issue as the size of the issue increases. Offerings under \$1 million can have expenses as high as 23.6 percent of the offering. In contrast, offerings over \$500 million on average have expenses equal to only 3.2 percent of the offering.

A second study on the subject was published by Jay R. Ritter in 1987. The results are presented in the following table.

## EXHIBIT 12.2

**Direct Expenses of Going Public  
as a Percentage of Gross Proceeds  
(1977–1982)**

Gross proceeds <sup>a</sup> (\$)	Number of offers	Underwriting Discount <sup>b</sup> (%)	Other Expenses <sup>c</sup> (%)	Total cash Expenses (%)
<b>Firm Commitment Offers</b>				
100,000–1,999,999	68	9.84%	9.64%	19.48%
2,000,000–3,999,999	165	9.83%	7.60%	17.43%
4,000,000–5,999,999	133	9.10%	5.67%	14.77%
6,000,000–9,999,999	122	8.03%	4.31%	12.34%
10,000,000–120,174,195	176	7.24%	2.10%	9.34%
All Offers	664	8.67%	5.36%	14.03%
<b>Best-Efforts Offers</b>				
100,000–1,999,999	175	10.63%	9.52%	20.15%
2,000,000–3,999,999	146	10.00%	6.21%	16.21%
4,000,000–5,999,999	23	9.86%	3.71%	13.57%
6,000,000–9,999,999	15	9.80%	3.42%	13.22%
10,000,000–120,174,195	5	8.03%	2.40%	10.43%
All Offers	364	10.26%	7.48%	17.74%

<sup>a</sup> Gross proceeds categories are nominal; no price level adjustments have been made.

<sup>b</sup> The underwriting discount is the commission paid by the issuing firm; this is listed on the front page of the firm's prospectus.

<sup>c</sup> The other expenses figure comprises accountable and nonaccountable fees of the underwriters, cash expenses of the issuing firm for legal, printing, and auditing fees, and other out-of-pocket costs. These other expenses are described in footnotes on the front page of the issuing firm's prospectus. None of the expense categories includes the value of warrants granted to the underwriter, a practice that is common with best efforts offers.

(Reprinted from: Jay R. Ritter, "The Costs of Going Public," *Journal of Financial Economics*, January 1987, p. 272, with permission from Elsevier Limit.)

This study again shows a relationship between the size of the offering and the expenses as a percentage of the offering. It is clear that smaller deals incur significantly larger costs as a percentage of gross proceeds.

As far back as 1977, in Revenue Ruling 77-287, the IRS recognized the effectiveness of restricted stock study data in providing useful information on the quantification of DLOMs. The Baird, Willamette, and Valuation Advisors studies of transactions in closely held stocks did not exist at that time, but the IRS and the courts have sometimes been receptive to this data for assisting in quantifying DLOMs. Unfortunately, after some of the court cases involving experts such as Mukesh Bajaj with LECG, LLC, have started to question the validity of using these studies. A court case such as *Charles T. McCord, Jr., et ux. v. Commissioner*<sup>27</sup> should be read to gain an understanding of the challenges posed in the courts.

<sup>27</sup> *Charles T. McCord, Jr., et ux. v. Commissioner*, 120 TC 358.

In chapter 20, I discuss one of the Tax Court cases that I believe can serve as a good learning tool for all valuation analysts (even me!). This case is *Bernard Mandelbaum et al. v. Commissioner*.<sup>28</sup> Despite the valuation analyst's research and logical argument, the court in *Mandelbaum* did not allow the 70 and 75 percent discounts deducted in the appraisal.<sup>29</sup> The court, however, was extremely methodical in its opinion, and although the decision has its faults, it can be used as a guide for valuation analysts, particularly in the tax arena.

The IPO studies and court cases are proof that discounts that tend to be larger than those quoted from the restricted stock studies can be justified. Think about the appropriateness of the discounts that can be applicable to interests in companies that are not large enough to go public! One of the best explanations of why a DLOM varies from case to case was written by Robert E. Moroney in an article titled, "Why 25% Discount for Nonmarketability in One Valuation, 100% in Another?"<sup>30</sup> Box 12.3 includes the 11 factors from the Moroney article that should be considered in the application of a DLOM.

### Box 12.3 Moroney's 11 Factors for Consideration in the Application of a DLOM

1. **High dividend yield.** Companies that pay dividends tend to be more marketable than companies that do not.
2. **Bright growth prospects.** Companies that have bright growth prospects are easier to sell than companies that do not. This makes them more marketable.
3. **Swing value.** If a block of stock has swing value, it may be more marketable than the typical small block of stock. This swing value could include a premium. This can be emphasized when a 2 percent interest exists with two, 49 percent interests. The 2 percent interest can be worth quite a bit to either 49 percent interest if it will give that interest control of the company.
4. **Restrictions on transfer.** Restrictions on transfer make the stocks less marketable because of the difficulty in selling them.
5. **Buy-sell agreements.** Buy-sell agreements can go either way. The agreement can create a market for the stock, making it more marketable, or the agreement can restrict the sale, making it less marketable.
6. **Stock's quality grade.** The better the quality of the stock, the more marketable it will be. This can be evidenced by comparing the subject company with others for supporting strengths and weaknesses.
7. **Controlling shareholder's honesty.** The integrity of the controlling shareholder can make a big difference with regard to the ability to sell a partial interest in a company. If the controlling shareholder tends to deal with the other shareholders honestly, the other interests in that company tend to be more marketable.
8. **Controlling shareholder's friendliness.** Similar to the degree of that shareholder's honesty, the manner in which he or she deals with others can make the stock more marketable.
9. **Prospects for the corporation.** If a corporation has good prospects for the future, it will generally be more marketable.
10. **Prospects for the industry.** A company that is in an industry with good prospects will also generally be more marketable.
11. **Mood of the investing public.** When the investing public is bullish, they are more readily willing to make an investment. This can increase the stock's marketability.

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A discussion of how each of these factors related to the appraisal subject is a good way to support the size of the discount. Obviously, these items can be used to determine if more or less of a discount is warranted, but they will not help you quantify the discount in terms of percentages.

Using all of the information discussed in this chapter should get you to a reasonable DLOM. The answer must make sense. Controlling interests will almost always be easier to sell than minority interests. As a matter of fact,

<sup>28</sup> *Bernard Mandelbaum et al. v. Commissioner*, T.C. Memo. 1995-255.

<sup>29</sup> *Ibid.*

<sup>30</sup> *Taxes* (1977): 316–320.

most minority interests in closely held companies cannot be sold. In reality, this makes them virtually worthless. A well-thought-out discussion of all factors to be considered can help support large discounts.

## SMALL COMPANY DISCOUNT

The small company discount is similar to the DLOM. In fact, this discount is the same as the DLOM, except that it is purely size related. The valuation analyst must again be careful not to double-count when considering this type of discount. Size factors may have already been considered in the selection of multiples or capitalization rates. Data in publications such as *Mergerstat Review* indicates that the acquisition prices for entire private companies tend to be lower than tender offer prices for public companies. One possible explanation for this is that entire private companies tend to be smaller than many of the public companies involved in tender offers.

There are other reasons for a small company discount. Closely held companies do not make as much reliable information available to the willing buyer as public companies do, and this may cause acquirers to view the private company as riskier than its public counterpart. The closely held company may also be less marketable than the public company because of the lack of an institutional following. Another reason for the possible discount is that the majority or single shareholder or owner may have all of his or her investment in one business and, therefore, he or she has liquidity needs that are very different from those of diversified shareholders in public companies.

Although *Mergerstat Review* documents that the entire private company tends to sell at a lower price than that for tender offers of public companies, it does not indicate whether it took longer to sell the privately held company. This may also be justification for the discount. Most of the *Mergerstat* data results from buyer initiated transactions. It would be interesting, and probably useful, to know the difference, if any, between published prices of completed transactions in which the seller may have initiated the negotiations and those that were initiated by the buyer. This could help the valuation analyst understand if the parties' motivations could have affected the transaction price.

Completed transactions in which the buyer initiated the transaction would be applicable for valuations used to establish an estimated sale price for planning or negotiating purposes or to perform an allocation of the purchase price when the transaction has already taken place. Completed transactions in which the seller initiated the transaction would be more applicable for estate and gift tax purposes than for other purposes in which the amount of time and effort required to complete the sale is relevant to the value concluded. The sales of closely held businesses are generally seller initiated because the owners decide to sell their business, and the ultimate sales price already reflects a DLOM. If the business was priced too high, interim reductions in the selling price that would already reflect the DLOM may have taken place during the marketing period. In reality, these reductions may have also corrected the selling price from the seller's "great expectations" to a more reasonable level of market value.

An analysis performed a number of years ago by Raymond Miles and based on data from The Institute of Business Appraisers' (IBA) market database further supports the premise that small companies sell for lower multiples than large companies. Miles included the following table, "Correlation Between Company Size and Price-to-Earnings Multiples," in an article titled "Price/Earnings Ratios and Company Size Data for Small Businesses," published in the September 1992 issue of *Business Valuation Review*:

<b><i>Correlation Between Company Size and Price-to-Earnings Multiples</i></b>	
<b><u>Range of company size (\$000)</u></b>	<b><u>Mean P/E</u></b>
0–49	1.66
50–99	2.11
100–149	2.44
150–199	2.74
200–249	3.06
250–499	3.44
500–1,000	4.26

Miles's study of the IBA database indicates that the price-to-annual earnings multiple increases as a company's size increases. Other studies regarding the size of companies in the public marketplace have been published in *Business Valuation Review*; the results are consistent.

## DISCOUNT FROM NET ASSET VALUE

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A discount from net asset value is commonly applied in the valuation of real estate investment companies, holding companies, and oil and gas interests. This discount is generally appropriate for the valuation of asset intensive companies and is used to derive a freely traded value. In essence, this discount is similar to a discount for lack of control. See the sample Family Limited Partnership report that is found on the CD-ROM included with this book for the analysis involved in supporting this discount.

## KEY PERSON DISCOUNT

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A key person discount is frequently seen in the valuation of a closely held business when the "key" person is no longer going to be part of the business. This is often the case when the valuation is being performed for an estate of which the decedent was the key person in the business. One way to determine the appropriate discount is to review the case law for the size of discounts allowed in the past and try to associate the facts of a particular case with the assignment at hand. Be careful not to let case law drive your valuation.

A better way to handle this discount may be to build the effect of the loss of the key person into the forecast of future operations or to add an additional risk component to the discount rate. If the loss of the key person is a true loss, the business will probably suffer. The amount of the loss will be based on the importance of the key person and on how long it may take to find a replacement and bring that replacement up to the level where the key person had been.

Before you automatically take a discount for the key person, consider whether the company is the beneficiary of an insurance policy on the key person's life (assuming the reason for the loss of the key person is death). Life insurance proceeds can act to offset a discount if they provide the company with the required funds to replace the key individual.

Not all owners of businesses are key persons. Do not take a discount unless you have the appropriate support for the loss attributable to that person. This can be illustrated in a case that our firm was involved in several years ago. The executor of an estate hired another valuation analyst to value a controlling interest in a company that made baked goods. The valuation analyst took a 20 percent discount due to the loss of the key person. We were subsequently brought into the case by a beneficiary who challenged the valuation. What we found out was that the so-called key person was not so key after all. In fact, this individual was so conservative that the company's growth was being stunted. The decedent's children took over the running of the company after his death, and the company started to grow in a way that it had not experienced in the past. (I wonder if the IRS would assess a key person premium?)

Adding a key person discount may also increase the possibility that the client will be audited by the IRS. If the other discounts total 35 percent, you may or may not get the audit notice. However, add an additional 15 percent to the 35 percent already taken, and the 50 percent discount will very conceivably be looked at. That is not to say that you will not get it through the IRS if it is well supported. Just be ready for the audit!

## BLOCKAGE DISCOUNT

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A blockage discount is another type of discount, although it applies only to publicly traded companies. This discount is the result of when a large block of stock is placed on the market at one time. The large block hitting the market all at once may cause the price per share to fall in order for all of the shares to be sold. The Tax Court has been pretty clear on the point that a blockage discount cannot be taken on closely held shares. Exhibit 12.3 demonstrates the analysis involving a blockage discount. In this assignment, we were retained to determine whether there should be a blockage discount, and if so, how much it should be?



### EXHIBIT 12.3

## BLOCKAGE DISCOUNT

Trugman Valuation Associates, Inc. was engaged by (a client) to establish the fair market value of seven million shares of Wal-Mart Stores, Inc. stock as of November 1, 1995. The purpose of this appraisal is to determine the fair market value of these shares for inclusion in a gift tax return.

**Background of the Assignment.** On November 1, 1995, a donor gave each of her daughters a gift of 7,000,000 shares of common stock in Wal-Mart Stores, Inc. On that date, Wal-Mart Stores, Inc. was actively traded on the New York Stock Exchange. Its price was as follows:

High/Ask	Low/Bid	Close/Bid	Average
22¼	21%	22¼	21.9375

The value of the seven million share block, before discounts, was \$153,562,500. Trugman Valuation Associates was hired to determine the value of these shares on November 1, 1995, including the applicable blockage discount.

According to Research Institute of America,

Where stock is actively traded in, and the turnover is substantial enough, it will yield a representative price picture for valuing smaller blocks but furnish no adequate basis for the valuation of abnormally large blocks. In valuing abnormally large blocks, there has been a definite and flowing recognition by the courts, and reluctantly by IRS, of the blockage rule.

The blockage rule attributes to the unit of a large block a lower value than the market value per unit as found for small lots. It must be shown that the existing market is clearly not broad enough to absorb the large block without decline of the price level. This rule is a concession to the obvious fact that sudden unloading of a large quantity of a commodity tends to drive the price down. It has been applied by the courts for estate, gift and income tax purposes.<sup>1</sup>

The issue in this matter is whether or not a discount for blockage is applicable, and if so, what is the appropriate size of the discount?

**History of Wal-Mart Stores, Inc.** Wal-Mart Stores began in 1945 when Sam Walton began a franchise, Ben Franklin Variety Store in Newport, Arkansas. Sam's brother, James, began a similar venture in Missouri in 1946. These operations continued until 1962, when the operation was incorporated in Delaware under the Wal-Mart Stores, Inc. name. In 1984, the company opened its first three Sam's Clubs, and in 1988, its first Wal-Mart Supercenter.

By the end of 1995, Wal-Mart Stores, Inc. owned and operated 1,995 Wal-Mart Stores, 433 Sam's Clubs, and 239 Wal-Mart Supercenters in the United States. The company also has operations in Mexico, Puerto Rico, Canada, Brazil, Argentina, and Indonesia.

At October 31, 1995, Wal-Mart was expanding the number of locations in which it was operating, as well as increasing the size of many of its locations. The result was an increase in sales, which increased the company's net income as well. Net income for the nine months ended October 31, 1995 was up almost 9 percent over the same figure from a year earlier.

In August 1995, the company introduced a Web site on the World Wide Web; its main purpose is as a marketing tool. At the company's annual meeting in June 1995, management revealed expected revenues in excess of \$90 billion dollars. This was not as high as previously expected, but still substantially higher than the year before.<sup>2</sup>

In August 1995, retail stocks including Wal-Mart's were considered to be bargains. "Retail stocks have been beaten down to where they are bargains, and should be helped by the recent drop in interest rates. Recommended stocks include Wal-Mart Stores..."<sup>3</sup> Mr. Wyatt explains that despite the slump in retail stocks, Wal-Mart Stores' stock price had increased 22.3 percent during 1995, and was expected to continue rising for another year. This type of article in the press helps to generate interest in a stock such as Wal-Mart Stores.

<sup>1</sup> *Federal Tax Coordinator 2d*, Chapter P-Basis and Valuation of Property, P-6233, Research Institute of America.

<sup>2</sup> "Wal-Mart Still Growing But Not as Explosively; \$100B Maybe in 1996," *Women's Wear Daily*, 169, (1995): 1.

<sup>3</sup> Wyatt, John. "Discount days are here for retailers," *Fortune* 132 (1995): 260.

(Continued)



**EXHIBIT 12.3** (Continued)

**Valuation Calculations.** The subject of this valuation is shares in a publicly traded company. Treasury Regulation 20.2031-2(b)(1) states:

In general, if there is a market for stocks or bonds, on a stock exchange, in an over-the-counter market, or other, the mean between the highest and lowest quoted selling prices on the valuation date is the fair market value per share or bond.

In section 25.2512-2(3), the regulation states:

In certain exceptional cases, the size of the block of stock to be valued in relation to the number of shares changing hands in sales may be relevant in determining whether selling prices reflect the fair market value of the block of stock to be valued. If the executor can show that the block of stock to be valued is so large in relation to the actual sales on the existing market that it could not be liquidated in a reasonable time without depressing the market, the price at which the block could be sold as such outside the usual market, as through an underwriter, may be a more accurate indication of value than market quotations.

The theory behind this is that by attempting to sell a large block of stock, one of two things occurs: the supply of the stock goes up by a large percentage, and the demand is not there; or it takes such a long time to sell the shares that the present value of money received is less than the market value on a given day, or both. Therefore, a discount might be deemed appropriate to compensate for either the depressive effect of “dumping” a large block of shares into the market or for the time value of not having use of the proceeds of the sale at the valuation date.

The stock exchanges define a block trade as a trade of 10,000 shares or more. A New York Stock Exchange (NYSE) working paper from 1994 explained that 54 percent of the NYSE’s volume was from block trades.<sup>4</sup>

A block trade can be executed in two ways.

A block trade can be sent directly to “downstairs” markets comprising the continuous intra day market and batch markets such as the after hours crossing sessions at the NYSE. Alternatively, a block trade may first be directed to the “upstairs” market where a brokerage firm (or block broker) facilitates the trading process by locating counterparties to the trade before sending it to the downstairs market. Although downstairs markets offer anonymity and a high degree of immediacy, these characteristics may result in significant adverse selection costs for large trades. By contrast, upstairs intermediation reduces the price impact of a large trade but is associated with additional costs in the form of potential information leakage during the process, lack of immediacy, and higher brokerage fees.<sup>5</sup>

Stock traded on an active market generally represents the price for a small block or blocks of the stock; there is no mechanism for determining the price of a large block. Although a 7,000,000 share block of Wal-Mart only represents a small percentage of the total share holdings, it is a larger number of shares than is traded on an average day.

However, court cases have specifically stated that the value of a block is not determined by what it would bring if dumped as a whole on the market at one time.

Determining a reasonable period of time ‘depends on all the facts and circumstances.’ Periods of up to a year have been found to be reasonable, although the periods may be much shorter if factors such as market volatility and time limitations so dictate.<sup>6</sup>

Some specific examples of determining a reasonable time frame are as follows:

- A blockage discount was allowed for decedent’s 159,000 shares when the average weekly shares traded on the NYSE was 3,600 shares (*Estate of Sophia P. Brownell*, TC Memo 1982-632).
- A blockage discount was not allowed for a block of 32,000 shares, when average monthly trading was 10,000 shares per month because the total number of shares being appraised was well below one year’s total trading volume (*Richard O. Wheeler*, TC Memo 1978–208).

<sup>4</sup> Cheng, Minder and Ananth Madhavan, “In Search of Liquidity: Block Trades in the Upstairs and Downstairs Markets,” NYSE Working Paper 94-02.

<sup>5</sup> Ibid.

<sup>6</sup> *Estate of Dorothy B. Foote v. Commissioner*, TC Memo 1999-37.

## EXHIBIT 12.3

- A blockage discount was disallowed on two blocks of decedent's shares, where the size of the block was approximately 1 to 2 percent of the total number of shares traded in the year of death. The justification for the discount was that all of the shares would be sold at one time. The court stated

In valuing a block of stock, we are not required to assume that the block was dumped on the market at one time on the valuation date. Rather, the inquiry must be directed to the effect upon the market based on the assumption that the block was being fed out into the market during a reasonable period of time (*Estate of Myrtle M. Sawade*, TC Memo 1984-626).

The court follows this up by referencing *Bankers Trust Co. v. United States*, which states, "the courts which have considered the blockage issue have concluded that the problem should be treated in terms of whether the market could have absorbed the shares within a reasonable period of time."

Clearly, the courts have ruled that the determination of a reasonable period of time is a facts and circumstances test.

According to Wal-Mart's July 31, 1995 Form 10-Q filed with the Securities and Exchange Commission, Wal-Mart Stores, Inc. had 2,295,757,065 shares of common stock outstanding. The subject block is 0.3 percent of the total outstanding shares.

Trading activity and stock prices for the year prior to the gift are as follows:

WAL-MART STORES, INC. TRADING VOLUME				
Date	Volume	High/Ask	Low/Bid	Close/Bid
11/1/94	1,174,000	23.75	23.375	23.625
11/2/94	2,917,000	24.125	23.50	23.875
11/3/94	3,009,000	23.75	23.375	23.50
11/4/94	3,114,000	24.125	23.50	23.75
11/7/94	1,718,000	24.125	23.50	23.875
11/8/94	1,712,000	24.125	23.75	23.875
11/9/94	4,184,000	24.375	23.875	24
11/10/94	1,924,000	24.50	24	24.125
Data intentionally left out of this exhibit. It was for an entire year in the original report.				
10/17/95	7,038,000	22.75	22.125	22.75
10/18/95	5,470,000	23	22.50	22.75
10/19/95	4,758,000	22.875	22.375	22.875
10/20/95	6,559,000	23.125	22.625	23
10/23/95	5,230,000	23	22.50	22.625
10/24/95	3,055,000	22.875	22.50	22.50
10/25/95	3,781,000	22.75	22.25	22.50
10/26/95	3,341,000	22.50	21.75	21.875
10/27/95	3,134,000	22.125	21.75	22.125
10/30/95	2,795,000	22.375	21.75	21.875
10/31/95	5,302,000	22.25	21.50	21.625
11/1/95	4,256,000	22.25	21.625	22.25

Based on this data, the average daily trading volume was 3,167,730 shares, with average ask, bid, and close prices of \$24.50, \$23.98, and \$24.28 respectively.

(Continued)

**EXHIBIT 12.3** *(Continued)*

Over this period, the price traded in a fairly narrow range from \$213 to \$272, a spread of \$63, or approximately 30 percent. Over the one-year period, the price rose until approximately July 1995, and then declined again. This appeared to be a weakness in retail stocks in general, but Wal-Mart's stock price was predicted to rise.

The question becomes, how long would it take to "trickle" 7,000,000 shares into the marketplace, and what effect would this have on the price? The courts have clearly determined that it is unreasonable to base a blockage discount on the expectation that all of the shares would be put on the market at one time.

One of the issues that the court has addressed in determining the applicability of a blockage discount is the size of the block being valued in relation to the total number of shares traded in the year. According to the trading data previously listed, total shares traded in the period November 1, 1994 to 1995 amounted to 804,603,400. A 7,000,000 share block is less than 1 percent of the annual trading volume. This figure in conjunction with prior court cases seems to indicate that a blockage discount would not be applicable.

The second issue revolves around large daily trades in the stock itself. The table that follows excerpts certain days' trading activities. As previously mentioned, average daily trading in Wal-Mart Stores' stock is approximately 3.2 million shares. The data in this table shows trading activity for those days when the number of shares traded exceeded 5 million shares. There were 20 such days. It should be noted that we were unable to determine if the additional shares traded were in large blocks. Also provided in this table is the closing price for the day prior to the large trading volume days, with the percentage change in the closing price.

<b>LARGE TRADING VOLUME DAYS</b>						
<b>Date</b>	<b>Volume</b>	<b>High/Ask</b>	<b>Low/Bid</b>	<b>Close/Bid</b>	<b>Prior closing</b>	<b>% Price change</b>
11/17/94	6,512,000	23.5	22.50	22.625	23.375	-3.21%
11/18/94	5,870,000	23.125	22.625	22.75	22.625	0.55%
12/9/94	7,512,000	21.625	21.125	21.50	21.375	0.58%
12/16/94	9,485,000	23	22.25	23	22.625	1.66%
2/28/95	5,310,000	24.25	23.625	23.75	23.375	1.60%
3/28/95	5,678,000	25.125	24.375	24.875	24.50	1.53%
3/29/95	6,047,000	25.75	24.875	25.50	24.875	2.51%
5/12/95	6,291,000	25.50	24.25	25.25	24.375	3.59%
6/13/95	6,307,000	26.125	25.625	26.125	25.50	2.45%
6/14/95	5,282,000	26.625	26	26.50	26.125	1.44%
6/16/95	6,667,000	26.50	26.125	26.50	26.25	0.95%
8/30/95	9,504,000	25.375	24.75	25	25.125	-0.50%
9/15/95	5,989,000	25.875	25.50	25.625	25.375	0.99%
10/11/95	5,909,000	23.875	22.8125	23	23.875	-3.66%
10/12/95	6,791,000	23.50	22.875	22.875	23	-0.54%
10/13/95	7,796,000	23.25	22.875	23.125	22.875	1.09%
10/16/95	5,790,000	23.125	22.125	22.50	23.125	-2.70%
10/17/95	7,038,000	22.75	22.125	22.75	22.50	1.11%
10/18/95	5,470,000	23	22.50	22.75	22.75	0.00%
10/20/95	6,559,000	23.125	22.625	23	22.875	0.55%
<b>Mean % Price change</b>						<b>0.50%</b>

**EXHIBIT 12.3**

Several facts can be observed from this data.

1. There is no consistency in the price change size or direction when a larger number of shares are traded.
2. There is an active market for large blocks of stock to be bought and sold.

Overall, when large blocks of Wal-Mart Stores' stock are placed on the market, the average price change is approximately 0.50 percent. This indicates that a block of 7,000,000 shares could be sold within a matter of days (two to three), and the sale of this block would not affect the price. Therefore, in our opinion, a blockage discount would not be applicable.

**Conclusion.** The fair market value of 7,000,000 shares of Wal-Mart Stores, Inc. as of November 1, 1995 is \$153,562,500, and no blockage discount is applicable.

**NONVOTING STOCK DISCOUNT**

Lots of analysts make the mistake of thinking that there is a big difference between the value of voting and non-voting stock. At a control level, I can understand there being a difference in value. However, at the minority level, the difference is really small. Studies have been done comparing different classes of stock in public companies, and the discounts were low. Exhibit 12.4 reflects a section of a report that we recently issued.

**EXHIBIT 12.4****VOTING VS. NONVOTING SECTION FROM REPORT**

The Class B common shares have no voting rights. However, based on the certificate of incorporation, if less than 1,875 shares of the Class A common shares are not held by the original shareholders, the Class B shares obtain voting rights.

However, due to its current lack of voting rights, an additional discount must be considered because an asset with voting rights is more valuable than one without voting rights, thus providing a theoretical basis for such a discount. However, the various studies measure the premium for voting rights over nonvoting rights, so that is how the data is applied.

A study performed by Vijay M. Joy and Allan L. Riding shows that nonvoting shares in public companies tend to trade at approximately a 7 percent discount to voting shares in the same company.<sup>1</sup>

According to Shannon Pratt,

Where differentials in favor of voting stock exist, they generally have been under 5 percent, and no study has indicated a differential of over 10 percent. Again, the distribution of the stock can have a bearing. If one stockholder has total control anyway and there is no cumulative voting, the question of whether the minority shares are voting or nonvoting is academic unless a split of the control block is foreseeable.<sup>2</sup>

A more recent study has been conducted annually by The Financial Valuation Group in Tampa, Florida.<sup>3</sup> According to James Hitchner:

<sup>1</sup> Joy, Vijay M. and Allan L. Riding, "Price Effects of Dual Class Shares," *Financial Analysts Journal*, (1986): 58–67.

<sup>2</sup> Pratt, Shannon P., Robert F. Reilly, and Robert P. Schweihs, *Valuing a Business*, 3rd edition. (Chicago: Irwin Professional Publishing), 1996: 323.

<sup>3</sup> James A. Hitcher, *Financial Valuation: Applications and Models*, 2nd edition (New Jersey: John Wiley & Sons, Inc.): 432–450.

(Continued)

**EXHIBIT 12.4** *(Continued)*

Yearly research by The Financial Valuation Group in Tampa identified nonfinancial and nonutility companies whose stock trades in two classes on listed exchanges. The research focused on operational companies and, thus, excluded the highly regulated financial and utility companies, except where financial or utility data was required as a proxy to fill certain gaps in data. In each case, both the voting and nonvoting stock were offered, side by side, in their various markets. This list was ultimately reduced to the stock of companies where the only difference between the shares was the voting rights. The dividends were the same, and the shares were equal in all respects, with the exception of voting rights, where the Class A shares generally were granted four to ten times as much voting power per share. This research seems to indicate that where the shares traded represented only a minority interest, a small added value was placed on the voting shares by the marketplace.<sup>4</sup>

A summary of the results reveals the following:<sup>5</sup>

<b>VOTING PREMIUMS</b>				
	<b>Year end</b>		<b>Average Hi-Low</b>	
	<b>Median</b>	<b>Mean</b>	<b>Median</b>	<b>Mean</b>
1992	3.54%	6.65%	4.51%	7.68%
1993	1.48%	2.17%	4.14%	4.81%
1994	0.82%	5.50%	2.29%	5.35%
1996	2.86%	3.50%	1.57%	3.29%
1998	0.00%	0.57%	1.42%	2.19%
1999	2.14%	5.91%	7.77%	5.91%
2000	2.01%	9.08%	1.02%	8.67%
2001	1.56%	9.05%	2.22%	11.63%
2002	1.89%	6.52%	1.68%	7.22%
2003	0.39%	6.43%	1.29%	6.51%
2004	0.00%	5.35%	0.47%	6.52%
2005	0.00%	0.44%	0.24%	1.82%

Statistically, the median is a better indicator of the central point of the data because one outlier can skew a mean. The data in the above table indicates that the nonvoting premiums have declined to less than 1 percent in the most recent years. In this case, the Class B shares will obtain voting rights at some point, which also points to a lower differential. Therefore, a premium of 1 percent for the voting shares over the value of the nonvoting shares has been deemed appropriate for the subject company stock.

<sup>4</sup> Ibid: 432.

<sup>5</sup> Ibid: 450.

## APPLICATION OF DISCOUNTS AND PREMIUMS

The proper application of discounts and premiums requires the valuation analyst to understand their impact. Some discounts and premiums are additive, while others are multiplicative. For example, the application of lack of control discounts and DLOMs is multiplicative, not additive. This can be illustrated as follows. Assume a lack of control

discount of 25 percent and a DLOM of 35 percent. If these discounts were additive, the valuation analyst would add them together and apply a 60 percent discount from the control value. However, the total discount to be taken from the control value is calculated as follows:

$$1 - [(1-.25)(1-.35)] = .5125$$

For those of you who, like me, are not into mathematical equations, this same example can be demonstrated as follows:

Value on a control, marketable basis	\$100.00
Less lack of control discount (25%)	<u>25.00</u>
Value on a minority, marketable basis	\$ 75.00
Less DLOM (35%)	<u>26.25</u>
Value (cumulative discount 51.25%)	\$ 48.75

The application of a DLOM and discounts for legal restrictions, environmental restrictions, and litigation discounts may overlap. Therefore, be aware of the possibility of double counting. Small company discounts that relate to the sale of an entire business—as opposed to the DLOM relating the control value to public prices—are mutually exclusive.

The small company discount that is determinable from the *Mergerstat Review* data and other sources may be caused by several factors, including, but not limited to, lack of marketability. The DLOM is exactly what it is meant to be, and to add it to the small company discount when you value an entire closely held company would result in a double counting of the DLOM.

The discount from net asset value and the lack of control discount are mutually exclusive. When a discount from net asset value is applied, a lack of control discount is generally inappropriate. However, the discount from net asset value may apply to the subject company or to the underlying assets. This could result in discounts being applied at both the asset level and the entity level. This is the concept that is being used to value minority interests in family limited partnerships. If the appraisal subject is a minority block of shares in a closely held investment, holding, or asset intensive company, the discount from net asset value—used to obtain the freely traded value—and the DLOM are both applicable and are always multiplicative.

## OTHER PREMIUMS AND DISCOUNTS

There will be times when other premiums and discounts will be appropriate. Some of these occasions may involve swing vote premiums or litigation uncertainties. A swing vote premium is the increased value that a minority interest may have due to the ability to swing the control in the entity to one of the other shareholders. A 2 percent owner may have a valuable asset if the other shareholders each own 49 percent.

Discounts come in all shapes and sizes. During an estate valuation, our firm applied a discount because of the uncertainty of an ongoing litigation, which made the marketability of the decedent's shares less desirable. Exhibit 12.5 contains a section from one of our reports. The IRS signed off on this valuation. This should serve as further proof that a well thought out discussion can assist the valuation analyst in obtaining larger discounts than those in the published studies. In this instance, the business was owned equally by three family factions. One of the families filed suit against the others to force a buyout of this interest and several others in related entities. At the last minute, a proposed settlement fell apart. During this time, a second family faction decided they would hold the remaining faction hostage by trying to coerce a buyout of their interests as well. This family was anything but close.

## EXHIBIT 12.5

### DISCOUNT FOR UNCERTAINTY OF LITIGATION

At the date of the decedent's death, the Jones family litigation was still ongoing. Despite a possible settlement five months earlier, a four-year litigation continued to shadow the Jones's entities. A willing buyer would have to consider the risks associated with this litigation because it was not finalized until four months after the decedent's death.

At the date of death, the proposed settlement had fallen apart. A willing buyer of the decedent's one-third interest in the partnership was looking at a best case scenario, in which the one-third interest would become a one-half interest, with the remaining one-half interest being owned by a "nonfriendly" partner. At the conclusion of the litigation, it became obvious that the defendants were not necessarily on the same side.

Obtaining the additional interest would force the partnership to commit to a payout of \$913,772. In addition, the following parcels of real estate, having the following appraised values, would no longer be owned by the partnership:

Smith Township	\$1,165,000
Jones, lot 1	8,000
Jones, lot 2	150,000
Brown Township	3,800
Greene	800,000
<b>Total</b>	<b>\$2,126,800</b>

The total settlement amount of approximately \$3 million is greater than the enterprise value.

The willing buyer would also expend additional legal fees to resolve the issue because the settlement was not definite. Why would anyone want to obligate himself or herself in that way? No prudent investor would purchase this 33.3 percent interest knowing that the best case scenario would render the company insolvent. Furthermore, part of the overall settlement included an indemnification relating to environmental liability, which is a serious problem for this entity.

This litigation would render this partnership interest virtually worthless due to the contingencies associated with it. A settlement was able to take place because the other Jones entities involved in the litigation interacted, and other companies or individuals were able to generate available funds without depending on Jones, Inc.'s financial success. Therefore, the amount paid in settlement of the litigation was clearly in excess of the fair market value of the decedent's interest in Jones, Inc. This valuation analyst feels that a discount of 100 percent is justified in this instance.

Using the uncertainty of litigation in an appraisal of another entity that was related to the subject in exhibit 12.5, we could not justify a 100 percent discount, but we used the information that we had to quantify the size of the discount in dollars instead of as a percentage. Exhibit 12.6 contains the section of our report dealing with this issue. The examples in exhibits 12.5 and 12.6 were part of seven valuation reports that were prepared for a decedent's estate tax return. The cumulative discount taken for the decedent's minority interests was 75 percent. When the IRS audited this estate, it began the negotiations by allowing a 45 percent combined discount. This told us that we had a very strong case for our discounts. The case finally settled, allowing a 62 percent combined discount. The only reason that the case settled at this level was that the IRS threatened to open up the 25 real estate and machinery appraisals that were used by us in determining the value of the various business interests. Power is a wonderful leverage tool!



**EXHIBIT 12.6****DISCOUNT FOR UNCERTAINTY OF LITIGATION**

At the date of death, the Jones family litigation was still ongoing. Despite a possible settlement five months earlier, a four-year litigation continued to shadow the Jones's entities. A willing buyer would have to consider the risks associated with this litigation because it was not finalized until four months after the decedent's death.

At the date of death, the proposed settlement had fallen apart. A willing buyer would have to acquire the decedent's interest subject to the ongoing litigation. The best case scenario for the willing buyer would be that the tentative settlement from before death is reached, and 37.5 shares are redeemed for \$250,921. This would turn the 33.3 percent interest into a 50 percent interest, with the balance of the stock being owned by an "unfriendly" stockholder group.

The company would also be obligated to disburse \$250,921 for the settlement plus the final costs of settling the litigation. Therefore, the best case scenario would require the willing buyer to assume the interest subject to this obligation. Because the effective pro rata obligation of the decedent's interest would be 50 percent of \$250,921, or \$125,461, an equivalent discount is appropriate.

Some valuation analysts handle these miscellaneous discounts differently. Some adjust income streams, some adjust discount rates or multiples, and some choose to ignore these factors completely. Short of ignoring them completely, there is no definitive method of handling these items. The valuation analyst should use common sense. The manner in which the valuation analyst chooses to handle these situations may depend on the purpose and function of the appraisal assignment. In certain types of litigations, such as divorce, certain jurisdictions seem to be against discounts because they feel that the nonbusiness owner spouse is "getting the shaft." In actuality, that spouse will probably receive a windfall if no discounts are provided for. However, use your head. If you know that your jurisdiction is against discounts, build it into the balance of your valuation. However, if you are working on a job that is governed by statute, you must perform your appraisal in accordance with the law. Remember, you are supposed to be giving your objective opinion about the value of the interest being appraised. If you get a good, supportable number, these types of cosmetics may help you advocate your own opinion!

**CONCLUSION**

By now you realize that supporting valuation premiums and discounts is as much fun as going to the dentist. Although there are empirical studies for control premium data and DLOMs, the application of these and other discounts to small and medium sized businesses or business interests is a very subjective task.



# CHAPTER 13

## Revenue Ruling 59-60

### CHAPTER GOALS

In this chapter, I will attempt to review Revenue Ruling 59-60 in more detail than you have seen throughout this book. In fact, it will probably be in more detail than you have ever seen before, especially for newcomers to business valuation. You should be able to use this chapter as a review of most of the appraisal concepts that we have covered. If you bought the first or second edition of this book, this chapter will serve as a good refresher for you. Not much has changed; if it ain't broke, why fix it?

### INTRODUCTION

This chapter contains an annotated version of Revenue Ruling 59-60. The revenue ruling appears in italics, and the sections of this ruling that are in bold italic print are intended to emphasize a particular point. The author, not the IRS, has done the boldfacing. This ruling is so important to business valuation that I was tempted to boldface the entire document. (Relax, I didn't!)

Revenue Ruling 59-60 is said to be one of the greatest business valuation treatises ever written. It is hard to imagine that it came out of our government! This ruling is quoted more often than any other source in the valuation field. Although the ruling was written to provide guidance on the valuation of closely held stocks for estate and gift tax purposes, the IRS expanded its applicability to income taxes. Because of its wide acceptance, many other authorities have looked to this ruling for guidance in valuing closely held stocks and other types of entities for many reasons other than taxes.

Despite having read this document more than 400 times (it was 200 in the last edition), I continue to find elements that I had not seen before. As we go over the ruling, I will attempt to point out the intent of the ruling and illustrate its compliance with modern appraisal theory. The essence of this chapter will be to determine what this revenue ruling really says.

### REVENUE RULING 59-60

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*Section 1. Purpose. The purpose of this Revenue Ruling is to outline and review in general the approach, methods and factors to be considered in valuing shares of the capital stock of closely held corporations for estate tax and gift tax purposes. The methods discussed herein will apply likewise to the valuation of corporate stocks on which market quotations are either unavailable or are of such scarcity that they do not reflect the fair market value.*

Although the main focus of this revenue ruling is the valuation of closely held stocks, Revenue Ruling 59-60 has equal applicability to other types of entities. Whether the valuation subject is a partnership, sole proprietorship, or a limited liability company, the factors discussed in this ruling can generally be applied. In addition to the fact that this ruling is applicable to other types of entities, Revenue Ruling 65-192 expanded it to include income taxes, estate and gift taxes, and other taxes.

*Section 2. Background and Definitions. .01 All valuations must be made in accordance with the applicable provisions of the Internal Revenue Code of 1954 and the Federal Estate Tax and Gift Tax Regulations. Sections 2031(a), 2032, and 2512(a) of the 1954 Code (sections 811 and 1005 of the 1939 Code) require that the*

*property to be included in the gross estate, or made the subject of a gift, shall be taxed on the basis of the value of the property at the time of death of the decedent, the alternate date if so elected, or the date of gift.*

Two important points are made right off the bat. First, any valuation that is going to be performed for tax purposes must follow the provisions of the Internal Revenue Code (IRC) and Regulations. The next point is that the valuation is date specific. The property is to be valued at the date of death, the alternate valuation date, or the date of the gift. This is consistent with the discussion in the section of chapter 3 titled “Effective Date(s) of the Valuation.”

*.02 Section 20.2031-1(b) of the Estate Tax Regulations (section 81.10 of the Estate Tax Regulations 105) and section 25.2512-1 of the Gift Tax Regulations (section 86.19 of Gift Tax Regulations 108) define fair market value, in effect, as the price at which the property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts. Court decisions frequently state in addition that the hypothetical buyer and seller are assumed to be able, as well as willing, to trade and to be well informed about the property and concerning the market for such property.*

The definition included in this ruling is one of the most commonly used definitions of fair market value. To make the definition complete, it is important to understand and include the statement about court decisions (the last sentence of the previous quotation). For a “true” fair market value to be estimated, the situations outlined in box 13.1 must apply.

### **Box 13.1 Considerations for Fair Market Value Conditions**

**1. There must be a willing buyer.**

Not only does the buyer have to be willing, but he or she must also be able to make the purchase. It would not matter if I wanted to buy a company such as Google or General Electric if I do not have the ability to consummate the deal. (Maybe next year if I sell enough of these books!)

**2. There must be a willing seller.**

This concept seems easier than it really is when it comes to smaller businesses. The business owner frequently has certain obligations that may prohibit the sale of the property. For example, imagine a nonassignable lease with 10 years left on it at an above-market rent. This could prevent the willing seller from being able to sell the business, unless the price is lowered substantially so that the willing buyer can pay the higher-than-market rent. This would indicate that the fair market value of the property is reduced due to the unfavorable lease situation.

Considering a market or income approach, cash flow would be reduced because of the higher rent, resulting in a lower value. This could also make the business less marketable. Using an asset-based approach, the valuation analyst would end up with a liability for an unfavorable leasehold. Although the willing seller may not want to sell the property at a reduced price, the economic reality is that the business is worth less.

**3. Neither the willing buyer nor the willing seller should be under any compulsion to buy or sell (no duress).**

Because fair market value assumes a reasonable period of exposure on the market, the buyer and seller cannot be compelled to consummate a transaction. The seller should be able to wait for the market price and not end up with a fire sale situation. The buyer should not be in a position where he or she has to purchase this business. If the buyer had been unemployed for a while and purchasing his or her employment was the only way to keep from running out of money, the temptation would be to overpay for the opportunity to get back to work.

**4. Both buyer and seller must be reasonably knowledgeable about the property (including property market).**

Fair market value is not achieved if the parties to the transaction do not know what the business is worth compared with similar businesses in the market. Just as buyers are likely to overpay for the business, sellers may, at times, give the business away for too little. This situation should occur only if the buyer or seller fails to call us to do an appraisal.

Although this point is not separately stated, fair market value also assumes a covenant not to compete between the willing buyer and seller. If there were no such covenant, why would anyone purchase a business if the seller could open up next door? This point is somewhat controversial. Many valuation analysts believe that a covenant not to compete is not included in fair market value, but let's face reality. When a small business is sold, there is frequently a covenant not to compete. However, its value is rarely determined. More often than not, a negotiation takes place to include something for tax purposes, but this is usually taken off the purchase price. It is included in the sales price that we hear when we are told that the business sold.

*.03 Closely held corporations are those corporations the shares of which are owned by a relatively limited number of stockholders. Often the entire stock issue is held by one family. The result of this situation is that little, if any, trading in the shares takes place. There is, therefore, no established market for the stock and such sales as occur at irregular intervals seldom reflect all of the elements of a representative transaction as defined by the term "fair market value."*

In this section of the Revenue Ruling, the IRS concedes that there is no established market for closely held stocks. This admission indicates that fair market value cannot truly be achieved, because there is virtually no market. This concept begins the recognition of the lack of marketability in a closely held company. Revenue Ruling 77-287 addresses the issue of discounts for lack of marketability as it relates to restricted stock. However, if a property cannot be sold due to lack of a market, how can it be worth something other than its value to the current owner? Marketability issues were discussed in great detail in chapter 12. Revenue Ruling 77-287 is reproduced in appendix 12.

*Section 3. Approach to Valuation .01 A determination of fair market value, being a question of fact, will depend upon the circumstances in each case. No formula can be devised that will be generally applicable to the multitude of different valuation issues arising in estate and gift tax cases. Often, an appraiser will find wide differences of opinion as to the fair market value of a particular stock. In resolving such differences, he should maintain a reasonable attitude in recognition of the fact that valuation is not an exact science. A sound valuation will be based upon all the relevant facts, but the elements of common sense, informed judgment, and reasonableness must enter into the process of weighing those facts and determining their aggregate significance.*

Some very important points are raised in this section. First, the circumstances of each case must be considered individually. This means that you cannot treat each valuation the same. This holds true even if the appraisal subject is the same type of business that you have valued previously. No two businesses are truly alike. Consider all of the facts before you come to an opinion.

Another important concept is that no formula can be devised (not even the formula method from Revenue Ruling 68-609) that can be applied to every appraisal. You must consider the facts and circumstances of each assignment to establish which valuation methodologies are appropriate in each situation. Don't rely on a mechanical application.

Now comes one of my favorite parts: Valuation is not an exact science. No kidding! If you can accept this concept, you are on your way to becoming a valuation analyst. If you are looking for black-and-white, you have come to the wrong place. By now you should recognize that there is no black-and-white, only a million shades of gray.

The ruling points out the importance of using "common sense, informed judgment, and reasonableness" in performing the assignment. There are no substitutes for these items. Common sense plays a big role in the valuation process because the decisions that are made by a valuation analyst are often subjective. Because we do not always have the best information to work with, common sense frequently gets us through the assignment.

Along with common sense, informed judgment is important. Because the valuation process is so subjective, the valuation analyst needs to be well informed to make the various choices that have to be made. Using economic, industry, and company information to analyze risk as it pertains to multiples or to discount and capitalization rates can only assist the valuation analyst in making an informed judgment.

*.02 The fair market value of specific shares of stock will vary as general economic conditions change from "normal" to "boom" or "depression," that is, according to the degree of optimism or pessimism with which the investing public regards the future at the required date of appraisal. Uncertainty as to the stability or continuity of the future income from a property decreases its value by increasing the risk of loss of earnings and*

**value in the future.** *The value of shares of stock of a company with very uncertain future prospects is highly speculative. The appraiser must exercise his judgment as to the degree of risk attaching to the business of the corporation which issued the stock, but that judgment must be related to all of the other factors affecting value.*

Economic analysis is necessary at the valuation date in order to determine how the investing public feels about the future income of the property. Uncertainty about future income increases risk and affects the value in the future. Judgment is related to all factors in the valuation process, not just some. Each analysis that the valuation analyst performs—whether it is on the economy, the industry, or the finances of the company—cannot be done in a vacuum. All of these items must be considered for the valuation analyst to assess risk properly. The risk assessment will be used to adjust the multiples derived from guideline companies (comparables) or to adjust discount and capitalization rates.

Risk analysis is discussed in chapter 6. Multiples are discussed in chapters 7 and 8. Discount and capitalization rates are discussed in chapter 11.

*.03 Valuation of securities is, in essence, a prophecy as to the future and must be based on facts available at the required date of appraisal. As a generalization, the prices of stocks which are traded in volume in a free and active market by informed persons best reflect the consensus of the investing public as to what the future holds for the corporations and industries represented. When a stock is closely held, is traded infrequently, or is traded in an erratic market, some other measure of value must be used. In many instances, the next best measure may be found in the prices at which the stocks of companies engaged in the same or a similar line of business are selling in a free and open market.*

The most important lesson learned in this section of the ruling is that valuation is based on the future (the principle of future benefits is discussed in chapter 4). Relying on history alone to perform appraisals is clearly wrong. The only time history can be used is if it represents what is expected to happen in the future.

The ruling also points out that the market is the best source of value. Publicly traded stocks are a good consensus on the market, because these stocks are actively traded in a free and open market. However, because this information is not available for closely held businesses, the valuation analyst should use the actively traded stocks of companies that are in the same or a similar line of business. “Use the market approach” is the message that is being sent. Even if the guideline company method cannot be used with public companies, the market approach should continue to be a viable alternative. See chapter 7 or 8 for alternative applications of the market approach.

**Section 4. Factors to Consider.** *.01 It is advisable to emphasize that in the valuation of the stock of closely held corporations or the stock of corporations where market quotations are either lacking or too scarce to be recognized, all available financial data, as well as all relevant factors affecting the fair market value, should be considered. The following factors, although not all-inclusive, are fundamental and require careful analysis in each case:*

- a. The nature of the business and the history of the enterprise from its inception.*
- b. The economic outlook in general and the condition and outlook of the specific industry in particular.*
- c. The book value of the stock and the financial condition of the business.*
- d. The earning capacity of the company.*
- e. The dividend-paying capacity.*
- f. Whether or not the enterprise has goodwill or other intangible value.*
- g. Sales of the stock and the size of the block of stock to be valued.*
- h. The market price of stocks of corporations engaged in the same or a similar line of business having their stocks actively traded in a free and open market, either on an exchange or over-the-counter.*

What can I say? Here it is again. By now, you know the importance of each one of these items. If you don’t, you may want to reread the first 12 chapters of this book. If you have read business valuation books, the eight factors outlined in Revenue Ruling 59-60 appear over and over again. These items should be self-explanatory. If they are not, I suggest that you start this book again.

*.02 The following is a brief discussion of each of the foregoing factors:*

*(a) The history of a corporate enterprise will show its past stability or instability, its growth or lack of growth, the diversity or lack of diversity of its operations, and other facts needed to form an opinion of the degree of*

**risk involved in the business.** For an enterprise which changed its form of organization but carried on the same or closely similar operations of its predecessor, the history of the former enterprise should be considered. **The detail to be considered should increase with approach to the required date of appraisal, since recent events are of greatest help in predicting the future; but a study of gross and net income, and of dividends covering a long prior period, is highly desirable.** The history to be studied should include, but need not be limited to, the nature of the business, its products or services, its operating and investment assets, capital structure, plant facilities, sales records and management, all of which should be considered as of the date of the appraisal, with due regard for recent significant changes. **Events of the past that are unlikely to recur in the future should be discounted, since value has a close relation to future expectancy.**

Revenue Ruling 59-60 discusses the fact that the valuation analyst has to know where the company has been to predict where it is going. History is an important element in any business valuation exercise, because it allows the valuation analyst to assess items such as growth, business diversification, and the other elements of risk that pertain to the appraisal subject. This information ultimately helps support the multiples, discount rates, and capitalization rates used in the assignment. You will also want to use history as a basis for forecasting future operations, if that is appropriate in the given assignment.

The valuation analyst should obtain a thorough understanding of the company. This goes far beyond just gathering numbers. You need to understand the evolution of the business, including information regarding the company's product lines, competition, employees, and management, and also a considerable amount of additional information that is gathered in the early part of the assignment. These items are discussed in chapter 5.

Revenue Ruling 59-60 also indicates that events of the past that are not expected to recur in the future should be disregarded, because the future is more important than the past. These past nonrecurring items will be adjusted during the normalization process. The normalization process is intended to restate the financial information provided by the company to an economic basis (see chapter 6).

*(b) A sound appraisal of a closely held stock must consider current and prospective economic conditions as of the date of appraisal, both in the national economy and in the industry or industries with which the corporation is allied. It is important to know that the company is more or less successful than its competitors in the same industry, or that it is maintaining a stable position with respect to competitors. Equal or even greater significance may attach to the ability of the industry with which the company is allied to compete with other industries. Prospective competition which has not been a factor in prior years should be given careful attention. For example, high profits due to the novelty of its product and the lack of competition often lead to increasing competition. The public's appraisal of the future prospects of competitive industries or of competitors within an industry may be indicated by price trends in the markets for commodities and for securities. The loss of the manager of a so-called "one-man" business may have a depressing effect upon the value of the stock of such business, particularly if there is a lack of trained personnel capable of succeeding to the management of the enterprise. In valuing the stock of this type of business, therefore, the effect of the loss of the manager on the future expectancy of the business, and the absence of management-succession potentialities are pertinent factors to be taken into consideration. On the other hand, there may be factors which offset, in whole or in part, the loss of the manager's services. For instance, the nature of the business and of its assets may be such that they will not be impaired by the loss of the manager. Furthermore, the loss may be adequately covered by life insurance, or competent management might be employed on the basis of the consideration paid for the former manager's services. These, or other offsetting factors, if found to exist, should be carefully weighed against the loss of the manager's services in valuing the stock of the enterprise.*

This section of the ruling covers several different topics for consideration. It first tells us to consider current and prospective economic and industry information at the date of the appraisal. To assess economic and industry risk properly, the valuation analyst must consider the impact of the economy and the industry on the appraisal subject. For example, if the appraisal subject is a building contractor that primarily builds residential housing, and mortgage interest rates at the date of the appraisal are very high but are forecast to go down substantially, a conclusion could be drawn that the current operations, which probably have slowed down considerably because of the high rates, will most likely pick up again in the future with the falling rates. This can affect the forecast of "probable future earnings" and the amount of risk built into your multiples, discount rates, or capitalization rates. Be careful not to double-count by adjusting in both places!



The industry in which the appraisal subject operates is to be considered as well. If the entire computer industry were changing to small personal computers, and the appraisal subject were continuing to build mainframe computers for the same market, there might be a problem with the future sales of the company's products. This would obviously affect the company's value.

The ruling also tells the valuation analyst to consider the possible impact of competition on the appraisal subject. If you are valuing a company with a product that is highly profitable and extremely "hot," there is a good chance that competition will come into the market, even if it was not there before. If you get the feeling that the situation is too good to be true, it probably is!

The next area covered by the ruling discusses the mood of the investing public. Fair market value comes from the market. You cannot ignore the market if an industry has become so favorable that investor perception is driving prices up. If investors are willing to pay higher prices for similar types of companies, the appraisal subject may be going along for the ride, if all else is equal.

Finally, this section discusses the impact of the loss of a key person. (The ruling actually refers to a "one-man" business. Ladies, on behalf of the Treasury Department, I apologize. We all know that this is politically incorrect! Certainly, in my firm, the key man is a woman.) The loss of a key person will frequently have an impact on a small company, more so than on a large company that has a management team in place. The loss of a key individual can have an adverse effect on the future operations of any business, but the valuation analyst must consider whether that individual can be replaced and how much time it would take to replace him or her.

There may be a slight downturn for the business in the short term until a replacement is found, but it may, in fact, only be short-term. The company may be able to find an adequate replacement who, given a reasonable amount of time, could put the company back on track. There may even be life insurance proceeds to protect the company so that adequate funds are available to handle this problem. The ruling is pretty clear on the fact that the valuation analyst should consider items that offset the loss of the key person, as well as the impact of the loss of the key person.

*(c) Balance sheets should be obtained, preferably in the form of comparative annual statements for two or more years immediately preceding the date of appraisal, together with a balance sheet at the end of the month preceding that date, if corporate accounting will permit. Any balance sheet descriptions that are not self-explanatory, and balance sheet items comprehending diverse assets or liabilities, should be clarified in essential detail by supporting supplemental schedules. These statements usually will disclose to the appraiser (1) liquid position (ratio of current assets to current liabilities); (2) gross and net book value of principal classes of fixed assets; (3) working capital; (4) long-term indebtedness; (5) capital structure; and (6) net worth. Consideration also should be given to any assets not essential to the operation of the business, such as investments in securities, real estate, etc. In general, such non-operating assets will command a lower rate of return than do the operating assets, although in exceptional cases the reverse may be true. In computing the book value per share of stock, assets of the investment type should be revalued on the basis of their market price and the book value adjusted accordingly. Comparison of the company's balance sheets over several years may reveal, among other facts, such developments as the acquisition of additional production facilities or subsidiary companies, improvement in financial position, and details as to recapitalizations and other changes in the capital structure of the corporation. If the corporation has more than one class of stock outstanding, the charter or certificate of incorporation should be examined to ascertain the explicit rights and privileges of the various stock issues including: (1) voting powers, (2) preference as to dividends, and (3) preference as to assets in the event of liquidation.*

Here, the ruling tells the valuation analyst to obtain at least two years of balance sheets for the appraisal subject so that a comparison can be performed. In practice, most valuation analysts look for more years of data (generally five or more). The idea is to spot changes in the company's makeup that will help the valuation analyst understand how the company has arrived at its current financial position. A review of the comparative balance sheets will help the valuation analyst understand if the company has made any major acquisitions of other companies (look for intangibles) or productive capacity (look for large increases in fixed assets) or other items that may be necessary to forecast future operations.

If a proper comparison is to be made to guideline companies, changes to the capital structure should also be considered, assuming that the interest has the ability to change it. This may affect the valuation analyst's decision of whether to value equity or invested capital. Changes in the capital structure may also affect many of the financial ratios that the valuation analyst uses as analytical tools.

Revenue Ruling 59-60 suggests that the valuation analyst review differences in the rights of the different classes of stock that may exist, and that the valuation analyst pay particularly close attention to voting differences, dividend preferences, and rights in liquidation. These items will affect the level of control that is afforded the stockholders. For example, if a stockholder has voting stock as opposed to nonvoting stock, there is more of an ability to shape the direction of the company (assuming there is enough stock to do this). Therefore, there may be a larger control premium or, conversely, a smaller discount for lack of control (minority).

*(d) Detailed profit-and-loss statements should be obtained and considered for a representative period immediately prior to the required date of appraisal, preferably five or more years. Such statements should show (1) gross income by principal items; (2) principal deductions from gross income including major prior items of operating expenses, interest, and other expenses on each item of long-term debt, depreciation and depletion if such deductions are made, officers' salaries, in total if they appear to be reasonable or in detail if they seem to be excessive, contributions (whether or not deductible for tax purposes) that the nature of its business and its community position require the corporation to make, and taxes by principal items, including income and excess profits taxes; (3) net income available for dividends; (4) rates and amounts of dividends paid on each class of stock; (5) remaining amount carried to surplus; and (6) adjustments to, and reconciliation with, surplus as stated on the balance sheet. With profit and loss statements of this character available, **the appraiser should be able to separate recurrent from nonrecurrent items of income and expense, to distinguish between operating income and investment income, and to ascertain whether or not any line of business in which the company is engaged is operated consistently at a loss and might be abandoned with benefit to the company.** The percentage of earnings retained for business expansion should be noted when dividend-paying capacity is considered. **Potential future income is a major factor in many valuations of closely held stocks, and all information concerning past income which will be helpful in predicting the future should be secured. Prior earnings records usually are the most reliable guide as to the future expectancy, but resort to arbitrary five- or ten-year averages without regard to current trends or future prospects will not produce a realistic valuation.** If, for instance, a record of progressively increasing or decreasing net income is found, then greater weight may be accorded the most recent years' profits in estimating earning power. It will be helpful, in judging risk and the extent to which a business is a marginal operator, to consider deductions from income and net income in terms of percentage of sales. Major categories of cost and expense to be so analyzed include the consumption of raw materials and supplies in the case of manufacturers, processors, and fabricators; the cost of purchased merchandise in the case of merchants; utility services; insurance; taxes; depletion or depreciation; and interest.*

This section of the ruling tells the valuation analyst to obtain at least five years of income statement data in sufficient detail so that the valuation analyst can properly understand the data's components. Five years is not automatically the correct number. There will be times when a company's business cycle is longer or shorter, and the valuation analyst must use judgment to determine the appropriate time period to use for that particular assignment. Adjustments should be made to past earnings (reasonable compensation), if appropriate.

The ruling also tells the valuation analyst to consider operating and nonoperating income and expense items separately. Because most of the valuation methods are designed to produce the value of the operating assets and liabilities, it is logical to remove the nonoperating income and expense items from the stream of income that is used.

Potential future income is discussed in the ruling and is said to be of major importance in valuation. This is the entire valuation process! Nobody buys history. The potential future income, whether in the form of dividends, capital appreciation, or a combination of the two, is what the willing buyer is purchasing. History is used to help predict the future. The ruling emphasizes that the valuation analyst cannot resort to an arbitrary use of history to value a company if it is not reflective of "probable future earnings." Current trends and future prospects must be taken into consideration in the valuation process.

*(e) Primary consideration should be given to the dividend-paying capacity of the company rather than to dividends actually paid in the past. Recognition must be given to the necessity of retaining a reasonable portion of profits in a company to meet competition. Dividend-paying capacity is a factor that must be considered in an appraisal, but dividends actually paid in the past may not have any relation to dividend-paying capacity. Specifically, the dividends paid by a closely held family company may be measured by the income needs of the stockholders or by their desire to avoid taxes on dividend receipts, instead of by the ability of the company to*

*pay dividends. Where an actual or effective controlling interest in a corporation is to be valued, the dividend factor is not a material element, since the payment of such dividends is discretionary with the controlling stockholders. The individual or group in control can substitute salaries and bonuses for dividends, thus reducing net income and understating the dividend-paying capacity of the company. It follows, therefore, that dividends are a less reliable criterion of fair market value than other applicable factors.*

The use of dividend-paying capacity, as opposed to the actual dividends paid for a controlling interest, should be considered in an appraisal, because the controlling shareholders have the ability to control the level of dividends actually disbursed. In fact, most closely held companies do not pay dividends, because they are not tax deductible. More often than not, dividends are paid as additional compensation to create a tax-deductible expense. The dividend-paying capacity will be determined by normalizing the income statement and by using the normalized earnings to derive the net cash flow available to the stockholders. The net cash flow model (discussed in chapter 10) demonstrates this process.

*(f) In the final analysis, goodwill is based upon earning capacity. The presence of goodwill and its value, therefore, rests upon the excess of net earnings over and above a fair return on the net tangible assets. While the element of goodwill may be based primarily on earnings, such factors as the prestige and renown of the business, the ownership of a trade or brand name, and a record of successful operation over a prolonged period in a particular locality, also may furnish support for the inclusion of intangible value. In some instances it may not be possible to make a separate appraisal of the tangible and intangible assets of the business. The enterprise has a value as an entity. Whatever intangible value there is, which is supportable by the facts, may be measured by the amount by which the appraised value of the tangible assets exceeds the net book value of such assets.*

In this section, the ruling indicates that goodwill is based on the company's earning capacity. However, the ruling also seems to indicate that there are other factors (such as prestige or the brand name) that may add to the value and that also should be considered. In essence, the ruling indicates that the valuation analyst should value the entire company, and it is the excess over the value of the net tangible assets that becomes the intangible value. The ruling is a bit ambiguous in this section because it starts off by discussing goodwill and concludes by addressing other intangibles as well.

Most valuation analysts recognize the ruling as suggesting that the value of the entire company will include all intangibles, not just goodwill.

*(g) Sales of stock of a closely held corporation should be carefully investigated to determine whether they represent transactions at arm's length. Forced or distress sales do not ordinarily reflect fair market value, nor do isolated sales in small amounts necessarily control as the measure of value. This is especially true in the valuation of a controlling interest in a corporation. Since, in the case of closely held stocks, no prevailing market prices are available, there is no basis for making an adjustment for blockage. It follows, therefore, that such stocks should be valued upon a consideration of all the evidence affecting the fair market value. The size of the block of stock itself is a relevant factor to be considered. Although it is true that a minority interest in an unlisted corporation's stock is more difficult to sell than a similar block of listed stock, it is equally true that control of a corporation, either actual or in effect, representing as it does an added element of value, may justify a higher value for a specific block of stock.*

Revenue Ruling 59-60 suggests that the valuation analyst review past transactions in the subject company's own stock to determine if it can be used as an indication of value. This can be the case only if the stock was transferred in an arm's-length manner meeting all of the requirements of the definition of fair market value. In particular, distress sales and sales of small blocks of stock will generally be a poor indicator of value. The smaller blocks may be used if the valuation analyst is valuing a small block of stock, but may be very inappropriate for a controlling block.

This ruling also indicates that a blockage discount is inappropriate for large blocks of stock of a closely held corporation. The sale of a large block of stock of a closely held company will generally not have the same depressing effect (supply may be greater than demand) that selling a large block of stock may have on the public market. However, the ruling recognizes that it is more difficult to sell a minority interest in a closely held com-

pany than to sell the same interest in a public company (marketability), but also that controlling interests may have elements giving them more value (control is worth more than minority, and control is more marketable than minority).

*(h) Section 2031(b) of the Code states, in effect, that in valuing unlisted securities the value of stock or securities of corporations engaged in the same or a similar line of business which are listed on an exchange should be taken into consideration along with all other factors. An important consideration is that the corporations to be used for comparisons have capital stocks which are actively traded by the public. In accordance with section 2031(b) of the Code, stocks listed on an exchange are to be considered first. However, if sufficient comparable companies whose stocks are listed on an exchange cannot be found, other comparable companies which have stocks actively traded on the over-the-counter market also may be used. The essential factor is that whether the stocks are sold on an exchange or over-the-counter, there is evidence of an active, free public market for the stock as of the valuation date. In selecting corporations for comparative purposes, care should be taken to use only comparable companies. Although the only restrictive requirement as to comparable corporations specified in the statute is that their lines of business be the same or similar, it is obvious that consideration must be given to other relevant factors in order that the most valid comparison possible will be obtained. For illustration, a corporation having one or more issues of preferred stock, bonds, or debentures in addition to its common stock should not be considered to be directly comparable to one having only common stock outstanding. In like manner, a company with a declining business and decreasing markets is not comparable to one with a record of current progress and market expansion.*

Here is the reason that valuation analysts employ the guideline company method of appraisal. Revenue Ruling 59-60 tells the valuation analyst to consider using comparative (guideline) companies to determine the value of the subject company. The ruling also points out that care should be exercised in selecting guideline companies. *Comparability* must relate to numerous factors and not be restricted to companies in the same or similar line of business. Review the items discussed in chapter 7 for suggested factors to consider when you determine comparability.

Another factor discussed is that the publicly traded guideline companies must be actively traded to be used in this analysis. This should eliminate any of the special motivations that buyers and sellers may have had in the market and that are not representative of fair market value (insiders trading shares of a thinly traded issue).

*Section 5. Weight to Be Accorded Various Factors. The valuation of closely held corporate stock entails the consideration of all relevant factors as stated in section 4. Depending upon the circumstances in each case, certain factors may carry more weight than others because of the nature of the company's business. To illustrate:*

- (a) Earnings may be the most important criterion of value in some cases whereas asset value will receive primary consideration in others. In general, the appraiser will accord primary consideration to earnings when valuing stocks of companies which sell products or services to the public; conversely, in the investment or holding type of company, the appraiser may accord the greatest weight to the assets underlying the security to be valued.*
- (b) The value of the stock of a closely held investment or real estate holding company, whether or not family owned, is closely related to the value of the assets underlying the stock. For companies of this type the appraiser should determine the fair market values of the assets of the company. Operating expenses of such a company and the cost of liquidating it, if any, merit consideration when appraising the relative values of the stock and the underlying assets. The market values of the underlying assets give due weight to potential earnings and dividends of the particular items of property underlying the stock, capitalized at rates deemed proper by the investing public at the date of appraisal. A current appraisal by the investing public should be superior to the retrospective opinion of an individual. For these reasons, adjusted net worth should be accorded greater weight in valuing the stock of a closely held investment or real estate holding company, whether or not family owned, than any of the other customary yardsticks of appraisal, such as earnings and dividend-paying capacity.*

In section 5 of the ruling, the weight to be assigned to the different approaches used in business valuation is discussed. For companies that sell products or services to the public, earnings are to be afforded the greatest weight during the valuation process. For companies that are asset intensive, earnings may not be as meaningful. The ruling is consistent with modern-day valuation theory, because an asset-based approach is rarely used for businesses that have an intangible value beyond the valuation of the underlying assets. Obviously, an asset-based approach is available if the intangible assets are valued separately and added to the result.

While discussing the valuation of the underlying assets, Revenue Ruling 59-60 suggests that the expenses of liquidation be considered in the determination of value. The irony of this section is that Private Letter Ruling 9150001 specifically frowns on the application of capital gains taxes attributable to the selling off of assets. The courts had also taken the position that, unless liquidation is imminent, the effect of capital gains taxes is considered too speculative to be factored into the valuation. This was particularly true prior to the repeal of the General Utilities Doctrine, which was associated with Section 337 liquidations.<sup>1</sup> Now, however, capital gains taxes have been permitted as part of the discount for lack of marketability in cases such as *Davis* and *Eisenberg*. There are also cases allowing a dollar for dollar reduction; *Dunn* happens to be one. This has created a favorable argument for corporate-level taxpayers because they can no longer escape the corporate-level tax.

Finally, this section reiterates the importance of a market valuation as opposed to what is performed by a valuation analyst. The ruling indicates that the investing public's opinion should be given more weight than a retrospective assessment by an individual. This confirms the importance of having the underlying assets appraised in the determination of the adjusted net worth of a company, particularly when the underlying assets are real estate or investments, which are regularly valued by the market.

*Section 6. Capitalization Rates.* In the application of certain fundamental valuation factors, such as earnings and dividends, it is necessary to capitalize the average or current results at some appropriate rate. A **determination of the proper capitalization rate presents one of the most difficult problems in valuation. That there is no ready or simple solution** will become apparent by a cursory check of the rates of return and dividend yields in terms of the selling prices of corporate shares listed on the major exchanges of the country. **Wide variations will be found even for companies in the same industry.** Moreover, the ratio will fluctuate from year to year depending upon economic conditions. Thus, **no standard tables of capitalization rates applicable to closely held corporations can be formulated. Among the more important factors to be taken into consideration in deciding upon a capitalization rate in a particular case are: (1) the nature of the business; (2) the risk involved; and (3) the stability or irregularity of earnings.**

This section says it all! Determining the appropriate capitalization rate is one of the most difficult parts of the valuation process. The important part of this section is that there are no easy answers, there are no standard tables, and the valuation analyst needs to consider, at a minimum, the nature of the business, the risk involved, and the stability or irregularity of earnings.

*Section 7. Average of Factors.* Because valuations cannot be made on the basis of a prescribed formula, there is no means whereby the various applicable factors in a particular case can be assigned mathematical weights in deriving the fair market value. **For this reason, no useful purpose is served by taking an average of several factors (for example, book value, capitalized earnings and capitalized dividends) and basing the valuation on the result.** Such a process excludes active consideration of other pertinent factors, and the end result cannot be supported by a realistic application of the significant facts in the case except by mere chance.

Section 7 of the ruling states that although one attempts to reconcile the final value estimate, there is no formula available to reconcile the various valuation methods that may be applicable to a given appraisal. Each valuation assignment consists of a unique set of circumstances that will require the valuation analyst to analyze the results of the different valuation methods used to derive a final estimate of value. Even between similar assign-

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<sup>1</sup> The General Utilities Doctrine was repealed as part of the Tax Reform Act of 1986. Previously, it would have been possible to liquidate a corporation and avoid a corporate-level tax. The Tax Reform Act of 1986 removed this escape hatch and created double taxation to the corporation and shareholders on the liquidation.



ments, the information that the valuation analyst may obtain will provide more or less confidence in the application of certain methods. Companies have different balance sheet compositions, which could affect the weight to be afforded to the net worth of the company.

In simple terms, do not take an average of all of the valuation methods that you decided were appropriate because the answer will no doubt be incorrect, unless you are extremely lucky.

**Section 8. Restrictive Agreements.** *Frequently, in the valuation of closely held stock for estate and gift tax purposes, it will be found that the stock is subject to an agreement restricting its sale or transfer. Where shares of stock were acquired by a decedent subject to an option reserved by the issuing corporation to repurchase at a certain price, the option price is usually accepted as the fair market value for estate tax purposes. See Rev. Rul. 54-76, C.B. 1954-1, 194. However, in such case the option price is not determinative of fair market value for gift tax purposes. Where the option, or buy and sell agreement, is the result of voluntary action by the stockholders and is binding during the life as well as at the death of the stockholders, such agreement may or may not, depending upon the circumstances of each case, fix the value for estate tax purposes. However, such agreement is a factor to be considered, with other relevant factors, in determining fair market value. Where the stockholder is free to dispose of his shares during life and the option is to become effective only upon his death, the fair market value is not limited to the option price. It is always necessary to consider the relationship of the parties, the relative number of shares held by the decedent, and other material facts, to determine whether the agreement represents a bona fide business arrangement or is a device to pass the decedent's shares to the natural objects of his bounty for less than an adequate and full consideration in money or money's worth. In this connection see Rev. Rul. 157, C.B. 1953-2, 255, and Rev. Rul. 189, C.B. 1953-2, 294.*

Revenue Ruling 59-60 reiterates that buy-sell agreements may be binding for estate tax purposes but may not be binding for gift tax purposes. Factors surrounding the buy-sell agreement must be considered by the valuation analyst to determine if the agreement represents an arm's-length agreement and not one that is designed to avoid taxes. Consideration must clearly be given to special situations, such as related shareholders, but that is one of many factors to be considered.

The IRS will also scrutinize a situation in which shareholders arbitrarily determine the value for their buy-sell agreement, as opposed to a provision that calls for an independent appraisal by a qualified valuation analyst. The general feeling is that there is too much room for manipulation if the determination of this value is left to the shareholders alone.

**Section 9. Effect on Other Documents.** *Revenue Ruling 54-77, C.B. 1954-1, 187, is hereby superseded.*

## CONCLUSION

By now, you should have more of an understanding of Revenue Ruling 59-60. Considering that the ruling was promulgated in 1959, it has stood the test of time. Business valuation theory corresponds to the factors set forth in this ruling. For the most part, this Revenue Ruling is like motherhood and apple pie. It just makes sense! Regardless of the set of standards followed in performing a business valuation, they all send the same message: Consider the factors set forth in Revenue Ruling 59-60. I hope that the next time you read this Revenue Ruling you will see the valuation process in a different light. Valuation has not really changed. We just get smarter as time goes by.





# CHAPTER 14

## *The Valuation Report*

### CHAPTER GOALS

In this chapter, I will explain the following:

- The components of a valuation report
- The types of valuation reports
- The preparation of the business valuation report
- The defense of the business valuation report
- Common errors in business valuation reports

### INTRODUCTION

Appraisal reports will vary depending upon the assignment. The different types of reports generated will be based on the needs of the client and will frequently be cost driven. A detailed report may be too expensive for a client, although it may be required because of the nature of the assignment. This is a problem the valuation analyst constantly faces.

### COMPONENTS OF A VALUATION REPORT

*Statement on Standards for Valuation Services (SSVS) No. 1* begins its discussion about valuation reports in paragraph 47. It states that

47. A valuation report is a written or oral communication to the client containing the conclusion of value or the calculated value of the subject interest. Reports issued for purposes of certain controversy proceedings are exempt from this reporting standard (paragraph 50).

48. The three types of written reports that a valuation analyst may use to communicate the results of an engagement to estimate value are: for a valuation engagement, a detailed report or a summary report and for a calculation engagement, a calculation report.

Regardless of whether the valuation analyst is a CPA, Standard 10 of the *Uniform Standards of Professional Appraisal Practice (USPAP)*, as well as the rest of the USPAP, must be followed for all Financial Institutions Reform Recovery and Enforcement Act (FIRREA) engagements, which are engagements that involve a federally related transaction. Many government agencies are now requiring that the USPAP be followed.

According to the USPAP, each analysis, opinion, and conclusion reached should be communicated in a manner that is not misleading (no kidding!). The report should be clearly and accurately presented. It should also contain enough information to allow the reader to properly understand the contents, the sources of information used by the valuation analyst to draw certain conclusions, and the basis for the conclusions reached. The valuation analyst should also disclose any unusual assumption or limiting condition that directly affects the appraisal and should explain its effect on value. Sounds like SSVS No. 1, huh?

The intent of the USPAP is to ensure that the valuation analyst properly communicates his or her findings in a thorough manner that will be helpful to the reader of the report. To accomplish this task, the USPAP lists certain items that must be in a report. For example, a definition of value must be in a report. If it is not, how will the reader properly understand the context in which the analysis has been done?

### Box 14.1 Required Sections of a Detailed Valuation Report

- Letter of Transmittal
- Table of Contents
- Introduction
- Description of the Assignment
- Assumptions and Limiting Conditions
- Sources of Information
- Analysis of Subject Entity and Related Nonfinancial Information
- Subject Company Information
- Economic Data
- Industry Information
- Financial Statement/Information Analysis
- Valuation Approaches and Methods Considered
- Valuation Approaches and Methods Used
- Valuation Adjustments
- Nonoperating Assets, Nonoperating Liabilities, and Excess or Deficient Operating Assets
- Representation of the Valuation Analyst
- Reconciliation of Estimates and Conclusion of Value
- Qualifications of the Valuation Analyst
- Appendixes and Exhibits

In my opinion, a good appraisal report should contain at least the required disclosures from SSVS No. 1, which will also put the valuation analyst in compliance with the USPAP. I've included the required sections of a detailed valuation report are in box 14.1 for reference.

### LETTER OF TRANSMITTAL

The letter of transmittal is the cover letter in which you basically tell your client, "Here it is, but if you want to know more, see the attached report." A sample transmittal letter appears as part of the report on the CD-ROM accompanying this book.

### TABLE OF CONTENTS

This should be pretty self-explanatory. Make sure the reader can find things in your report.

### INTRODUCTION

The introduction section should provide an overall description of the valuation engagement. SSVS No. 1 states that the introduc-

tion section may include the content listed in box 14.2, among other things. The information in this section should be sufficient to enable the intended user of the report to understand the nature and scope of the valuation engagement, as well as the work performed.

### Box 14.2 SSVS No. 1 Suggested Content for a Valuation Report

- Identity of the client
- Purpose and intended use of the valuation
- Intended users of the valuation
- Identity of the subject entity
- Description of the subject interest
- Whether the business interest has ownership control characteristics and its degree of marketability
- Valuation date
- Report date
- Type of report issued (namely, a detailed report)
- Applicable premise of value
- Applicable standard of value
- Assumptions and limiting conditions (alternatively, these often appear in an appendix)
- Any restrictions or limitations in the scope of work or data available for analysis
- Any hypothetical conditions used in the valuation engagement, including the basis for their use
- If the work of a specialist was used in the valuation engagement, a description of how the specialist's work was relied upon
- Disclosure of subsequent events in certain circumstances
- Any application of the jurisdictional exception
- Any additional information the valuation analyst deems useful to enable the user(s) of the report to understand the work performed

If you put all of the box 14.2 stuff in the introduction, your report will be 50 pages at this point. Personally, I do not put all of this in the introduction section of my reports. I believe that it can make this section too cumbersome. Fortunately, SSVS No. 1 states, “If the above items are not included in the introduction, they should be included elsewhere in the valuation report.” I vote for elsewhere. I prefer to have a “Description of the Assignment” section.

## DESCRIPTION OF THE ASSIGNMENT

Consider this section of the report as the introduction. This is the part of the report that spells out what your assignment was. It should include a complete description of the appraisal subject—for example, “35 shares of the common stock of XYZ Corp., a New Jersey Corporation, which represents a 43.5 percent minority interest in that corporation, owned by John Smith.” This section should also provide the reader with the effective date of the appraisal. This is the date at which the business or business interest has been appraised. The valuation analyst should also disclose the purpose and function of the appraisal. The purpose may be to determine the fair market value of the company, while the function may be to describe how it will be used (for example, for gift tax purposes, estate tax purposes, or divorce litigation).

The description section will generally disclose the identity of the client. The client may not be the same individual to whom the transmittal letter is addressed. We are frequently retained by parties going through litigation who instruct us to send the report to the attorney. If the client is not the attorney, the cover letter would be addressed to the client, but mailed to the attorney. This is like playing “Who’s on First?”

Finally, this section of the report should include the definition of value being used in the report. Most of the time, it will be fair market value. If a different standard of value is used, it should be very clearly defined.

## ASSUMPTIONS AND LIMITING CONDITIONS

This is one of the most important sections of the report. It contains the valuation analyst’s assumptions covering the entire report, such as the assumption that the information being provided by the client is valid without independent verification. This should be considered the valuation analyst’s disclaimer. The accounting profession knows all about disclaimers.

Valuation analysts are a little more subtle about the way they disclaim certain items. Instead of the typical accountant’s disclaimer, which hits the reader between the eyes on page 1 of the accountant’s report, the valuation analyst’s assumptions are placed more subtly within the report. Some valuation analysts prefer to put this section in an appendix at the back of the report. I frequently cut and paste these items out of my engagement letter and add any additional items that may be applicable to the current assignment. It does not matter where in the report this goes, as long as it is included. This is called covering your posterior!

Certain assumptions and limiting conditions are standard for all engagements. These should be included in your engagement letter with the client, so that there is no misunderstanding about the client’s acceptance of your report subject to at least those assumptions and limiting conditions. There may be others that end up in your report as well. (See chapter 3 for the discussion of engagement letters.) Some of the more common assumptions and limiting conditions are illustrated in the sample reports on the CD-ROM that came with this book.

## SOURCES OF INFORMATION

Appraisal reports are supposed to be replicable by any qualified reader. Therefore, an appraisal report should include all of the sources considered by the valuation analyst in providing a conclusion of value. This allows a qualified reader to independently review the various sources used by the analyst in order to draw a similar conclusion (or at least understand how the analyst derived his or her conclusion). (Some valuation analysts prefer to put this section in an appendix to the report rather than in the report itself.) It is advisable to list all the items that were reviewed but, more importantly, to list those items that had an effect on your conclusion. Do not include items that have no relevance to the assignment at hand. For example, if you are valuing a corporate interest for a divorce, do not list the personal tax returns of the parties unless they had some relevance to the assignment.

Besides listing all of the stuff that you reviewed and considered, SSVS No. 1 also tells us that this section may include the following:

- a. For valuation of a business, business ownership interest, or security, whether and to what extent the subject entity's facilities were visited
- b. For valuation of an intangible asset, whether the legal registration, contractual documentation, or other tangible evidence of the asset was inspected
- c. Names, positions, and titles of persons interviewed and their relationships to the subject interest

## ANALYSIS OF THE SUBJECT ENTITY AND RELATED NONFINANCIAL INFORMATION

For this section, SSVS No. 1 states that we should include a description of the relevant information from the categories found in box 14.3.

### Box 14.3 SSVS No. 1 Subject Entity Information

- |  |  |
|--|--|
| • Nature, background, and history  | • Economic environment                   |
| • Facilities   | • Geographical markets                   |
| • Organizational structure   | • Industry markets                       |
| • Management team (which may include officers, directors, and key employees) | • Key customers and suppliers            |
| • Classes of equity ownership interests and rights attached thereto          | • Competition                            |
| • Products or services, or both  | • Business risks                         |
|  | • Strategy and future plans              |
|  | • Governmental or regulatory environment |

This section, once again, can be broken up into smaller sections, but you want to make sure that you include all of the important stuff. I break this section down as follows:

- Subject company data
- Economic data
- Industry data

### Subject Company Data

Revenue Ruling 59-60 suggests that one of the eight factors to be considered in performing an appraisal is “the nature of the business and the history of the enterprise from its inception.” This section of the report will frequently include a discussion of the following areas:

- History of the business
- Form of organization
- Restrictions on the sale of the subject interest
- Subsidiaries and affiliates
- Ownership and control
- Management
- Product lines
- Subject industry
- Competition
- Location

This section of the report will allow the valuation analyst to demonstrate his or her knowledge of the subject company. One of the greatest faults that I find in other valuation analysts' reports is that they either skip this section or write a one paragraph description of the company. How can anyone understand what makes the company have value if this information is omitted? This information adds to the risk assessment that we discussed

previously. It helps justify discount rates, capitalization rates, discounts for lack of control, discounts for lack of marketability, and control premiums. These items are discussed in detail in chapter 5.

## Economic Data

The appraisal report should contain a discussion of the economy, concentrating on how it affects the appraisal subject (see chapter 5 for a detailed discussion about the economic analysis that should be done). Remember to make this section relevant to the appraisal subject. Some commercial vendors sell an analysis of the economy that can be inserted into an appraisal report. The problem with using such an analysis is that it assumes that every appraisal subject is affected by the same economic factors. This is not necessarily true. Although a construction contractor may be affected by rising interest rates, a brain surgeon probably is not. Including a long discussion about interest rates in a valuation report for a brain surgery practice will not only be boring, but also out of place.

## Industry Data

The report should also contain a discussion of the appraisal subject's industry. The discussion should be detailed enough to demonstrate how the appraisal subject fits into the industry; how the industry is affected by the economy; whether the industry is mature, stable, or cyclical; and anything else that may be pertinent to the appraisal. The discussion may also cover industries that affect the appraisal subject, even though the appraisal subject is not in that industry. For example, our firm appraised a printing business that was specialized; it serviced only the pharmaceutical industry. Our report contained a discussion of the changes in the pharmaceutical industry because they had a major effect on the appraisal subject's business. For more information about industry analysis, see chapter 5.

## FINANCIAL STATEMENT/INFORMATION ANALYSIS

This is the section of the appraisal report that includes the trend and ratio analysis of the subject company. With regard to its performance, the subject company should generally be compared not only with itself but also with either guideline companies or industry composite data. This section of the report also includes the financial projections or forecast for the company, including operational expectations (revenues, net profits, and cash flow). This is a critical section of the report because not only do you need this information to perform the valuation calculations, but you also need it for assessing risk, which will be used to adjust either the multiples used in guideline company methodologies or the component of the discount rate pertaining to the specific company risk premium.

## VALUATION APPROACHES AND METHODS CONSIDERED

Because the valuation analyst generally considers all applicable approaches and methods, this section of the report is almost boilerplate. This is where you can list the advantages and disadvantages of the approaches to value and why they may or may not be applicable to the particular valuation. For example, this is where you would discuss the fact that you will not be using the asset based approach because you are valuing a professional practice, which generates its value from earnings and cash flow.

## VALUATION APPROACHES AND METHODS USED

All of the methods that were considered as part of the appraisal should be discussed either in a separate section, as in the previous text, or in the valuation section of the report. This section should also contain a discussion about the search for publicly traded guideline companies. The discussion should include the parameters of the search, the reason that certain companies were considered but eliminated, and the companies used as guideline companies. Some valuation analysts include an adjusted balance sheet and a normalized income statement in this section of the report, along with an appropriate discussion of the adjustments that were made. Other valuation analysts will include this information in the financial statement analysis section of the report.

After the discussion of the selected methods of valuation and the calculations of value under each method, a reconciliation should be included in the report, and it should lead to a conclusion of value. SSVS No. 1 suggests a separate section. I think that it belongs here. Once again, the standards are not trying to tell us that things need to look exactly the same. They are telling us to make sure to include all important parts of the valuation process somewhere in the report so that the reader can properly understand what we have done.

## VALUATION ADJUSTMENTS

This is the section in which SSVS No. 1 suggests that the valuation analyst discuss premiums and discounts and includes a detailed justification for those that were applied in the report, as well as a justification for the size of those premiums or discounts.

## NONOPERATING ASSETS, NONOPERATING LIABILITIES, AND EXCESS OR DEFICIENT OPERATING ASSETS

SSVS No. 1 wants the valuation analyst to discuss the nonoperating items or any of the other items that were segregated during the valuation process that are now added back at the end of the process. The nonoperating items were probably normalized off the balance sheet, and you may have discussed this in the financial analysis section of your report. Just don't forget to add or subtract this stuff back to and from the operating value of the business (if appropriate). Excess or deficient assets are usually a closing adjustment in a transaction and should be addressed here as well.

## REPRESENTATION OF THE VALUATION ANALYST

This is the equivalent to the "Appraiser's Certification" for the non-CPAs. We usually have this as an appendix to the report.

## RECONCILIATION OF ESTIMATES AND CONCLUSION OF VALUE

I generally put this in with the valuation analysis of the approaches and methods used. It can be separately stated, but it flows better right after you discuss the valuation calculations.

## QUALIFICATIONS OF THE VALUATION ANALYST

Let the reader of the report know that you are really qualified to do the appraisal. Just don't lie! This is where you are saying to the reader of the report that you have the training and background to have done this assignment properly. You may have fooled your client into hiring you, but now the user of the report needs to be convinced.

## APPENDIXES AND EXHIBITS

This section of the report will generally include the backup documentation that supports the appraisal. Some valuation analysts include a comparative balance sheet and income statement in this section; others may also include all of the valuation calculations. To me, there is nothing worse than reading an appraisal report in which the valuation analyst makes me constantly jump from the narrative to schedules in the back of the report to follow the story that is being told. I would rather see the financial information included in the body of the narrative. This may be more difficult for your word processing person to do, but it is more courteous to the reader. Keep in mind that the reader is, frequently, the one who will be paying your fee!

## TYPES OF VALUATION REPORTS

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During a typical business valuation engagement, the valuation analyst may be asked to issue one type of report or several different types. In the previous editions of this book, I referred to them as (1) *formal reports*, (2) *informal reports*, (3) *letter reports*, and (4) *oral reports*. Let's change the terminology right now. SSVS No. 1 contains the following:

47. A valuation report is a written or oral communication to the client containing the conclusion of value or the calculated value of the subject interest. Reports issued for purposes of certain controversy proceedings are exempt from this reporting standard (paragraph 50).

48. The three types of written reports that a valuation analyst may use to communicate the results of an engagement to estimate value are: for a valuation engagement, a detailed report or a summary report; and for a calculation engagement, a calculation report.

### ***For a Valuation Engagement***

- a. *Detailed Report*: This report may be used only to communicate the results of a valuation engagement (conclusion of value); it should not be used to communicate the results of a calculation engagement (calculated value) (paragraph 51).

- b. *Summary Report*: This report may be used only to communicate the results of a valuation engagement (conclusion of value); it should not be used to communicate the results of a calculation engagement (calculated value) (paragraph 71).

For a valuation engagement, the determination of whether to prepare a detailed report or a summary report is based on the level of reporting detail agreed to by the valuation analyst and the client.

**For a Calculation Engagement**

- c. *Calculation Report*: This type of report should be used only to communicate the results of a calculation engagement (calculated value); it should not be used to communicate the results of a valuation engagement (conclusion of value) (paragraph 73).

Standard 10 of the USPAP discusses two types of reports, an appraisal report and a restricted use appraisal report. The comments to this standard state the following:

When the intended users include parties other than the client, an Appraisal Report must be provided. When the intended users do not include parties other than the client, a Restricted Use Appraisal Report may be provided.

The essential difference between these options is in the content and level of information provided. The appropriate reporting option and the level of information necessary in the report are dependent on the intended use and intended users.

An appraiser must use care when characterizing the type of report and level of information communicated upon completion of an assignment. An appraiser may use any other label in addition to, but not in place of, the label set forth in this standard for the type of report provided.

In essence, the distinction being made in the USPAP is the difference between a detailed report and a summary report. It is interesting to note, however, that a detailed report *must* be provided if the intended users are not the client. This is an attempt to make sure that the reader has all of the necessary information to understand the report properly.

Whether the engagement is a *valuation* or a *calculation* is defined in the *Scope of Work* section of the USPAP. This is the manner in which the project is identified and what steps are necessary to perform a credible job. Keep in mind that a calculation is not a valuation.

Regardless of which report format you use, every business valuation engagement requires you to do all of the work that is necessary to formulate a supportable conclusion of value about the appraisal subject. The business valuation report is nothing more than the mechanism that is used to communicate your opinion. The report, however, can be a dynamic tool to convince the reader that you have done a good job in deriving your conclusion of value.

Each of the report types serves a different purpose in a valuation engagement. The type of assignment can affect the content of your report and, therefore, a clear understanding of the engagement is essential before you can do your job. Before going too much further, let's define each of these report types.

## DETAILED REPORTS

A detailed report is covered in SSVS No. 1 beginning at paragraph 51. This type of report has also been referred to as a *formal* or *self-contained* report. A detailed business valuation report is the highest level report that you can provide to your client. The contents of the report will generally contain all of the information covered earlier in this chapter. A detailed business valuation report can range from 40–80 pages or more (400 pages is our record. We charged by the pound for that report).

## SUMMARY REPORTS

Less than detailed reports are frequently requested and are perfectly acceptable in certain situations in which the user of the report is informed that much of the detail is excluded from the report. The USPAP calls these reports *restricted use appraisal reports*. Sometimes, based on the needs of the client, he or she may not want to pay the valuation analyst to include a section in the report that describes the company. This is especially true if the appraisal is for planning purposes. However, this description would be important to a third party who is not familiar with the appraisal subject.



A summary report contains considerably less information than a detailed report. SSVS No. 1 says “A summary report is structured to provide an abridged version of the information that would be provided in a detailed report, and therefore, need not contain the same level of detail as a detailed report.” However, SSVS No. 1 then goes on to require, at a minimum, that a summary report include a list of items that can be found here in box 14.4.

#### **Box 14.4 SSVS No. 1 Suggested Content for a Summary Report**

1. Identity of the client
2. Purpose and intended use of the valuation
3. Intended users of the valuation
4. Identity of the subject entity
5. Description of the subject interest
6. The business interest’s ownership control characteristics, if any, and its degree of marketability
7. Valuation date
8. Valuation report date
9. Type of report issued (namely, a summary report) (paragraph 48)
10. Applicable premise of value
11. Applicable standard of value
12. Sources of information used in the valuation engagement
13. Assumptions and limiting conditions of the valuation engagement (paragraph 18)
14. The scope of work or data available for analysis including any restrictions or limitations (paragraph 19)
15. Any hypothetical conditions used in the valuation engagement, including the basis for their use (paragraph 22)
16. If the work of a specialist was used in the valuation (paragraph 20), a description of how the specialist’s work was used, and the level of responsibility, if any, the valuation analyst is assuming for the specialist’s work
17. The valuation approaches and methods used
18. Disclosure of subsequent events in certain circumstances (paragraph 43)
19. Any application of the jurisdictional exception (paragraph 10)
20. Representation of the valuation analyst (paragraph 65)
21. The report is signed in the name of the valuation analyst or the valuation analyst’s firm
22. A section summarizing the reconciliation of the estimates and the conclusion of value as discussed in paragraphs 68 and 69
23. A statement that the valuation analyst has no obligation to update the report or the calculation of value for information that comes to his or her attention after the date of the valuation report

This list has more items on it than the detailed report contained. You just have to write less. When you look closely at these items, you will realize that the standard wants to insure that the valuation analyst is protected. Most of this stuff is necessary because even though you are issuing a summary report, you still did a full valuation engagement. Whatever you do, do not get mixed up about your assignment. A summary report is appropriate for a full valuation. Anything less in scope falls into a calculation engagement. That will require a different type of report.

## **CALCULATION REPORTS**

This is the only type of report that can be used for a calculation engagement. Think about the calculation engagement as being more of an agreed upon procedures assignment than a valuation engagement. You will be doing less in scope and, accordingly, you need to report on the lesser scope engagement. SSVS No. 1 requires that the valuation analyst identify that it is a calculation report. The report should contain many of the same items, but adapted for the calculation engagement, including but not limited to the analyst’s representation, assumptions, and limiting conditions; use of a specialist; appendixes; and exhibits.

As for the section of the report summarizing the concluded value, SSVS No. 1 states that the items listed in box 14.5 should be included in the calculation report.

**Box 14.5 SSVS No. 1 Suggested Content for a Calculation Report**

1. Certain calculation procedures were performed; include the identity of the subject interest and the calculation date.
2. Describe the calculation procedures and the scope of work performed or reference the section(s) of the calculation report in which the calculation procedures and scope of work are described.
3. Describe the purpose of the calculation procedures, including that the calculation procedures were performed solely for that purpose and that the resulting calculated value should not be used for any other purpose or by any other party for any purpose.
4. The calculation engagement was conducted in accordance with the Statement on Standards for Valuation Services of the American Institute of Certified Public Accountants.
5. A description of the business interest's characteristics, including whether the subject interest exhibits control characteristics, and a statement about the marketability of the subject interest.
6. The estimate of value resulting from a calculation engagement is expressed as a calculated value.
7. A general description of a calculation engagement is given, including that (1) a calculation engagement does not include all of the procedures required for a valuation engagement and (2) had a valuation engagement been performed, the results may have been different.
8. The calculated value, either a single amount or a range, is described.
9. The report is signed in the name of the valuation analyst or the valuation analyst's firm.
10. The date of the calculation report is given.
11. The valuation analyst has no obligation to update the report or the calculation of value for information that comes to his or her attention after the date of the report.

## ORAL REPORTS

Oral reports are also acceptable, although not advisable. Some attorneys prefer oral reports in litigation as a strategy for keeping the other side guessing. The Federal Rules of Civil Procedure have changed the use of oral reports. This “trial by ambush” approach is now frowned on in many courts.

This type of report is generally accomplished through testimony, either at a deposition or a trial. On occasion, your client may just want a verbal opinion as to what his or her business should sell for. SSVS No. 1 advises the member to document the substance of the oral report communicated to the client in his or her working papers.

## PREPARING THE BUSINESS VALUATION REPORT

Now that we have discussed the types of reports, the next step is to understand when to use each type of report. Personally, I prefer issuing detailed valuation reports. This type of report allows me to demonstrate not only that I did my job well, but also the fact that I know valuation theory. Knowledge of the different sets of standards from the different appraisal organizations can help you play an important litigation support role by assisting your client's attorney in impeaching the other side's expert for not following the standards of the organizations to which the expert belongs.

The standards have been discussed earlier in this book, so there is no need to repeat the discussion here. However, if you did not read about the standards when you encountered them, now would be a good chance to do so (you thought you could skip them and get away with it, huh?). By this point in the book, you should also have awoken from your nap and ordered your own copy of SSVS No. 1 and the USPAP (you have already been given SSVS No. 1 in chapter 2). I would have given you the USPAP, but I hate violating copyright laws.

## FEDERAL RULES OF CIVIL PROCEDURE

This book is not a legal treatise, nor is it intended to address the Federal Rules of Civil Procedure (FRCP), but there have been some changes made to the rules, and they affect expert testimony; therefore, they may also affect the

business valuation reports that we issue in litigation engagements. The changes impose stricter rules regarding the disclosure and timing requirements for expert opinions.

FRCP 26(a)(2)(B) states that

Except as otherwise stipulated or directed by the court, this disclosure shall, with respect to a witness who is retained or specially employed to provide expert testimony in the case or whose duties as an employee of the party regularly involve giving expert testimony, be accompanied by a written report prepared and signed by the witness. The report shall contain a complete statement of all opinions to be expressed and the basis and reasons therefore; the data or other information considered by the witness in forming the opinions; any exhibits to be used as a summary of or support for the opinions; the qualifications of the witness, including a list of all publications authored by the witness within the preceding ten years; the compensation to be paid for the study and testimony; and a listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding four years.

These rules are intended to eliminate the “trial by ambush” technique that certain states have allowed previously. Working with a New York law firm, we were once asked to render our opinion by telephone. The other side could have then deposed us, and unless they asked the correct questions, they might never have known what we did or what we relied on. Let’s face it, that type of law was counterproductive! Maybe with full disclosure, such a case would have settled.

## USING YOUR REPORT AS A SELLING TOOL

All of us who serve as expert witnesses know that we should be objective if we are to be credible. Those of us who belong to appraisal organizations are ethically bound not to be advocates for our client. However, this does not mean that we cannot be advocates for our own opinions. The accounting profession has rules on objectivity and integrity. A business valuation report is the perfect forum for selling your opinion of the value of the appraisal subject.

Once you have performed all of the required steps to reach an opinion of value, the next step is to communicate it in such a way that the reader of your report will have no alternative but to realize that you are correct. The manner in which you write and present your report can help you convince the reader that you have reached the appropriate conclusion. I generally want my reports to tell a story. The beginning of my story includes a discussion of the theory of how to value a business or business interest. Keep in mind that the story will change depending on whether you are valuing a controlling interest or a minority interest.

The middle of my story includes the application of the appraisal theory, discussed in the beginning of my story, to the appraisal subject. This is the guts of the valuation. It includes the analysis (financial, economic, and industry) and the valuation calculations. This section of the report is intended to show the reader how the theory applies to this appraisal. After being presented with the approaches and methods in the beginning section, the reader now sees them with numbers.

The final section of the story is my conclusion, which ties together the first two sections of the report. Here is the theory; here is how it is applied; therefore, my conclusion must be correct if I followed the theory. This may seem pretty basic, but it has proven to be an effective tool in the courtroom, regardless of whether it was a bench trial or a jury trial.

The business valuation report should contain a thorough analysis that demonstrates how much you know about the appraisal subject, its industry, and the other items that will affect its value. Too often, reports have all of the correct components, but each section is so skimpy that it fails to demonstrate that the valuation analyst did any more than the minimum amount of work in that assignment. For example, a common error is to include financial ratios in the report but fail to discuss what they mean.

Your appraisal report is your opportunity to demonstrate your knowledge. If you include items in your report, they should be explained well. Don’t be afraid to quote other sources. Use recognized sources in your report to support your work. Quoting sources such as the government (the IRS, Revenue Rulings, the Bureau of Labor and Statistics, and so on) makes your work hard to dispute. Judges and juries show a great deal of respect for information taken from authoritative sources. Quoting other experts in the field also works. I like to include quotes from Pratt. Most of the attorneys who have been involved in business valuation litigation know of his work. You can even quote Trugman! I can’t, but you can.

Another way to use your report as a selling tool is to emphasize a particular section, especially if it covers a subjective portion of the process (such as capitalization rates). For example, you can include extra wording in the

report if the capitalization rate that you have selected is 75 percent. If you had selected 15–20 percent, you would still have to justify your rate, but clearly not as much as if the rate is out of the range that people are used to seeing.

In one particular valuation, we included a discussion of the rates of return required by venture capital firms so that we could support a very high capitalization rate (78 percent). We quoted an article published in *Business Valuation Review* that addressed venture capital returns. The author of this article described different rates of return depending on which stage of the business life cycle the subject was in and related this to the appraisal subject. We showed that the appraisal subject could not even qualify for venture capital financing, which supported our assessment of the riskiness of an investment in this company. By quoting another source, we strengthened our argument to the point that the judge found in our favor. Some of the supporting language from our report included the following:

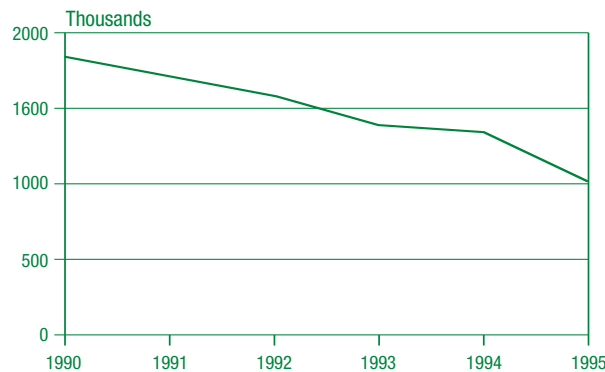
Further support for these high capitalization rates comes from an examination of the venture capital market. “Professional venture capitalism requires a minimum of 40 to 50 percent rates of return on the small company ‘superstars’ of tomorrow,” according to Bradley A. Fowler, Esq. in an article published in *Business Valuation Review*, June 1989. Rates have not changed materially, and as such, this article lends some excellent insight into required rates of return.

According to the article, venture capitalists who are financing seed or start-up companies were looking for 50 percent or more compound rates of return. Quoting a PriceWaterhouse article, the author states, “depending upon the perceived risk, the venture firm is going to want a rate of annual return of 40% to 80% or more. And they will also want the ability to liquidate their investment, usually within five years.”

Smith Company is clearly not a “superstar.” With negative book value, a history of losses, little depth in management, and heavy short-term liabilities, a venture capitalist would not be interested in the company. This should warrant an exceptionally high required rate of return.

Another selling tool is the use of graphs. The personal computer has given the valuation analyst a greater capability of demonstrating important points with the use of pictures. Bar charts, pie charts, and trend lines are great tools for driving a point home. Let’s assume that the company being appraised has had a decreasing sales volume over the period covered by the appraisal (figure 14.1).

**FIGURE 14.1**  
**XYZ SALES CO. YEARLY SALES**



Do you really need to say much more? The downward slope of the graph makes it pretty obvious that the trend was not good. The use of graphs is especially effective when the valuation analyst is called on to testify. Pointing the judge to a picture in your report will be much more effective than expecting the judge to read a lengthy report.

No matter how much the valuation analyst points out that a company incurs risk for having most of its sales come from a few customers or from a particular type of service, it can also be effective to present a chart in conjunction with tables to demonstrate this effectively. exhibit 14.1 illustrates this point.

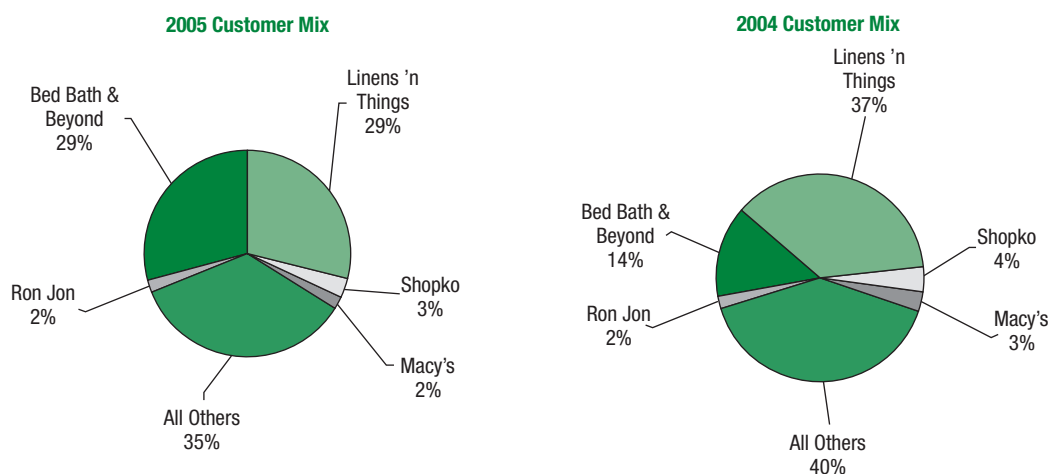
The use of color printers not only dresses up your report, but it also highlights the story even better than black and white. A good network compatible color printer now costs about \$2,000. The profit from your next appraisal report can buy you one (or it can pay the rent).

### EXHIBIT 14.1 USING TABLES AND CHARTS

In the last three years, the company's largest customers were as follows:

Customer	2003		2004		2005	
	\$	%	\$	%	\$	%
Bed Bath & Beyond	\$ 330,179	3.72%	\$ 1,628,375	14.06%	\$ 3,227,199	29.02%
Burlington Coat Factory	244,819	2.76%	—	0.00%	—	0.00%
Linens 'n Things	3,581,744	40.35%	4,275,435	36.92%	3,187,092	28.66%
Macy's Home Stores	—	0.00%	352,004	3.04%	252,858	2.27%
Ron Jon Surf Shop	273,808	3.08%	243,615	2.10%	214,459	1.93%
Shopko Stores Inc.	295,162	3.32%	412,771	3.56%	313,724	2.82%
All others	4,151,765	46.77%	4,667,455	40.31%	3,926,784	35.31%
<b>TOTAL REVENUES</b>	<b>\$8,877,477</b>	<b>100.00%</b>	<b>\$11,579,655</b>	<b>100.00%</b>	<b>\$11,122,116</b>	<b>100.00%</b>

The customer mix for these two years is shown graphically below.



In 2005, Bed Bath & Beyond and Linens 'n Things made up about 58 percent of the company's revenues. In 2004 and 2003, sales were 51 percent and 44 percent, respectively. Prior to 2003, Jones Sales lost Bed Bath & Beyond as a customer due to the action of a salesman for the company. Bob Jones worked hard to regain this customer, and it is now the company's largest account.

Another selling tool for appraisal reports is the manner in which they are presented. At our firm, we like to bind our reports in our firm's report covers and to include labeled dividers between the sections. We do not use preprinted dividers because our reports tend to vary. Instead, we use plain dividers and print whatever needs to be on the divider on clear labels. The appearance of an appraisal report can also help sell the report. If it is cosmetically attractive, the reader will believe that a great deal of time went into the work product. We have found that many judges will not read the report but will comment on the fact that it appears to be a well-constructed document.

If you have prepared your business valuation report in a comprehensive manner, it will also help you prepare for trial. I will use my report to refresh my memory in preparation for testimony. I find that I put so much information in my report that I spend more time reading it than I do going over working paper files. At trial, I will use it as a refresher if I am asked a question that I do not remember the answer to. This is a time saver compared to sitting on the witness stand and going through files.

## USING THE OTHER SIDE'S REPORT TO HELP SELL YOUR OPINION

In a litigation assignment, wouldn't it be great if we were always lucky enough to get the other side's report before we had to do ours? Unfortunately, this does not happen often enough. However, when it does happen, you might as well take advantage of it. The other side's report can help the valuation analyst structure his or her report to point out the flaws in the methodologies and conclusions of the other valuation analyst. Having the other side's report in advance frequently allows the valuation analyst to emphasize those areas that are known to be a point of contention in the litigation battle of the experts.

Sometimes, critiquing the other side's report before preparing our own points out the many problems that we need to address in our report. We will use whatever information we can to our advantage. The best way to illustrate this point is to use some real examples. Exhibit 14.2 contains an excerpt of a critique that our firm prepared in the past. I will explain how we addressed the problem if it is not evident from the critique itself.

In exhibit 14.2, the subject business was a floor covering distributor that was being valued for a shareholder dispute. The minority shareholder was claiming oppression even though there was none. The expert on the other side could not find any signs of it. Obviously, we were not happy with the other side's report.

### EXHIBIT 14.2 USING THE OTHER SIDE'S REPORT

Trugman Valuation Associates, Inc. has been asked to perform a critique of the valuation report issued in this matter by Green & Company (hereafter referred to as the *Green Report*). In order to make this critique easy to follow, we have made page references to the Green Report.

According to Section 3.01 of Revenue Ruling 59-60:

A sound valuation will be based upon all relevant facts, but the elements of common sense, informed judgment, and reasonableness must enter into the process of weighing those facts and determining their aggregate significance.

This statement lays the foundation for much of the critique presented herein. One of the most critical aspects of business valuation is that the valuation analysts approach the assignment objectively and use common sense and sound judgment. As the following critique indicates, this does not appear to be the case with the Green Report.

**Page 4.** Beginning on page 4 of the Green Report, the valuation analysts begin a detailed discussion of the company and the nature of its operations. The majority of the information used to form the basis for the valuation analysts' understanding of the company was taken from a proposal prepared by the company for the purposes of securing the Regional Distribution Center (RDC) contract from Armstrong Carpet (hereafter referred to as the *Proposal*).

In discussions with management, much of the information used to prepare the Proposal was based on future plans. On page 1 of the Proposal, the company calls the Proposal "hypothetical." In general, the Proposal

(Continued)

**EXHIBIT 14.2** *(Continued)*

was a tool used by the company to acquire what they thought to be a very positive relationship with Armstrong Carpet. Accordingly, it was written to highlight the positives of the relationship and minimize its potential pitfalls and negatives. As indicated in the section of this report titled "History and Nature of the Business," the relationship with Armstrong Carpet (in everyday dealings) was extremely difficult to manage and required a great deal of time and energy from key individuals at the company. In addition to the amount of work involved in maintaining the Armstrong Carpet relationship, there are a lot of real business risks involved with the Armstrong Carpet agreements.

Regarding the history and future (including the Armstrong Carpet relationship), the Green Report states the following:

The company was founded in 1950 by David Johnson (grandfather of John Johnson). In 1982, Richard Johnson (son of David and father of John) secured the Armstrong Carpet relationship. Since 1995, John Johnson has filled the leadership role and carried the title of President. The expressed intentions are to continue to expand the company and to carry it from its current third generation into a fourth generation of family in this business. Expectations as expressed in this Proposal were favorable for long-term continued success. In particular, the Proposal expressed expectations of the company being able to flourish into the next generation because of Mr. Johnson's children, as well as "a fine assortment of nieces and nephews to draw upon." The Proposal went on to describe the continuation of the company (and by inference its continued success) as "almost a certainty."

Though the complete excerpt from the Report is lengthy, it serves to illustrate the lack of in-depth knowledge the valuation analysts possessed regarding the company, the appraisal subject. One important note on the excerpt above is the fact that the Armstrong Carpet relationship was initiated in 1982 (and by no means was it secure). Although this is only a single word, it gives us additional insight into the lack of knowledge of the evolution of the Armstrong Carpet relationship on their part.

Although the Proposal points out that the company's goals are to be successful, and that part of its ability to be successful in the future depends on management succession, these valuation analysts assume that because the company has management succession plans, it will undoubtedly be successful. The Proposal states the following:

With his soon-to-be three children and a fine assortment of nieces and nephews to draw upon, the expectation of the company being driven into the future by a fourth generation Johnson is almost a certainty.

It is quite clear from this excerpt that the Proposal is speaking only to the certainty of a fourth generation and not inferring its guaranteed success. A successful distribution business requires many different factors in order to achieve success. Management has to believe it will be successful, but success is never guaranteed, especially in an industry that is migrating toward an environment with increasing pricing pressure as a result of increased competition and industry consolidation.

Although the points mentioned above may not appear to have a significant impact on the valuation of the company, the implications of not having a complete understanding of an appraisal subject are significant because an incorrect outlook can lead to an estimate of value that is unrealistic given the true risks of the subject company.

The valuation analysts are experienced certified public accountants who are well aware of the fact that a proposal of this type is intended to "sell" the company. Rather than taking a realistic look at the company, they chose to ignore the facts in order to benefit their client. They chose to not use objectivity in their analysis.

**Pages 5–6.** The valuation analysts go on to explain the company's top management, key personnel, and sales force. Although we understand that much of this information was taken directly from the Proposal, many of the individuals described on pages 5 and 6 were future hires and were not in place as of the writing of the Proposal. Even after the company secured the RDC program, several of these individuals either did not take the job offered to them or quit after a short period of time. In addition to the personnel, the sales force members listed on page 6 of the Green Report were also merely plans, and only 2 of the 11 people listed in the table actually ended up in those positions (again, these individuals either never took the job, quit, or were fired).



## EXHIBIT 14.2

Although many of these types of issues do not impact the financial history of the company, the information was used by the valuation analysts to form an opinion as to the risk (or lack of risk) inherent in the company's business. Accordingly, because they clearly did not have a complete understanding of the business they were appraising, there is a great amount of uncertainty as to the accuracy of the estimates they used to derive an estimate of value of the company.

On the bottom of page 6, the valuation analysts explain some of the costs that went along with securing the Armstrong Carpet distributorship. Below are the paragraphs (in their entirety) from the Green Report explaining these costs.

Recognizing that if it succeeded in securing this distributorship (which it did), the company would experience very significant and very near term explosive growth, it also addressed in the Proposal the matter of various staffing and capital needs. In particular, in referencing handling inside sales and outside service, the Proposal stated, 'The increased order volume will not affect these standards. Sufficient staff will be employed to maintain our service levels.' Reference to 'these standards,' apparently, specifically refers to inside sales standards of all calls being picked up by the fourth ring and all calls being processed with 100 percent accuracy.

The Proposal went on to further indicate the company's plans and efforts to expand its facility's capabilities, including reconfiguration of the warehouse (including improvements to the loading docks, improving warehouse office capabilities, increasing racking, expanding the parking lot, adding equipment, and adding an estimated 24 people). This part of the Proposal went on to indicate the company's expectation of adding 6 tractors, 14 trailers, and 2 straight trucks, as well as increasing loading crew activity from one to three shifts. No concerns were expressed as to the company's ability to handle the anticipated growth and to continue that sales level and to grow it.

In discussions with management, it has been found that some of these improvements and enhancements have been completed, but the majority have not. Furthermore, many of these initial plans have been altered or eliminated. The point we are trying to make (and this is confirmed in our discussions with management) is that there are a lot of costs associated with the RDC program that the company has undertaken. These costs (or capital expenditures) should be used as an offset in the calculation of the net cash flows of the company in the future. However, the Green Report did not consider the cost of these capital expenditures in their calculation. They mention them in the text part of the Green Report (because it seems to help them support all the great things the company will do in the future), but fail to incorporate the impact of these cash outlays into their estimate of value of the company.

**Page 7.** On page 7, the valuation analysts discuss the company's growth projections given in the Proposal. They also include a discussion of how sales increased once they secured the Armstrong Carpet distributorship. However, the valuation analysts do not spend any time discussing the fact that the profitability of the company (although management would have liked to have increased as dramatically as sales did from the increasing volume) did not increase substantially as a result of the increased volume from the RDC program. Two years ago, the company had sales and a normalized net loss of approximately \$27 million and \$184,000, respectively. However, last year, the company had sales and a normalized net income of approximately \$58 million and \$34,000, respectively. Accordingly, with an increase in sales of more than \$30 million, the company was able to increase profits by only approximately \$218,000. As this indicates, the increased business has proven to result in very little profitability (although more than in the past). Again, the concept presented above deals with the reasonableness of the projections used by these valuation analysts to value the company.

**Page 8.** In the "Industry Outlook" section of the Green Report, the valuation analysts state the following:

According to the most recent sales figures, there has been increased demand for hard floor coverings such as hardwood and ceramic flooring, which both increased 5.6 percent and 5.3 percent, respectively, from a few years ago. Carpet and area rug sales decreased by 1.7 percent and vinyl sheet and floor tiles decreased by 2.4 percent during the same period.

Popularity of hardwood and ceramic flooring continues to increase along with laminate flooring. Ceramic tile is gaining specifically in commercial markets where durability, scratch resistance, ease of cleaning, and cost-effectiveness are essential. Though laminate flooring is not as sturdy, it is estimated that this segment nearly doubled between the pertinent period.

*(Continued)*

**EXHIBIT 14.2** (Continued)

The valuation analysts' statements regarding the outlook of the flooring industry should have helped them arrive at the conclusion that the market for the company's main product lines (vinyl sheet and tile flooring and related products) is decreasing. Even if the company is able to capture additional market share (which they are trying aggressively to do), the best they will end up with is a larger piece of a smaller pie. The reality of this shrinking market share was confirmed in our discussions with the company management and its lack of sales growth in the most recent period. All they had to do was ask the right questions during discovery, and they would have realized that their analysis was flawed.

**Page 9.** On page 9, the Green Report explains the impact of industry fragmentation as follows:

Due to industry fragmentation competition being strong, customer service is often a means for wholesalers and retailers to differentiate themselves. Included in customer service is product availability, range of floor covering products, and breadth of services offered (for example, design, installation, and financing). Pricing remains the primary competitive factor.

Again, they touch on some critical issues in the floor covering distribution industry, but fail to incorporate these realities into the valuation of the company. With increasing competition and industry consolidation, industry participants are going to have to provide more service to their customers at a lower price. It is pretty clear that this has to have some negative effect on profitability. Again, this selective lack of follow through on their part confirms that they did not consider all relevant factors in evaluating the future of the company (and ultimately its value).

Regarding increasing competition from home centers, they state the following:

Floor covering wholesalers and retailers are facing increasing competition from home centers. For instance, industry leader Home Depot has reportedly pledged to focus more on the floor covering industry. Many small and medium sized contractors already purchase from home centers because of competitive pricing of floor coverings as well as for their one stop shopping environment. Experts predict more builders will turn to home centers in the future.

As the above statement indicates, home centers are grabbing market share from the more traditional wholesale and retail sources. It is unclear whether or not they deemed this element of the floor covering industry to be negative or positive with respect to its impact on the company. In discussions with management, we verified that this trend is, in fact, a reality. The result of this trend (by their own admission) is turning the company's traditionally higher margin sales into higher volume, lower margin sales. The company has Armstrong Carpet squeezing them on one side and Home Depot squeezing them on the other. The company has to work extremely hard to turn a profit on these sales (with continued superior customer service) as well as its other lines of business. The net result is a less profitable business.

**Page 10.** An essential aspect of any valuation is an in-depth look into the economy affecting the appraisal subject at the time of the appraisal. In addition to the national economy, a thorough appraisal investigates the effects of the regional economy on the appraisal subject. In the case of the company, the majority of its business occurs within an 80-mile radius of its headquarters. Accordingly, an in-depth analysis of the economic conditions of the metropolitan area is essential. This will give the overall picture of the major forces that will be acting upon the company in the future.

**Pages 13–15.** On these pages, the valuation analysts calculate adjusted net income using various adjustments to the reported earnings of the company. This process is called *normalization* and is intended to reflect what a willing buyer would be buying on a prospective basis. The valuation analysts have chosen to use a debt free approach that will determine the total operating value of the company: equity plus interest bearing debt. Although we agree with the methodology used to normalize the company's income statements, we disagree with some of the specific adjustments made by them. Given that they used last year as the basis for deriving an estimate of value using a discounted-cash-flow (DCF) analysis, it is very important to understand the adjustments made to this base year.

**Real estate taxes and building depreciation.** Although we agree that the depreciation expense for the building and improvements should be added back, real estate taxes are an expense normally incurred by a tenant and should not be added back.

**Other income.** As discussed, rental income is nonrecurring and, as such, should have been deducted for all the years under review.

## EXHIBIT 14.2

**Travel and entertainment.** Although we agree with considering the sporting event ticket sales as a nonoperating expense, they should have also considered the income received in prior years.

**Fair market rent.** Though we agree that a fair market rental should be considered in the appraisal, the Green Report includes a rental figure that is in conflict with the real estate appraisal that they relied upon. We could not tell what caused this inconsistency.

**Pages 16–18.** The verbiage included in these pages of the Green Report is excellent. Because this is the exact wording from the sample report included in *Understanding Business Valuation*, authored by Gary R. Trugman, CPA/ABV, MCBA, ASA, MVS, the officer technically responsible for this report should have given proper attribution to the author instead of plagiarizing the work as his own. We are glad, however, that they believe that Gary Trugman is an authority on this subject.

**Pages 19–21.** Discounted cash flow (DCF) valuation. Using the normalized income stream for last year derived on page 13 of the Green Report as a starting point, the valuation analyst attempted to derive an estimate of value for the company using a DCF approach to valuation. In order to do this, the valuation analyst projected each of the individual expense categories for the next four years. As indicated in the “As Adjusted” column, the valuation analyst determined how each expense was to be projected: (1) as a percentage of sales based on the adjusted income statement, (2) increasing each year at a constant rate based on the adjusted income statement, or (3) as a percentage of salaries (for payroll taxes only).

Again, although the methodology appears to be sound, the overall results do not make sense. In order to simplify our critique, we will address each of the items in the projection individually in the order in which they are presented on page 19 of the Green Report.

**Sales.** Although the overall estimate of 8.5 percent growth for the next four years is not that unreasonable, their basis for determining this growth is formed solely from the Proposal. As such, they did not perform any due diligence on these sales growth estimates. Furthermore, although they use actual results from the current year on page 20 of the Green Report to confirm their estimate of projected gross profit margins of 13 percent, they failed to mention that sales for the nine months ended in that year were flat, as compared to the same period in the previous year (\$43,974,169 in sales for the nine-month period ended in the current year, compared to \$43,324,340 for the same period last year). Discussions with management confirmed that current year-end sales will most likely be flat compared to last year. Based on issues like these, the valuation analysts did not use sound judgment and reasonableness in some of their assumptions.

**Cost of sales.** In projecting cost of sales for the company, the valuation analysts used last year’s actual results as the basis for their projections. Although this accurately represents history, future trends for cost of sales may change. Based on discussions with management, as well as common sense, the trend of increasing lower margin sales is expected to continue in the future.

**Operating expenses.** In order to put the projections used by the valuation analysts into some kind of perspective, we looked at total operating expenses as a percentage of sales for last year (as adjusted) through the projection period. They are as follows:

Year	Sales	Operating expenses	Operating expenses as a % of sales
2004	\$58,388,296	\$6,632,761	11.36%
2005	63,351,301	7,032,547	11.10%
2006	68,736,162	7,494,875	10.90%
2007	74,578,736	7,992,706	10.72%
2008	80,917,928	8,528,921	10.54%

As the preceding table indicates, the valuation analyst has projected the operating expenses of the company to consistently decrease over the period under review. Although this does not seem like a significant amount on a percentage basis, it is very significant when you apply these percentages to the increasing sales in each year. For

(Continued)

**EXHIBIT 14.2** (Continued)

example, if we compare the difference in profit (before taxes) by holding relative operating expenses constant and using the projections above, the result is a drastic increase in profitability (and value). These results are summarized below:

Year	Operating expenses— as projected	Operating expenses— constant	Difference (%)	Sales	Difference (\$)
2004	11.36%	11.36%	0.00%	\$58,388,296	\$ —
2005	11.10%	11.36%	0.26%	63,351,301	163,999
2006	10.90%	11.36%	0.46%	68,736,162	313,377
2007	10.72%	11.36%	0.64%	74,578,736	479,248
2008	10.54%	11.36%	0.82%	80,917,928	663,149

As the preceding table indicates, income is extremely sensitive to operating expense projections. Furthermore, the valuation analyst does not provide any support for the reduction in expenses over the period under review. As the projections on page 19 of the Green Report indicate, the valuation analyst determined that the majority of the expenses are projected to increase independent of the sales achieved by the company. As discussed earlier in this report, the company is going to have a difficult time maintaining its current level of expenses. To assume that they will be able to decrease expenses year after year is not realistic and is further evidence of the lack of due diligence performed by the valuation analysts.

Now that we have touched upon the overall reasonableness of the projected operating expenses used in the Green Report, we have a few points on some individual expenses which need to be mentioned.

**Fair rental.** The fair market rent for the property owned by the company has been projected to increase at only 1 percent each year for the periods under review. This is less than the rate of inflation. It just does not make sense.

**Depreciation/replacement cost.** The valuation analyst does not forecast future depreciation expense based on projected capital expenditures and existing fixed assets, but rather projected depreciation as a percentage of sales. This can lead to inaccurate results if depreciation does not follow the same growth pattern as sales. Accordingly, this should be calculated using specific capital expenditure projections and expected future depreciation of existing fixed assets. These valuation analysts never considered the capital requirements of the company in their forecast. Because they are significant, the Green Report contains a fatal flaw in this area.

**Debt free income.** Even if we assume that the adjustments made to last year are reasonable, the projected benefit stream (debt free income) is not. Although no single operating expense projection appears to be unreasonable on its own, the end result (in this case, debt free income) appears to be very unreasonable.

The concepts of “common sense” and “reasonableness” become very applicable in dealing with a DCF analysis in that the resulting projections have a material impact on the final value of the appraisal subject. Accordingly, they must make sense and be reasonable. According to the projections used by the valuation analyst to value the company, projected debt free income (which is the starting point for the net cash flow calculation) for last year through the projection period are as follows:

Year	Debt free income	Year-to-Year growth
2004	\$ 182,486	
2005	721,873	295.58%
2006	864,495	19.76%
2007	1,021,519	18.16%
2008	1,194,247	16.91%

## EXHIBIT 14.2

As the preceding table indicates, the valuation analysts have projected debt free net income to nearly quadruple in the first year of the projection period and continue with 20 percent, 18 percent, and 17 percent year-to-year growth during 2006, 2007, and 2008, respectively. Furthermore, the compound annual growth rate (CAGR) for debt free income is 59.9 percent from 2004–2008 and 18.3 percent from 2005–2008.

Another way to consider the projected debt free income is to look at debt free income as a percentage of sales. The following table does this:

Year	Sales	Debt-free income	Debt-free income as a % of sales
2004A	\$58,388,296	\$ 182,486	0.31%
2005	63,351,301	721,873	1.14%
2006	68,736,162	864,495	1.26%
2007	74,578,736	1,021,519	1.37%
2008	80,917,928	1,194,247	1.48%

As the preceding table indicates, debt free income as a percentage of sales has been projected to consistently increase over the forecast period. Again, the valuation analyst does not offer an explanation as to the reasonableness of being able to achieve this dramatic increase in profitability. In the valuation analysts' explanation of how the projections were derived, the focus was on sales growth rather than income growth. Even though the valuation analysts acknowledge that the increased volume from Armstrong Carpet would lead to a lower gross profit margin, they fail to follow through with this thought into the projections. They do not explain how the company is going to be able to cut costs as drastically as has been projected. As such, we believe this projected income stream is not reasonable and has major implications on the value derived using this method.

Several adjustments are required to debt free income in order to arrive at net cash flow. Typically, net cash flow (applicable to invested capital) is defined as follows:

$$\begin{aligned} \text{Invested Capital Net Cash Flow} = & \text{Debt Free Net Income} + \text{Noncash charges (D\&A, Deferred Taxes, etc.)} \\ & - \text{Capital Expenditures} - \text{Increases in Net Working Capital (or} \\ & + \text{Decreases in Net Working Capital)} \end{aligned}$$

Although we agree with the methodology used by the valuation analysts to arrive at debt free income, they fail to make the appropriate adjustments in order to arrive at a correct estimate of net cash flow. The following is an explanation of the mistakes made by the valuation analysts in calculating the projected net cash flows on page 1 of the Green Report.

**Changes in working capital.** On the bottom of page 20, the appraisers show an analysis of historical working capital (current assets less current liabilities) as a percentage of sales. However, the impact that working capital has on cash flow is related to the increase or decrease from period to period:

$$\text{Change in Working Capital} = \text{Working Capital (period } n - 1) - \text{Working Capital (period } n)$$

Their assumption of 4 percent of sales for projected changes in working capital does not take into account the actual increase or decrease in cash from year to year. Using the historical working capital figures presented on the bottom of page 20 of their report, we calculated the change in working capital from 2000–2004. The results of this analysis are as follows:

(Continued)

## EXHIBIT 14.2 (Continued)

Year	Working capital	(Increase) / Decrease in working capital
2004	\$2,229,918	\$ 77,044
2003	2,306,962	(427,048)
2002	1,879,914	171,915
2001	2,051,829	(74,016)
2000	1,977,813	

The results shown above illustrate the corresponding sources (as indicated by a positive number) and uses (indicated by a negative number) of cash from changes in working capital for the respective periods. The valuation analyst should have considered these values—and not just working capital—in the development of net cash flow for a given period. As the preceding table indicates, there does not appear to be any identifiable trend in the changes in working capital on a historical basis. As such, a more detailed analysis would be required.

In order to fully understand the future changes in working capital for the company, a valuation analyst should make a reasonable attempt at forecasting the current assets and current liabilities of the subject company. This is done by analyzing each asset or liability and how the valuation analyst expects it to change in the future (that is, days receivable, days payable, and days inventory). They chose to take the shortcut approach rather than the more accurate one.

Although the effects of projecting changes in working capital as was done by the valuation analyst may have actually reduced the projected net cash flow, the use of incorrect methodology is not acceptable. Furthermore, it casts a great deal of doubt on the other assumptions and estimates made in the Green Report.

**Capital expenditures/depreciation.** According to the projections on page 19 of the Green Report, the valuation analysts did not account for the addition of noncash charges (that is, depreciation) and the deduction of capital expenditures in their net cash flow projections. Although valuation analysts may estimate depreciation and capital expenditures to be equal in the future for small, closely held companies (and thus would offset each other), the valuation analysts have failed to explain the reasoning behind the omission of these items from the cash flow projections. Furthermore, given the company's high level of expected future capital expenditures (which they discussed earlier in their report), this type of assumption (without a thorough investigation and analysis) led them to inaccurate results. Again, this leads us to believe that they have not been diligent in developing a reasonable estimate of future net cash flows for the company.

A normal procedure for estimating these adjustments is to estimate future capital expenditures based on the growth and expansion plans of the company. Because some plans were discussed in the information used by them to develop the projections, one could reasonably expect that capital would be required in the early years of the forecast period in order to align themselves with the future plans of their main supplier (Armstrong Carpet) and the RDC program. Had they chosen to ask the right questions in discovery, they would have been aware of the significant expenditures that the company is facing in the next several years (if they can put it off that long).

**Page 21.** Once the valuation analyst calculates debt free cash flow, an estimate for the discount rate needs to be made.

**Equity discount rate.** The valuation analysts appear to be using the concept of the build-up method in that they compare the subject company to the overall returns of small companies.

However, the build-up method must begin with a "safe" rate as of the valuation date (typically, long-term government bonds). To this safe rate, the returns of large company stocks are added to arrive at a total market return applicable to the valuation date. To the total market return, a small company risk premium is added (if applicable). This increment reflects the additional returns required by an investor to invest in small company stocks. In addition to the small company risk, an additional premium may be added to account for the additional risks involved with an investment in a closely held company. Although this is a very subjective adjustment, some of these risks include industry, financial, management, and supplier, as well as other business risks. They have ignored all of the risks of the company and have chosen to use a required rate of return as if this company were larger and safer.



## EXHIBIT 14.2

**Weighting.** The valuation analysts use a 30/70 percent debt-to-total capital weighting in their calculation of the weighted average cost of capital. As with some of the other elements of the valuation analysts' calculations, this is stated without any basis or explanation. As discussed previously in this report, we utilized *Cost of Capital Quarterly* (CCQ) for Standard Industrial Classification (SIC) code 50 to estimate a reasonable debt-to-total capital ratio. In reviewing the data contained in CCQ, we noticed that the smaller companies in the data had a lower percentage of debt than the larger companies. This is evidenced by the following table of data taken from CCQ:

Percentile	1997 Sales (\$ Millions)	Total capital (\$ Millions)	Debt/Total capital
75th	\$647	\$427	48.46%
Median	215	118	28.37%
25th	40	24	11.78%

Given that the company is a smaller company, one would expect that it would exhibit the same debt-to-total capital ratios of similar size companies in the same industry (distribution). By putting greater weight on the debt portion of the capital structure, a lower discount rate is derived, resulting in a higher estimate of value. Once again, this appears to be advocacy instead of objective analysis.

In addition to the methodology used to derive a discount rate (in this case, the weighted average cost of capital [WACC]), the valuation analyst must check the results for reasonableness. In this case, we believe that a 17 percent discount rate (or WACC) is too low for the company's risk profile. The build-up method (if applied correctly) provides only a basis for establishing an appropriate discount rate. As such, the valuation analyst still needs to put the assignment into perspective and think about how the specific risks of the subject company impact the riskiness of the future benefits being discounted.

**Perpetuity growth rate.** In the DCF analysis on page 19 of the Green Report, they use a perpetuity growth rate of 5 percent (the perpetuity growth rate is the expected sustainable future growth rate of net cash flow of the appraisal subject after the discrete forecast period). Although we do not have a problem with 5 percent as a perpetuity growth rate, the underlying assumption of a DCF analysis is that the appraisal subject has reached a steady state by the end of the forecast period (in this case, 2008). It is clear that, according to the net cash flow projections used by them, this is not the case. Although this is not a major issue (given that there were so many other issues with the Green Report), it further supports our point that they failed to apply sound financial theory in this valuation. Accordingly, the results cannot provide a useful basis for estimating the value of the company.

**Built-in capital gains.** As an offset to the fair market value of the nonoperating assets used to calculate the total value of the company, the potential tax liability resulting from capital gains should be considered. Ms. Johnson would receive a windfall if she were to receive a share of the property with the remaining shareholder left to pay all of the capital gains tax.

**Discount for lack of marketability.** Although the methodology and support used to derive the discount for lack of marketability (DLOM) is suspect, the end result of a 20 percent DLOM appears to be reasonable. However, there are a few points in this section of the Green Report that we want to highlight to further illustrate their lack of regard for the underlying issues of the company.

The valuation analysts state the following regarding the application of these DLOM studies.

The range of marketability discounts indicated from a review of these data sources tends to be between 15 percent and 50 percent (it should be noted that these studies are based upon minority blocks of stocks in privately held companies).

The majority of the studies used as the basis for the DLOM generally deal with minority blocks of stock of publicly held companies, not privately held companies.

(Continued)



**EXHIBIT 14.2** *(Continued)*

Regarding one of the factors to consider when determining a DLOM for a specific appraisal subject, they state:

Whether there are any restrictions governing the sale of the stock to interested third parties [None known].

On page 4, paragraph 23 of the Commercial Flooring Products Distributorship Agreement with Armstrong Carpet, it states the following:

This Agreement is not assignable or otherwise transferable by Distributor without the written consent of Armstrong Carpet. "Assignment" or "transfer" includes any change in ownership or control of Distributor which Armstrong Carpet in its sole discretion deems substantial.

As the preceding excerpt indicates, this limitation (as well as many others in the agreements with Armstrong Carpet) clearly states that Armstrong Carpet can terminate the distributorship at its sole discretion upon change of ownership or control. Although this does not appear to have influenced the choice of a DLOM, it leads us to believe that they probably did not even read the Armstrong Carpet agreements (because if they did, they should have mentioned a lot of the limiting conditions in support of their DLOM). It seems that they should have a higher discount based on the facts.

## UNDERSTANDING THE WEAKNESSES IN THE VALUATION PROCESS

There are generally two schools of thought when it comes to preparing a valuation report, particularly for litigation. The first is to never admit to having weaknesses in your report. Many attorneys feel that if a valuation analyst includes a discussion about weaknesses in his or her report, or if the valuation analyst points out weaknesses, he or she is giving the opposition too much ammunition with which to attack the report. On the other hand, admitting that valuation is not an exact science and that the process sometimes requires a valuation analyst to use information that is potentially flawed can help demonstrate the level of knowledge of the business valuation analyst, not to mention the objectivity.

Therefore, the other school of thought is to take the wind out of the opponent's sail and address each area that the valuation analyst expects to be subject to an attack upon cross-examination. If the valuation analyst addresses those areas that he or she knows will be attacked, the valuation analyst will not provide the opposing attorney with the opportunity to raise these issues as if they are a surprise. Attorneys love to make a judge or jury think that they have caught the expert doing something deceitful. If the valuation analyst admits that there are shortcomings with the report, there is little surprise, and it becomes no big deal. For example, if the valuation analyst uses industry composite data from Risk Management Association (RMA) *Annual Statement Studies*, and the appraisal subject is not a "great" match for that Standard Industrial Classification code, the valuation analyst can acknowledge that the information should be used with caution.

Any experienced business valuation analyst knows that he or she can be attacked because of the weaknesses in certain parts of his or her reports. Think about defending a capitalization rate. Unless the valuation analyst has excellent market data, he or she probably cannot totally support the rate selection. This is a subjective process that is frequently attacked.

The experienced valuation analyst recognizes that a capitalization rate can be justified only by comparing the rate used with other rates available in the marketplace or by testing the conclusion reached for reasonableness. Admitting the subjectivity of the process is not going to be harmful if the valuation analyst proves that the answer makes sense. I frequently testify that I am hired not to determine a capitalization rate but, rather, to opine on the value of the business. Quite frankly, if the value makes sense, who cares how I got there? If you concentrate on supporting your overall opinion, the component parts of how you got there are not as important.

## VALUATION ANALYST, PROTECT YOURSELF!

When preparing any type of business valuation report, the valuation analyst must be thinking about the potential liability that can arise from this type of engagement. Unlike many of the conventional accounting engagements that a CPA is asked to perform, a business valuation assignment is calling for a conclusion of value. A disclaimer on page 1 of the report will not get the valuation analyst too many jobs. Imagine how the client would feel getting a 100-page report that starts out by stating, “I am not responsible for the conclusion that I am about to give.”

The valuation analyst must pay careful attention to each assignment. If I am a CPA-valuation analyst, the last thing that I want a client to think is that a business valuation is an audit. In fact, our engagement letter specifically indicates that we are not doing an audit. In addition, so many of our litigation jobs involve forensic accounting (you know, playing hide-and-seek with unreported income in a divorce) that we must be very careful in that type of engagement.

Because valuation is a prophecy of the future, forecasts and projections are frequently included in our reports. Valuation analysts should include some language to indicate clearly that they are not guaranteeing the outcome, nor have they audited the projections, unless they have. We will accept the forecast or projections from management, perform some due diligence purely with respect to the appraisal assignment, and put any and all caveats in our report.

It is also a good idea to restrict the use of your appraisal report. The limiting conditions of our firm make it clear that the report can be used only for the purpose that is outlined in the introduction section. The report also states that only the definition of value defined in the report is the applicable standard of value for that assignment. This prevents your client from taking a report that was performed for estate planning and turning it into an offering memorandum for potential investors.

A final suggestion in this regard. If you issue a less than complete report, put in restrictive language such as the following:

This report does not contain all of the required disclosures of a comprehensive appraisal report. Therefore, only those individuals who have complete knowledge about the appraisal subject may be aware of all of the facts and circumstances that are not contained herein. This report should therefore not be used by others because they may be misled by its incomplete contents.

If that does not scare them away, make them read your report when it is tied around the neck of a Bengal tiger.

## DEFENDING THE BUSINESS VALUATION REPORT

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In any assignment, the valuation analyst may be called upon to defend the business valuation report. For litigation engagements, this may take place at depositions or in the courtroom. At depositions, the usual rules apply. Do not volunteer anything. The valuation analyst cannot score any points in a deposition, and there is little reason to try to defend the report at this stage of the proceedings. At the deposition, the opposing attorney is generally trying to find out what the valuation analyst did, why he or she did it, and how it was done. Our firm’s experience is that a well-written report often means a short deposition. When we issue a detailed report, there is little left to the imagination. Other than wanting to review our underlying documentation and possibly question us about our assumptions, the other side does not have many questions.

Once we have explained what we did in the report, how we did it, and why we did it, there is little left that can be asked. Always discuss your deposition technique with your client’s attorney beforehand. Most attorneys will tell you to give the other side nothing. Others, on rare occasions, will tell you to give them everything in the hopes that your knowledge and thoroughness will help the parties settle the case. Never take the latter for granted! That is not your job.

At the time of the trial, you, the expert, will once again have an opportunity to defend the report. The testimony will generally be divided between the direct examination and the cross-examination. On direct examination, I like to use my report as a selling tool. Although the report is rarely entered into evidence, the judge in a bench trial will usually accept a copy of the report to help him or her follow along with my testimony. In these cases, the use of clear tables and graphs is an exceptional way to educate the judge.

Your report's appearance is important. It should look as professional as the job you did. A nice cover, dividers, and good presentation will help. Window dressing works wonders! During your direct examination, take the opportunity to invite the judge to follow along with the chart on page 10, the graph on page 21, or anything else that will give the judge a reason to review this well structured document. Even if the judge does not read the report, the appearance will indicate your professionalism, as long as your testimony does not negate it.

When preparing for trial with a client's attorney, I ask the attorney to allow me to testify according to the sequence of my report. Because the report is written to tell a story, my testimony follows the same pattern. It is much easier to follow a familiar format than having to learn a new routine just before trial.

Cross-examination can also be used by the expert to defend his or her report. I like to refer to my report before answering certain questions. First, it acts as a refresher of what I have done and, second, it allows me to think about the question and about the answer that I am about to give.

Using the appraisal report during cross-examination can also be an effective demonstration of the valuation analyst's thoroughness. When the attorney states, "You didn't consider this in your analysis, did you?" it gives you a great opportunity to respond, "With all due respect, if you turn to page 39 of my report, you will see that I did consider that very issue." Needless to say, a well prepared attorney will rarely give you the opportunity to embarrass him or her that way. Don't be surprised, however, if you are given this opportunity, and be prepared to take advantage of it.

## COMMON ERRORS IN BUSINESS VALUATION REPORTS

After reviewing numerous business valuation reports, both those in actual engagements as well as those that have been submitted by applicants who have applied for accreditation to some of the appraisal organizations, I have compiled a list of what not to do in an appraisal report. You have seen many of these items throughout the book when I showed you the other side's work product. I have included some of the most common errors in box 14.6 that I have seen.

### Box 14.6 Common Errors in a Business Valuation Report

- 1. Definition of value.** Frequently, appraisal reports refer to a particular standard of value (that is, fair market value), but the definition is missing from the report. The definition of *fair market value* has varied considerably in different jurisdictions and must be clearly defined so that the reader can be certain of its meaning.  
Another common error regarding the definition of value occurs when the valuation analyst defines the standard of value that was supposed to be used in the assignment but applies a different standard of value during the appraisal process.
- 2. Choice of appraisal method(s).** One of the common errors seen in appraisal reports is the use of only one or two appraisal methods in the assignment, as opposed to all appropriate methodologies. Considering all the appropriate appraisal methods act as a good check on each of the methods used and should always be part of a full appraisal.  
Relying on a "favorite" method is another common error made by inexperienced valuation analysts. Some individuals take a liking to a particular method and always use it. The excess earnings method is one of the favorite methods. This practice should be avoided. The correct appraisal methods should be based on the availability of information and the facts and circumstances of the appraisal.  
Another common error is using methods that contradict each other. For example, the capitalization of income method is generally used if the income in the numerator is stable, whereas the discounted future earnings method is used when the income being forecast is unstable. The use of each of these methods in the same appraisal is an indication that the income stream is both stable and unstable. How can that be?

**Box 14.6 Common Errors in a Business Valuation Report** *(Continued)*

3. **Market data.** A major flaw in many appraisals occurs when the valuation analyst is so sure that market data cannot be located that he or she never bothers to look for it. This is absolutely wrong! Market data should be looked for in every valuation.
4. **Selection of guideline companies.** Many problematic reports include guideline companies that are poor comparables: the guideline companies chosen are not similar and relevant enough to the appraisal subject to make them good companies to use in the appraisal. This often occurs when the valuation analyst uses guideline companies that are so much larger than the appraisal subject that a true comparison cannot be made. Imagine comparing the local hardware store to The Home Depot.

Another problem with the selection process occurs when the valuation analyst does not look far enough to find good guideline companies. A company does not necessarily have to be in the same Standard Industrial Classification code to be a good guideline company. Revenue Ruling 59-60 suggests “same or similar.”

5. **Financial Analysis.** This is often missing from appraisal reports. Other than using historical financial information for the valuation calculations, some individuals forget to perform a trend or comparative company analysis to make the appropriate determinations of risk.

Another common error is the inclusion of financial ratios in the appraisal report without any discussion about the meaning or relevance of the ratios. We also frequently see normalization adjustments made in reports that are not adequately explained. There should be an explanation for all adjustments made. Avoid arbitrary adjustments that cannot be properly supported.

6. **Discount and capitalization rates.** The problem in this area could fill up an entire book on valuation. The general problem in this part of the report is usually that there is an inadequate amount of support for the determination of the rates used. The risk analysis may be inadequate to support the valuation analyst’s conclusion of the appropriate rates.

Another problem is applying a rate for a particular benefits stream to another benefits stream (for example, applying a discount rate for net cash flow to earnings or applying a pretax rate to an after tax stream).

A frequent error is the use of the 15–20 percent capitalization rates from Revenue Ruling 68-609 regardless of the risk associated with the benefits stream, particularly the excess earnings attributable to intangibles.

7. **Premiums and discounts.** Similar to discount and capitalization rates, the biggest problem is that the report does not include enough support for these items. The percentages used should be supported by a well thought out analysis of the factors that affect premiums and discounts.
8. **Typographical errors.** There is nothing worse than seeing a valuation analyst charge a client thousands of dollars and not take the time to proofread the report properly. Typos are an indication of carelessness and should be avoided whenever possible. Spelling errors are unacceptable, especially in light of the spell-check features of most word processing software packages.
9. **Illogical conclusion.** Another error, and the most fatal, is reaching a conclusion that does not make sense; the valuation analyst does not perform any sanity tests, and the end result defies logic. Often, we see that the value conclusion is so high that the cash flow from the business could never support a purchase price in a transaction. My favorite example of this is the time when our client’s attorney cross-examined the other side’s expert and asked, “Mr. Smith, would you pay that much for this business?” Mr. Smith responded, “Why no, never.” How can a valuation analyst expect anyone to believe in the estimate of value if he or she does not?

## THE RECONCILIATION PROCESS

At the end of the appraisal process, the valuation analyst must choose a value based on the various methodologies that were used. In a perfect world, all of the methods used would result in the same value, making the choice easy. Unfortunately, we do not live in a perfect world. The likelihood of all of the values even coming close to one another is slim.

This is the part of the assignment that will determine if the valuation analyst understands valuation. The pros and cons of each method should be considered. For example, the adjusted book value method may not have considered any intangibles that the business may have and, therefore, may result in an understatement of the value. On the other hand, the Picasso painting is not generating any cash flow, but may have a market value of \$42 million.

Each method should be carefully scrutinized for areas that could have resulted in an error (or less confidence), and a determination should be made as to how much weight will be placed on the method in light of the other methods used in the appraisal. Table 14.1 includes one set of example data showing the process of weighting various appraisal methods.

<u>Method</u>	<u>Value</u>	<u>Weight</u>	<u>Calculated Value</u>
<b>MARKET APPROACH</b>			
Price/Earnings	\$ 4,400,000	30%	\$ 1,320,000
Percent of sales	\$ 4,700,000	10%	\$ 470,000
Multiple of book value	\$ 4,400,000	30%	\$ 1,320,000
Dividend payout ratio	\$ 4,200,000	10%	\$ 420,000
<b>ASSET BASED APPROACH</b>			
Adjusted book value	\$ 1,200,000	0%	\$ 0
Liquidation value	\$ 430,000	0%	\$ 0
<b>INCOME APPROACH</b>			
Capitalization of benefits method	\$ 4,800,000	20%	\$ 960,000
<b>ESTIMATE OF VALUE</b>			<u>\$ 4,490,000</u>
<b>ROUNDED</b>			<u>\$ 4,500,000</u>

There is no magical formula to the weighting process. It is entirely up to the valuation analyst's good judgment as to where the final value estimate will come in. Some valuation analysts do not like to show the preceding computations, while others do. Either way is acceptable as long as you can explain your conclusion.

Avoid a common error, which is to take a straight mathematical average of all methods. Most often, your result will be incorrect. In fact, Revenue Ruling 59-60 specifically tells us not to just average the numbers.

Make sure you round your conclusion. The number of places to round will depend on the materiality of the conclusion. Rounding to the nearest \$1,000 may be appropriate for smaller appraisals, whereas rounding to the nearest \$100,000 may be appropriate in others. Rounding the conclusion illustrates to the reader that valuation is not an exact science. Though you want to be accurate, you do not have to be precise.

After you reach your conclusion, don't forget to test it for reasonableness. Ask yourself two key questions:

- **If I were the buyer, would I pay this much for the business?**
- **If I were the seller, would I sell it for that much?**

If the answer to either of these questions is no, go back to the drawing board and see where you went wrong.

Another test that works particularly well for the income approach and should be considered for the market approach as well is known as the *justification for purchase test*. A good friend of mine, Ken McKenzie, former co-executive director of the Institute of Business Appraisers, taught me this test at the first business appraisal seminar that I attended, almost 25 years ago. This is also known as the *business broker's method* because it is used by business brokers to price a business for sale.

The justification for purchase test is designed to determine if the cash flow that is forecast to be generated by the business will be adequate to cover the debt payments that will result from the acquisition of the business, assuming normal business terms. Exhibit 14.3 demonstrates this test as it was included in a valuation report.

### EXHIBIT 14.3

#### JUSTIFICATION FOR PURCHASE TEST

In order to test our value for reasonableness, we performed a “justification for purchase” test based on a hypothetical acquisition of the company. A willing buyer would be concerned with the ability to pay off the acquisition from the cash flow of the business. We performed a justification for purchase test using a five-year payback period. Our test results are as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5
Annual payments	\$1,561,139	\$1,561,139	\$1,561,139	\$1,561,139	\$1,561,139
Interest	436,623	352,334	261,722	164,319	59,618
Principal	<u>\$1,124,516</u>	<u>\$1,208,805</u>	<u>\$1,299,417</u>	<u>\$1,396,820</u>	<u>\$1,501,521</u>
Cash flow					
Pretax income	\$2,198,907	\$2,286,863	\$2,378,338	\$2,473,471	\$2,572,410
Interest expense	436,623	352,334	261,722	164,319	59,618
Taxable income	\$1,762,284	\$1,934,529	\$2,166,616	\$2,309,152	\$2,512,792
Tax	704,914	773,812	846,646	923,661	1,005,117
Net income	<u>\$1,057,370</u>	<u>\$1,160,717</u>	<u>\$1,269,970</u>	<u>\$1,385,491</u>	<u>\$1,507,675</u>
Principal payments	1,124,516	1,208,805	1,299,417	1,396,820	1,501,521
Cash flow	<u>\$ (67,146)</u>	<u>\$ (48,088)</u>	<u>\$ (29,447)</u>	<u>\$ (11,329)</u>	<u>\$ 6,154</u>
Return on down payment	<u>-2.06%</u>	<u>-1.47%</u>	<u>-0.90%</u>	<u>-0.35%</u>	<u>0.19%</u>

The calculations above reflect a payback period of five years. In other words, a willing buyer who puts down 33 percent and finances the remainder at 1 percent above the prime rate can expect to have the loan paid off in five years. In this case, neither the buyer nor the seller is leaving too much money on the table for the benefit of the other party. This demonstrates the reasonableness of the value that we determined.

As a sanity check, we looked in the *Business Reference Guide* which contains rules of thumbs on pricing of businesses. For manufacturing of wood kitchen cabinets and countertops, the pricing rule of thumb is 2.5 times seller’s discretionary earnings. For this company, this would be approximately \$8.7 million. The entity value on a control, nonmarketable basis was calculated to be approximately \$9.8 million. The higher value reflects the better-than-industry performance of the company and further demonstrates the reasonableness of the value we determined.

It was mentioned earlier that there was not enough market data to apply the market approach. However, as an additional sanity check, we compared the company’s price to revenue ratio to the price to revenue ratios of the transactions. The price to revenue ratios from the transactions ranged from 0.09–0.47. The subject company’s price to revenue ratio is 0.39. This is within the range of the ratios of the transactions and, again, supports the reasonableness of our conclusion.

Exhibit 14.3 illustrates a simple test that is designed to determine whether the buyer could afford to pay for the business based on the value that was determined by the valuation analyst. Most small to medium sized businesses do not have the ability to use creative financing techniques to pay for the acquisition. The two major concerns of the buyer consist of making payroll at the end of the week and being able to pay off the debt service that exists as a result of the acquisition. In fact, if the cash flow of the business is not adequate to pay down the debt, most of these types of transactions cannot take place.

Some valuation analysts (and some software programs) suggest that there needs to be a cash-on-cash return (return on the down payment) in order for the test to work properly. This is incorrect because the valuation analyst’s role is to determine a cash equivalent value initially. If there is a cash return on the down payment, the seller

is allowing the buyer to have an extra return above the required rate of return that entered into the initial determination of value. This means that the seller is leaving too much money on the table as part of the transaction. The optimal situation is for the cash return to be a break-even, or at least, reasonably close to it.

The justification for purchase test should attempt to simulate a real transaction using a realistic down payment, interest rate, and term for the financing. Certain businesses require larger down payments than others. Speak to a business broker, and he or she can probably give you some guidance. The interest rate that we use is generally anywhere from prime rate to 3 points above the prime rate depending on the risk of the business. The term rarely goes out more than five or six years. Don't do something silly like using a 15-year payback. The buyer cannot get that type of financing. The results should make sense.

Even after testing the justification for purchase test, the illustration shows additional sanity checks that were performed to support our conclusion.

## CONCLUSION

At this point, you now have more of an idea about the appraisal report. The enclosed CD-ROM contains several sample reports. Now you even have some samples that you can plagiarize. How do you think we all get started? Thank you, Dr. Pratt, for that great sample report in your first book! Just remember that there is only a small amount of boilerplate, and that the rest will have to be created from scratch each time. Also, remember that a good report will be understandable to the reader. With all of that in mind, I'll see you in court!



## CHAPTER 15

# Valuing Intangible Assets: An Overview

### CHAPTER GOALS

In this chapter, I am going to explain some stuff about separable intangible assets and why this area is emerging as a bona fide specialty area of business valuation and financial reporting. At the conclusion of reading this chapter, you should understand the following:

- The basic types of intangible assets
- How intangible assets are used by the owners of these assets
- Some of the common valuation assignments requiring this type of analysis
- Some legal cases addressing royalty rate calculations for patent infringement cases
- Some of the background of valuing intangibles independently
- Issues of remaining useful life (RUL) and intangible life cycles
- Where to look for market information for royalty rates
- Some of the emerging concepts of fair value in financial reporting
- How an allocation assignment of separable intangible assets is distinguished from unallocated goodwill

#### Author's Note

Fair value for financial reporting implies a different concept than our earlier discussion of a fair value standard in minority shareholder litigation matters. While the words are the same, there are different definitions depending on the litigation.

You should not consider yourself to be a valuation specialist in this area simply because you've read this chapter. A specialist requires at least two chapters (and probably more). Intangible asset valuation for financial reporting is a dynamic and changing arena with emerging terminology and interaction between U.S. and international accounting standards. If you plan to play in the fair value for financial reporting playground, look for additional classes and specialized work experience. Box 15.1 lists a number of resources for determining fair value of intangible assets.

#### **Box 15.1** Resources for Determining Fair Value for Intangible Assets

1. Several organizations offer CPE classes for determining fair value for intangible assets.
  - The AICPA offers a live course that is offered through various state societies entitled "Valuing Goodwill and Intangible Assets" as well as a self-study course with the same name.
  - The American Society of Appraisers offers a three day class, BV 301, entitled "Valuation of Intangible Assets for Financial Reporting."
  - The Institute of Business Appraisers offers a one day course as well: #1035, "Valuing Intangibles—Surviving the Slings and Arrows of 141 and 142."

*(Continued)*

### Box 15.1 Resources for Determining Fair Value for Intangible Assets *(Continued)*

2. Valuing intangible assets is a significant area of audit risk and is closely examined by audit firms. The AICPA offers a variety of practice aids, including the following:
  - The Fair Value Measurement Valuation Toolkit for Financial Accounting Standards Board Statements of Financial Accounting Standards (SFAS) No. 141 Business Combinations
  - SFAS 142, Goodwill and Other Intangible Assets—A Toolkit for Valuation Analysts
3. A July 2007 document from the International Valuation Standards Committee is an excellent review of most concepts of intangible asset valuation, although it is intended for assignments with international connotations.
  - This 58 page discussion paper entitled “Determination of Fair Value of Intangible Assets for IFRS Reporting Purposes” can be downloaded at no charge from [www.ivsc.org/ivsc/intangibleassets.pdf](http://www.ivsc.org/ivsc/intangibleassets.pdf).

This area of valuation is not for everyone. You really need to know what you are doing. To help you even more, some of the books that I have in my library include the following:

- *Valuing Intangible Assets*
- *The Handbook of Business Valuation and Intellectual Property Analysis*
- *Valuation of Intellectual Property and Intangible Assets*
- *Intellectual Property: Valuation, Exploitation, and Infringement Damages*
- *Valuation for Financial Reporting*

See the bibliography in appendix 19 for the full details on these books.

## INTRODUCTION

*Intangible assets* (intangibles) are long lived assets used in the production of goods and services. They lack physical properties and represent legal rights or competitive advantages (a bundle of rights) developed or acquired by an owner. In order to have value, intangible assets should generate some measurable amount of economic benefit to the owner, such as incremental revenues or earnings (pricing, volume, and better delivery, among others), cost savings (process economies and marketing cost savings), and increased market share or visibility. Owners exploit intangibles either in their own business (direct use) or through a license fee or royalty (indirect use). The *International Glossary of Business Valuation Terms* (IGBVT)<sup>1</sup> is a glossary of business valuation terms that defines intangible assets as “non-physical assets such as franchises, trademarks, patents, copyrights, goodwill, equities, mineral rights, securities and contracts (as distinguished from physical assets) that grant rights and privileges, and have value for the owner.”

For financial reporting, the definition is simply, “assets (not including financial assets) that lack physical substance.” The most important difference in this definition is that it excludes *goodwill*, which is separately defined as “the excess of the cost of an acquired entity over the net of the amounts assigned to assets acquired and liabilities assumed.” Financial goodwill also includes any intangible assets that do not meet the recognition criteria in the financial reporting standards.

Increasingly, intangibles—ranging from intellectual property (soon to be defined) and brands to licenses and R&D pipelines—dwarf the tangible book assets of all sorts of companies in all sorts of industries. For example, the market value to book value multiple of the Standard & Poor (S&P) 500 Index passed the 2× rate in the late 1980s and rose to nearly 5× in 2000, with about a 2.9× multiple from 2002–2007. It is not unusual to see operating companies bought and sold that are in the primary business of owning and managing intangibles, particularly intellectual property. Service companies that are “tangible asset light” see most of their value comprised of intangible assets.

<sup>1</sup> Available at <http://fvs.aicpa.org/Resources/Business+Valuation/Tools+and+Aids/Definitions+and+Terms/International+Glossary+of+Business+Valuation+Terms.htm> or see appendix 5 of this book.

Apart from tangible assets that have *financial substance* (things like cash, accounts receivable, or prepaid expenses) or *physical substance* (fixed assets such as equipment), intangible assets show several characteristics that are described in box 15.2.

### Box 15.2 Intangible Asset Characteristics

- *Identifiability.* Intangible assets can be specifically identified with reasonably descriptive names and should see some evidence or manifestation of existence such as a written contract, license, diskette, procedural documentation, or customer list, among others. The intangible assets should have been created at an identifiable time (or event) and be subject to termination at an identified time (or event).
- *Manner of acquisition.* Intangible assets can be purchased or developed internally.
- *Determinate or indeterminate life.* A determinate life will usually be established by law or contract or by economic behavior and should have come into existence at an identifiable time as the result of an identifiable event.
- *Transferability.* Intangible assets may be bought, sold, licensed, or rented and are subject to the rights of private ownership, ensuring a legal basis for transfer.

Of the preceding characteristics, the two most commonly seen factors of intangibles are *identifiable* and *transferable*. Ask yourself if the subject asset will meet the SLERT factors, allowing them to be

- Sold
- Licensed
- Exchanged
- Rented
- Transferred

If at least one of the SLERT criteria can be met by an asset lacking substance, chances are that you are dealing with an intangible asset that can be distinguished from the overall goodwill, particularly if the rights to this asset can be separated legally. For financial reporting, the asset will be separated from goodwill if it has legal or contractual standing, regardless of the ability to separate the asset. Box 15.3 illustrates the types of assets commonly seen in a business enterprise.

### Box 15.3 Common Assets Within a Business Enterprise

Tangible assets within a business enterprise include the following:

- Financial assets (cash, accounts receivable, prepaid expenses or sometimes *net working capital* [current assets less current liabilities])
- Plant, property, and equipment
- Other generally accepted accounting principles defined assets

Intangible assets within a business enterprise include the following:

- Recorded and separable
  - Marketing related
    - Trademarks
    - Trade names
    - Brand names
    - Logos or marks
    - Internet domain names
    - Newspaper mastheads
    - Trade dress
  - Technology related
    - Proprietary computer software products (external market)
    - Operating or application, or both, software (internal use)
    - Software copyrights
    - Automated databases (including title plants)
    - Integrated circuit masks and masters (mass works)
    - Industrial designs, formulas, processes, and recipes

(Continued)

**Box 15.3 Common Assets Within a Business Enterprise** *(Continued)*

- Product patents and applications
- Process patents and applications
- Trade secrets
- Engineering drawings and technical documentation
- Blueprints or proprietary documentation
- In-process research and development
- Customer Related
  - Customer lists (prior customers, existing customers, and customer leads)
  - Customer contracts
  - Customer relationships (short term or long term)
  - Order or production backlogs
  - Favorable supplier contracts
- Contract or Location Related
  - Supplier contracts (unfavorable supplier contracts may be a liability)
  - License and franchise agreements
  - Operating and broadcast rights
  - Noncompete agreements (employment contracts)
  - Leasehold interests
  - Mineral exploitation rights
  - Easement rights
  - Air and water rights
- Artistic Related
  - Literary works and copyrights
  - Musical compositions
  - Copyrights
  - Maps, pictures, and photographs
  - Engravings
  - Video and audiovisual materials (including marketing materials)
  - Name, likeness, and voice (which can be licensed—consider the new “I Dream of Jeannie” slot machines)
- Unallocated and not Separable (Overall Goodwill):
  - Human capital related (collection of experience, skill, and education for future performance)
    - Trained and assembled workforce
    - Customer service capability
    - Labor relations, including union contracts or non-union status
    - On going training or recruiting programs
  - Strategic or enterprise related
    - Intellectual capital
    - Organizational infrastructure
    - Network synergies
    - Growth opportunities
    - Unidentifiable walk-in customers
    - Presence in geographic markets or locations
    - Credit ratings and access to capital markets
    - Favorable governmental relations

## WHAT IS INTELLECTUAL PROPERTY?

Intellectual property (IP) is a subset of intangible assets created by human intellect or inspiration. Intangible assets that receive legal protection become IP patents, trademarks, trade secrets, and copyrights, among other things. Some economic phenomena do not qualify as IP, such as high market share, profitability, monopoly position, and market potential. For years, a specialized subset of law has developed around IP that is transferred between owners or is the subject of a lawsuit for misuse. Four legal sources give rise to this field:

1. Patents (U.S. Code Title 35). A patent is a document that describes an invention that can be developed, used, and sold with the authorization of the owner. A patent is an agreement between the inventor and a country with exclusionary rights (usually 15–20 years) defined by the claims, divulged to prevent others from making, using, importing or selling, or some combination of these, whatever it is that is included in the claims. This does not give rights to do anything, just *negative* rights to exclude others from doing those things claimed. In the total absence of any other subject patents that would otherwise block the original patent holder, patents to enter the product into a commercial endeavor would not block the patent holder. Patents have to be new (which includes original). Only the inventor is allowed to get a patent.
2. Trademarks or brands (U.S. Code Title 15). Trademarks are distinctive names, symbols, sounds, colors, mottos or emblems that identify a product or firm from among others to indicate the source of the goods or services. Unlike patents, trademarks can be renewed forever as long as they are being used in commerce. Trademarks include such items as the following:
  - i. Trade dress, design, or image of products
  - ii. Trade names
  - iii. Service marks (service firms)
  - iv. Collective marks (manufacturers and others not providing services)
  - v. Certification marks (Professional Engineer (PE), Certified Business Adviser (CBA), “union made”)
  - vi. 10 year registration with the U.S. Patent Office

#### Author's Note

According to the United States Patent and Trademark Office, “registrations granted *prior* to November 16, 1989 have a 20 year term, and registrations granted on or after November 16, 1989 have a 10 year term.” You can search for characteristics of intangible assets at <http://www.uspto.gov/main/faq/>.

3. Trade secrets (Uniform Trade Secrets Act, although governed by state laws). Trade secrets are things that get value from being kept secret and are subject to reasonable efforts to being kept secret. A trade secret may be information, a formula, a pattern, a method, a process or a technique that (a) derives actual or potential independent economic value from not being generally known or readily ascertainable by other persons who can obtain economic value from its disclosure or use, and (b) is the subject of reasonable efforts to maintain its secrecy. Examples include customer lists, research and development, recipes and food formulas, patterns, or anything that gains value from being kept secret (proprietary) and lasts forever as long as it keeps its utility and is kept secret.
4. Copyrights (U.S. Code Title 17; 1976 Copyright Act). A copyright is a form of protection to the authors of expressive ideas such as literary, dramatic, musical, artistic, and certain intellectual work, both published and unpublished. Copyrights have to be original. Registered copyrights are enforceable. Unregistered copyrights are enforceable only upon registration. Statutory damages (up to \$70,000) are only possible for registered copyrights. It is hard to prove—unless it’s a direct copy—economic damages beyond the statutory damage level, and Internet stuff may be particularly hard to prove. Copyrights for works created on or after January 1, 1978, protect the work from the moment of creation until 70 years after the author’s death. Works for hire and anonymous and pseudonymous works have copyright protection that lasts for 95 years from the date of publication or 120 years from the date of creation, whichever is shorter.

## CONDUCTING A VALUATION OF INTANGIBLE ASSETS

Valuation assignments must estimate the value of intangibles, recognizing the volatility, ongoing creation, and problems with protection and enforcement. Business valuation analysts have been independently valuing intangible assets for many years, usually in the context of an exchange between owners (transaction), for estate and gift tax purposes, or as part of a litigation assignment. Knowledge underlies the creation of value. Some of the questions that need to be answered include the following:

- What would a willing buyer pay to employ the intangible asset?
- What is the useful life of this asset?
- What portion of the operating income does this asset generate?

New financial reporting concepts require measurement of these separable intangible assets from the overall goodwill in a purchase price allocation, attributable to an acquisition (price paid over tangible assets and assumed tangible liabilities) and periodic testing of unallocated residual goodwill for impairment. I've included some of the most common types of assignments in box 15.4.

### Box 15.4 Common Financial Reporting Assignments

In financial reporting, intangible assets are valued on a control basis, and the total value of the intangible is estimated rather than the equity in the intangible. In other assignments, some proportion or fractional interest of the rights or total ownership in equity may be the subject being appraised.

- Financial reporting (goodwill allocation, goodwill impairment, and intangible asset impairment)
  - Purchase price allocation (Statements of Financial Accounting Standards (SFAS) No. 141)
  - Goodwill impairment (SFAS 142)
  - Accounting for impairment or disposal of long lived assets (SFAS 144)
- Taxation (Federal, state, and local)
  - Charitable contribution
  - Gift or estate
  - Compensation paid (intellectual property)
  - Basis of transferred assets in partnership
- Transaction, merger, contribution to joint venture, acquisition, and fairness opinion
- Financing, loan collateral, or securitization
- Litigation (infringement damage, contract breach, marital dissolution, anticompetitive behavior, and attorney malpractice)
- Transfer pricing (Internal Revenue Code Section 482 studies—related intercompany parties in different tax jurisdictions)
- Licensing and royalty rate decisions
- Bankruptcy and reorganization analysis

Is an intangible asset valuation assignment different from a more standard, or traditional, business valuation assignment? Well, *yes* and *no*. I just want you to know that I am being very decisive here. While it is true that one particular valuation method might be precisely wrong for a particular intangible asset, there are usually several valuation methods that would be approximately right, and while arguments exist for the use of each of these methods, there may be no clear winner. Doesn't that make you feel better?

In undertaking the intangibles assignment, there are common planning elements for all valuation assignments, such as the following:

- Purpose and objective of the analysis
- Defining the subject intangible asset
- Understanding the legal rights subject to analysis
- Date of value
- Highest and best use considerations
- Report writing—telling a story analysis should be replicable<sup>2</sup>

Data collection, however, will probably be different in the intangibles assignment. We need to consider the following:

- History and development of the intangible asset
- Owner or operator, or both
- Licensee or licensor, or both
- Industry operations and pricing data
- Competitive environment
- Commercial comparative intangible assets, cost, and treatment

With regard to the approaches and methods to be used in these types of assignments, the same ones that I discussed in the previous few chapters will be used here also. The minor exception is the asset based approach will be referred to as the *cost approach*. There will be a few minor twists in the application of these approaches, but they are

<sup>2</sup> Robert Reilly, "Effective Intangible Asset Valuation Reports." *Business Appraisal Practice* (Spring 2007).

similar. As in all valuations, all three approaches should be considered. Here are a few ideas on methodologies and the inherent struggles in using each one.

## MARKET APPROACH

Observable (one might say “findable”) market based transactions of identical or substantially similar intangible assets recently exchanged in an arm’s length transaction are often difficult to obtain. Publicly traded data usually represents a market capitalization of the enterprise, not singular intangible assets. Market data from market participants (a term we will run into later) is often used in income based models, such as determining reasonable royalty rates and discount rates. Direct market evidence is usually available in the valuation of internet domain names, carbon emission rights, and Federal Communications Committee licenses (for radio stations, for example). Consider the following:

1. Search for sale/license transactional data
2. Issue of comparability and timing
3. Selecting/adjusting price multiples
4. Selecting/adjusting royalty rates

## INCOME APPROACH

Income based models are best used when the intangible asset is income producing or when it allows an asset to generate cash flow. Just as in other valuation assignments, an income approach technique converts future benefits (such as cash flows or earnings) to a single, discounted amount, usually as a result of increased revenues or cost savings. We have the traditional two choices of either *capitalizing* a single period of benefits or *discounting* a future stream of benefits. One of the primary difficulties within an income approach method is distinguishing the cash flows uniquely related to the intangible asset from the cash flows related to the whole company. Income models examine a discount rate from either (1) a weighted average cost of capital (WACC, or the right side of the balance sheet reflecting debt plus equity), (2) a weighted average return on assets (WARA, or the left side of the balance sheet), or (3) an internal rate of return (IRR) to the investor. Among the most common income based methods is the *relief from royalty method*, where one directly estimates cost savings (or income enhancement) from using an intangible such as a trademark or patent. Under the relief from royalty method, value is based on the avoided third party license payment for the right to employ the asset to earn benefits. A multi-period excess earnings model begins with an estimate of total income reduced by contributions from all other tangible and intangible assets, yielding residual income (or *excess*) that is then discounted to present value. Income based methods are usually employed to value customer related intangibles, trade names, and covenants not to compete. Consider the following with regards to the income approach:

1. Separation of revenue streams and related expenses
2. The expected useful life of the intangible asset
3. Alternative measures of income
4. Operating earnings of the intangible asset
5. Royalty rate income that might be earned by the intangible asset
6. Direct capitalization methods
7. Residual value considerations
8. Discount rate selection
9. Alternative valuation methods including real options techniques and Monte Carlo models
10. Tax amortization benefit (more controversial)

## COST APPROACH

Cost based analyses are based on the economic principle of substitution and usually ignore the amount, timing, and duration of future economic benefits, as well as the risk of performance within a competitive environment. *Historical cost* reflects only the actual cost that had been incurred to develop the asset. *Reproduction cost new* implies the current cost of an *identical* new property. *Replacement cost new* implies the current cost of a *similar* new property having the nearest *equivalent utility* to the property being valued. In most cases, replacement cost new is the most direct and meaningful cost based means of estimating the value of an asset. Once replacement cost new is



estimated, various forms of obsolescence must be considered, such as functional, technological, and economic. Physical deterioration is common for tangible assets, but not for intangibles, although overuse or deterioration of tangible assets could affect value of specific intangibles and the business enterprise. You might reflect upon the following formula:

<b>Reproduction Cost New</b>	
<i>Less</i>	Curable functional and technological obsolescence
<i>Equals</i>	Replacement cost new
<i>Less</i>	Incurable functional and technological obsolescence
<i>Less</i>	External economic obsolescence
<i>Less</i>	Physical deterioration
<i>Equals</i>	Pre-tax value of the intangible asset (absent any amortization benefit)

Cost based models are best used for valuing an assembled workforce, engineering drawings or designs, and internally developed software where no direct cash flow is generated. Consider the following:

1. Hard *and* soft costs are included
2. Cost measurements
3. Reproduction cost new (exact duplicate)
4. Replacement cost new (equal utility)
5. Measuring functional and economic obsolescence
6. Replacement cost new less depreciation

While different valuation analysts may approach the valuation assignment differently, table 15.1 illustrates how I believe you should approach the valuation for certain types of intangibles.

<b>TABLE 15.1 INTANGIBLE VALUATION APPROACH SUMMARY</b>			
<b>ASSET</b>	<b>PRIMARY</b>	<b>SECONDARY</b>	<b>TERTIARY</b>
Patents	Income	Market	Cost
Technology	Income	Market	Cost
Copyrights	Income	Market	Cost
Assembled workforce	Cost	Income	Market
Internally developed software	Cost	Market	Income
Brand names	Income	Market	Cost
Customer relations	Income	Cost	Market

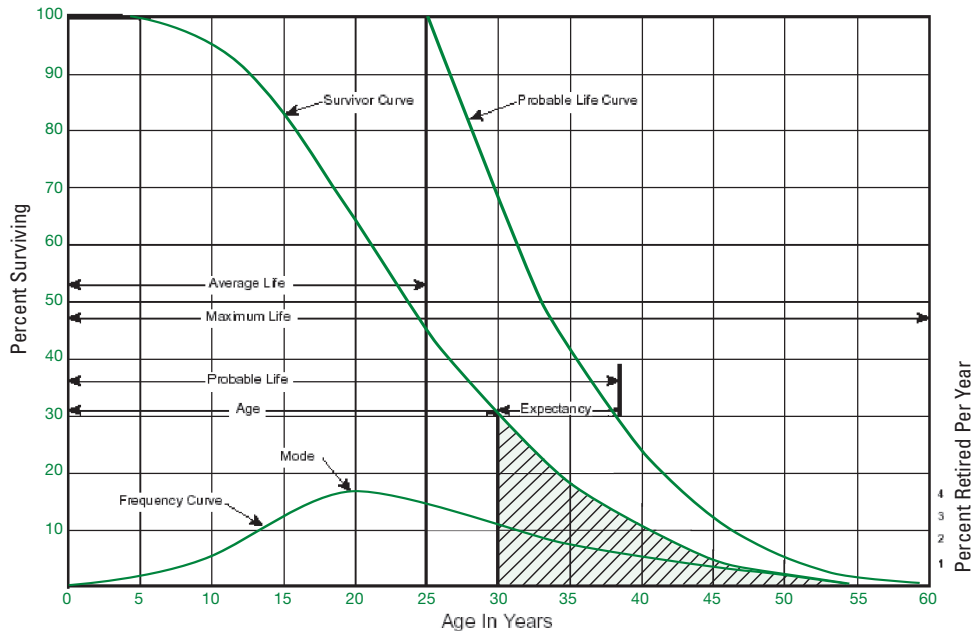
## WHAT IS A REMAINING USEFUL LIFE ANALYSIS?

Every separable intangible asset carries the concept of *utility*, or effective use, over a time horizon. Like fixed assets, intangibles wear out, too. Market forces, obsolescence, replacements and operational enhancements eat away at the value of existing intangibles. Legal, regulatory, or contractual provisions may limit the asset's useful life. This thinking relates to asset attrition (a decay or retirement pattern) similar to mortality tables that are used in insurance.

Separable intangible assets require estimates of their RUL, which technically are management's responsibility although valuation analysts should understand the mechanics and assist management in developing an estimate of the economic life of the asset. In other words, the amortization of the asset's value for financial reporting purposes is an accounting estimate and not a valuation estimate. The value of a noncompete agreement, for example, may be reflected over the life of the agreement (for example, three years). At the end of the third year, the agreement has no basis or distinguishable competitive advantage, so the value following the expiration of the agreement would be zero. The same type of argument is sometimes made for separately identifiable supplier agreements. Yet the asset carries one additional advantage—the opportunity for the existing business to attempt to extend the agreement, perhaps under new terms.

I hate to do this to you, but you should be familiar with the term *Iowa curves*. This original analysis was developed in the 1930s by academics studying characteristics of industrial properties.<sup>3</sup> These professors studied the attrition of units of property into curves representing expected trends with convergence to zero survivors at some future point. As a result, the range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa curves. As seen in figure 15.1, the key lines represent the percentage of survivors (Y-axis) with aging over time (X-axis). At time zero, 100 percent of the asset utility (survivors) exists, with the most probable life curve at 30 years. As time advances, however, the asset decays, offering smaller and smaller utility to the owner.

**FIGURE 15.1**  
**A TYPICAL SURVIVOR CURVE AND DERIVED CURVES**



Other theoreticians have pointed out the importance of survival analysis for valuation assignments.<sup>4</sup> In case this stuff is not bad enough, you may be confronted with the term *Weibull distributions*. Similar to the Iowa curves analysis, Professor Waladdi Weibull developed in 1951 statistical methods that were used to estimate the remaining useful life of many industrial items such as ball bearings, vacuum tubes, and electrical insulation. In addition, a survival curve can be estimated based on turnover information. The statistical methods and processes for performing a lifing analysis can fill a whole book and are beyond the scope of this chapter. Thank Goodness!

<sup>3</sup> Robley Winfrey, "Statistical Analysis of Industrial Property Retirements," Iowa State College, Engineering Experiment Station, Bulletin 125, 1936.

<sup>4</sup> M. P. Dandekar, "Estimate of Remaining Useful Life," *Valuation* (June 1996).

## WHAT IS A REASONABLE ROYALTY RATE AND WHERE DO I GET THIS STUFF?

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A number of methods used in valuing intangibles require the use of reasonable (or comparable) royalty rates to judge the discounted value of costs saved, as if the intangible asset (such as a patent) were licensed for use through a royalty requirement. Usually royalty rates are stated as a percentage of sales or payment to the licensor per product divided by the product sales price. Factors affecting selection of appropriate royalty rates include the following:

- Profitability
- Investment necessary
- Life or obsolescence, or both
- Government restrictions
- Terms (such as infringement penalties, geographic limits, time limits, and exclusivity)

One key court case you should be familiar with is *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152 (6th Cir. 1978). This was a patent infringement case that outlined good reasoning in order to either calculate lost profits directly or estimate damages based on a royalty rate model. In order for a patent holder to receive damages in the form of lost profits, a series of four questions must be answered:

1. Is there a demand for the patented products?
2. Are available non-infringing substitute products not available (for example, in a two supplier market, the customer must purchase either the patent holder's product or the infringing product)?
3. Did the patent owner have manufacturing and marketing capability to exploit the demand?
4. Can the lost profits be quantified?

If the answer is "yes" to all of these questions, lost profits may be calculated directly. If any of the questions results in a "no" answer, reasonable royalty rates should be used to quantify the value of infringement.

A second key court case is *Georgia Pacific v. U.S. Plood*, 318 F. Supp 1116, 6 USPQ 235 (SD NY 1970) concerning a hypothetical royalty rate for patent infringement. The legal reasoning in this case listed 15 factors that should be considered in estimating damages from alleged misuse. When actual damages in the form of lost profits cannot be proven, the patent owner is entitled to receive a reasonable royalty as payment for infringement by the defendant. Conceptually, a reasonable royalty is an amount that a person, desiring to manufacture and sell a patented article, as a business proposition, would be willing to pay as a royalty and yet be able to make and sell the patented article, in the market, at a reasonable profit.

The setting of a royalty rate after infringement, however, undermines the assumption of ordinary arm's length negotiations between a truly willing patent owner and a potential licensee. If the setting of a reasonable royalty after the fact did not take into account the distressed nature presented by forced litigation, it would make an election to infringe a handy means for competitors to impose a compulsory license upon every patent owner. In fact, except for the limited risk that the patent owner might meet the heavy burden of proving the four elements required for recovery of lost profits (see the preceding *Panduit* case), the infringer would have nothing to lose and everything to gain if he could count on paying only the normal, routine royalty non-infringers might have paid.

These 15 factors shown in box 15.5 on the next page have become known as the *Georgia-Pacific factors*. They were first set out in *Georgia-Pacific Corp. v. U.S. Plywood Corp.* by Judge Tenney of the District Court for the Southern District of New York. Although it is rare for the United States Court of Appeals for the Federal Circuit to defer to any court, let alone a district court, time and time again, the Federal Circuit endorses these factors as the appropriate factors to consider in making a determination regarding the appropriateness of any award of reasonable royalties.

Even though royalty rates are frequently used in calculating economic damages cases, the selection of reasonable royalty rates is also necessary for "relief from royalty" calculations to estimate value in a discounted cash flow analysis. This type of analysis is a blend of a market and income approach. This evidence is scattered throughout the Securities and Exchange Commission submissions, newspaper articles, and other company information and is especially difficult to gather for a one time use. Most valuation analysts inquire of one or more databases available via the Internet (with a credit card) that have been compiled for IP experts. Cost can vary

### Box 15.5 Georgia Pacific 15 Factors in Determining Reasonable Royalty Rates

The amount of a reasonable royalty after infringement turns on the facts of each case, as best they may be determined. Among the relevant facts as cited in the case *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, are the following

1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty
2. The rates paid by the licensee for the use of other patents comparable to the patent in suit
3. The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold
4. The licensor's established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly
5. The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business or whether they are inventor and promoter
6. The effect of selling the patented specialty in promoting sales of other products of the licensee, the existing value of the invention to the licensor as a generator of sales of his nonpatented items, and the extent of such derivative or convoyed sales
7. The duration of the patent and the term of the license
8. The established profitability of the product made under the patent, its commercial success, and its current popularity
9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results
10. The nature of the patented invention, the character of the commercial embodiment of it as owned and produced by the licensor, and the benefits to those who have used the invention
11. The extent to which the infringer has made use of the invention and any evidence probative of the value of that use
12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions
13. The portion of the realizable profit that should be credited to the invention as distinguished from nonpatented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer
14. The opinion testimony of qualified experts
15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount that a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and that amount would have been acceptable by a prudent patentee who was willing to grant a license

according to the number of transactions selected and the amount of information available, from less costly (\$) to more costly (\$\$\$):

- Financial Valuation Group ([www.fvginternational.com](http://www.fvginternational.com)) (\$)
- Royalty Source ([www.royaltysource.com](http://www.royaltysource.com)) (\$)
- Licensing Economic Review (Smith & Parr) ([www.ausinc.com](http://www.ausinc.com)) (\$\$)
- Intellectual Property Research Associates ([www.ipresearch.com](http://www.ipresearch.com)) (\$\$)
- Consor Intellectual Asset Management ([www.consor.com](http://www.consor.com)) (\$\$\$)

Selections among the various royalty rate transactions require judgment in order to match the selection to the subject intangible. Most initial scans from the before mentioned databases will result in dozens of transactions. Some selection winnowing must take place. An example of a winnowed peer group list is noted in table 15.2, showing 13 sample royalty rate transactions for a trademark valuation.

**TABLE 15.2**  
**TRADEMARK—RELIEF FROM ROYALTY CALCULATIONS**

Date of Value, December 31, 2007		Detailed Royalty Rate Data—Trademark/Business Services (Selection based on business services, consumer orientation, and name recognition)							
Licensee	Licensor	Upfront Fee	Royalty Rate %		Royalty Rate % (High Range)	Basis	Annual Minimum Fee	Licensed Property	Notes
			(Low Range)	(High Range)					
<i>Trademark: Business Services</i>									
1 CHC International, Inc.	Carnival Corp.	\$ —	1.00%	1.00%	1.00%	sales	\$100,000	Use of “Carnival” trademark in hotels and casinos	1997 agreement allows for minimum \$100,000 annual payment; 20 year term. 1997 transaction.
2 Uffman & Associates, Inc.	Credit Bureau of Baton Rouge	\$ —	5.00%	5.00%	5.00%	sales	\$ —	Use of name.	
3 Various advertising agencies	AdsOnly Group, Inc.	\$19,500	5.00%	5.00%	5.00%	sales	\$ —	Planned advertising franchisees. Licensor plans to assist in location, operations, legal and accounting work, and training.	Additional 1.5% is charged for continuing national advertising costs. The \$19,500 typically covers training manuals and additional materials.
4 Various advertising agencies	Resourcenet	\$50,000	5.00%	5.00%	5.00%	sales	\$ —	Support services for creative service companies.	The \$50,000 typically covers materials and additional set-up expenses. Franchisees also pay an initial audit fee of \$10,000 and \$7,500 for initial training.
5 Various services, agencies, computer integrated systems design	USWeb Corp.	\$ —	5.00%	5.00%	5.00%	sales	\$ —	Non-exclusive right to maintain an office and advertise in designated territory. Fee includes rights to use intellectual property, proprietary information, and development methodologies.	Licenses pay royalties equal to the greater of a minimum monthly fee or 5% royalty plus 2% promotion payment (expenses) based on adjusted gross revenues.

TABLE 15.2  
TRADEMARK—RELIEF FROM ROYALTY CALCULATIONS

Licensee	Licensor	Upfront Fee	Royalty Rate % (Low Range)	Royalty Rate % (High Range)	Basis	Annual Minimum Fee	Licensed Property	Notes
<b>Trademark: Business Services</b>								
6 Various advertising agencies	Adventures in Advertising Franchise, Inc.	\$27,500	4.00%	4.00%	sales	\$ —	Imprinted promotional products to be used in trade shows, product introductions, safety programs, and various awards. Licensed property include customer designed computer software program and total market support.	Initial franchise fee of \$27,500 may include sample products and training.
7 Various accounting, auditing, and bookkeeping services	E. K. Williams	\$35,000	2.00%	8.00%	sales	\$ —	Accounting franchises, including support materials.	Royalty will vary on a sliding scale based on volume and longevity. Royalty percentages drop as gross revenue increases and as practice ages.
8 (affiliate)	Minnegasco	\$ —	1.00%	1.00%	sales	\$ —	Use of utility's name and reputation.	Utility regulators ordered gas utility to pay its customers the royalty fee; 1996 order by the Minnesota Public Utilities Commission.
9 Sodexho Marriott Services, Inc.	Sodexho Alliance, S.A.	\$ —	0.05%	0.05%	sales	\$ —	Use of name "Sodexho" in connection with food services.	1998 transaction through 2001; extended at same rate thereafter.
10 SUSA Partnership LP (Storage USA, Inc. is a general partner)	Storage Development Portfolio, LLC	\$ —	5.00%	5.00%	sales	\$ —	Use of trade name "Storage USA" for self-storage facilities.	1999 agreement.

(Continued)

TABLE 15.2 (continued)  
TRADEMARK—RELIEF FROM ROYALTY CALCULATIONS

Licensee	Licensor	Upfront Fee	Royalty Rate %		Basis	Annual Minimum Fee	Licensed Property	Notes
			(Low Range)	(High Range)				
<b>Trademark: Business Services</b>								
11 (affiliate)	Washington Natural Gas Company	\$ —	1.50%	1.50%	sales	\$150,000	Use of parent company's name, reputation, and public image.	1994 order of the Washington Utilities and Transportation Commission.
12 Vitaminshoppe Com, Inc. (retail stores)	The Vitamin Shoppe (catalog and mail-order house)	\$ —	1.00%	5.00%	sales	\$ 1,000,000	Exclusive use of name, logo and marks for online sales.	2000 agreements between affiliated entities; 5% royalty for sales up to \$25 million; declining royalties to 1% for sales over \$100 million.
13 ftd.com, Inc. (affiliate)	Florist Transworld Delivery, Inc. (subsidiary of FTD Corporation)	\$ —	1.00%	1.00%	sales, net of discounts	\$ —	Non-exclusive right to use parent company's trademarks in sales through Internet.	1999 agreement; 99 year term.
<b>Analysis of Data:</b>								
	Low		0.05%	0.05%				
	Mean		2.81%	3.58%				
	Median		2.00%	5.00%				
	High		5.00%	8.00%				
	Standard Deviation		0.0201	0.0239				
	Coefficient of Variation		0.7153	0.6676				



Although some of these transactions have upfront fees or minimum annual fees, the analyst's duty is to choose a reasonable rate from the data to apply in a discounted cash flow model.

Once the reasonable royalty rate is selected (let's say 3 percent, based on the analyst's judgment of the peer group evidence), it is applied to sale projections (let's say the royalty is based on revenues) to arrive at the tax affected discounted royalties "avoided" or "saved."

In table 15.3 on the next page, a simple model is shown using a tax rate of 40 percent and a discount rate of 18 percent with a mid-year convention. We will assume 100 percent usage of the trade name although some adjustments for unbranded products, maintenance expense, and future probability of continued use might also be reflected. Summing the present values for the discrete periods and adding a termination value suggested combined cash flow savings of \$1,163,764. An amortization benefit is added (I will explain this in a little while) to suggest a fair value of the trade name of \$1,365,000. Because the royalty rate is derived from market evidence and used in an income based discounted future earnings projection, most valuation professionals consider the relief from royalty method to be a hybrid methodology of market and income approaches.

## IMPORTANCE OF FAIR VALUE MEASUREMENTS

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The high demand for intangible asset valuation in the United States in recent years has principally occurred because of the requirements for fair value accounting and the new U.S. accounting rules promulgated by the Financial Accounting Standards Board (FASB). In addition, international transfers of intangible assets between related parties in different tax jurisdictions are being scrutinized by taxing authorities. Internal Revenue Code Section 482 relates to transfer pricing, indicating that "in the case of any transfer of intangible property, the income with respect to such transfer or license shall be commensurate with the income attributable to the intangible."

This is a fast changing area, and this chapter only covers a brief overview of the substantive issues. Should you desire to do this type of work specializing in fair value for financial reporting, you will need more training! The guidance for valuing intangible assets for financial reporting is continually evolving and may vary between U.S. generally accepted accounting principles (GAAP), International Financial Reporting Standards (IFRS), and other accounting standards. You must make certain that you are familiar with the most recent rules as they are changing much faster than I can write about them.

Some of the statements that you need to familiarize yourself with include, but are not limited to, the following:

- Accounting Principles Board (APB) 16, *Business Combinations* (1970)
- APB 17, *Intangible Assets* (1970)
- Statements of Financial Accounting Standards (SFAS) 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of* (1995)
- SFAS 141, *Business Combinations* (2001)
- SFAS 142, *Goodwill and Other Intangible Assets* (2001)
- SFAS 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* (2002)
- SFAS 157, *Fair Value Measurements* (2006)
- SFAS 141(R), *Business Combinations* (2008)

The key statements you should know are SFAS 141, 141R, 142, 144, and 157. These form the core of much of the demand for valuation work related to financial reporting.

## STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 141

SFAS 141 addresses the allocation of the purchase price (all assets and liabilities purchased including goodwill and other intangible assets) in business combinations on or after June 30, 2001. It is important to note that an allocation assignment differs from an appraisal assignment. In an allocation assignment, the purchase price (at fair value) is already established, so the analyst in allocating the residual intangibles must be, in the words of one chap, "approximately not wrong." An appraisal, by definition, requires the analyst to estimate a point value or range of value at which the property would exchange hands, as of a specific date and under a given standard and premise of value. An identifiable intangible asset is recognized apart from goodwill if (a) it arises from contractual or other legal rights or (b) it is capable of being separated or divided from the acquired entity and sold, licensed, exchanged, rented, or transferred. Does this sound familiar?

**TABLE 15.3**  
**TRADEMARK—RELIEF OF ROYALTIES CALCULATIONS: VALUATION DATE DECEMBER 31, 2007**

	For the twelve month periods in the future:					Terminal Year
	Year 1	Year 2	Year 3	Year 4	Year 5	
Sales	\$6,000,000	\$8,000,000	\$10,000,000	\$10,500,000	\$10,815,000	\$11,139,450
Sales growth rate in model		33.33%	25.00%	5.00%	3.00%	
Proportion of trade name revenues	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Total revenue	\$6,000,000	\$8,000,000	\$10,000,000	\$10,500,000	\$10,815,000	\$11,139,450
Royalty (3%)	180,000	240,000	300,000	315,000	324,450	334,184
Total royalties	\$ 180,000	\$ 240,000	\$ 300,000	\$ 315,000	\$ 324,450	\$ 334,184
Tax effected royalty savings		40.0%				
Periods (mid-year convention)	0.5	1.5	2.5	3.5	4.5	4.5
Present value factor (weighted average cost of capital)	0.9206	0.7801	0.6611	0.5603	0.4748	1,336,733
Present value of royalty savings	\$ 99,425	\$ 112,334	\$ 118,998	\$ 105,897	\$ 92,429	0.4748
Terminal year value						\$ 634,681
<b>Sum of present values</b>						\$ 529,083
<b>Terminal year value</b>						634,681
<b>Combined value of cash flows</b>						\$1,163,764
<i>Amortization benefit</i>						
<i>Discount rate</i>						18.0%
<i>Tax rate</i>						40.0%
<i>Tax amortization period</i>						15
<i>Present value of annuity over period</i>						5.53087
<i>Amortization benefit</i>						201,339
<b>Fair value of trade name</b>						\$1,365,103
<b>Rounded</b>						\$1,365,000

 **Author's Note**

The amortization benefit factor is 201,346 / 1,163,808 = .1730062, or 17.3%.

## STATEMENT OF FINANCIAL ACCOUNTING STANDARDS No. 142

SFAS 142 relates principally to impairment of goodwill and other indefinite lived intangible assets or unallocated goodwill. Reporting units must be identified. Impairment testing is required at least annually. That is a good thing for valuation analysts after their clients stop complaining about the fees charged annually. *Impairment* occurs when the fair value of the purchased intangibles (goodwill) is less than the carrying value of this asset—a straight non-cash hit to reported net income. Consider the merger of AOL and Time Warner several years ago. The ultimate impairment charge to the booked value of unallocated goodwill was about \$54 billion! Ouch! In other words, purchased intangibles are no longer assumed to be wasting assets and may remain on the balance sheet until eroded by impairment. Intangibles with finite lives are amortized over the remaining useful life (no longer a 40 year maximum).

## STATEMENT OF FINANCIAL ACCOUNTING STANDARDS No. 144

SFAS 144 relates to impairment testing of long lived assets (both tangible and intangible) with defined lives.

## STATEMENT OF FINANCIAL ACCOUNTING STANDARDS No. 157

SFAS 157 was issued in September 2006, effective for financial statements for fiscal beginning years after November 15, 2007. This statement defines fair value, establishes a framework for measuring fair value for GAAP purposes, and enhances disclosure requirements about fair value. The key definitional elements on fair value measurements from FASB 157 can be found in box 15.6.

### Box 15.6 FASB 157 Key Terms and Definitions

- *Fair value* is the price that would be received for an asset or paid to transfer a liability in an orderly transaction between *market participants* at the measurement date.
- For assets, *highest and best use* is based on a hypothetical transaction without regard to intended use by the reporting entity.
- A *fair value measurement* is for a particular asset or liability. Therefore, the measurement should consider attributes specific to the asset or liability, for example, the condition and/or location of the asset or liability and restrictions, if any, on the sale or use of the asset at the measurement date. The asset or liability might be a standalone asset or liability (for example, a financial instrument or an operating asset) or a group of assets and/or liabilities (for example, an asset group, a reporting unit, or a business).\*
- Fair value is a market based measurement, not an entity specific measurement. While earlier Financial Accounting Standards Board statements highlighted five levels of inputs to be considered, Statements of Financial Accounting Standards No. 157, *Fair Value Measurements*, reduced the hierarchy to three levels of inputs to the various techniques and re-emphasized three acceptable approaches as market, income, and cost:
  - Level 1: Quoted prices in active markets for identical assets and liabilities at the measurement date. (As an example, consider the quoted prices of shares of stock in a publicly traded company.)
  - Level 2: Direct or indirect observable quoted market prices for similar assets and liabilities in an active market or prices for identical or similar assets or liabilities, or both, in an inactive market. This requires directly observable inputs for substantially the full term of an asset or liability. Market inputs may be derived from or corroborated by observable market data. (As an example, consider a plot of land where other parcels with the same characteristics have been bought and sold.)
  - Level 3: Unobservable, but objective, entity specific data reflecting assumptions that market participants would use. Internally developed inputs should exclude entity specific factors if information is available that market participants would use different assumptions. These market assumptions should be developed from reasonably available information without undue cost and effort. *Many of the value inputs and intangible assets methods used by valuation professionals in fair value analyses are Level III inputs and would require the highest amount of disclosure.*

\* Cambridge Partners & Associates FAQ at [www.cambridge-partners.com/intangible-asset-valuation-faq.htm](http://www.cambridge-partners.com/intangible-asset-valuation-faq.htm)

### ✉ Author's Note

The Financial Accounting Standards Board has decided to defer certain requirements of Statement No. 157, *Fair Value Measurements*, for specific types of situations. FASB has also released Statement 141R (revised), *Business Combinations*, which further distinguishes terms and expected methodologies.

Fair value under U.S. GAAP is now an exit price (sell-side), which means the price a company would receive if it was to sell the asset in the marketplace or paid if it was to transfer the liability. Fair value was previously thought to be an entry price (buy-side), which is generally what a company would pay to acquire an asset or would receive to assume the liability. The exit price for an asset or liability is conceptually different from its transaction price (an entry price). While exit and entry prices may be identical in many situations, the entry transaction price is no longer presumed to represent the fair value of an asset or liability on its initial recognition. (All of these entries and exits make me think that I am stuck in a revolving door.) And, some wiggle room exists if the costs to do this type of analysis is claimed to be excessive. SFAS 157 paragraph 30 states that “the reporting entity’s own data used to develop unobservable inputs shall be adjusted if information is reasonably available without undue cost and effort that indicates that market participants would use different assumptions.” Who defines “undue cost and effort”?

It is essential to view fair value from the point of view of *market participants* rather than the specific entity. Market participants are unrelated parties, knowledgeable of the asset or liability given due diligence, willing and able to transact for the asset or liability without compulsion, and may be hypothetical. The transaction to sell the asset or transfer the liability is a hypothetical transaction as of the measurement date and assumes an appropriate period of exposure to the market such that the transaction is considered orderly.

*Exposure time* is a concept derived from real property and personal property appraisal. According to Uniform Standards of Professional Appraisal Practice Statement No. 6, “Reasonable Exposure Time in Real Property and Personal Property Market Value Opinions,” exposure time is defined as “the estimated length of time the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal; a retrospective opinion based on an analysis of past events assuming a competitive and open market.” The exposure time concept is presumed to precede the effective date of value, whereas *marketing time* is the estimated amount of time to sell the asset after the effective date of value.

Market participants may be either strategic or financial buyers, and there are terms in the FASB’s literature that define either the principal or most advantageous market for the asset or liability. In addition, market participants may be firms in the same industry, actual (or interested) bidders for the subject entity (or asset), or firms that employ similar assets demonstrating a history of buying and selling those assets reflecting prices paid and risks assumed.

## WHAT IS AN “AMORTIZATION BENEFIT”?

SFAS 141 (and SFAS 109, *Accounting for Income Taxes*) requires the recognition of a *deferred tax liability* in the opening balance sheet for identified intangibles that have no tax basis or other assets with a greater book basis than tax basis. These are usually Class VI assets except “goodwill” and “going concern value” as described in Internal Revenue Code Section 197. A detailed discussion about the tax amortization benefit is beyond the scope of this book. However, it is something that you need to know about. For reference, the common formula for the tax amortization benefit is:

$$PVCF * (n/n - ((PV(k, n, -1) * (1-k)^{0.5*t}) - 1))$$

where,

PVCF = Present value of cash flows from the asset

$n$  = 15 years (or finite amortization period)

$k$  = Discount rate

$t$  = Tax rate

$PV(k, n, -1) * (1-k)^{0.5}$  = Present value of a \$1 annuity over 15 years, at the given discount rate (which assumes mid period receipt of benefit)

Cool formula, huh? The tax amortization benefit should only be included for assets where the benefit is appropriate and the asset is subject to taxation. Assets in foreign countries should reflect conditions of the local tax code.

#### Author's Note

One of the better books for learning more about the amortization benefit and other methods of valuing intangibles under Statement of Financial Accounting Standards (SFAS) 141, *Business Combinations*; SFAS 142, *Goodwill and Other Intangible Assets*; and SFAS 157, *Fair Value Measurements*; rules is the second edition of *Valuation for Financial Reporting: Fair Value Measurements and Reporting, Intangible Assets, Goodwill, and Impairment*, by Michael Mard, James Hitchner, and Steven Hyden (Hoboken, NJ: John Wiley & Sons, 2007).

## HOW ABOUT SOME MORE EXAMPLES!

Because I know that you are probably as excited as you can possibly be about this stuff, let's throw in a few more examples. Here are some unrelated examples of various methods that valuation analysts have used to estimate fair value of specific intangibles. Many methods exist that may be relevant and the Level 1, Level 2, and Level 3 inputs should be considered as a hierarchy of considering market evidence. For most estimates of specific intangibles, the least preferred Level 3 inputs to the models are probably the most likely we will use.

### CREATE A LEAD SCHEDULE FOR YOUR ANALYSIS

Let's suppose that we are engaged to undertake an allocation assignment to determine fair value of separable intangible assets and unallocated residual goodwill. The *structure of the transaction* is the first issue, which will suggest an overall value of the total intangible component of the transaction. Table 15.4 found on the following page shows a lead schedule of a sample acquisition costing \$2,600,000, with \$1,920,000 comprising the amount to be allocated.

Because it is a lead schedule, we can use this schedule as a sanity check of our ultimate conclusions regarding the separable intangibles and the unallocated goodwill component with a weighted average return on assets. In this example, if the discount rate is 18 percent for the entire company, the working capital and fixed assets would require a smaller rate of return because of their tangible nature, and the discount rates for the combined intangibles must be higher! This is similar to the example about the rates of return when you use the excess earnings method.

In table 15.4 we actually see the rates concluded for the separate intangibles (customer list, software, trademarks, noncompete contracts, and unallocated goodwill). A proof of the appropriateness of the rates can be derived by calculating the return on the asset categories as a percentage of the purchase price, suggesting a target for allocation. Similarly, computing the return of the separate intangibles suggests an approximate proof of the overall intangible assets to be allocated. While the algebra of this methodology may appear somewhat constrained, it nonetheless offers mathematical support for the conclusions reached if you chose to select different after tax rates of return for the separate intangible assets.

#### Author's Note

The remaining examples do not relate to this schedule.

**TABLE 15.4**  
**LEAD SCHEDULE—SUMMARY**

**Structure of the Acquisition**

<b>Cash paid at closing</b>	<b>\$2,500,000</b>	<b>Per asset purchase agreement</b>
<b>Plus: Liabilities assumed</b>	<b>50,000</b>	
<b>Add: Cost of acquisition (estimated per client)</b>	<b>50,000</b>	<b>Per management*</b>
<b>Total consideration (adjusted purchase price)</b>	<b>\$2,600,000</b>	
<b>Less: Net working capital assets assumed</b>	<b>(160,000)</b>	<b>Per closing statement</b>
<b>Less: Net fixed assets assumed</b>	<b>(520,000)</b>	<b>Per market appraisal</b>
<b>Net amount to be allocated (rounded)</b>	<b><u>\$1,920,000</u></b>	
<b>Goodwill and other intangible assets</b>	<b><u>\$1,920,000</u></b>	

**Discount Rate Attributable to Overall Assets**

	<u>Fair Value</u>	<u>% of Enterprise Value</u>	<u>Weighted Average Return on Assets (Discount Rate)</u>	<u>Total Return</u>	<u>Return as % of Purchase Price</u>
<b>PURCHASE PRICE</b>	<b>\$2,600,000</b>	100.0%	18.0%	\$468,000	18.0%
<b>Working capital</b>	<b>160,000</b>	6.2%	8.0%	12,800	0.5%
<b>Fixed assets</b>	<b>520,000</b>	20.0%	10.0%	52,000	2.0%
<b>Intangibles</b>	<b>1,920,000</b>	73.8%	21.0%	403,200	15.5%
				<u>\$468,000</u>	<u>18.0%</u>

*Intangibles discount rate in total must be higher than the enterprise overall!!*

**Discount Rate Attributable to Identified Intangibles**

	<u>Fair Value</u>	<u>% of Enterprise Value</u>	<u>Weighted Average Return on Assets (Discount Rate)</u>	<u>Calculated Total Return</u>	<u>Return as % of Purchase price</u>
<b>Purchase price</b>	<b>\$2,600,000</b>	100.0%	18.0%	\$468,000	18.0%
<b>Customer list</b>	<b>800,000</b>	30.8%	20.0%	160,000	6.2%
<b>Software</b>	<b>500,000</b>	19.2%	20.0%	100,000	3.8%
<b>Trademarks</b>	<b>300,000</b>	11.5%	22.0%	66,000	2.5%
<b>Noncompete contracts</b>	<b>130,000</b>	5.0%	22.0%	28,600	1.1%
<b>Unallocated goodwill</b>	<b>190,000</b>	7.3%	26.0%	49,400	1.9%
<b>Fair value of intangibles</b>	<b><u>\$1,920,000</u></b>	73.8%		404,000	15.5%

\* Note: May change with new rules

## FAIR VALUE OF THE CUSTOMER LIST

Table 15.5 shows a simple replacement cost method of assessing the value of a customer list, based on acquisition costs invested to attract each customer. For purposes of these models, we will assume that the judgments reflect unobservable, but objective, entity specific data reflecting assumptions that market participants would use.

Following the model, total selling costs attributable to attracting new customers during the prior four years totaled \$366,839. After tax affecting this amount, the replacement cost per customer is gauged to be \$1,378. Extending by the number of customers in the business and allowing for an amortization benefit, suggests fair value of the customer list is \$1,550,000.

**TABLE 15.5**  
**FAIR VALUE OF CUSTOMER LIST/CUSTOMER BASE**  
**REPLACEMENT COST METHOD**

<b>Year</b>	<b>Reported Revenues</b>	<b>Estimated Independent Selling Costs</b>	<b>Proportion of Selling Costs to Reported Revenues</b>	<b>% Selling Costs Allocated to New Customers</b>	<b>New Customer Selling Costs</b>	<b>Number of New Customers</b>
Jan–Dec 2007	\$3,000,000	\$110,000	3.67%	90.0%	\$ 99,000	23
Jan–Dec 2006	2,500,000	103,000	4.12%	90.0%	92,700	45
Jan–Dec 2005	2,200,000	97,500	4.43%	90.0%	87,750	37
Jan–Dec 2004	2,000,000	56,339	2.82%	90.0%	50,705	40
		<u>\$366,839</u>			<u>\$ 330,155</u>	<u>145</u>
		Total pre-tax selling costs, new customers			\$ 330,155	
		Less taxes at 39.5%			(130,411)	
		After tax selling costs, new customers			199,744	
		Divided by new customers			145	
		Replacement cost per new customer			1,378	
		Number of existing customers			1,000	
		Total replacement cost of customers			1,378,000	
		<b>Amortization Benefit</b>				
		Discount rate		25.00%		
		Tax rate		39.5%		
		Tax amortization period		15		
		Present value of annuity over period		4.31479		
		Amortization benefit			176,643	
		<b>Fair value of customer list (rounded)</b>			<u><b>\$1,554,643</b></u>	
		<b>Fair value of customer list (rounded)</b>			<u><b>\$1,500,000</b></u>	

## FAIR VALUE OF ACQUIRED SOFTWARE

Table 15.6 shows a simple replacement cost for existing software less an obsolescence factor. The key elements are the number of lines of code, productivity ratings based on time to recreate lines of code, and estimated hours required to reproduce this software. Generally, software does have some obsolescence, requiring a judgment factor derived from technical management personnel. In this example, using a 20 percent obsolescence adjustment plus adjustments for taxes and amortization benefit, the software intangible is estimated at \$175,000.



**TABLE 15.6**  
**FAIR VALUE OF ACQUIRED SOFTWARE**  
**REPLACEMENT COST METHOD LESS OBSOLESCENCE**

Module in Place	Lines of Code	Productivity Rating*	Adjusted LOC Basis	Std LOC Per Hour	Hours to Recreate	
1	15,000	4	3,750	4	938	
2	2,100	3	700	4	175	
3	18,000	3	6,000	4	1,500	
Total	35,100				2,613	
		Blended hourly rate			\$ 125	
		Reproduction cost			\$ 326,625	
		Less obsolescence factor		20%	(65,325)	
		Replacement cost			\$ 261,300	
		Less taxes		39.5%	(103,214)	
		After tax value, before amortization			\$ 158,086	
		<i>Amortization benefit</i>				
		Discount rate		30.00%		
		Tax rate		39.5%		
		Tax amortization period		15		
		Present value of annuity over period		3.72633		
		Amortization benefit			\$ 17,200	
		<b>Fair value of software</b>				<b>\$ 175,286</b>
		<b>Fair value of software (rounded)</b>				<b>\$ 175,000</b>

\*Productivity rating based on code generation tools as discussed with technical operations management.

## FAIR VALUE OF CUSTOMER RELATED INTANGIBLES WITH AN EXCESS EARNING MODEL

A multi-period excess earnings model (EEM) is an income based method using, in most cases, a discounted cash flow analysis. Theoretically, the value of the subject intangible is equal to the present value of the discounted incremental after tax cash flows attributable only to the subject intangible. EEM is most commonly used to value the most essential, or primary asset responsible for generating income in the enterprise, such as customer related intangibles or technology, or both (that is sold to third parties). The net cash flows attributable to the subject intangible are those in excess of fair returns on all other contributory assets. Be careful when using an EEM model, however. Complex issues arise in possible cross charges and indirect (or related) benefits to related assets.

In table 15.7, the projected net income of the enterprise is adjusted for the contribution of the tangibles and all other intangibles (as derived from different methods). After tax cash flows are discounted using a 28 percent discount rate (mid-year convention). Adjusting for an amortization benefit of 12 percent (lets say as previously calculated), the fair value of the residual customer related intangibles is \$45,000.

**TABLE 15.7**  
**FAIR VALUE OF CUSTOMER RELATED INTANGIBLES**  
**EXCESS EARNINGS METHOD**

<b>Year (Period)</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Income from operations before tax	\$40,000	\$52,000	\$45,000
Less taxes at 39.5%	(15,800)	(20,540)	(17,775)
Enterprise projected net income (loss)	\$24,200	\$31,460	\$27,225
Less charge for contributory assets*			
Working capital	\$ 900	\$ 1,100	\$ 800
Fixed assets	5,000	7,500	7,000
Assembled workforce	700	700	400
Trademarks	500	800	100
Noncompete agreements	100	50	
Total contributory charges	\$ 7,200	\$10,150	\$ 8,300
After tax cash flows	\$17,000	\$21,310	\$18,925
Periods (mid-year convention)	0.50	1.50	2.50
Discount rate based on asset category	28.00%	28.00%	28.00%
Discount factor based on asset category	0.8839	0.6905	0.5395
Present value of cash flows	\$15,026	\$14,715	\$10,210
Sum of three year impact			\$39,951
Tax amortization factor			1.12
<b>Calculated fair value of residual customer related intangibles</b>			<b>\$44,745</b>
<b>Calculated fair value of residual customer related intangibles (rounded)</b>			<b>\$45,000</b>
*Note: Derived from other sources			

## FAIR VALUE OF NONCOMPETE AGREEMENTS USING A “WITH AND WITHOUT” MODEL

I am going to provide you with an example here, but I am also going to address this topic further in chapter 17. Valuing a noncompete agreement is commonly accomplished using an income method to demonstrate the economic difference in future operational income *without competition* and *with competition*. A discounted cash flow model is constructed for the length of the term of the noncompete. There is no residual value once the noncompete agreement expires. The projections should reflect the probability of competition, although some valuation analysts prefer to multiply the difference finding by a percentage probability factor (generally, 10 percent to 90 percent, reflecting capacity, desire, and ability to effectively compete) that the competition will occur if the noncompete agreement were not in place. Table 15.8 (on the following page) shows examples of valuing three year noncompete agreement, with an amortization factor (previously determined) added at the end to conclude that the employment agreements carry a fair value of \$76,000.

## FAIR VALUE OF THE ASSEMBLED WORKFORCE

Overall, goodwill is that which is left over from the fair value paid in exchange, after removing the fair value of the tangible assets and the separable intangible assets. We accountants call it the “plug” number. While we typically do not independently recognize human capital assets as separable, most valuation assignments require that we estimate the fair value of the workforce itself as a contributory asset. The assembled workforce component is usually less than the remaining portion of goodwill, which we label as unallocated. Occasionally, the calculation of the workforce value is greater than the residual unallocated portion, suggesting that the buyers may, in fact, have gotten themselves a deal.

<b>TABLE 15.8</b>			
<b>FAIR VALUE CALCULATION OF EMPLOYMENT AND CONFIDENTIALITY AGREEMENTS</b>			
<b>Forecasted Normalized Income Statements of Without Competition</b>			
	<b>1</b>	<b>2</b>	<b>3</b>
Revenue	\$16,000,000	\$19,000,000	\$22,000,000
<i>Growth Percentage</i>		18.75%	15.79%
Cost of Sales at 71.15%	11,384,000	13,518,500	15,653,000
Gross Profit	\$ 4,616,000	\$ 5,481,500	\$ 6,347,000
Operating Expenses at 27.58%	4,412,800	5,240,200	6,067,600
Income from Operations Before Tax	\$ 203,200	\$ 241,300	\$ 279,400
Less: Taxes at 39.5%	(80,264)	(95,314)	(110,363)
<b>Forecasted Operational Income After Tax</b>	<b>\$ 122,936</b>	<b>\$ 145,986</b>	<b>\$ 169,037</b>
<b>Forecasted Normalized Income Statements Operations With Competition</b>			
	<b>1</b>	<b>2</b>	<b>3</b>
Revenue	\$12,000,000	\$14,250,000	\$16,500,075
<i>Growth Percentage</i>		18.75%	15.79%
Cost of Sales at 71.15%	8,538,000	10,138,875	11,739,803
Gross Profit	\$ 3,462,000	\$ 4,111,125	\$ 4,760,272
Operating Expenses at 27.58%	3,309,600	3,930,150	4,550,721
Income from Operations Before Tax	\$ 152,400	\$ 180,975	\$ 209,551
Less: Taxes at 39.5%	(60,198)	(71,485)	(82,773)
<b>Forecasted Operational Income After Tax</b>	<b>\$ 92,202</b>	<b>\$ 109,490</b>	<b>\$ 126,778</b>
<b>Calculation of Differences Between Operational Income Without and With Competition</b>			
	<b>1</b>	<b>2</b>	<b>3</b>
Income Without Competition	\$122,936	\$145,986	\$169,037
Income With Competition	92,202	109,490	126,778
Net Difference in Model Due To Competition	\$ 30,734	\$ 36,496	\$ 42,259
Periods (Mid-Year Convention)	0.50	1.50	2.50
Discount Rate Based on Asset Category	30.00%	30.00%	30.00%
Discount Factor Based on Asset Category	0.8771	0.6747	0.5190
Operational AfterTax Income Difference	\$ 26,957	\$ 24,624	\$ 21,932
Sum of ThreeYear Impact		\$ 73,513	
Tax Amortization Factor		1.04	
<b>Calculated Fair Value of Agreements</b>		<b>\$ 76,454</b>	
<b>Calculated Fair Value of Agreement (Rounded)</b>		<b>\$ 76,000</b>	

To put it simply, in doing an allocation assignment, a valuation analyst is expected to prepare an estimate of the fair value of the assembled workforce. Table 15.9 (on the following page) is an example of one model, showing a variety of costs that market participants would be expected to absorb in order to attract, train, and assume a full productive status. With assumptions regarding fringe benefits, hiring and relocation costs, and training costs, the after tax projected expense to “re-create” the workforce is slightly more than \$480,000. Adjusting for an amortization benefit suggests a value of \$528,000.

**TABLE 15.9**  
**ASSEMBLED WORKFORCE VALUATION**

<b>I. Hiring Costs:</b>									
Employee Classification	Average Annual Salary	Fringe Benefit % of Salary	Average Salary with Benefits	Hiring Costs	Relocation Costs	Total Hiring Cost Per Employee	Number of Employees as of Valuation Date	Total Hiring Cost	Total
Executive staff	\$170,000	24.0%	\$210,800	\$63,240	\$20,000	\$83,240	2	\$166,480	
Key supervisory staff	90,000	24.0%	111,600	33,480		33,480	5	167,400	
Administrative staff	52,000	24.0%	64,480	2,000		2,000	10	20,000	
Support staff	45,000	24.0%	55,800	5,000		5,000	22	110,000	
						Total Hiring	39	\$463,880	
<b>II. Training Costs:</b>									
Employee Classification	Average Salary with Benefits	Percent Effective	Months Until Full Productivity	Inefficiency Training Costs	Direct Training Costs	Total Training Costs Per Employee	Number of Employees as of Valuation Date	Total Training Cost	Total
Executive staff	\$210,800	75%	6	\$15,371	7,685	\$23,056	2	\$ 46,112	
Key supervisory staff	111,600	75%	5	6,975	5,000	11,975	5	59,875	
Administrative staff	64,480	75%	4	3,358	1,679	5,037	10	50,370	
Support staff	55,800	75%	4	2,906	5,000	7,906	22	173,932	
					Total training		39	\$330,289	
					Subtotal			\$794,169	
					Less income tax expense (39.5%)			(313,697)	
					Total			\$480,472	
					<b>Amortization benefit</b>				
					Discount rate				33.10%
					Tax rate				39.5%
					Tax amortization period				15
					Present value of annuity over period				3.43765
					<b>Amortization benefit</b>				47,824
					<b>Fair value of workforce</b>			<b>\$528,296</b>	
					<b>Fair value of workforce (rounded)</b>			<b>\$528,000</b>	

## CONCLUSION

I have tried to provide you with some basics about intangible asset valuations. Keep in mind that this was really basic. If you are going to play in this sandbox, get out a big shovel. This is truly an area of specialty. Although techniques used follow traditional business valuation approaches and methods, application can vary in the models and assumptions. Should you choose to undertake these types of assignments, you will need *much* more training and study beyond this chapter. It is hoped that this will at least get you started.

# CHAPTER 16

## *Estate and Gift Valuations*

### CHAPTER GOALS

In this chapter, I will attempt to explain

- Valuation rules for estate and gift tax purposes.
- Valuing family limited partnerships (and similar entities) for gift tax purposes.
- Court cases that you need to be aware of.
- How to do your job properly.

### INTRODUCTION

As I was writing this chapter for the last edition, President Bush was getting Congress to pass his \$1.3 trillion tax bill that would eliminate the estate tax over the next 10 years. It has since been passed. As we get closer to a new administration, I wonder when it will be revoked. Currently, with tax rates as high as 45 percent, the opportunities for the business valuation analyst are great. If you are going to work in this arena, however, you must know the rules. And there are definitely rules.

Business valuation assignments performed for estate and gift tax purposes are subject to the laws found within the Internal Revenue Code (IRC) and Regulations. This is not optional. It is the law. But as with all laws, there always seem to be interpretations that are questioned. Though it is not my intent to turn this book into a tax treatise, the business valuer needs to be aware of the rules. If you are not an accountant, work with an accountant, a tax attorney, or someone who knows the rules. If you are an accountant, find someone who understands the rules.

Besides the IRC and Regulations, it is also a pretty good idea for you to be familiar with Revenue Rulings, Private Letter Rulings, Tax Court decisions, and all types of other stuff that relate to this area. You also need to know that there are various penalties built into the tax law that penalize taxpayers and sometimes valuation analysts for substantially understating a tax liability. Besides the malpractice issues that I addressed earlier in this book, you certainly do not want to find yourself in a position where you or your firm is laying out money in the form of penalties.

### PENALTIES FOR UNDERVALUATION ON ESTATE AND GIFT TAX RETURNS

If you are going to work in this arena, you should be aware of the potential penalties that you and your client face. IRC Section 6662 provides for penalties against taxpayers for undervaluation of assets on estate and gift tax returns. These penalties are based on the percentage difference between the value reported on the estate or gift tax return and the value finally determined. Your clients are facing the following possible penalties:

<b>Value Per Tax Return as a Percentage of the Final Value</b>	<b>Penalty</b>
More than 65%	0%
More than 40%, but less than 65%	20%
40% or less	40%

So what does this mean? It means that if your client gets whacked with a penalty, you or your insurance carrier may get to write a check. According to the 2006 Pension Protection Act, the substantial and gross valuation penalty tests for valuation understatement for returns filed after August 17, 2006 are applicable when the value of property claimed on an estate or gift tax return is 65 percent or less of the amount determined to be the right amount. A gross valuation misstatement exists when the value of the property is 40 percent or less of the amount determined to be correct. The penalty is based on any additional tax due to an undervaluation exceeding \$5,000.

## PENALTIES AGAINST APPRAISERS

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The 2006 Pension Protection Act went one step further and added a new penalty on any person who prepares a property appraisal where the value results in a substantial or gross (new IRC Sec. 6695A) valuation misstatement. This penalty will cost you the lesser of

- a. the greater of 10 percent of the underpayment; or
- b. 125 percent of the gross income received by the appraiser for the appraisal services.

This penalty is in addition to the existing \$1,000 penalty under IRC Section 6701 that may be assessed against valuation analysts whose valuations result in substantial understatements of tax. To make matters even worse, the law allows the IRS to keep valuation analysts from testifying in any future IRS tax proceedings without assessing a Section 6701 penalty. Valuation analysts may also incur sanctions under Treasury Department Circular No. 230, which governs the right of CPAs and others to practice before the IRS. Now that I have sufficiently scared you, let's discuss valuations for estate and gift tax purposes.

## REVENUE RULING 59-60

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All valuations that are performed for estate and gift tax purposes are subject to Revenue Ruling 59-60. Not only have I discussed this ruling throughout the book, but chapter 13 was devoted solely to it. You also have a copy of it in appendix 6. I am not going to repeat all of that stuff here. Just reread it.

## CHAPTER 14 GUIDELINES

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Chapter 14 of the IRC (Sections 2701–2704) is an important part of the tax law to know if you are doing this type of work. The rules are very complex and confusing. I will try to explain the more important provisions to you as we go along.

## CASE LAW

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Although a valuation analyst should not necessarily perform his or her role by relying on case law, this is an area of practice where having knowledge of the law certainly helps. There is much more case law than this book can include in this chapter. *PPC's Guide to Business Valuations* provides a pretty neat synopsis of many of the important cases in the estate and gift area. The guide discusses (at the very least) the cases found in box 16.1. So, in case you think you are getting close to the end of your reading, you ain't seen nothing yet!

### Box 16.1 Business Valuations Cases to be Familiar With

- *Central Trust Co. v. United States* [305 F.2d 393, 158 Ct. Cl. 504, 10 AFTR 2d 6203, 62-2 USTC P 12092 (Ct. Cl. 1962)]
- *Estate of Mildred Hershede Jung v. Commissioner* [101 TC 412 (1993)]
- *Estate of Joseph Cidulka v. Commissioner* [TC Memo 1996-149 (1996)]
- *Estate of Arthur G. Scanlan v. Commissioner* [TC Memo 1996-331 (1996) and Reconsideration denied, TC Memo 1996-414 (1996)]



**Box 16.1 Business Valuations Cases to be Familiar With**

- *Estate of Thomas A. Fleming v. Commissioner* [TC Memo 1997-484 (1997)]
- *Estate of Artemus D. Davis v. Commissioner* [110 TC530 (1998)]
- *Eisenberg v. Commissioner*. [155 F.3d 50, 82 AFTR 2d 98-5757 (2nd Cir. 1998), acquired 1999-4 I.R.B. 4 (I.R.S. 1999)]
- *Estate of Richard R. Simplot v. Commissioner* [112 TC 130 (1999), and reviewed on other grounds, 249 F.3d 1191, 87 AFTR 2d 2001-2165 (9th Cir. 2001)]
- *Herbert V. Kohler, Jr., et al. v. Commissioner* [TC Memo 2006-152 (2006)]
- *Robert Dallas v. Commissioner* [TC Memo 2006-212 (2006)]
- *Robertson v. U.S.* [97 AFTR 2d 2006-589 (2006)]
- *Michael W. Huber, et ux., et al. v. Commissioner* [TC Memo 2006-96]
- *Estate of Frazier Jelke III, et al. v. Commissioner* [TC Memo 2005-131 (2005)]\*
- *Charles T. McCord, et al. v. Commissioner* [120 TC 358 (2003)]
- *Succession of McCord, Jr. v. Commissioner* [461 F.3d 614, 98 AFTR 2d 2006-6147 (5th Cir. 2006)]
- *Estate of Helen A. Deputy v. Commissioner* [TC Memo 2003-176 (2003)]
- *Peter S. Peracchio v. Commissioner* [TC Memo 2003-280 (2003)]
- *Estate of William G. Adams, Jr. v. Commissioner* [TC Memo 2002-80 (2002)]
- *Donald Janda, et ux. v. Commissioner* [TC Memo 2001-24 (2001)]
- *Estate of Mildred Green, et vir. v. Commissioner* [TC Memo 2003-348 (2003)]
- *Estate of Etta H. Weinberg v. Commissioner* [TC Memo 2000-51 (2000)]
- *Estate of Beatrice Ellen Jones Dunn v. Commissioner* [TC Memo 2000-12 (2000)]
- *Estate of Cyril I. Magnin, et al. v. Commissioner* [TC Memo 2001-31 (2001)]
- *Estate of Paul Mitchell v. Commissioner* [250 F.3d 696, 87 AFTR 2d 2001-2043 (9th Cir. 2001)]
- *Leonard Pipeline Contractors Ltd. v. Commissioner* [142 F.3d 1133, 81 AFTR 2d 98-1664 (9th Cir. 1998)]
- *Johann T. Hess v. Commissioner* [TC Memo 2003-251 (2003)]
- *Estate of Mary D. Maggos, et ux. v. Commissioner* [TC Memo 2000-129 (2000)]
- *Estate of Welch v. Commissioner* [208 F.3d 213, 85 AFTR 2d 2000-1200 (6th Cir. 2000)]
- *Estate of Charles A. Borgatello, et al. v. Commissioner* [TC Memo 2000-264 (2000)]
- *Gross v. Commissioner* [272 F.3d 333, 88 AFTR 2d 2001-6858 (6th Cir. 2001)]
- *Estate of Richie C. Heck v. Commissioner* [TC Memo 2002-34 (2002)]
- *Polack v. Commissioner* [93 AFTR 2d 2004-2094 (8th Cir. 2004)]
- *Okerlund v. United States* [53 Fed. Cl. 341, 90 AFTR 2d 2002-6124 (Ct. Fed. Cl. 2002), motion for new trial denied, 91 AFTR 2d 2003-1134 (Ct. Fed. Cl. 2003), affirmed 365 F.3d 1044, 93 AFTR 2d 2004-1715 (Fed. Cir. 2004)]
- *Estate of James J. Renier, et al. v. Commissioner* [TC Memo 2000-298 (2000)]
- *Estate of George C. Blount, et al. v. Commissioner* [TC Memo 2004-116 (2004)]
- *Estate of George C. Blount v. Commissioner* [96 AFTR 2d 2005-6795 (11th Cir. 2005)]
- *Estate of H. A. True, Jr. v. Commissioner* [TC Memo 2001-167 (2001)]
- *Estate of Joseph H. Lauder v. Commissioner* [TC Memo 1992-736 (1992)]
- *In re Estate of Patricia D. King* [668 N.W.2d 6 (Minn. App. 2003)]
- *Morrissey v. Commissioner* [243 F.3d 1145, 87 AFTR 2d 2001-1250 (9th Cir. 2001)]
- *Hackl v. Commissioner* [118 TC 279 (2002), affirmed 335 F.3d 664, 92 AFTR 2d 2003-5254 (7th Cir. 2003) rehearing denied 335 F.3d 664, 92 AFTR 2d 2003-5254 (7th Cir. 2003)]
- *Estate of Josephine T. Thompson, et al. v. Commissioner* [TC Memo 2004-174 (2004)]
- *Estate of Helen M. Noble, et. al. v. Commissioner* [TC Memo 2005-2 (2005)]
- *In re Irrevocable Living Trust of Lang v. Chemical Bank* [2004 WL 950060 (Mich. App. 2004)]

\*At the time of the writing of this chapter, this case has been appealed to the 11th Circuit and reversed on November 15, 2007, but no citation has been assigned yet.

## THE VALUATION REPORT

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Preparing a business valuation report for estate and gift tax purposes should really be no different from preparing a well written report for other purposes where fair market value is the standard of value. If you follow the guidance that I have tried to give you throughout this book, you should do fine.

Valuations performed for gift tax situations are subject to the *adequate disclosure* rules (see exhibit 16.1 later in this chapter). In fact, if a discount is taken in the valuation report, a box needs to be checked on the gift tax return that effectively says to the IRS “audit me.” In order for the statute of limitations to begin running, a gift tax return must meet the adequate disclosure requirements. These days, one of the most common types of reports is for the valuation of an interest in a family limited partnership.

## THE FAMILY LIMITED PARTNERSHIP REPORT

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Family limited partnerships (FLPs) have grown in popularity as an estate planning tool and a way to depress transfer tax values. Although this discussion refers to family limited partnerships, many of the concepts discussed also apply to family limited liability companies created primarily as asset-holding companies. Business valuation analysts should be aware of the issues involved in valuing FLP interests and how to prepare a report that is less likely to be challenged by the IRS, or, if challenged, one that will more likely allow the challenge to be resolved in favor of the concluded value.

Valuation analysts need to do more than focus on what discounts they can use to reduce the value of an FLP interest. After all, this is usually the main fight with the IRS (see chapter 12 for a discussion on discounts). The FLP agreement and other partnership documents must be thoroughly analyzed before the valuation analyst can begin to render an opinion of value. The final report must at least contain certain information about the assignment—the nature of the interest being valued, the terms of the partnership agreement, and the financial condition of the entity.

This discussion is designed as an overview of the FLP valuation process and the items to consider. It is designed to help you prepare valuation reports more effectively and perhaps minimize the opportunity for the IRS to challenge your opinion of value.

### WHAT IS AN FLP?

Simply stated, an FLP is a nontaxable entity that is created and governed by statute and whose partners (both general and limited) and assignees consist mainly of family members.

It is nontaxable because, as a partnership, it is a pass-through entity. Unlike a corporation, which is subject to corporate-level income tax, a partnership does not pay any income taxes at the entity level. Partners will be liable for income taxes on their proportionate share of any partnership income, whether it is distributed in the form of cash or not.

A limited partnership is created under and governed by the Revised Uniform Limited Partnership Act (RULPA) of the state in which it is formed. Though they are similar in many respects, each state’s Limited Partnership Act contains features that are different (although some states’ acts are the same).

The FLP is also affected by various sections of the IRC, as is the valuation of interests in an FLP.

Even the term *family member* is carefully defined in IRS regulations. Members of the family are defined as the transferor or the transferor’s spouse, the transferor’s or spouse’s lineal descendants, and their spouses. This definition includes adopted children or offspring of the transferor’s children but does not include aunts, uncles, cousins, and the like.

Many of the issues that arise in appraising FLPs become legal interpretations of the partnership agreement, rather than *pure* valuation issues. Although as valuation analysts it is important that we know and understand the issues, it is imperative that we leave the “lawyering” to the lawyers. You have heard me say that over and over again. If there is any doubt in the valuation analyst’s mind regarding the nature of the assignment or the terms of the partnership agreement, the client’s attorney should be the one to explain it to the valuation analyst, not the other way around.

## WHY ARE FLPs ATTRACTIVE?

FLPs are particularly attractive as estate planning tools because, through the creation of an FLP, the following apply:

1. Parents or grandparents have the ability to indirectly transfer interests in family-owned assets without losing control of them.
2. A high degree of protection against creditors can be achieved. This is because a partner's creditor is legally unable to gain access to the assets in the partnership.
3. The assets can be kept in the family, which is an objective of many families. This can be achieved by placing restrictions on the transfer of partnership interests, especially in the event of divorce, bankruptcy, or death of a partner.
4. Problems pertaining to undivided or fractionalized interests when a property is gifted to several individuals can be avoided. This can be especially important in the case of real estate properties.
5. When family-owned assets are placed in a partnership, advantages can arise through economies of scale and diversification.
6. A great deal of flexibility can be achieved through the partnership agreement, which can provide broad investment and business powers. These can be amended as the family's needs change, as long as all partners are in agreement.
7. As mentioned earlier, the partnership is a pass-through entity and does not pay income taxes.
8. The gifting or transfer of an ownership interest in a limited partnership may be made at a lower value than that interest's pro rata share of net asset value. The reason for this is that a limited partnership interest is likely to be both noncontrolling and nonmarketable.

## WHAT EXACTLY IS THE ASSIGNMENT?

As stated early in this book, the valuation analyst should obtain a retainer agreement (and a retainer) from the client, which should spell out the precise nature of the assignment the analyst is going to perform. The importance of having a clear understanding of what the valuation assignment is cannot be overemphasized. It is important that the parameters of the assignment found in box 16.2 become a part of the appraisal report.

### Box 16.2 Valuation Assignment Parameters

1. The name of the client (for instance, the person who engaged the valuation analyst). The client is responsible for identifying the nature of the interest to be appraised.
2. The nature of the interest being appraised (for example, general partner interest, limited partner interest, or assignee interest). It is important to note here that the thing being appraised is not a percentage interest in any or all of the assets owned by the partnership, but rather an interest in the partnership itself.
3. The size of the interest being valued. Size can be represented by a percentage interest amount, the number of units or shares, or even a dollar amount.
4. The valuation date and the purpose for which the valuation is being performed (for instance, whether it is for estate planning [gifting] or estate valuation purposes).
5. The standard of value. The retainer agreement should provide a definition of the standard of value that will be determined in the appraisal. These standards are defined in the following tax regulations:

Estate planning (gifting)—Treasury Regulation 25.2512-1

Estate valuation (after death)—Treasury Regulation 20.2031-1(b)

Both of these sections define the standard of fair market value as follows:

The fair market value (of the property being valued) is the price at which the property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or sell and both having reasonable knowledge of relevant facts.

This definition should appear in the report as well.

## WHAT DOCUMENTS ARE NEEDED TO PREPARE THE APPRAISAL REPORT?

The analyst should obtain the following documents before beginning the assignment:

1. The Agreement of Partnership (or other type of business agreement depending upon the form of the entity), as well as a copy of the Certificate of Limited Partnership that has been filed with the state where the partnership was created. The certificate is an important document because it gives notice of the formation of the limited partnership and the limited liability of the limited partners, and discloses some of the terms of the partnership agreement. Without this document, the possibility exists that the FLP will not be recognized by the IRS.

If the valuation analyst is not familiar with the Limited Partnership Act of the state of formation, he or she should also obtain a copy of it.

2. A list of the assets that were initially contributed to the partnership, as well as documentation of any assets that were contributed after the formation of the FLP.
3. Valuations of real estate and other assets held by the partnership as of the valuation date (for example, market values of marketable securities). If the partnership owns interests in other closely held businesses or partnerships, these interests must be separately appraised before the value of the LP interest can be determined.
4. Financial statements and tax returns for the partnership for a reasonable number of years, or since inception. If it is a new partnership, these will not exist.
5. The general partner's anticipated policies regarding distributions or a Section 754 election. The Section 754 election will be covered later.
6. If the FLP is ongoing, a history of distributions, if any, made to partners.
7. Information such as minutes of meetings of partners or other documents, if they exist, may give the analyst some insight into the intent of the donor at the time of formation of the partnership.

## HOW DOES REVENUE RULING 59-60 HELP?

Revenue Ruling 59-60 provides basic guidelines for appraising shares of closely held corporations. It is also a valuable guide to appraising FLPs. Every valuation report of a family limited partnership interest should closely follow Section 4 of Revenue Ruling 59-60, which enumerates the factors the valuation analyst should consider in his or her valuation.

Most of the information necessary to describe the nature of the FLP and its history can be found in the partnership agreement and the certificate of partnership. This section of the report is often overlooked, as many analysts prefer to concentrate on the valuation calculations and the discounts selected. However, it is important to make a thorough review of the partnership agreement and to include a list of the pertinent aspects of it in the report.

Remember, our assignment is to determine the fair market value of an FLP interest, not the fair market value of the underlying assets. That is what the valuation analyst should be concentrating on in his or her report.

## WHAT IS CHAPTER 14?

Chapter 14 of the IRC was enacted in October 1990 and outlines the special valuation rules that must be adhered to when valuing interests in closely held companies and partnerships. The basic premise behind this section is that when valuing business interests that are to be transferred between family members, the valuation analyst should ignore restrictions that would not exist if the transaction were between unrelated third parties.

This chapter consists of only four sections, three of which actually relate to family limited partnerships. If the partnership does not comply with the provisions of this chapter, the IRS may determine that the partnership does not exist for tax purposes and value the underlying assets directly in calculating the applicable gift or estate tax.

The provisions of the partnership agreement should comply with the sections of Chapter 14; the major items contained in an FLP agreement are listed in box 16.3, with the applicable sections of Chapter 14.

Section 2701 addresses special valuation rules used for lifetime gifts when a junior equity interest (corporate, partnership, or LLC) is transferred from one family member to another and the transferor retains a senior equity interest in the company. In this instance, *senior* and *junior* interests refer to interests that are not equal economically, such as preferred stock versus common stock. They do not refer to *general* or *limited* partners as such, because general and limited partners are often economically the same. Although they have disproportionate liability and management responsibilities, this alone does not make a general partner interest *senior* to a limited partner interest.

For this reason, the special valuation rules contained in IRC Section 2701 do not apply to a gift of a partnership interest where all items of income and loss are shared in the same proportions by all partnership interests. A reading of the partnership agreement will determine whether or not the FLP is a *pro rata* partnership, where the only differences between the general partner interest and the limited partner interest are management rights and the extent of liability exposure.

Section 2703 deals with restrictions placed on the rights of the transferee in the partnership interest. This section provides that the value of any property is to be determined without regard to

1. any option, agreement, or right to acquire or use the property at a price less than fair market value.
2. any restriction on the right to sell or use the property.

These rules do not apply when

1. there is a bona fide business arrangement.
2. it is not a device to transfer the property for full and adequate consideration.
3. its terms are comparable to similar arrangements entered into by persons in arm's-length transactions.

What is the significance of Section 2703? The term *property* in Section 2703 does not mean the assets contributed to the FLP by the partners, because those assets are 100 percent owned by the FLP. Once the assets have been contributed to the FLP, no partner or assignee has a right to receive, possess, or use the assets. What they do have is a right to possess their general and limited partner interests. Since it is the interest in the FLP that is the property for purposes of IRC Section 2703, whether this section applies depends upon the restrictions placed on the rights of the transferees in the partnership interest.

Whether or not Section 2703 applies is for the client or client's attorney to decide, not the valuation analyst. The valuation analyst is retained to determine an opinion of value for a partnership interest (not a partnership asset). At most, the valuation analyst can be alert for provisions in the agreement and contact the client if anything appears questionable.

Under this IRC section, the IRS will argue that the restrictions in the agreement are more onerous than the restrictions would be between two unrelated parties, and as a result, the agreement is not valid. If the IRS wins this argument, then a partnership does not exist, and the actual gift made was the actual underlying assets, rather than an interest in a family limited partnership.

Section 2704 deals with lapsed voting and liquidation rights. Section 2704(a) treats certain lapsed voting or liquidation rights in an FLP as *deemed transfers* that become subject to gift or estate tax. Generally, this IRC section becomes applicable if there is only one general partner and this partner is an individual. Voting rights lapse if at the time of death this general partnership interest becomes a limited partnership interest, and the general partner's rights to liquidate the partnership lapse as a result. The issue becomes how to measure that loss in *rights*.

**Box 16.3****FLP Agreement Provisions with Chapter 14 Compliance**

<u>Provision</u>	<u>Chapter 14 Section</u>
Formation	2703
Purpose	2703
Term	2704(b)
Management	2704(a)
Capital contributions	2703
Allocations of profit and loss	2701
Distributions	2701
Transfer restrictions	2703 and 2704(b)
Dissolution	2703 and 2704(b)

Many experts conclude that the best way to avoid triggering Section 2704(a) is to have a general partner that is a corporation or other entity. In the alternative, an FLP could have more than one general partner if the partners are individuals and there is a provision for succession from one to another should one die. These provisions must be spelled out in the partnership agreement.

Section 2704(b) disallows consideration of certain restrictions (called the *applicable restrictions*) on liquidation rights in valuing the transfer of an interest in a family-controlled entity.

An applicable restriction is any limitation on the ability to liquidate the entity in whole or in part that is more restrictive than the limitations that would apply under state law, if the restriction did not exist in the agreement.

If the liquidation restrictions in an agreement are more restrictive than state law, under Section 2704(b), the valuation analyst should value the interest utilizing state law provisions, rather than the more restrictive rights in the agreement.

There are a number of states that have changed their Limited Partnership Act to state that the provisions of the Partnership Agreement control liquidation restrictions, and therefore, many LPs are formed in these states. For this reason, it is imperative for the valuation analyst to understand the appropriate state law.

## HOW DOES ALL THIS AFFECT THE VALUATION ASSIGNMENT?

Many valuation analysts are concerned with the size of the discounts taken in an FLP valuation, as they believe that this is the biggest concern to the IRS. Although the IRS is concerned with excessive discounts, some of the recent case law has centered on the issue of whether the partnership “truly” exists. The IRS has raised this issue by either attacking the reason for the formation of the partnership or raising Chapter 14 issues, specifically Sections 2703 and 2704.

Remember, if the IRS can win on these issues, then the FLP is not seen as a valid entity, and therefore, the gifts become gifts of the underlying assets directly, rather than partnership interests (in other words, no discounts).

Some of the cases that dealt with these issues are the following:

- *Baine P. Kerr, et ux. v. Commissioner*, 113 TC 449
- *Estate of Albert Strangi v. Commissioner*, 115 TC 35
- *Ina F. Knight v. Commissioner, et vir v. Commissioner*, 115 TC 36
- *Church v. United States*, 85 AFTR 2d 2000-804

This is not intended to be an exhaustive list; it is merely an example of some of the issues that the IRS has brought up on audit that have been decided by the courts. I am also providing only brief synopses of portions of the cases for illustrative purposes. You should read each entire case so that nothing is taken out of context.

## LET'S LOOK AT SOME COURT CASES

### ***Baine P. Kerr, et ux. v. Commissioner*, 113 TC 449**

The IRS contended that the FLP agreement contained restrictions on the liquidation of the partnership that constituted *applicable restrictions* within the meaning of Section 2704(b), and that these restrictions should be disregarded in valuing the transferred interests.

In its decision, the court determined that the agreement was not more restrictive and therefore did not contradict applicable restrictions. The court stated:

We reach this conclusion because Texas law provides for the dissolution and liquidation of a limited partnership pursuant to the occurrence of events specified in the partnership agreement or upon the written consent of all the partners and the restrictions contained in section 10.01 of the partnership agreement are no more restrictive than the limitations that generally would apply to the partnerships under Texas law.

### ***Estate of Albert Strangi v. Commissioner*, 115 TC 35**

The IRS took the position that under the business purpose and economic substance doctrines, the FLP should be disregarded in valuing the assets in the decedent's estate. The estate contended that there were clear and compelling nontax motives for creating the partnership, including the provision of a flexible and efficient means by which to manage and protect the decedent's assets. They also gave the following arguments: “(1) to reduce executor and attorney's fees payable at the death of decedent, (2) to insulate decedent from an anticipated



tort claim and the estate from a will contest, and (3) to provide a joint investment vehicle for management of decedent's assets."

The court was skeptical of the business purposes claimed by the estate and concluded that no active business was conducted by the FLP after its formation. Despite that, the court stated the following:

FLP was validly formed under State law. The formalities were followed, and the proverbial "i's were dotted" and "t's were crossed." The partnership, as a legal matter, changed the relationships between decedent and his heirs and decedent and actual and potential creditors. Regardless of subjective intentions, the partnership had sufficient substance to be recognized for tax purposes. Its existence would not be disregarded by potential purchasers of decedent's assets, and we do not disregard it in this case.

This case bounced back and forth between the Tax Court and the Court of Appeals several times. Although the IRS was not able to convince the courts that this wasn't a valid partnership, the IRS eventually prevailed on a new tactic, pushing the assets back into the estate value under Section 2036.

### ***Ina F. Knight v. Commissioner, et vir v. Commissioner, 115 TC 36***

The IRS contended that the partnership lacked economic substance and failed to qualify as a partnership under federal law. The petitioners contended that their rights and legal relationships and those of their children changed significantly when the partnership was formed, assets were transferred to it, and interests were transferred to the children's trusts, and that the partnership must be recognized for federal gift tax purposes.

The court agreed with the petitioners that the partnership must be recognized for federal gift tax purposes. It stated the following:

State law determines the nature of property rights, and Federal law determines the appropriate tax treatment of those rights.

The parties stipulated that the steps followed in the creation of the partnership satisfied all requirements under Texas law, and that the partnership has been a limited partnership under Texas law since it was created. Thus, the transferred interests are interests in a partnership under Texas law. Petitioners have burdened the partnership with restrictions that apparently are valid and enforceable under Texas law.

### ***Church v. United States, 85 AFTR 2d 2000-804***

The estate was entitled to an estate tax refund based on its expert's valuation of the decedent's family partnership interest. The partnership was valid under law in Texas, where it was formed to preserve the family ranching enterprise, consolidate undivided ranch interests, and raise cattle; the decedent effectively conveyed securities held in a brokerage account to the partnership before death, and the partnership agreement showed her intent to relinquish beneficial interest.

Also, conveyance was not a taxable gift on the partnership's formation; the fact that the securities' value exceeded the decedent's partnership interest did not render the transfer gratuitous where the partnership did not confer financial benefit on any partner. Sections 2036 and 2038 did not apply.

In addition, Section 2703's term *property* did not refer to predeath contributions and statutory language and legislative history showed that the statute did not cover the term or the partnership agreement's sale restrictions, thus reducing the partnership interest's value.

## **SECTION 2036**

This section of the IRC does not directly relate to valuation, but has been an effectively used tool by the IRS in fighting family limited partnerships.

Section 2036 entitled "Transfers with Retained Life Estate" is reproduced below:

#### **TRANSFERS WITH RETAINED LIFE ESTATE**

**2036(a) General Rule.** The value of the gross estate shall include the value of all property to the extent of any interest therein of which the decedent has at any time made a transfer (except in case of a bona fide sale for an adequate and full consideration in money or money's worth), by trust or otherwise, under which he has retained for his life or for any period not ascertainable without reference to his death or for any period which does not in fact end before his death—



**2036(a)(1)** the possession of enjoyment of, or the right to the income from, the property, or  
**2036(a)(2)** the right, either alone or in conjunction with any person, to designate the persons who shall possess or enjoy the property or the income therefrom.

**2036(b) Voting Rights.**

**2036(b)(1) In General.** For purposes of subsection (a)(1), the retention of the right to vote (directly or indirectly) shares of stock of a controlled corporation shall be considered to be a retention of the enjoyment of transferred property.

**2036(b)(2) Controlled Corporation.** For purposes of paragraph (1), a corporation shall be treated as a controlled corporation if, at any time after the transfer of the property and during the 3-year period ending on the date of the decedent's death, the decedent owned (with the application of section 318), or had the right (either alone or in conjunction with any person) to vote, stock possessing a least 20 percent of the total combined voting power of all classes of stock.

**2036(b)(3) Coordination with Section 2035.** For purposes of applying section 2035 with respect to paragraph (1), the relinquishment or cessation of voting rights shall be treated as a transfer of property made by the decedent.

**2036(c) Limitation on Application of General Rule.** This section shall not apply to a transfer made before March 4, 1931; nor to a transfer made after March 3, 1931, and before June 7, 1932, unless the property transferred would have been includible in the decedent's gross estate by reason of the amendatory language of the joint resolution of March 3, 1931 (46 Stat. 1516).

Although the IRS has not won every case on this issue, they have been relatively successful. When the IRS prevails on this issue, the amount of the gift, without discounts, is included in the decedent's estates. Some of the cases that have been decided under Section 2036 are as follows:

- *Estate of Reichardt v. Commission*, 114 TC 144.
- *Estate of Harper v. Commissioner*, TC Memo 2002-121.
- *Kimbell v. U.S.*, 2003 WL 138081, Doc 2003 - 2946, 2003 TNT 22-12 (N.D.TX. 2003). Vacated and remanded by 5th Circuit Court of Appeals (No. 03-10529).
- *Estate of Strangi v. Commissioner*, 115 TC 478 (2000), affirmed in part and revised in part 293 F. 2D 279 (5<sup>th</sup> Cir. 2002), remand TC Memo 2003-145.
- *Estate of Stone v. Commission*, TC Memo 2003-309.

This is not an all-inclusive list of the Section 2036 cases that have been ruled on in the last few years, but they do demonstrate the issues that the service is raising in this area. Section 2036 is a legal and tax argument, not a valuation issue. However, because many of us advise clients on these issues or work with attorneys in setting up or maintaining FLPs, box 16.4 provides some key things to keep in mind.<sup>1</sup>

### Box 16.4 Section 2036 Considerations

1. Select FLP Assets Carefully.
  - a. Do not transfer a personal residence to a FLP.
  - b. To avoid the appearance of an *implied agreement*, do not transfer substantially all of the decedent's assets to the FLP. Make sure the decedent retains, OUTSIDE of the FLP and in the client's own name, sufficient assets to meet his or her own personal needs.
  - c. Transfer business assets to a FLP. A closely held business makes a great asset to contribute to a FLP. The active involvement of the FLP in a legitimate business activity may be the best way to avoid inclusion under Section 2036.

<sup>1</sup> Adapted from "A Practical Approach to FLPs: It's Not All Gloom and Doom," a presentation made by David Aughtry Esq. at the 2004 AICPA National Business Valuation Conference. Copyright 2008 by David D. Aughtry. Used with Permission.

**Box 16.4 Section 2036 Considerations**

2. Avoid Certain Patterns of Distributions.
  - a. Avoid timing distributions to coincide with personal expenditures. It makes the FLP look like the decedent's personal pocketbook.
  - b. If possible, do not make distributions and allow the FLP to accumulate its income.
  - c. If distributions are necessary, have the FLP agreement provide for distributions at the same time each period; for example, quarterly distributions can be made. Another option is to determine distributions on the basis of the profitability of the FLP's assets.
  - d. When distributions are made, make sure they are proportionate to the interest owned by the partners.
  - e. Always keep detailed records of distributions—approval process used, reasons, and so on.
3. Avoid Giving the Client "Control" Over the Contributed Assets.
  - a. Avoid placing the client in a position where he or she has control over the partnership distributions.
  - b. Do not make the client general partner or allow the client to have enough power to remove the general partner and place himself or herself or another person in the role of general partner.
  - c. Avoid placing the client in a position where he or she can dissolve the FLP.
  - d. Avoid giving the client's attorney-in-fact management responsibilities.
  - e. Do not waive general partner's fiduciary duties. Do NOT provide that the general partner will be relieved of normal fiduciary responsibilities.
  - f. Consider hiring an unrelated party to handle the day to day management of the FLP and the general partner entity. This also supports the legitimate business purposes of the FLP.
4. Structure FLP to Include Other Interest-Holders.
  - a. If possible, have other family members contribute property to FLP to enhance the bona fide status of the FLP. This supports the FLP's legitimate business purpose.
  - b. Include unrelated interest-holders. The inclusion of unrelated interest-holders may help prevent a court from disregarding the general partner's fiduciary duties.
  - c. Always involve other partners and general partner entity owners in negotiation and implementation process. Documenting the involvement of the other interest-holders may help establish the applicability of the bona fide sale exception to Section 2036.
5. Observe Formalities.
  - a. Observe all the formalities. Don't just rely on accounting entries. Avoid accruing certain payables; leave a paper trail.
  - b. Get the books made promptly after the FLP is created.
  - c. Open the FLP checking account promptly after FLP formation.
  - d. Retitle assets in FLP's name promptly.
6. Don't Treat an FLP Like a Testamentary Arrangement.
 

Be aware and cautious of setting up a FLP with a widow or widower who is on their death bed. This could be problematic because there would only be limited post-transfer history and it creates the impression that the transaction is testamentary in nature.

**MORE COURT CASES**

Court cases need to be reviewed on a pretty regular basis. I am providing you with another list of court cases from *PPC's Guide to Business Valuations* (box 16.5), compiled from the chapter on Family Limited Partnerships. Even this list, however, should not be used by itself because there may be newer cases that you need to consider when you are doing your job!

**Box 16.5 Court Cases Involving FLPs**

- *Estate of Lillie Rosen, et al. v. Commissioner* [TC Memo 2006-115 (2006)]
- *Korby v. Commissioner* [98 AFTR 2d 2006-8115 (8th Cir. 2006)]
- *In the Matter of the Estate of Norman B. Hjersted* [135 P.3d 202, 35 Kan. App. 2d 778 (Kan. App. 2006)]
- *Estate of Virginia A. Bigelow, et al. v. Commissioner* [TC Memo 2005-65 (2005)]
- *Estate of Austin Korby, et al. v. Commissioner* [TC Memo 2005-103 (2005)]
- *Estate of Ida, et al., v. Commissioner* [TC Memo 2004-39 (2004)]
- *Estate of Abraham v. Commissioner* [408 F.3d, 95 AFTR 2d 2005-2591 (1st Cir. 2005)]
- *Estate of Albert Strangi v. Commissioner* [115 TC 478 (2000)]
- *Gulig (Estate of Strangi) v. Commissioner* [293 F.3d 279, 89 AFTR 2d 2002-2977 (5th Cir. 2002)]
- *Estate of Albert Strangi, et al. v. Commissioner* [TC Memo 2003-145 (2003)]
- *Strangi v. Commissioner* [96 AFTR 2d 2005-5230 (5th Cir. 2005)]
- *Estate of Theodore R. Thompson v. Commissioner* [TC Memo 2002-246 (2002)]
- *Estate of Morten B. Harper v. Commissioner* [TC Memo 2002-121 (2002)]
- *Reichardt v. Commissioner* [114 TC 144 (2000)]
- *Estate of Dorothy Morganson Schauerhamer v. Commissioner* [TC Memo 1997-242 (1997)]
- *Rayford L. Keller, et al. v. United States* [96 AFTR 2d 2005-6736 (S.D. Tex. 2005)]
- *Kimbell v. United States* [244 F. Supp. 2d 700, 200391 AFTR 2d 2003-585 (DC TX 2003), vacated and removed, 93 AFTR 2d 2004-2400 (5th Cir. 2004)]
- *Wheeler v. United States* [116 F.3d 749, 80 AFTR 2d 97-5075 (5th Cir. 1997)]
- *Estate of Eugene E. Stone, III, et al. v. Commissioner* [TC Memo 2003-309 (2003)]
- *J.C. Sheperd v. Commissioner* [115 TC 376 (2000)]
- *Sidney E. Smith III, et al. v. U.S.* [94 AFTR 2d 2004-5283 (W.D. Pa. 2004)]
- *Sidney E. Smith III, et al. v. United States* [96 AFTR 2d 2005-6549 (W.D. Pa. 2005)]
- *Estate of Morten B. Harper v. Commissioner* [TC Memo 2000-202 (2000)]
- *Charles T. McCord, Jr., et ux. v. Commissioner* [120 TC 358 (2003)]
- *Estate of W.W. Jones II v. Commissioner* [116 TC 121 (2001)]
- *Estate of Elma M. Dailey, et al. v. Commissioner* [TC Memo 2001-263 (2001)]
- *Ina F. Knight v. Commissioner* [115 TC 506 (2000)]
- *Estate of Etta H. Weinberg v. Commissioner* [TC Memo 2000-51 (2000)]
- *Estate of Charles Porter Schutt, et al. v. Commissioner* [TC Memo 2005-126 (2005)]
- *Estate of Wayne C. Bongard, et al. v. Commissioner* [124 IC 95 (2005)]
- *Church v. United States* [85 AFTR 2d 2000-804 (2000)]
- *Church v. United States*, 268 F.3d 1063, 88 AFTR 2d 2001-5352 (5th Cir.2001)]

And the list goes on and on and on and on . . .

**THINGS TO CONSIDER IN THE APPRAISAL PROCESS**

The basic characteristics of the transferred interest in the FLP, combined with specific provisions in the FLP agreement and state law, form the foundation for the valuation adjustments used in arriving at the fair market value of the transferred interest in the FLP. I have included some of the factors to be considered in determining appropriate valuation adjustments in box 16.6.

**Box 16.6 Factors to Consider Impacting Valuation****Factors to be considered that are found in the partnership agreement**

- A provision (term-of-years provision) in the partnership agreement that the partnership shall continue to exist for a definite term of years, unless it is dissolved or liquidated prior to this date

**Box 16.6 Factors to Consider Impacting Valuation**

- No guarantee by the managing general partner or general partners of the return of any partner's capital contributions, nor any allocations of profits or losses, nor any distributions of distributable cash (not even enough to cover the annual taxes of the partners)
- Approval rights of limited partners required for certain major decisions; otherwise limited partners and assignees are excluded from participation in management
- How the election of new managing general partners is accomplished
- A provision that distances the limited partners and assignees from the assets of the FLP
- The right of the managing general partner(s) or general partner(s) to determine distributable cash
- Capital call provision obligating partners and assignees
- Limitations on the voluntary and involuntary transferability of general partner, limited partner, and assignee interests
- The presence of rights of first refusal
- Consent of all partners required for a transferee or assignee of an interest in the partnership to become a substituted limited partner
- Whether the managing general partners or general partners are required to make an IRC Section 754 election
- Limitations on the *right* of the general partner to withdraw from the partnership prior to the expiration of its stated term and provision that, should the general partner exercise his or her power to withdraw early, his or her general partner interest shall become a limited partner interest and he or she may also be subject to damages for breach
- Limitations on the right of a limited partner and assignee to withdraw from the partnership prior to the expiration of its stated term
- Provisions for dissolution of the partnership mirroring state law

**Factors to be considered but may not be found in the partnership agreement**

- The reputation, integrity, and perceived competence of the partnership management and general partner(s)
- The number of investors in the partnership
- The type of assets owned by the partnership
- Whether or not the assets of the partnership are well diversified
- The amount of financial leverage inherent in the partnership's capital structure
- The caliber of the information flow from the partnership and the general partner(s)
- The current and historical amount of cash actually distributed to partners and assignees
- Underlying cash flow coverage of yearly distributions made to partners and assignees
- The size of the interest
- The universe of interest buyers
- The *default rules* under state law

**WHAT ABOUT METHODOLOGY?**

What is the best approach for valuing an FLP interest? Which methods can and should be used? Section 4 of Revenue Ruling 59-60 states:

- (a) ... in general, the appraiser will accord primary consideration to earnings when valuing stocks of companies which sell products or services to the public; conversely, in the investment or holding type of company, the appraiser may accord the greatest weight to the assets underlying the security to be valued.
- (b) The value of the stock of a closely held investment or real estate holding company, whether or not family owned, is closely related to the value of the assets underlying the stock. For companies of this type the appraiser should determine the fair market values of the assets of the company. Operating expenses of such a company and the cost of liquidating it, if any, merit consideration when appraising the relative values of the stock and the underlying assets. The market values of the underlying assets give due weight to potential earnings and dividends of the particular items of property underlying the stock, capitalized at rates deemed proper by the investing public at the date of appraisal. A current appraisal by the investing public should be superior to the retrospective opinion of an individual. For these reasons, adjusted net worth should be accorded greater weight in valuing the stock of a closely held investment or real estate holding company, whether or not family owned, than any of the other customary yardsticks of appraisal, such as earnings and dividend paying capacity.

This seems to imply that some type of asset based approach would be the most appropriate and, indeed, the only approach to appraising an FLP interest. Whereas an asset based approach might be a frequently used approach to valuing such an interest, it is by no means the only one. Often, an income approach may be used as well. The approach to be used may be determined based on the underlying assets of the FLP or whether or not there is a history of distributions to the partners and how extensive and consistent the distributions were. Depending on the assets held by the partnership, a market approach could also be utilized. Depending on the circumstances of the case, more than one method may be appropriate.

In *Estate of Etta H. Weinberg, et al. v. Commissioner* (TC Memo 2000-51), the court accepted both an income approach and an asset based approach for determining the value of the decedent's minority interest in a limited partnership that owned and operated an apartment complex. The court found that the taxpayer's use of the net asset value method under the asset based approach was warranted because the property would retain most of its inherent value regardless of rental income production. Furthermore, the court found that the capitalization of the three-year average of distributions under the income approach was also appropriate. The findings of the court illustrate that the reliance on one approach (particularly the asset based approach) for the valuation of FLPs is not always sufficient or relevant.

In deciding on the methodology to apply to the valuation of partnership interests, the following applies:

When valuation consultants use an asset based approach to value an FLP interest, the restrictions in the partnership agreement are often the sole justification for the amount of the discounts. In these cases, the IRS attempts to disregard the restrictions for valuation purposes by demonstrating that the terms of the partnership agreement are onerous and not comparable to arm's-length transactions. If the restrictions are disregarded, the IRS then argues to invalidate the partnership agreement for valuation purposes, resulting in a significant increase in the value of the limited partnership interest.

While this rationale has not been proven in tax court, the IRS has used it to successfully negotiate with taxpayers for an increase in the amount of gift and estate taxes that would have otherwise been paid. If the valuation is determined using the income and market approaches and does not rely solely on the restrictions in the partnership agreement, it is more difficult for the IRS to dispute the valuation.<sup>2</sup>

## Asset Based Approach

Obtain fair market value of all assets and liabilities on the balance sheet and apply appropriate discounts (for lack of control and marketability).

## Income Approach

Determine cash flow available to partners and capitalize or discount as appropriate.<sup>3</sup> If a sale of the underlying assets is contemplated, the sales price might be the applicable terminal value. Apply discount for lack of marketability in most cases, (no discount for lack of control necessary as cash flow capitalized or discounted is the amount available to the minority owner and, therefore, the result is a minority value).

## Market Approach

Determine valuation multiples by looking for comparable publicly traded interests. The appropriate multiple could be price to dividends, adjusted for the risks associated with your specific valuation assignment.<sup>4</sup> Since this data is based on dividends or distributions to the minority interests, the result is a minority value. Therefore, only a discount for lack of marketability needs to be applied.

## VALUATION ADJUSTMENTS

Valuation adjustments are supposed to reflect the lack of control inherent in limited partnership interests and the lack of marketability any type of closely held partnership interest endures. These are two separate issues that

<sup>2</sup> Jay E. Fishman et. al., *PPC's Guide to Business Valuations*, 17th ed. (Fort Worth, Tex: Thomson Practitioners Publishing Company, 2007), 14-14.

<sup>3</sup> Sources of rates of return include *The Wall Street Journal*, Morningstar, and the National Association of Real Estate Investment Trusts (NAREIT).

<sup>4</sup> Sources for comparable (guideline) data are Closed End Mutual Funds (*The Wall Street Journal* and Morningstar) and *Direct Investment Spectrum* published by Partnership Profiles Inc.).

usually result in two separate adjustments or discounts. The courts recognize the necessity for these discounts but often disagree about how much of a discount should be allowed.

Fair market value is determined by the nature of the interest transferred. Unless the partners agree to admit the transferred interest as a partner, it is an *assignee interest*. Therefore, the hypothetical willing buyer would consider as significant whether or not the other partners would admit him or her as a partner with all the rights that go with being a partner.

An assignee interest has only an economic interest in the partnership. That is, he or she has a right to receive distributions, if any, and a right to distributions on liquidation. An assignee interest has fewer rights than a limited partner.

A limited partner, like a minority shareholder, does not have the ability to “get at” the partnership assets to either manage them or dispose of them. A limited partner may have little or no say in partnership management issues. And, like a minority shareholder, a limited partner does not control distributions. These are all prerogatives of management or, in the case of the limited partnership, the general partner or the general partner who has been designated as the managing partner.

The hypothetical willing buyer most likely would not pay a liquidation price (pro rata of the underlying assets) for a limited partner or assignee interest in a limited partnership. What a willing buyer would pay would be something less than liquidation value in order to receive a return on his or her investment. This is the basis for valuation adjustments or discounts.

The analyst must read the partnership agreement carefully to determine what the rights and duties of both types of partners are. The voting rights of the limited partners should be determined. These are the types of things that will contribute to the size of the discount for lack of control.

## Discount for Lack of Control

Although I provided you with some of this stuff in chapter 12, it is important enough to repeat. The types of assets owned by the partnership must be considered when finding a starting point for this discount. As previously discussed, the valuation analyst may not need a discount for lack of control if he or she utilizes an income or market approach for this type of assignment. Although an FLP could hold almost any type of asset, most FLPs own either marketable securities, real estate, or some combination of both.

## Marketable Securities

A logical reference point when valuing such an FLP is a closed-end investment fund. It is best to use closed-end investment funds that hold publicly traded securities that are similar to the securities held by the FLP, such as domestic stocks, foreign stocks, speciality funds, corporate bonds, municipal bonds, or government bonds. There are many other types of funds.

Typically, these funds trade at discounts to their net asset values (NAVs). Statistical efforts to determine a definitive explanation for these discounts have failed to reveal a reason for the discounts. In any event, the discounts (and premiums) observed in the marketplace serve as a proxy for the lack of control discount. The reason that they serve as a proxy is that holders of closed end funds have the same lack of control over the underlying assets that a limited partner in an FLP has. It is presumed that these discounts represent the market's decrease in value for not having access to the assets and not having any control over them.

Whether the valuation analyst adjusts these discounts before applying them to his or her FLP interest is a question of specific facts and circumstances of your particular valuation. If you believe that the interest you are appraising has less control, then you might increase the discount, and vice versa. Another issue relates to the similarities of the portfolios. The valuation analyst might believe that his or her portfolio would trade at a higher or lower discount. Whatever position the valuation analyst takes, the discussion should include all of the reasoning behind the adjustments. However, there is at least one Tax Court case that frowned on changing the size of the discount because there was nothing available to support the adjustment.<sup>5</sup>

This discount only pertains to the issue of lack of control. It has nothing to do with marketability factors. The perceived riskiness of any individual security in the FLP's portfolio will be reflected in the market value of that

<sup>5</sup> See *Peter S. Peracchio v. Commissioner*, TC Memo 2003-280.



security. Any adjustments the analyst might be tempted to make because the partnership interest is not as easily traded as a share in a closed-end mutual fund should be avoided. That is a different discount.

There are several factors (box 16.7) that might be considered in making adjustments to the starting point for the discount for lack of control. Remember that adjustments should be reasonable and reflect the facts of the particular FLP interests.

### Box 16.7 Discount for Lack of Control Adjustment Considerations

**Professional management.** Many FLPs do not have professional management, while closed-end funds do. This would drive the discount higher.

**Regulation.** Closed-end funds are regulated by the SEC; the FLP investor enjoys no such protection.

**Diversification and size.** The FLP portfolio may not have the same level of diversification as a closed-end fund. One can look at specialized funds that invest in one industry as a comparison. FLPs are often very tiny compared to closed-end funds. This might increase the discount.

**Investment objective.** An FLP portfolio may reflect no defined investment policy or objectives. This may be a lack of professional management.

**Quality.** Speculative versus investment grade. Recall, however, that the security's market price should reflect the market's opinion about its overall quality. Avoid double counting in the discount.

**Performance.** If the FLP has been in existence for a while, its total return might be compared with that of various similar closed-end funds.

**Average maturity.** For fixed income portfolios, average maturity of the bonds will affect their market values. Again, this factor should be addressed in the price of the security.

## Real Estate

Very often, an FLP will hold one or more pieces of real property. These might range from the family home to vacation property, vacant land, a farm, or some income producing real property, such as apartments, retail, or office space. The analyst should review these assets carefully in order to determine the nature of each, as this will affect the selection of discounts.

A starting point for determining lack of control discounts for FLPs owning real estate would be real estate limited partnerships (RELPs) and real estate investment trusts (REITs). These partnerships have been in existence for a number of years and a body of data has been accumulated on many aspects of them. A fairly liquid secondary market for RELPs exists. It is nowhere near as liquid as a stock exchange, but enough transactions take place, that there is good data on the discounts at which these securities trade to their NAVs.

Data on this market has been gathered by Partnership Profiles Inc. since 1990. Partnership Profiles issues a bimonthly publication entitled *Direct Investment Spectrum*, which offers general commentary about the secondary market for RELPs and REITs. Operating data for five years are provided where available, including information on cost of properties owned, percentage of leverage, gross revenues, net income, cash flow, working capital, and a history of distributions to partners.

The May/June issue of *Direct Investment Spectrum* contains the results of their annual study of market discounts from NAVs. This issue can give the analyst valuable information concerning a starting point for a discount for lack of control for the FLP interest. The company also makes its data available through its Minority Interest Database, which is available by subscription at [www.partnershipprofiles.com](http://www.partnershipprofiles.com). The factors outlined in box 16.8 (on the following page) can influence the price of a RELP in the secondary market. These factors can be considered by the analyst in determining a value for the FLP interest.

According to Partnership Profiles, Inc., the discount derived using this data is primarily a discount for lack of control, but also includes some discount for lack of marketability. Be careful not to double count!



Whether or not an FLP has a history of making distributions is an important consideration in determining the discount. Generally, partnerships that make distributions trade at smaller discounts to their NAVs, all other things being equal. The amount of debt is important as well. If the appraisal FLP has no debt, it should be compared to partnerships that have little or no debt as well.

Consider as many comparable partnerships from this study as possible. Courts have maintained that more comparables are better than fewer, and certainly better than only one.

As with a discount obtained using closed end funds, this discount for real estate limited partnerships is also a starting point. It may be adjusted—either upward or downward—by factors which differentiate the appraisal FLP from the comparable real estate limited partnership. These are similar to the ones enumerated under the marketable securities section.

### Box 16.8 RELP Factors for Valuation Consideration

1. The type of real estate assets owned by the partnership
2. The amount of financial leverage inherent in the partnership's capital structure
3. Underlying cash flow coverage of yearly distributions made to partners
4. The caliber of the information flow from the partnership and the general partner
5. Whether or not the assets of the partnership are well diversified
6. The reputation, integrity, and perceived competence of the management and general partner
7. Liquidity factors such as: how often a partnership interest trades, the number of investors in the partnership, the time period until liquidation, the universe of interested buyers, whether the partnership is publicly or privately syndicated, and the presence of rights of first refusal

## Discount for Lack of Marketability

An additional adjustment is often made to account for the fact that there is no secondary market for FLP interests. These interests lack marketability; that is, they cannot be liquidated or converted to cash quickly. If one owns shares of a publicly traded corporation, one may call a broker, sell the shares, and have the cash proceeds within a few business days. Not so with FLP interests, and this is the basis for the discount for lack of marketability (DLOM).

In addition to the lack of a secondary market for FLP interests, certain provisions are often written into FLP agreements restricting the transfer of interests, especially to individuals or entities outside the family circle. These restrictions create an additional lack of marketability factor. Some of them include the following:

- With some exceptions, a general partner, limited partner, or an assignee may not transfer all or any part of his or her interest without the prior written consent of the general partners, which consent may be given or withheld at the discretion of the general partners.
- A transferee of an interest in an FLP shall only be entitled to the rights of an assignee unless the consent of all general partners and a majority in interest of the limited partners is given to make the transferee a substitute limited partner.
- No partner or assignee shall have the right to withdraw from the FLP prior to its dissolution and liquidation.
- No partner or assignee may withdraw or reduce his or her capital contribution or capital account without the consent of the general partner.

## Other Provisions Affecting Marketability

In addition to provisions in the agreement that restrict transfer, a history of little or no dividends or distributions from the FLP to the partners is a factor that affects marketability. A willing buyer might be more inclined to ignore restrictions on transfer of his or her interest in exchange for a stream of cash benefits. However, little or no distribution history is common with FLPs, which often retain income and gains in order to fulfill the long-term investment goals of the partnership.

Another factor that might affect the marketability of an FLP interest is the *754 Election*. This is an election that the partnership *might* make under IRC Section 754, which provides that the partnership may elect to adjust the inside basis of the partnership's underlying assets. In other words, the partnership can adjust its internal books to show that a new partner paid a higher price for assets that are worth more at the time of the purchase (transfer). This election would not affect the existing partners, but it would have positive tax consequences for a new partner.

If there is nothing in the agreement that addresses the 754 election, it does not mean that the partnership cannot make the election. It still can. However, a willing buyer might wish to have assurance that such an election will be made. This is especially critical if the appraised fair market value of the underlying assets of the partnership have increased in value over their original basis. Since there is considerable record keeping involved once this election is made, an FLP may be reluctant to make the election. However, there is at least one Tax Court case<sup>6</sup> that expressed skepticism when the valuation analyst increased the discount because there was nothing in the agreement guaranteeing that the election would be made. The judge stated that he did not believe that a transaction would take place without the guarantee of a 754 election. However, I've seen many partnership tax returns where a transfer of an interest takes place without a corresponding election!

When valuing a general partner interest, some consideration may be given to an additional marketability factor reflecting the liability exposure assumed by the general partner and that under many states' partnership statutes, a majority of the limited partners may remove a general partner that assigns all of the general partner's interest in an FLP to a third party. Here, the analyst must read the partnership agreement carefully to determine under what circumstances a general partner interest may be transferred or whether, after withdrawal of a general partner, that general partner interest becomes a limited partner interest. In this case, the DLOM might be increased.

An FLP can require additional capital from the partners in order to meet operating expenses and have extra capital for partnership requirements. This type of provision is not included in every FLP agreement, but its presence may warrant an additional lack of marketability factor. Capital calls might require that an interest holder remain liquid in order to meet them, rather than place funds in a higher yielding but less liquid investment. A willing buyer would give this additional liability exposure and potential loss of a more favorable investment rate of interest consideration in determining value and so does the business appraiser when valuing the interest in the FLP.

### Sources of Marketability Discounts

The sources for discounts for lack of marketability for FLP assignments are the same as for all valuation assignments, restricted stock studies, and pre-IPO transactions. The valuation analyst starts with these studies and then needs to address the facts and circumstances of the specific valuation assignment to determine the adjustments to the benchmark discount that will be utilized in the assignment at hand. There are several lists of factors to consider that have been published. The first list found in box 16.9 comes from *PPC's Guide to Business Valuations* (page 14-37).

The second list comes from an article published by Robert E. Moroney entitled, "Why 25% Discount for Nonmarketability in One Valuation, 100% in Another?" I gave you this stuff in chapter 12.

#### Box 16.9 Marketability Discount Factors

**Some of the factors that would cause an interest to trade at a low marketability discount include the following:**

- Minimal volatility in the value of the underlying assets
- Above average expectations for future yield
- A proven and stabilized history of income
- Certainty of distributions or expectation of capital appreciation
- Limited time period on restriction of ability to sell the interest
- Favorable outlook for future growth of the entity

**Factors that would cause an interest to trade at a higher discount include the following:**

- High degree of volatility in the value of the underlying assets
- Questionable ability to generate a satisfactory return on assets
- Inability to generate sufficient earnings for distributions or to support future growth in operations
- Small size in relation to other investments and lack of diversification
- Involvement in industries or activities viewed unfavorably by the investing public

<sup>6</sup> See *Estate of W.W. Jones II v. Commissioner*, 116 TC 121.

## Other Potential Adjustments

There are several other adjustments that may be included in determining a final value. Some of these adjustments may apply to the value of the underlying assets, rather than to the value of an FLP interest.

### Fractional Interest Adjustment

The fair market value of an undivided ownership interest in real property is worth something less than the percentage of ownership multiplied by the fair market value of the real property as a whole. Fractional interest adjustments should not be limited to undivided interests in real property, but should be considered any time a fractional interest is held in any type of property. Some of the factors considered by the willing buyer at arriving at a fractional interest adjustment are the following:

1. Lack of control associated with a minority interest in the property
2. Lack of marketability of a fractional interest
3. Procedural burdens, possible delays, and costs involved in severance proceedings
4. Lack of certainty about what portion of the property would be awarded to each party upon severance
5. The nature of the property
6. The difficulty of obtaining mortgage financing for the purchase of a fractional interest
7. Declining economic conditions
8. Loss of a major tenant

Most real estate appraisers will not apply these fractional interest discounts. However, the valuation analyst should check the real estate appraisal, if there is one, to see if this has already been done, in order to avoid double-discounting.

### Portfolio Adjustment

The basis for a portfolio adjustment is an FLP with a nondiversified portfolio of marketable securities. In applying a willing buyer-willing seller test, the valuation analyst must decide if a willing buyer might not be interested in a portfolio with a specific asset mix, rather than a diversified portfolio. A portfolio containing one or two holdings might be considered more risky than one that was well diversified. See *Estate of Piper v. Commissioner*, 72 TC 1062 (Sept. 13, 1979).

### Restricted Securities Adjustment

Restricted securities are those that are acquired from an issuer in a transaction exempt from registration requirements of federal and state securities laws (known as *private placements*). There are also restrictions imposed by the Securities and Exchange Commission (SEC) on resales of these restricted securities. Several court cases have upheld additional discounts to account for restricted securities, but if the price of the security already reflects such a discount, it should not be taken twice.

### Blockage Adjustment

This adjustment accounts for the depressive effect of suddenly placing a large block of stock on the market. This adjustment is expressly recognized by Treasury Regulation Sections 20.2031-2(e) and 25.2512-2(e). Adjustments of this type are limited to blocks of publicly traded stock. It is helpful to fully document trading and volume activity in a stock for a period of time prior to the valuation date in order to justify such an adjustment.

### Market Absorption Adjustment

This is an expansion of the blockage adjustment to take into account other assets besides stock, such as real estate, works of art, sheet music, manuscripts, books, animal mounts, and animal trophies. The basis of this adjustment reflects the lack of time within which to make an orderly disposition of these types of assets. It is possible that the sale of all of the property at once or within a short space of time might result in an abrupt increase in supply which, with no change in demand, might reduce the price the properties might bring. The analyst should consider the number and type of asset being considered and whether or not such an adjustment has been included in any professional appraisal of these assets.

## Adjustment for Built-In Capital Gains Tax

Under the willing buyer-willing seller test, an adjustment may be made for the fact that the underlying assets may now have a market value greater than book value and that there may be a built-in capital gain with respect to those assets. If so, a willing buyer might become responsible for capital gains tax when the assets are sold. A hypothetical willing buyer would take this into consideration when evaluating an FLP interest. This issue is also related to the Section 754 election.

## Adjustment to Present Value

This type of adjustment was permitted in valuing an FLP's underlying assets that were the winnings from a lottery ticket, which would be paid to the FLP over a period of time. The adjustment would not necessarily be applied to the FLP interest itself.

## THE FLP WRITTEN REPORT

Now that you have been presented with issues to consider, how do you go about presenting these findings in the report. One useful way is to set up your report following the eight factors of Revenue Ruling 59-60. Remember, the ultimate user of your report is the IRS. By laying out your report in the order of the eight factors, you are showing the service that you are considering each of the factors that they have laid out in their ruling. In addition, you should include sections relating to capitalization and discount rates, if appropriate, as well as discounts and premiums.

You might also want to consider following the IRS's adequate disclosure rules as laid out in Regulation Section 301.6501. These have been included as exhibit 16.1. Although these regulations specifically relate to gifts, including the same information in a report for estate tax purposes will aid you in preparing a well-supported report.

### EXHIBIT 16.1

#### IRS ADEQUATE DISCLOSURE RULES

**REG §301.6501(c)-1. Exceptions to general period of limitations on assessment and collection.**

**Caution:** The Treasury has not yet amended Reg. §301.6501(c)-1 to reflect changes made by PL 105-34.

**301.6501(c)-1(a) False return.** In the case of a false or fraudulent return with intent to evade any tax, the tax may be assessed, or a proceeding in court for the collection of such tax may be begun without assessment, at any time after such false or fraudulent return is filed.

**301.6501(c)-1(b) Willful attempt to evade tax.** In the case of a willful attempt in any manner to defeat or evade any tax imposed by the Code (other than a tax imposed by subtitle A or B, relating to income, estate, or gift taxes), the tax may be assessed, or a proceeding in court for the collection of such tax may be begun without assessment, at any time.

**301.6501(c)-1(c) No return.** In the case of a failure to file a return, the tax may be assessed, or a proceeding in court for the collection of such tax may be begun without assessment, at any time after the date prescribed for filing the return. For special rules relating to filing a return for Chapter 42 and similar taxes, see §301.6501(n)-1, 301.6501(n)-2, and 301.6501(n)-3.

**301.6501(c)-1(d) Extension by agreement.** The time prescribed by section 6501 for the assessment of any tax (other than the estate tax imposed by Chapter 11 of the Code) may, prior to the expiration of such time, be extended for any period of time agreed upon in writing by the taxpayer and the district director or an assistant regional commissioner. The extension shall become effective when the agreement has been executed by both parties. The period agreed upon may be extended by subsequent agreements in writing made before the expiration of the period previously agreed upon.

**301.6501(c)-1(e) Gifts subject to Chapter 14 of the Internal Revenue Code not adequately disclosed on the return.**

**301.6501(c)-1(e)(1) In general.** If any transfer of property subject to the special valuation rules of section 2701 or section 2702, or if the occurrence of any taxable event described in section §25.2701-4 of this Chapter, is not adequately shown on a return of tax imposed by Chapter 12 of subtitle B of the Internal Revenue Code (without regard to section 2503(b)), any tax imposed by Chapter 12 of subtitle B of the Code on the transfer or resulting from the taxable event

**EXHIBIT 16.1**

may be assessed, or a proceeding in court for the collection of the appropriate tax may be begun without assessment, at any time.

**301.6501(c)-1(e)(2)** Adequately shown. A transfer of property valued under the rules of section 2701 or section 2702 or any taxable event described in §25.2701-4 of this Chapter will be considered adequately shown on a return of tax imposed by Chapter 12 of subtitle B of the Internal Revenue Code only if, with respect to the entire transaction or series of transactions (including any transaction that affected the transferred interest) of which the transfer (or taxable event) was a part, the return provides:

**301.6501(c)-1(e)(2)(i)** A description of the transactions, including a description of transferred and retained interests and the method (or methods) used to value each;

**301.6501(c)-1(e)(2)(ii)** The identity of, and relationship between, the transferor, transferee, all other persons participating in the transactions, and all parties related to the transferor holding an equity interest in any entity involved in the transactions; and

**301.6501(c)-1(e)(2)(iii)** A detailed description (including all actuarial factors and discount rates used) of the method used to determine the amount of the gift arising from the transfer (or taxable event), including, in the case of an equity interest that is not actively traded, the financial and other data used in determining value. Financial data should generally include balance sheets and statements of net earnings, operating results, and dividends paid for each of the 5 years immediately before the valuation date.

**301.6501(c)-1(e)(3)** Effective date. The provisions of this paragraph (e) are effective as of January 28, 1992. In determining whether a transfer or taxable event is adequately shown on a gift tax return filed prior to that date, taxpayers may rely on any reasonable interpretation of the statutory provisions. For these purposes, the provisions of the proposed regulations and the final regulations are considered a reasonable interpretation of the statutory provisions.

**301.6501(c)-1(f)** Gifts made after December 31, 1996, not adequately disclosed on the return.

**301.6501(c)-1(f)(1)** *In general.* If a transfer of property, other than a transfer described in paragraph (e) of this section, is not adequately disclosed on a gift tax return (Form 709, "United States Gift (and Generation-Skipping Transfer) Tax Return"), or in a statement attached to the return, filed for the calendar period in which the transfer occurs, then any gift tax imposed by Chapter 12 of subtitle B of the Internal Revenue Code on the transfer may be assessed, or a proceeding in court for the collection of the appropriate tax may be begun without assessment, at any time.

**301.6501(c)-1(f)(2)** *Adequate disclosure of transfers of property reported as gifts.* A transfer will be adequately disclosed on the return only if it is reported in a manner adequate to apprise the Internal Revenue Service of the nature of the gift and the basis for the value so reported. Transfers reported on the gift tax return as transfers of property by gift will be considered adequately disclosed under this paragraph (f)(2) if the return (or a statement attached to the return) provides the following information—

**301.6501(c)-1(f)(2)(i)** A description of the transferred property and any consideration received by the transferor;

**301.6501(c)-1(f)(2)(ii)** The identity of, and relationship between, the transferor and each transferee;

**301.6501(c)-1(f)(2)(iii)** If the property is transferred in trust, the trust's tax identification number and a brief description of the terms of the trust, or in lieu of a brief description of the trust terms, a copy of the trust instrument;

**301.6501(c)-1(f)(2)(iv)** Except as provided in §301.6501-1(f)(3), a detailed description of the method used to determine the fair market value of property transferred, including any financial data (for example, balance sheets, etc. with explanations of any adjustments) that were utilized in determining the value of the interest, any restrictions on the transferred property that were considered in determining the fair market value of the property, and a description of any discounts, such as discounts for blockage, minority or fractional interests, and lack of marketability, claimed in valuing the property. In the case of a transfer of an interest that is actively traded on an established exchange, such as the New York Stock Exchange, the American Stock Exchange, the NASDAQ National Market, or a regional exchange in which quotations are published on a daily basis, including recognized foreign exchanges, recitation of the exchange

(Continued)

**EXHIBIT 16.1** *(Continued)*

where the interest is listed, the CUSIP number of the security, and the mean between the highest and lowest quoted selling prices on the applicable valuation date will satisfy all of the requirements of this paragraph (f)(2)(iv). In the case of the transfer of an interest in an entity (for example, a corporation or partnership) that is not actively traded, a description must be provided of any discount claimed in valuing the interests in the entity or any assets owned by such entity. In addition, if the value of the entity or of the interests in the entity is properly determined based on the net value of the assets held by the entity, a statement must be provided regarding the fair market value of 100 percent of the entity (determined without regard to any discounts in valuing the entity or any assets owned by the entity), the pro rata portion of the entity subject to the transfer, and the fair market value of the transferred interest as reported on the return. If 100 percent of the value of the entity is not disclosed, the taxpayer bears the burden of demonstrating that the fair market value of the entity is properly determined by a method other than a method based on the net value of the assets held by the entity. If the entity that is the subject of the transfer owns an interest in another non-actively traded entity (either directly or through ownership of an entity), the information required in this paragraph (f)(2)(iv) must be provided for each entity if the information is relevant and material in determining the value of the interest; and

**301.6501(c)-1(f)(2)(v)** A statement describing any position taken that is contrary to any proposed, temporary or final Treasury regulations or revenue rulings published at the time of the transfer (see §601.601(d)(2) of this Chapter).

**301.6501(c)-1(f)(3)** Submission of appraisals in lieu of the information required under paragraph (f)(2)(iv) of this section. The requirements of paragraph (f)(2)(iv) of this section will be satisfied if the donor submits an appraisal of the transferred property that meets the following requirements—

**301.6501(c)-1(f)(3)(i)** The appraisal is prepared by an appraiser who satisfies all of the following requirements:

**301.6501(c)-1(f)(3)(i)(A)** The appraiser is an individual who holds himself or herself out to the public as an appraiser or performs appraisals on a regular basis.

**301.6501(c)-1(f)(3)(i)(B)** Because of the appraiser's qualifications, as described in the appraisal that details the appraiser's background, experience, education, and membership, if any, in professional appraisal associations, the appraiser is qualified to make appraisals of the type of property being valued.

**301.6501(c)-1(f)(3)(i)(C)** The appraiser is not the donor or the donee of the property or a member of the family of the donor or donee, as defined in section 2032A(e)(2), or any person employed by the donor, the donee, or a member of the family of either; and

**301.6501(c)-1(f)(3)(ii)** The appraisal contains all of the following:

**301.6501(c)-1(f)(3)(ii)(A)** The date of the transfer, the date on which the transferred property was appraised, and the purpose of the appraisal.

**301.6501(c)-1(f)(3)(ii)(B)** A description of the property.

**301.6501(c)-1(f)(3)(ii)(C)** A description of the appraisal process employed.

**301.6501(c)-1(f)(3)(ii)(D)** A description of the assumptions, hypothetical conditions, and any limiting conditions and restrictions on the transferred property that affect the analyses, opinions, and conclusions.

**301.6501(c)-1(f)(3)(ii)(E)** The information considered in determining the appraised value, including in the case of an ownership interest in a business, all financial data that was used in determining the value of the interest that is sufficiently detailed so that another person can replicate the process and arrive at the appraised value.

**301.6501(c)-1(f)(3)(ii)(F)** The appraisal procedures followed, and the reasoning that supports the analyses, opinions, and conclusions.

**301.6501(c)-1(f)(3)(ii)(G)** The valuation method utilized, the rationale for the valuation method, and the procedure used in determining the fair market value of the asset transferred.

**301.6501(c)-1(f)(3)(ii)(H)** The specific basis for the valuation, such as specific comparable sales or transactions, sales of similar interests, asset-based approaches, merger-acquisition transactions, etc.



**EXHIBIT 16.1**

**301.6501(c)-1(f)(4)** Adequate disclosure of non-gift completed transfers or transactions. Completed transfers to members of the transferor's family, as defined in section 2032A(e)(2), that are made in the ordinary course of operating a business are deemed to be adequately disclosed under paragraph (f)(2) of this section, even if the transfer is not reported on a gift tax return, provided the transfer is properly reported by all parties for income tax purposes. For example, in the case of salary paid to a family member employed in a family owned business, the transfer will be treated as adequately disclosed for gift tax purposes if the item is properly reported by the business and the family member on their income tax returns. For purposes of this paragraph (f)(4), any other completed transfer that is reported, in its entirety, as not constituting a transfer by gift will be considered adequately disclosed under paragraph (f)(2) of this section only if the following information is provided on, or attached to, the return B 301.6501(c)-1(f)(4)(i) The information required for adequate disclosure under paragraphs (f)(2)(i), (ii), (iii) and (v) of this section; and

**301.6501(c)-1(f)(4)(ii)** An explanation as to why the transfer is not a transfer by gift under Chapter 12 of the Internal Revenue Code.

**301.6501(c)-1(f)(5)** *Adequate disclosure of incomplete transfers.* Adequate disclosure of a transfer that is reported as a completed gift on the gift tax return will commence the running of the period of limitations for assessment of gift tax on the transfer, even if the transfer is ultimately determined to be an incomplete gift for purposes of §25.2511-2 of this Chapter. For example, if an incomplete gift is reported as a completed gift on the gift tax return and is adequately disclosed, the period for assessment of the gift tax will begin to run when the return is filed, as determined under section 6501(b). Further, once the period of assessment for gift tax expires, the transfer will be subject to inclusion in the donor's gross estate for estate tax purposes only to the extent that a completed gift would be so included. On the other hand, if the transfer is reported as an incomplete gift whether or not adequately disclosed, the period for assessing a gift tax with respect to the transfer will not commence to run even if the transfer is ultimately determined to be a completed gift. In that situation, the gift tax with respect to the transfer may be assessed at any time, up until three years after the donor files a return reporting the transfer as a completed gift with adequate disclosure.

**301.6501(c)-1(f)(6)** Treatment of split gifts. If a husband and wife elect under section 2513 to treat a gift made to a third party as made one-half by each spouse, the requirements of this paragraph (f) will be satisfied with respect to the gift deemed made by the consenting spouse if the return filed by the donor spouse (the spouse that transferred the property) satisfies the requirements of this paragraph (f) with respect to that gift.

**301.6501(c)-1(f)(7)** Examples. The following examples illustrate the rules of this paragraph (f):

Example (1). (i) Facts. In 2001, A transfers 100 shares of common stock of XYZ Corporation to A's child. The common stock of XYZ Corporation is actively traded on a major stock exchange. For gift tax purposes, the fair market value of one share of XYZ common stock on the date of the transfer, determined in accordance with §25.2512-2(b) of this Chapter (based on the mean between the highest and lowest quoted selling prices), is \$150.00. On A's Federal gift tax return, Form 709, for the 2001 calendar year, A reports the gift to A's child of 100 shares of common stock of XYZ Corporation with a value for gift tax purposes of \$15,000. A specifies the date of the transfer, recites that the stock is publicly traded, identifies the stock exchange on which the stock is traded, lists the stock's CUSIP number, and lists the mean between the highest and lowest quoted selling prices for the date of transfer.

(ii) Application of the adequate disclosure standard. A has adequately disclosed the transfer. Therefore, the period of assessment for the transfer under section 6501 will run from the time the return is filed (as determined under section 6501(b)).

Example (2). (i) Facts. On December 30, 2001, A transfers closely-held stock to B, A's child. A determined that the value of the transferred stock, on December 30, 2001, was \$9,000. A made no other transfers to B, or any other donee, during 2001. On A's Federal gift tax return, Form 709, for the 2001 calendar year, A provides the information required under paragraph (f)(2) of this section such that the transfer is adequately disclosed. A claims an annual exclusion under section 2503(b) for the transfer.

(ii) Application of the adequate disclosure standard. Because the transfer is adequately disclosed under paragraph (f)(2) of this section, the period of assessment for the transfer will expire as prescribed by section 6501(b), notwithstanding that if A's valuation of the closely-held stock was correct, A was not required to file a gift tax return reporting the transfer under section 6019. After the period of assessment has expired on the transfer, the Internal

(Continued)



**EXHIBIT 16.1** *(Continued)*

Revenue Service is precluded from redetermining the amount of the gift for purposes of assessing gift tax or for purposes of determining the estate tax liability. Therefore, the amount of the gift as reported on A's 2001 Federal gift tax return may not be redetermined for purposes of determining A's prior taxable gifts (for gift tax purposes) or A's adjusted taxable gifts (for estate tax purposes).

Example (3). (i) Facts. A owns 100 percent of the common stock of X, a closely-held corporation. X does not hold an interest in any other entity that is not actively traded. In 2001, A transfers 20 percent of the X stock to B and C, A's children, in a transfer that is not subject to the special valuation rules of section 2701. The transfer is made outright with no restrictions on ownership rights, including voting rights and the right to transfer the stock. Based on generally applicable valuation principles, the value of X would be determined based on the net value of the assets owned by X. The reported value of the transferred stock incorporates the use of minority discounts and lack of marketability discounts. No other discounts were used in arriving at the fair market value of the transferred stock or any assets owned by X. On A's Federal gift tax return, Form 709, for the 2001 calendar year, A provides the information required under paragraph (f)(2) of this section including a statement reporting the fair market value of 100 percent of X (before taking into account any discounts), the pro rata portion of X subject to the transfer, and the reported value of the transfer. A also attaches a statement regarding the determination of value that includes a discussion of the discounts claimed and how the discounts were determined.

(ii) Application of the adequate disclosure standard. A has provided sufficient information such that the transfer will be considered adequately disclosed and the period of assessment for the transfer under section 6501 will run from the time the return is filed (as determined under section 6501(b)).

Example (4). (i) Facts. A owns a 70 percent limited partnership interest in PS. PS owns 40 percent of the stock in X, a closely-held corporation. The assets of X include a 50 percent general partnership interest in PB. PB owns an interest in commercial real property. None of the entities (PS, X, or PB) is actively traded and, based on generally applicable valuation principles, the value of each entity would be determined based on the net value of the assets owned by each entity. In 2001, A transfers a 25 percent limited partnership interest in PS to B, A's child. On the Federal gift tax return, Form 709, for the 2001 calendar year, A reports the transfer of the 25 percent limited partnership interest in PS and that the fair market value of 100 percent of PS is \$y and that the value of 25 percent of PS is \$z, reflecting marketability and minority discounts with respect to the 25 percent interest. However, A does not disclose that PS owns 40 percent of X, and that X owns 50 percent of PB and that, in arriving at the \$y fair market value of 100 percent of PS, discounts were claimed in valuing PS's interest in X, X's interest in PB, and PB's interest in the commercial real property.

(ii) Application of the adequate disclosure standard. The information on the lower tiered entities is relevant and material in determining the value of the transferred interest in PS. Accordingly, because A has failed to comply with requirements of paragraph (f)(2)(iv) of this section regarding PS's interest in X, X's interest in PB, and PB's interest in the commercial real property, the transfer will not be considered adequately disclosed and the period of assessment for the transfer under section 6501 will remain open indefinitely.

Example (5). The facts are the same as in Example 4 except that A submits, with the Federal tax return, an appraisal of the 25 percent limited partnership interest in PS that satisfies the requirements of paragraph (f)(3) of this section in lieu of the information required in paragraph (f)(2)(iv) of this section. Assuming the other requirements of paragraph (f)(2) of this section are satisfied, the transfer is considered adequately disclosed and the period for assessment for the transfer under section 6501 will run from the time the return is filed (as determined under section 6501(b) of this Chapter).

Example (6). A owns 100 percent of the stock of X Corporation, a company actively engaged in a manufacturing business. B, A's child, is an employee of X and receives an annual salary paid in the ordinary course of operating X Corporation. B reports the annual salary as income on B's income tax returns. In 2001, A transfers property to family members and files a Federal gift tax return reporting the transfers. However, A does not disclose the 2001 salary payments made to B. Because the salary payments were reported as income on B's income tax return, the salary payments are deemed to be adequately disclosed. The transfer of property to family members, other than the salary payments to B, reported on the gift tax return must satisfy the adequate disclosure requirements under paragraph (f)(2) of this section in order for the period of assessment under section 6501 to commence to run with respect to those transfers.

**301.6501(c)-1(f)(8)** Effective date. This paragraph (f) is applicable to gifts made after December 31, 1996, for which the gift tax return for such calendar year is filed after December 3, 1999.

Essentially, the IRS is telling the valuation analyst that to “pass muster,” we must present a fully supported and documented report. This is not substantially different from all of the standards discussed earlier in this book—do your work and report it properly.

Do not have the reader of the report have to guess about your methodology, discounts, or conclusions. For example, you do not want to state: “the studies indicate 25 to 45 percent, therefore, we selected 35 percent.” This is not supported. There are numerous court cases that disallow discounts, strictly because the valuation analyst did something similar to this. You should select a benchmark discount and then adjust it (up or down) based on specific items that you discussed in detail in your report. A sample FLP report is located on the CD-ROM that comes with this book.

## **AS VALUATION ANALYSTS, DO WE GO FOR THE BIG DISCOUNTS?**

You should now have a better idea about our role as valuers. It is important that the valuation analyst not cross the line from being an independent analyst to being an advocate of bigger and bigger discounts. This can happen, especially if a client requests that we review a partnership document with an eye to adding restrictions and provisions that might increase the discounts. This is not our role as valuation analysts, because we must be unbiased and not lose our objectivity. In addition, by acquiescing in such requests, we move beyond the realm of our own expertise.

This does not excuse valuation analysts from being aware of the law, especially state laws regarding limited partnerships and limited liability companies. Key questions to review with the partnership’s attorney might include the following:

1. What restrictions in the partnership documents are more restrictive than state law?
2. What is the state law? Get a copy of the state’s limited partnership act and read it thoroughly.
3. Does a limited partner have a right of withdrawal from the partnership and on what basis?

As we have seen, these issues can affect the valuation opinion.

It is important for the analyst to remember that his or her assignment is the determination of fair market value. This means the consideration of both a hypothetical willing buyer as well as a hypothetical willing seller. Your final opinion of value must be reasonable. Remember, the buyer might buy for that low a price, but as an independent analyst, you must also ask yourself the question, if I were the seller, would I sell that low?

## **CONCLUSION**

If I have done my job, you should now have a much better understanding about estate and gift valuations. You should also realize that you have an awful lot of court cases to read when you finish this book. If I have not done my job, you’d better buy another book if you are going to do this stuff!



# CHAPTER 17

## *Divorce Valuations*

### CHAPTER GOALS

In this chapter, I will attempt to explain the following:

- The role of the valuation analyst
- Standards of value and their unique aspects in divorce assignments
- Different valuation dates used in these assignments
- How the normalization process differs in divorce assignments
- Valuing professional practices for divorce assignments
- Personal versus enterprise goodwill
- How noncompete agreements affect values in the distribution of marital property

### INTRODUCTION

Many valuation assignments are performed for divorce purposes. Regardless of whether the jurisdiction falls under the *equitable distribution* rules or the *community property* rules, a marital business will usually have to be valued so that the parties can allocate the value with the other marital property. Business valuation assignments related to divorce proceedings have become a growing part of the valuation analyst's business. Since closely held businesses are considered to be marital assets, subject to distribution, there is a need to value these assets as part of the marital estate. In this book, closely held businesses include professional practices. However, the unique aspects of valuing professional practices are covered in chapter 18.

Performing a business valuation for divorce purposes is unlike any other type of business valuation assignment that the practitioner may get involved in. Because the proceeding takes place in a court of equity, the rules of the game may be different than what we are trained to do as valuation analysts. The trier of fact is charged with being fair to both parties in the overall divorce, and therefore, on occasion, may make the end result come out in a manner that makes the distribution of the marital estate fair to both parties, even if it means that the valuation of the business or business interest is changed from what you thought was the correct value. There have been times that I have seen a judge listen to testimony of the experts, take a little of this, and a little of that, and mysteriously come out with a value that permitted one spouse to keep the marital business and the other spouse to keep the marital home. And we thought that we were good with numbers! Some of these judges who were history majors in college move the numbers around better than you and I could ever do.

In addition to understanding the many nuances of business valuation, case law in the jurisdiction of the divorce must be considered. The valuation analyst must be aware of the local case law in order to avoid fatal errors in the valuation. For example, in certain jurisdictions, the valuer cannot consider any income that extends beyond the valuation date. Using a discounted cash flow methodology, which requires a forecast to be used to estimate value, may be a futile exercise, because the court may not allow the subsequent figures to be used. This makes the divorce valuation even more challenging because we are sometimes being asked to value a company without considering the future (who buys history?).

### THE ROLE OF THE VALUATION ANALYST

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The valuation analyst may be engaged to perform business valuation services for a variety of clients. These clients may be:

- The husband
- The wife
- Both parties
- An attorney
- The court

Most often, the valuation analyst will be engaged by one of the parties to the divorce, although, not always. More and more, litigants are finding that the cost of the divorce has become so prohibitively expensive, that they are seeking to retain only one valuation analyst. However, when the valuation analyst is hired by only one party, the other party may also engage a valuation analyst. Sometimes, each party may pick a valuation analyst, and the two valuation analysts may choose a third valuation analyst to act as a neutral valuation analyst for both parties.

The valuation analyst may also be court-appointed. Certain jurisdictions will appoint a valuation analyst in order to avoid a battle of the experts. This will not always work, however, because each party will continue to have the right to hire his or her own expert to challenge the court appointed valuation analyst. The court appointed valuation analyst will generally be looked upon by the court to be the only neutral party in the entire process, other than the court itself. In my experience, unless one party can show that the court-appointed valuation analyst really messed up, it is very difficult to convince the court that a different valuation should be accepted.

## DEFINITION OF VALUE

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Early in the valuation process, a valuation analyst must determine what the definition of value will be for the assignment at hand. In case that you have already forgot what was discussed in the earlier chapters of this book, re-read chapter 4, where the different standards (definitions) of value were defined. In the divorce arena, these definitions are frequently twisted, mangled, commingled, and redefined (and that is the easy part of the assignment).

Valuation analysts are accustomed to the concept of fair market value because of their experience in working with the income tax laws and regulations. However, in divorce-related valuations, the definition of value is usually dictated by the court that has jurisdiction over the matter. The problem is that even the same standard of value is applied inconsistently by the courts. Another problem is that frequently the standard of value must be interpreted from the case law as it is not clearly stated. As a valuation analyst, you can assist your client's attorney in the interpretation of the case law, but it is advisable not to be the party making the judgment call concerning the standard of value. This is a legal determination, and therefore, should be left to the attorney to make.

In *Standards of Value: Theory and Applications*, the authors provide a really good breakdown of their analysis of all of the jurisdictions where it comes to this matter. They indicate:

We found that only Arkansas and Louisiana provide direction in their statutes. We then moved to the case law in each jurisdiction, and through this review, we found clearer guidance in 10 additional states. Including Arkansas and Louisiana, 11 states direct the use of fair market value in their case law, and 1 state, Minnesota, uses the term *market value*, which we consider fair market value by the context of the usage.<sup>1</sup>

The standard of value in the other jurisdictions is not as easily determined. The case law must be reviewed in order to properly categorize the standard into what the appraisal field has called *value in exchange* or *value to the holder*. What this really means is that the valuation analyst must use the principles that are used in the valuation community to make them fit into the jurisdiction's mandate (through case law) concerning what should happen. For example, Florida is a fair market value state. Not only does *Christians v. Christians*<sup>2</sup> refer to fair market value, but *Thompson v. Thompson*<sup>3</sup> specifically states that

The clearest method would be the fair market value approach, which is best described as what would a willing buyer pay, and what would a willing seller accept, neither acting under duress for a sale of the business.<sup>4</sup>

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<sup>1</sup> Jay E. Fishman, Shannon P. Pratt, and William J. Morrison, *Standards of Value: Theory and Applications* (Hoboken, NJ: John Wiley & Sons Inc, 2007); 192.

<sup>2</sup> *Christians v Christians*, 732 So. 2d 47; 1999 Fla. App. LEXIS 6687; 24 Fla. L Weekly D 1218

<sup>3</sup> *Thompson v. Thompson*, 546 So.2d 99 (Fla. App. 4 Dist. 1989)

<sup>4</sup> *Ibid.*

This application of fair market value, which also requires the exclusion of personal goodwill (which will be discussed later in this chapter), makes the interpretation of this standard of value to be fair market value in exchange, as opposed to value to the holder.

The two most common definitions of value used by the courts seem to be fair market value and intrinsic (investment) value.<sup>5</sup> However, fair value has also shown up.

## FAIR MARKET VALUE

Fair market value is, by far, the most commonly used definition of value in the business valuation arena. However, fair market value seems to vary by jurisdiction. Frequently, the definition of fair market value is quoted from Revenue Ruling 59-60 as:

the amount at which the property would change hands between a willing buyer and a willing seller when the former is not under compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of the relevant facts.

This definition assumes a hypothetical arm's length sale without regard to a specific buyer or seller.

## INTRINSIC VALUE

“Beauty is in the eyes of the beholder.” This is probably the easiest way to describe intrinsic value. Although certain jurisdictions use this concept, and momentum is actually building in many others to use this concept, the term is ambiguous. Intrinsic value is frequently referred to as investment value to the owner of the business.

Intrinsic value recognizes the fact that the business owner who is going through a divorce will not be selling the business and, therefore, there will be no hypothetical transaction, as in a fair market value appraisal. Instead, the owner will continue to receive the benefits of ownership into the future. In this instance, the value of the business may be worth more or less to the owner than the market as a whole.

## FAIR VALUE

The first fair value case seen in the matrimonial arena came out of New Jersey in *Brown v. Brown*.<sup>6</sup> Following the thought process in the principles employed by the New Jersey Supreme Court in shareholder litigation, the family court judge determined that where a business that was being run harmoniously by three brothers was the subject of the marital estate, discounts for lack of control and marketability would be inappropriate as the nonbusiness owner spouse would receive less than an equitable share of the business because if the business were to be sold, each of the brothers would receive a pro rata share of the whole. While this may not be the *true* fair value of the one-third interest, it was the first time that the New Jersey courts moved away from fair market value. Fair value in the marital arena became the value of a pro rata share of the entire business.

## WHAT DO THE DEFINITIONS REALLY MEAN IN A DIVORCE CONTEXT?

If there was a written definition of what the different value concepts mean in a divorce engagement, many of us would have considerably less work to do. Much of the litigation that takes place partially arises because of the various interpretations of the value concepts. Although fair market value, intrinsic value, and fair value are not strangers to the experienced business valuation professional, case law and state statutes govern the division of property between the parties in a divorce. Unfortunately, most of the state statutes use the term *value* without any precise definition.

The valuation analyst using the fair market value concept generally assumes a hypothetical transaction. This also means that the valuation of a minority interest should probably include a discount for lack of control. However, this may not work in every jurisdiction. The valuation analyst must be familiar with the local case law. He or she should look for assistance from the client's attorney. Don't be surprised, however, if the attorney asks for your opinion. Be careful not to practice law without a license!

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<sup>5</sup> Intrinsic value and investment value, in a divorce context, are frequently described as *the value to the owner of the business*. Conventional valuation definitions treat these differently.

<sup>6</sup> *Ellen Brown, v. James Brown*, A-985-00T5, 2002 N.J. Super. LEXIS 105

Intrinsic value, rather than fair market value, is sometimes used in the valuation of professional practices for divorce purposes. Shannon Pratt discussed the California case of *Lopez v. Lopez*<sup>7</sup> in an early edition of *Valuing A Business*. In valuing professional goodwill, the court indicated that the following factors should be considered:

- The age and health of the professional
- The professional's demonstrated past earning power
- The professional's reputation in the community for judgment, skill, and knowledge
- The professional's comparative business success
- The nature and duration of the professional's practice, either as a sole proprietor or as a contributing member of a partnership or professional corporation

Some authors feel that a professional's age, health, judgment, skill, and other factors mentioned by the court are indications of intrinsic value. However, many of these factors may also be considered in a fair market value appraisal. The intrinsic value argument takes the position that because the professional will be staying with the practice, it is important to consider the personal attributes of the individual. Since fair market value assumes *any willing buyer* rather than *a specific buyer* or *the owner*, consideration of personal attributes violates the spirit of fair market value. The fair market value argument states that the willing buyer must be able to carry on the practice in a similar manner as the willing seller, and as such, must have a similar level of ability (judgment and skill, or in the case of a surgeon, the hands) to maintain the practice in a manner that has value. Clearly, this can be argued both ways.

Intrinsic value may also be applied to other types of closely held businesses. In a Wyoming case, *Neuman v. Neuman*,<sup>8</sup> one of the highly contested issues involved whether a discount for lack of marketability should be applied to the business value because the owner would not be selling the business. Fair market value assumes a sale, and therefore, a discount would have to be taken, if appropriate. The trial court, and later the Supreme Court of Wyoming, found in favor of not applying a discount, creating a difference between the value of a business to a *willing buyer* and the value of a business to *the owner* for purposes of divorce.

Another major issue arises as a result of each jurisdiction's determination of how these concepts should be applied. One of the controversial issues that should be considered by the valuation analyst is whether a covenant not to compete is to be included as part of a fair market value appraisal. While many valuation analysts have interpreted fair market value to have an implied covenant, not all do. Logically, a willing buyer would not buy the practice, particularly the goodwill, if the seller has the right to open up across the street. However, in the *Thelien*<sup>9</sup> case in Missouri, the court assigned no value to the intangibles because there was no evidence presented that indicated that Dr. Thelien could sell his share of the dental practice without a covenant not to compete and receive an amount greater than his share of the tangible assets.

Carrying some of these value concepts to an extreme, court cases have expanded accepted standards of value. For example, New Jersey case law used to refer to fair market value, and more recently fair value. However, in an attempt to bring *fairness* to the litigation, a judge followed the intrinsic standard of value and ruled that celebrity goodwill was a marital asset.<sup>10</sup> In *Piscopo*, entertainer Joe Piscopo was found to have celebrity goodwill. When was the last time that you saw Joe Piscopo? So much for his celebrity goodwill.

## VALUATION DATES

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Valuation dates in business valuations for divorce purposes should be provided to the valuation analyst by the clients and their attorneys, preferably the attorneys. The correct valuation date may depend on numerous factors, and as a result, the client's attorney will usually be in the best position to provide the date or dates that should be used. Business interests and business assets may be valued at numerous dates. This will frequently depend on the jurisdiction, whether the asset is considered active or passive, particular case sensitive factors, or the like. Therefore, the valuation date in a divorce engagement may be one, or more, of the following dates:

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<sup>7</sup> *In Re: Marriage of Lopez* 113 California Reporter 58 [38 Cal App. 3rd 1044 (1974)]

<sup>8</sup> *Neuman v. Neuman*, 842 P2d580 (Wyo. 1992)

<sup>9</sup> *Thelien v. Thelien*, 847 SW2d116 (MO App WD 1992)

<sup>10</sup> *Piscopo v. Piscopo*, 231 NJ Super 576



- Date of the marriage
- Date of a gift or inheritance
- Date of the separation
- Date of the divorce complaint
- Date agreed to by the parties
- Date of the trial

## DATE OF THE MARRIAGE

The date of the marriage will generally not be used for valuing the marital business unless there is a claim that part or all of the business is premarital, and therefore separate property. Business assets that are acquired or commingled during the marriage become marital property in most, if not all, jurisdictions. This may require the business to be valued at the date of the marriage, as well as a subsequent date, to measure any incremental appreciation that is considered to be subject to distribution.

## DATE OF A GIFT OR INHERITANCE

Property acquired by gift or inheritance frequently is considered to be separate property. When this is the case, valuation may not be necessary, because it is to be excluded from distribution. However, many arguments have been raised that the separate property becomes commingled into marital property. Sometimes, only some of the business ownership was inherited or gifted, making the balance subject to distribution. Also, the value of the gift or inheritance is often understated for tax purposes. When this occurs, the valuation analyst may wish to examine estate or gift tax returns to determine the manner in which the values were derived. This assumes, of course, that estate or gift tax returns were filed. It also assumes that the adequate disclosure rules (discussed in chapter 16) were followed so that you can figure out what was done to determine value. Guidance may be required from the attorney concerning the extent of the valuation services to be provided in these cases.

## DATE OF THE SEPARATION

In certain jurisdictions, the date of the separation of the parties is considered to be the date that the marriage is over. Other jurisdictions consider the date of separation as the time period that each party no longer contributes to the marital estate, but not necessarily the date to be used for the valuation. In other jurisdictions, everything is includible until a divorce complaint is filed. If the date of separation is the applicable date, a business valuation may be necessary as of that date.

## DATE OF THE DIVORCE COMPLAINT

For those jurisdictions that consider the date of the divorce complaint to be the applicable date, a business will generally be valued at that date. Many jurisdictions start off with this date, but provide the judge with the latitude to change the date if the facts and circumstances warrant it. Sometimes, the parties separate and no formal complaint is filed with the court for many years. Some attorneys may argue that the marriage really ended when the parties separated. In certain jurisdictions, this could require two appraisals to be performed, one at separation and one at the complaint date. Speak to your client's attorney for proper direction.

## DATE AGREED TO BY THE PARTIES

On occasion, the parties, with the help of their attorneys, may agree to a date to be used for the business valuation. Circumstances surrounding the particular divorce may encourage agreeing to the date. For example, a fairly well known individual is going to be divorced. As soon as a divorce complaint is filed, it becomes public record subject to media attention. The attorneys and the clients may agree to value all of the assets, come to a written settlement and take care of all aspects of the divorce before filing the actual complaint. After everything is taken care of, a complaint is filed but the parties are immediately divorced in an uncontested action. This saves the media harassment during the months or years that it takes to get divorced under normal circumstances.

## DATE OF THE TRIAL

This is always tricky for the business valuation analyst. Since we all know that it takes quite a bit of time to accumulate the information and analyze it for the purpose of opining on the value of a business, valuing the asset at the

time of trial becomes difficult, particularly because trial dates are frequently postponed, and we do not know the actual date until the last minute. However, many courts are specifying that assets in a marital dissolution be valued as of the date of the divorce trial. This not only makes it difficult for the valuation analyst to value the asset, but it makes an early settlement of the case even more difficult for the parties. Frequently, a date may be agreed upon by the parties so that the process does not have to be held up until trial.

## VALUATION METHODS

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In most business valuation assignments, two or more valuation methods will be used. The number of methods, as well as which methods, depends on the purpose of the assignment, the definition of value to be used, the type of business and the availability of information. The valuation analyst should apply similar criteria in divorce assignments as in other types of assignments unless the local jurisdiction provides otherwise (in the statute or case law). You also should be aware of any methods that the judge likes or dislikes. If the judge likes the excess earnings method, you really should do everything possible to include it in your valuation. Oh, by the way, there is one method that I have seen used by the courts that has not been mentioned in the book as of yet. It is the *HFB* method. This is the valuation method where the judge hears how much the marital house is worth, and because the nonbusiness owner spouse will get the house, the value of the business ends up coming in around the same amount. HFB stands for *house for business*. Only kidding!!!! (well—maybe not.)

## VALUATION AS OF A SPECIFIC DATE

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A business valuation is similar to a balance sheet: it is as of a specific date in time. Values change as factors around the business change. This is especially evidenced in the public stock market. As such, the information used in performing a business valuation should be only that information that was known or knowable as of the valuation date. This can best be illustrated by a real situation encountered by me. A valuation of a bicycle shop was to be performed as of June 10, 1992, the date of the divorce complaint. The business burned down on March 14, 1993. In this instance, the value as of June 10, 1992 was the real issue. A valuation analyst cannot forecast a fire nine months after the valuation date. Two other issues come to light with this example:

- If the business was overinsured, collected a large settlement, and increased the worth of the business, should the court take this into consideration in awarding distribution of the marital estate?
- If the business was underinsured, or coinsured, collected less than the inventory and business was worth, and was truly hurt by the fire, should the court take this into consideration in awarding distribution of the marital estate?

Since most divorce proceedings take place in a *court of equity*, the concept of fairness will often be the driving factor for the court. The valuation analyst will have to get guidance from the client's attorney concerning the valuation date, as well as what information can be considered based on the litigation position that will be taken in court. In my real example, it turned out that the business owner was overinsured, and the owner received an unbelievable insurance settlement that allowed him to rebuild a mega-store, that was worth far more than the previous store. However, the court required the valuation to be as of the earlier date, ignoring the insurance settlement—because the nonowner spouse was convicted of arson. You have to love this business!

## DATA GATHERING AND ANALYSIS

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The data gathering and analysis phase of a business valuation assignment is very important in providing the valuation analyst with the information needed to render a meaningful and well informed opinion of value of a business. The procedures and information will be the same regardless of the purpose of the assignment. However, a divorce valuation frequently requires additional documentation to be gathered and analyzed. Also, there may be other procedures that will be applied for divorce assignments.

Depending on the methods being used, the valuation analyst should gather sufficient information about the company being valued, including but not limited to, financial data, economy data, industry data, market data, as well as information about the history and nature of the company, its legal status, and its management.

Some practitioners send out massive document requests asking for the sun, the moon, and the stars. Although we would like to obtain as much of this information as possible, some of this data may not exist. If missing data is important to the assignment, the valuation analyst may need to use alternative procedures to obtain this information. For example, if an accounts payable listing is requested as of March 4, 2007, and the business does not maintain one, the valuation analyst can discuss the payment terms for vendor invoices with management, and perform a review of the checkbook to create such a listing based on the checks that were written after that date. This is one instance where being an accountant as well as a valuation analyst really pays off. The valuation analyst must be aware of the difference between information that is not available versus information that is intentionally not provided by the business owner. The latter happens frequently in litigation assignments, divorce or otherwise. If information is being intentionally withheld, the valuation analyst or a forensic accountant can try to perform forensic procedures to work around the missing data, but often, the client's attorney will have to get involved by petitioning the court to compel cooperation. This situation happens all too often and makes it very difficult for the valuation analyst to complete the assignment on a timely basis, if at all.

Since data gathering is such an important part of the valuation process, and because the nature of a litigation assignment is such that the valuation analyst may not get everything that is requested, the valuation analyst must keep good records regarding the documents that have been requested. The initial document request is frequently accomplished by having the client's attorney send the valuation analyst's document request to the other attorney. The valuation analyst will generally send written communications to the client's attorney regarding missing information. If the attorney decides to take appropriate legal action, it can be accomplished by attaching the letters received from the valuation analyst.

## GATHERING FINANCIAL DATA

Most valuation analysts ask for about five years of financial information when performing a business valuation. However, there is no magic to the five year period. Sometimes more information is needed, sometimes less. Rarely will the valuation date for most divorce valuations be on the year end of the company being valued. Accordingly, the valuation analyst should request interim financial statements. Other financial information such as tax returns, forecasts, budgets, or projections maintained by the company should also be requested. Analyses of the underlying assets, liabilities, and income and expense accounts may also be needed. These items should not be anything unusual for the valuation analyst who performs other types of business valuations.

## THE VALUATION PROCESS

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The balance of the valuation process is the same as it would be for other types of valuation assignments. However, the nature of a divorce litigation makes it more difficult to follow all of the normal steps that would be performed in a typical assignment. For example, if the nonclient spouse is actively involved in managing the business, he or she may be reluctant to allow the valuation analyst to visit the company's facilities. This individual may be trying to hide information from the valuation analyst that could be discovered during a site inspection (like expensive artwork on the walls). Alternatively, confidentiality may be the concern; that individual may not want the employees to know that a divorce is in progress. Sometimes, the business owner is just afraid that the employees will think that the business is going to be sold and they may leave unnecessarily. The valuation analyst should always request a site visit. If a site visit cannot be arranged, the valuation analyst should assess the impact of this on the valuation engagement. A qualification should also be put in the report such as:

We requested the opportunity to perform a physical inspection of the business premises but were denied access. Information gathered during such an inspection may have had an impact on the outcome of our analysis. Had we been allowed to inspect the premises, our conclusions may have been different.

If possible, the valuation analyst should conduct management interviews during the site inspection. The valuation analyst should ask all of the questions that are necessary to supplement the written documentation received, as well as to obtain a further understanding of the company's history, customer base, product mix, and financial results. If the valuation analyst has also been hired to perform a forensic examination of the company's records, any additional questions that are important to that examination should also be asked during these interviews.

## NORMALIZING THE FINANCIAL STATEMENTS

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The normalization process is intended to restate the reported earnings of the business to an economic basis that a prospective purchaser would receive. In divorce valuations, the restating of the reported income is also considered in the business owner's ability to pay support (or amount of support needed). These adjustments become even more important for that reason. Adjustments are generally made pertaining to generally accepted accounting principles (GAAP), nonrecurring items, nonoperating items, or discretionary items that are under the control of management. Frequently, the discretionary items become part of the business owner's ability to pay support or reduce the need to receive support. In Connecticut, for example, the amount of reasonable compensation used by the valuation analyst in the valuation of the marital business is often used as the amount that will be considered in the support part of the litigation. This eliminates the situation where the business owner gets double dipped from the value and support.

Normalization adjustments are generally made to the income statement to present the results of the company's operations as they might be in the hands of the prospective buyer of the company. Discretionary income statement adjustments are normally made only if a controlling interest is being valued. This is because a minority stockholder is generally unable to influence operations and, therefore, would not receive the adjusted income as dividends. However, in most divorce valuations, a minority interest in a family owned business will be treated as if the minority stockholder has control. The normalization adjustments are the same ones that were discussed previously.

### UNREPORTED REVENUES

In an attempt to hide income from the government and the business owner's spouse, the issue of unreported income frequently arises in divorce valuations. This is especially true when support is an issue. Forensic procedures can be performed by those valuation analysts with proper training. This book, however, is not intended to teach you how to play hide and seek.

When unreported revenues are located, the valuation analyst should advise the client's attorney immediately. The attorney may want to use this information to help negotiate a settlement before a report is written and a trial becomes necessary. In many states, the judge has a responsibility to turn over income tax fraud to the IRS or the local prosecutor, if evidence is presented in the courtroom that supports the allegation. If a settlement is not reached, and it becomes necessary to complete the valuation, most valuation analysts agree that the unreported revenue should be treated as a normalization or GAAP adjustment. You do not do your client a true service if you kill the goose that lays the golden egg. If the spouse goes to jail, where do you think the support will come from? However, as a valuation analyst, we cannot merely "turn the other cheek."

Sometimes, no matter how you try to help your client(s), they may not be rational when going through a divorce. I was court-appointed a few years ago to value a jewelry store. The husband owned the business and the wife, an accountant, provided me with the real set of books. I tried like crazy to get these people to settle the valuation issue. I dragged my feet in issuing a report, but finally the judge told me I needed to issue a report. He knew the allegations from the wife about unreported income and also knew that I was trying to help these people. To make a long story short, I testified to the unreported income and in the gallery of the courtroom were two invited guests of the judge, the IRS and the Division of Taxation of New Jersey.

### STOCKHOLDER LOANS

A common balance sheet normalization adjustment involves the treatment of *stockholder loans*. Very often, an asset may appear on the books representing monies taken by the owner in lieu of compensation. The treatment of this asset will depend on the collectibility of the loan. Since most businesses will be valued based on cash flow or earnings capacity, the valuation analyst should treat this balance sheet item as a non-operating asset. If this item is going to be considered as part of the individual's current earnings for support purposes, it may be unfair to also treat it as an asset of the business. Chances are that it will not be repaid in the future. If the balance has been accumulated over many years, only the current increment may end up being treated as income available for support purposes. Therefore, part of this asset *may* be considered as a nonoperating asset of the business.

When stockholder loans are recorded as liabilities of the company, the valuation analyst should assess whether the loan is for legitimate business purposes. For example, if the business owner has sufficient capital to act as a

bank for the business and adequate capitalization of the business is demonstrated, the stockholder loan should be treated as a true business liability. This is especially true when the business would have borrowed from a bank and repayment terms, notes, and other indications of an obligation are present.

Stockholder loans that do not meet the conditions above should be treated as being capital of the business. Undercapitalized businesses are set up frequently. The owner treats the infusion of monies as loans so that the money can be repaid, with or without interest, at the discretion of the owner. In most instances, these loans are paid in capital, and should be treated as such. For *cash* type businesses, the valuation analyst should investigate the source of these loans, as they may come from unreported revenues.

## INCOME TAXES

Income taxes are probably one of the most confusing adjustments that arise in divorce, and all valuation assignments. Some valuers prefer to value a company on a pretax basis, while others prefer an aftertax basis. Regardless of which is used, the answer should be the same. Whether the valuation analyst uses a pretax basis or an aftertax basis, the discount or capitalization rates will change accordingly. By now, you know this!

When valuation analysts are engaged to value sole proprietorships, partnerships, S corporations, or limited liability companies (nontax paying entities), a pretax or an aftertax earnings stream can be used. There is no definitive rule about these entities. Many valuers will use corporate tax rates, others will use individual rates. Individual rates get a little bit cloudy because of itemized deductions, personal exemptions, and self-employment taxes. The valuation analyst can use either set of rates, but should be prepared to discuss the merits of the rates used.

Pass through entities have given many state court judges a serious headache. The argument of *to tax or not to tax* keeps coming up in their courtrooms. In the Massachusetts case *Bernier*,<sup>11</sup> the court followed the guidance from *Delaware Open MRI v Kessler*. I discuss this case in chapter 20.

## EXPLAINING THE VALUATION

Unless prohibited by local statute or case law, the methods used in a divorce engagement are the same methods used in other types of valuation assignment. Since the nature of divorce valuations is adversarial, the valuation report will often become a source of controversy and come under attack by the opposition. An experienced valuation analyst will always assume that expert testimony will become necessary. For that reason, it is imperative that the judge and jury understand the valuation process and how the estimate of value was determined.

Frequently, the opposing attorney will attempt to destroy an expert's credibility by attacking the contents of the valuation report. It is not uncommon to see an attorney begin to ask an expert an abundance of questions in an attempt to confuse the judge and jury. Since most judges do not have a background in business valuation, it sometimes becomes easy to confuse them. Another favorite tactic used by attorneys is to attack forecasts and projections by sticking a copy of a subsequent financial statement in front of the expert and saying "isn't it true that your forecast was wrong?" Of course, the forecast is different than the actual results. All that an expert can say to this type of question is that "at the time the forecast was prepared, we used all of the information that was available to us at that time. This is the same information that a willing buyer would have known about as well. I really cannot say why the actual results were different. I would have to perform an extensive analysis to figure it out. This would take far more time than we have available at the trial."

## REACHING A CONCLUSION OF VALUE

After applying various methods of valuation to the subject company, the valuation analyst will have to determine the appropriate estimate of value. This is accomplished in the same fashion as every other type of valuation. However, different jurisdictions vary greatly when it comes to applying valuation premiums and discounts. The valuation analyst should speak with the client's attorney about local case law.

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<sup>11</sup> *Bernier v. Bernier*, 2007 Mass. LEXIS 598 (May 7, 2007)



## DIVORCE VALUATIONS OF PROFESSIONAL PRACTICES

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Professional practices are generally valued in the same manner as other types of businesses. However, there are definite distinctions between other types of businesses and professional practices. Some of the unique characteristics of the professional practice make them subject to special considerations in valuations, particularly for divorce.

### PROFESSIONAL PRACTICES VERSUS REGULAR BUSINESS ENTERPRISES

Professional practices are generally service businesses. Most of the value in a professional practice will be intangible in nature. The composition of the typical professional practice is that it does not have a significant investment in tangible assets as compared to its investment in people. However, some professional practices may have a sizeable investment in equipment. For example, a radiology practice may own MRI and X-ray equipment. Professional practices generally provide specialized services, which require the owners, and frequently their employees, to possess special levels of knowledge.

Professionals, such as doctors, lawyers, accountants, and in some cases, valuation analysts and others, are generally licensed by a state licensing body. Therefore, in most circumstances, professional practices can only be sold to similarly licensed professionals. Professional licenses are not transferable between individuals. Therefore, the market value of a license is nonexistent, if consideration is given to the true definition of that concept. Logic states that it cannot have value, if it cannot be sold. However, a license provides the professional with the ability to make a living, and therefore, it has intrinsic value to the individual licensee. In New York, the value of a license is a marital asset. I'm surprised that they don't value "green cards" because they provide the opportunity for a non-USA resident to earn a living! New York is a funny place—they will value almost anything.

Because of the nature of a professional practice, the value of the practice is highly dependent on the skills, reputation, and efforts of individual professionals. Therefore, some of the value of the practice is attributable to the personal reputation or skill of the owner and may not be transferable to a buyer. For example, a skilled heart surgeon cannot transfer his or her skilled hands to a willing buyer. This is known as *professional goodwill*. In some instances, professional goodwill has no value to a prospective purchaser. Practice goodwill, or the commercial goodwill of the practice, is generally a component of most professional practice valuation estimates.

Because professional practices are built on specialized services, the nature of the particular practice being valued needs to be considered. This means that one type of medical practice will be valued differently than another type of practice. For example, the nature of a general practice would be that referrals come from numerous sources, including existing patients. The patients also tend to be repetitive. A brain surgeon, however, probably gets most of his or her referrals from other doctors. Hopefully, for the sake of the patient, this type of practice does not have many recurring patients.

### DIVORCE VALUATIONS AND THE MARKET CAN BE VERY DIFFERENT

The divorce courts have created many precedents regarding the valuation of professional practices. The precedents, however, vary from jurisdiction to jurisdiction, and they do not always make sense from an appraisal point of view. The valuation analyst must become familiar with the case law in this area. For example, in New Jersey, attorneys were prohibited from selling their law practices. However, in *Dugan v. Dugan*<sup>12</sup> the court found that the attorney's goodwill was a marital asset subject to equitable distribution. This case is cited in many other states. Therefore, for divorce purposes, we need to value that which cannot be sold. Now, let's look at how a law practice could be sold.

What if Joe Lawyer brought in an associate who worked with him for two or three years? Joe retired and the associate takes over the practice and pays Joe a "retirement pension." This type of sale can take place, and does in the other professions pretty regularly. However, from a valuation standpoint, the valuation analyst should consider a discounted cash flow analysis to include the additional expense of having the associate work (an added expense) for the period of time that it may take to transition the practice over to him or her. An income expected to be generated by the associate should also be considered, but the point is that the transition may take a number of years.

Sometimes, government regulation affects professional practices. For example, through Medicare and Medicaid, health care services become subject to price schedules. When valuing a medical practice, the valuation analyst should be familiar with the government's regulatory role in the practice's industry.

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<sup>12</sup> *Dugan v. Dugan*, 92 N.J. 423 (1983)

## FINANCIAL INFORMATION

Most professional practices maintain their books and records using the cash basis of accounting. Therefore, the valuation analyst should investigate whether an accrual basis of accounting would affect the valuation. For accountants who perform appraisals, this may be easier than for other categories of valuation analysts. For a mature practice that is consistent from year to year, the method of accounting may not make that much difference. However, some practices can be greatly affected by growth, decline, or timing of receipts. This can be true for a personal injury law practice.

## Adjustments to Financial Information

Financial statements of professional practices must usually be adjusted for all of the GAAP and normalization items of other types of businesses. In addition, the following items are often important when valuing professional practices:

- Cash versus accrual accounting
- Work in process
- Contingent work in process
- Deferred revenues
- Contingencies

## PROFESSIONAL VERSUS PRACTICE GOODWILL

The distinction between *professional goodwill* (sometimes called *personal goodwill*) and *practice goodwill* (sometimes called *business or commercial goodwill*) is that professional goodwill is the goodwill that is associated primarily with the individual, versus practice goodwill, which is the goodwill associated primarily with the entity. This can be demonstrated by assuming John Smith CPA is a partner at PricewaterhouseCoopers. If a new client calls the firm specifically requesting John Smith, then there may be personal goodwill associated with the individual. However, if the client wants a “big four” name on the financial statements and contacts PricewaterhouseCoopers, and ends up with John Smith, there is probably practice goodwill. Sometimes, the two types of goodwill will overlap.

The existence of professional goodwill is based on the fact that clients come to the individual, as opposed to the firm. This may be based on the individual’s skills, knowledge, reputation, personality, and other factors. The implied assumption is that if this individual moved to another firm, the clients would go with him or her. Professional goodwill is more difficult to transfer to a new owner, but not impossible. Generally the professional will assist in a smooth transition to a new owner in order to obtain the maximum price for the practice.

## Goodwill in a Professional Practice

The issue of personal versus professional goodwill arises most often during a divorce valuation of a professional practice. In most instances, there is little reason to separate the two concepts. However, some courts have determined that sole practitioners in any profession can only have personal goodwill because he or she is the practice. A sole practitioner’s practice can easily have both forms of goodwill, not to mention other forms of intangible assets.

To illustrate this point, let’s assume that Sarah Jackson, attorney at law, is a personal injury specialist. Her trial skills have allowed her clients to get jury verdicts that begin at \$1,000,000. Her law practice has a book value of \$85,000 and contingent work in progress of \$700,000. Gross revenues for the firm are \$8,000,000. Ms. Jackson draws a salary of \$3,000,000 annually (she’s my hero!). The question becomes whether Ms. Jackson’s goodwill—her reputation and trial skills—can be transferred to another lawyer. If so, we might have many lawyers earning a lot of money. This illustrates personal goodwill.

Let’s illustrate practice goodwill. Now assume that Mary Brown, attorney at law, belongs to a prepaid legal services plan, from which she gets client referrals. Since the law firm is signed up with the legal services plan, referrals come to the practice regardless of her reputation and skills. This is practice goodwill. However, assuming that Ms. Brown does a good job for these clients, referrals may come to her in the future, which would be an element of personal goodwill.

The standard of value to be applied and the case law regarding goodwill will vary depending on the jurisdiction of the trial. The valuation analyst should ask the client’s attorney early in the process about the proper standard of value to be used. In fact, it is a good practice to have the standard of value spelled out in the engagement letter with the client. The valuation analyst should also make certain that the case law regarding goodwill in the jurisdiction of the divorce is understood.



Many courts have found that goodwill is an asset to be included in the marital estate of a professional for divorce purposes. In some states, professional goodwill is considered to be marital property even though it is not transferable. In such cases, the standard of value is not fair market value, but rather intrinsic value to the owner. Several states have taken the position that professional goodwill is not a marital asset subject to division, but practice goodwill is.<sup>13</sup>

As I pointed out before, one of the most widely cited cases detailing the factors to consider when valuing professional goodwill in a divorce is a California case, *Lopez v. Lopez*.<sup>14</sup> The factors listed in that case, which are worth repeating, include the following:

- The age and health of the professional
- The professional's demonstrated past earning power
- The professional's reputation in the community for judgment, skill, and knowledge
- The professional's comparative professional success
- The nature and duration of the professional's practice, either as a sole proprietor or as a contributing member of a partnership or professional corporation

As illustrated previously, it is frequently difficult to distinguish between professional goodwill and practice goodwill. In a Florida case, *Williams v. Williams*,<sup>15</sup> the trial court ruled that the value of Mr. Williams' accounting practice included \$43,200 in practice goodwill. On appeal, the trial court's finding was reversed. In its opinion, the appellate court stated:

the goodwill of [a] professional practice can be a marital asset subject to division in a dissolution proceeding, if it exists and if it was developed during the marriage . . . . However, . . . for goodwill to be a marital asset, it must exist separate and apart from the reputation or continued presence of the marital litigant . . . . When attempting to determine whether goodwill exists in a practice such as this, the evidence should show recent actual sales of a similarly situated practice, or expert testimony as to the existence of goodwill in a similar practice in the relevant market . . . . Moreover, the husband's expert, who testified the practice had no goodwill, stated that no one would buy the practice without a noncompete clause. This is telling evidence of a lack of goodwill.

Clearly, the noncompete clause was the issue in the court's strict interpretation of fair market value. The inconsistency of the various cases throughout the country makes this a challenging field. In a little while, you can read an exhibit that deals with the valuation of a noncompete clause.

Probably because of the number of divorces each year, it should be little surprise that California has more reported cases dealing with the valuation of professional practices than any other state. State courts will frequently look to other courts when they do not have a precedent of their own. The valuation analyst can be helpful to the attorney by being familiar with the cases, but it is the attorney's job to determine what case law should be followed.

The ongoing problem of the different court rulings can be further demonstrated in *Beasley v. Beasley*<sup>16</sup> and *Dugan v. Dugan*.<sup>17</sup> In *Beasley*, the court ruled that the sole proprietorship law practice cannot have goodwill because goodwill constitutes the present value of future earnings, which stem from the future post-marital efforts of the attorney spouse. In this situation, the court basically felt that the cut off date for the valuation is the date of the divorce. By using the future earnings of the attorney to calculate goodwill, the same dollars would be used to calculate both value and support. This would be double dipping.

In *Dugan*, it was decided that an individual's law practice, even though it was a professional corporation, can have goodwill that is transferable. The court stated that

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<sup>13</sup> Some of the cases dealing with personal goodwill around the country include *Nail v. Nail*, 486 S.W. 2d 761 (Texas Supreme Court 1972); *Geesbreght v. Geesbreght*, 570 S.W. 2d 427 (Texas Civil Appeals Court 1978); *Prahinsky v. Prahinsky*, 540 A.2d 833 (Md. App. 1988) and 582 A.2d 784 (Md. 1990); *Thompson v. Thompson*, 546 So.2d 99 (Fla. App. 4 Dist. 1989); *Hollbrook v. Hollbrook*, 103 Wis. 2d 327, 309 N.W. 2d 343; *Zells v. Zells*, 157 Ill. Dec. 480, 572 N.E. 2d 944 (111.1991); and *DeMasi v. DeMasi*, 366 Pa. Super. 19, 530 A. 2d 871,883.

<sup>14</sup> In re: Marriage of Lopez, 113 Cal. Rptr. 58 (38 Cal. App. 3d 1044 (1974))

<sup>15</sup> *Williams v. Williams*, No. 95-00577, 1996 WL 47675 (Fla.App.2 Dist. Feb. 7, 1996)

<sup>16</sup> *Beasley v. Beasley*, 518 A.2d 545 (Pa. Super. 1986)

<sup>17</sup> *Dugan v. Dugan*, 92 N.J. 423 (1983)

Goodwill is to be differentiated from earnings capacity. It reflects not simply a possibility of future earnings, but a probability based on existing circumstances . . . Moreover, unlike the license and the degree, goodwill is transferable and marketable . . . An individual practitioner's inability to sell a law practice does not eliminate the existence of goodwill and its value as an asset to be considered in equitable distribution. Obviously, equitable distribution does not require conveyance or transfer of any particular asset.

The irony of the *Dugan* case is that the same Supreme Court in New Jersey found that earnings capacity is not a marital asset in *Stern v. Stern*.<sup>18</sup> Earnings capacity was not a marital asset subject to distribution, but now, probable future earnings is a factor in determining whether there is goodwill which is subject to distribution. The words are so subtle that it would be easy for the untrained individual to misinterpret these cases. This is just one more reason for the valuation analyst to rely on the client's attorney for guidance with these matters. By the way, have you noticed that many of the really contested divorce cases involve attorneys as one of the litigants? They are the only ones who are crazy enough to take these issues all the way to the top court in the state. This is a very expensive process.

## NONCOMPETE AGREEMENTS

Many valuation analysts believe that implicit in the definition of fair market value is a covenant not to compete. If the seller has a right to open up next door, why would a willing buyer ever purchase a business or professional practice? Separating the value of the intangible assets (goodwill) from the value of the noncompete agreement is frequently a difficult task. In *Monaghan v. Monaghan*,<sup>19</sup> the business under scrutiny was a dental practice. The court determined that if the practice was sold, the nonbusiness owner spouse would receive 50 percent of the gross proceeds received in excess of \$80,000.

The practice was subsequently sold for \$160,000. The sales contract allocated the purchase price as follows:

Inventory and supplies	\$20,000
Patient list	15,000
Goodwill	6,000
Covenant not to compete	<u>109,000</u>
Total	<u>\$160,000</u>

A claim was made in this case that the practice actually sold for less than \$80,000 and the nonbusiness owner was not entitled to a share in the proceeds. The claim was based on the premise that the noncompete covenant was a personal asset and not part of the practice. Obviously, the opposite position was that the covenant was part of the goodwill of the practice.

The Washington appellate court did not have case law of its own to use regarding the treatment of a noncompete covenant in a divorce case. Relying on other jurisdictions, the appellate court cited cases from other western states. In these jurisdictions, the covenant not to compete was considered personal property belonging to the professional. These other courts reviewed the relationship of the noncompete as compared to the other assets to rule whether or not it seemed fair (like \$109,000 out of \$160,000). If the allocation was unreasonable in relation to the other assets, then a more fair and objective allocation would be required.

The appellate court remanded the case to the trial court to separate the value of the practice from the value of the covenant not to compete based on all of the evidence. Different jurisdictions treat noncompete agreements differently. Before the valuation analyst can address issues involving a noncompete agreement, advice should be obtained from the client's attorney concerning how the courts in that particular jurisdiction treat this issue. Exhibit 17.1 illustrates valuation issues dealing with a covenant not to compete. This is a really long exhibit, but be patient. It is intended to cover a lot of points about valuing covenants, personal goodwill, intangible assets, and how to document all of this stuff for a litigation report. Also, do not worry about the dates. I would have liked to use a more recent example, but examples this good do not come along regularly.

<sup>18</sup> *Stern v. Stern*, 66 NJ Super. 1975

<sup>19</sup> In re: *Delores A. Monaghan and Robert D. Monaghan* 78 Wash. App. 918, 899 P.2d 841 (Aug. 9, 1995).

**EXHIBIT 17.1**  
**VALUING THE COVENANT NOT TO COMPETE**  
**(MANY SECTIONS OF THE ACTUAL REPORT OMITTED FOR SPACE)**

**Description of the Assignment.** Trugman Valuation Associates, Inc. was retained by Joan Carnes to determine the equitable distribution value of Carnes Respiratory Services, Inc. (CRS or the company) as of March 9, 1995, as well as to determine the value of the covenant not-to-compete that was part of an actual transaction involving certain assets of the company. We have also been requested to opine on whether the value ascribed to the covenant not-to-compete is corporate, personal, or a combination of both.

In order to accomplish the assignment at hand, the following steps were taken by the valuation analyst:

1. Determine the fair market value of CRS.
2. Determine the fair market value of the tangible assets of CRS.
3. Determine the fair market value of the identifiable intangible assets of CRS.
4. Subtract the fair market value of the tangible and identifiable intangible assets of CRS from the fair market value of the total enterprise.

The result of this process will be to determine the residual, or unidentifiable intangible value that makes up the balance of the fair market value of the enterprise.

**Definition of Equitable Distribution Value.** For this matter, equitable distribution value of the equity of CRS has been determined as a result of an actual transaction involving certain assets of the company. Other assets were kept by the sole shareholder. The equitable distribution value has been determined and is referenced in the "Order on Motion to Vacate Final Judgment of Dissolution of Marriage" signed by the Honorable John L. Brown on July 24, 1996. The value established in paragraph (8) of this order is \$16,900,000.

 **Author's Note**

By the way, I forgot to explain what happened here. Mr. Carnes went to his wife during the divorce process and said "Sweetheart, let's not fight. My business is worth \$5 million and I am prepared to give you half of the value along with the other assets that you are entitled to. I just don't want to fight with you." Nice guy, right? Wrong!!! Two weeks after the divorce was put through by the court, Mrs. Carnes found out that Mr. Carnes had sold his company for \$15+ million. When she called him with not so nice things to say, he said "tough luck." The court found that fraud was committed and reopened up the issue of equitable distribution. Mr. Carnes hired a valuation analyst who determined that out of the almost \$17 million (sales price plus assets not part of the deal), \$5 million was a personal covenant not to compete and should not be considered as a marital asset for equitable distribution purposes. In comes Trugman Valuation Associates to the rescue!!!

**Nature and History of the Company.** Carnes Respiratory Services, Inc. was incorporated on June 10, 1981. The company began operations in City A, State, providing durable medical equipment and respiratory therapy products to patients referred to the company by their doctors. Products were sold primarily to elderly patients through Medicare, Medicaid, or private insurance.

As time went on, CRS opened three additional locations, in City B, City C, and City D, State. Each of these locations was opened after Mr. Carnes and his marketing team determined that the location was viable, based on its demographics. Each of the CRS facilities was owned by Mr. Carnes personally, and leased to the company.

At the valuation date, CRS was operating in various counties, selling items such as beds, wheelchairs, walkers, and respiratory therapy products. Sixty percent of CRS' sales came from respiratory therapy products, 30 percent from durable medical equipment, and 10 percent from miscellaneous products. Management estimated that 70 percent of its revenues resulted from rentals, and 30 percent from sales.

CRS developed a reputation for delivering high quality service to its patients. Services included guaranteed one hour delivery, 24 hours a day service, and educating patients in the use of their equipment. This was very important in differentiating CRS from the rest of the market. Other companies in the durable medical equipment market competed with CRS. In City A, competitors included Respitch, Inc. and Lincare. In City B, CRS' competition included MediHealth, Inc., Lincare, Americare, Inc., and State Oxygen, Inc. Competition in City C consisted of Coast, Inc., and Lincare. In City D,

### EXHIBIT 17.1

Lincare, Sunshine, Inc., Medicaid, Inc., and Homedco, Inc. competed with CRS. As will be discussed later in this report, although these companies participated in the same markets as CRS, Mr. Carnes did not believe that any of these companies offered a significant, competitive threat to CRS.

As of the valuation date, the company had approximately 50 employees. Responsibility for overall management was shared between Mr. Carnes and Ms. Lori Rodgers. Their duties included day-to-day operations, training, marketing, and ensuring that whatever needed to be done was accomplished. They also shared the responsibilities for managing the City A facility, which was both a retail and billing operation. Each of the other three stores had a manager responsible for the store's operations. The company had four marketing representatives whose primary responsibilities were to maintain existing referral sources and establish new ones. CRS also had a delivery manager, who was responsible for coordinating drivers and the delivery of products to patients. Additional employees included customer service representatives, drivers, accounts receivable clerks, office staff, warehouse staff, and a dispatcher.

**Excess Assets.** From our analysis of CRS' financial statements, it appears that CRS has excess assets. Excess assets, sometimes referred to as nonoperating assets, are assets that a business owns, that are not necessary for the operations of the business.

CRS had two categories of assets that are considered to be excess, current assets, and fixed assets. At the valuation date, CRS' balance sheet indicates that the company had \$1,136,933 of current assets and \$9,977 of current liabilities. This does not include the \$550,000 of accounts receivable sold to Public Company Purchaser. The reason for this is that CRS' financial statements are prepared on a cash basis, which does not include accounts receivable. Taking this into consideration, CRS had current assets of \$1,686,933. Subtracting CRS' current liabilities from this figure results in the calculation of CRS' working capital of \$1,676,956 (\$1,686,933 - \$9,977 = \$1,676,956).

To check the reasonableness of this position, we reviewed Integra's *Business Profiler* for working capital industry norms for durable medical equipment providers. For 1995, Integra reported that median working capital, as a percentage of sales, was 7 percent. Applying this to CRS' revenues for the 12 months ended February 28, 1995 results in the following calculation of working capital:

Revenues	\$5,930,480
Integra Working Capital as a Percent of Revenues	× 7%
Required Working Capital	<u>\$ 415,134</u>

This indicates that CRS had excess current assets of \$1,261,822.

Public Company Purchaser and CRS allocated \$550,000 of the purchase price to accounts receivable. Public Company Purchaser assumed no other current assets, and \$35,000 of accrued current liabilities were not recorded as of February 28, 1995. This results in working capital of \$515,000. This represents 8.68 percent of CRS' revenues in the latest 12 months. Although slightly above the median, this figure is still within industry norms. As a result, we have determined that CRS has excess current assets of \$1,136,933. This figure represents all of CRS' current assets other than the accounts receivable.

CRS owned certain vehicles that we believe were nonoperating assets. These vehicles were as follows:

1992 Mercedes	\$125,603
1992 Mercedes	61,158
1989 Jaguar	58,332
1993 Jeep	17,176
	<u>\$262,269</u>

In our opinion, these vehicles were not necessary for the operation of CRS. They are luxury automobiles that represented perquisites to Mr. Carnes. In addition, Mr. Carnes retained these vehicles after the asset sale to Public Company Purchaser. As a result, we have determined these vehicles are nonoperating assets. Their value has been estimated to be approximately \$200,000.

(Continued)

**EXHIBIT 17.1** (Continued)

**Valuation of Carnes Respiratory Services, Inc.** As indicated previously, the valuation of a closely-held company can be accomplished using the three approaches to value. One might ask why the transaction that transpired could not be used as the best indication of fair market value? Our analysis indicates that the price that was paid by Public Company Purchaser, Inc. represents a value that was greater than the fair market value of CRS.

In the actual transaction that took place, Public Company Purchaser purchased certain net assets of CRS at a price of \$15,035,000. According to the allocation included in the Asset Purchase Agreement dated March 9, 1995, the following was purchased:

Accounts receivable	\$ 550,000
Inventory	40,000
Fixed assets	712,000
Covenants	100,000
Goodwill/customer list	13,633,000
<b>Total</b>	<b>\$15,035,000</b>

The price paid is greater than the fair market value of the assets purchased. Since the definition of fair market value is based on *the most probable price*, a review of other factors brought to our attention in this matter, make us believe that the most probable price is lower than this amount. In addition, we believe that Public Company Purchaser had special motivations in consummating this deal that would cause the definition of fair market value to be violated.

In the deposition transcript of Steve Rice, a principal of Richard Associates, the business broker engaged by Mr. Carnes to assist in the sale of CRS, several statements are made that assist us in substantiating our position. Mr. Rice's responses are relevant in that they reflect the knowledge and expectations of the seller. In the course of Mr. Rice's deposition, he asserts that Public Company Purchaser overpaid for CRS, supporting his opinion with several pieces of information. Other than Public Company Purchaser, Mr. Rice indicated there were four offers made to purchase CRS. The companies and their offers are as follows:

Home Medical	\$11 million
Abey Home Healthcare	12 million
Homedco	11 million
Continuum Care	Undisclosed

Mr. Rice was then asked about the first Public Company Purchaser offer of \$13.5 million for CRS. This was an all cash offer and Mr. Rice thought after presenting the offer to Mr. Carnes "...our deal was done." Mr. Rice's opinion is explained in the ensuing dialogue:

"I felt that no one would turn that down and we just felt it was—at the time we believed it to be the highest price Public Company Purchaser had ever paid for a company. In fact, we could almost assure that it was the highest price they ever paid for a company." Mr. Rice was then asked, "the highest price in dollar amount or the highest price compared to profits?" To this, Mr. Rice responded,

It's the highest price compared to gross revenues. Public Company Purchaser's never—they pay between 1.75 and 1.2 times gross revenue and that's just—we thought that was outstanding.

That offer we took to Mr. Carnes, to John, and it never hit his desk before he threw it back at us and I'm telling you the truth. This thing never hit his desk. He wouldn't even look at it. He wouldn't talk to us.

Q. Did he say why he was turning it down?

A. Yes.

Q. Why?

A. Two provisions that we told him about, that most of his employees would be fired and he had no tenant for two of his properties. So after that point we let Public Company Purchaser sit out on a fence and I took that offer to all the other players and they all said let Public Company Purchaser buy it. That went

### EXHIBIT 17.1

on for about a month and we never had—we probably had some contact, but most of the contact with Public Company Purchaser was coming in the front door. They were calling us, what's going on?

Finally, the last player who hadn't given up was Continuum Care. Continuum Care kept fooling around, fooling around. Public Company Purchaser was getting nervous. They thought they were going to lose the deal. And we went back to them and said, make—give it one best shot. Go ahead. You're still way off the mark. We never told them what the other offers were. We just said, you're way off the mark. With the suggestion that they keep all the employees in the billing center and take all the leases on the property and it did. I mean, I had really nothing to—well, I guess it had a lot to do with me. I pushed it.

Q. You persuaded Public Company Purchaser?

A. I held their hand to the fire because they thought they were going to lose this deal in their own backyard and it would look very, very bad for a public company to do that.

It is clear Mr. Carnes's advisors thought this was a tremendous deal, and it exceeded their expectations. The offer was not rejected by Mr. Carnes because of the price. According to Mr. Rice, the offer was rejected by Mr. Carnes because most of CRS' employees would be fired, and he would not have a tenant for two of his properties. It was Mr. Rice who obtained the higher offer from Public Company Purchaser, along with the accommodation of Mr. Carnes' concerns. He did this by letting Public Company Purchaser "sit out on a fence" and by telling Public Company Purchaser that they were "way off the mark," even though it was by far the best offer he had received for CRS. What allowed Mr. Rice to do this was a nonfinancial concern on the part of Public Company Purchaser, namely that the deal was in Public Company Purchaser's "own backyard" and losing it would be embarrassing to Public Company Purchaser. From Mr. Rice's statements, it appears that Mr. Carnes would have accepted the \$13.5 million dollar offer if his two conditions regarding his employees and tenancy had been met.

In fact, the dialogue comes back to this issue:

Q. All right. Did Mr. Carnes ever tell you what changed his mind regarding deciding to sell his business? He kept turning you down and later he—

A. The key issue was that as soon as we locked the employees in place and no one was to be terminated is when he said that's worth all the money in the world to me and that's exactly what he said, it's worth all the money in the world, these people having a job.

Again, according to Mr. Rice, Mr. Carnes's issues were not related to price, but other nonprice factors. Mr. Rice further explains the actions of Public Company Purchaser by stating:

A. They're buying earnings. Earnings drive the price of their stock. John had a lot of earnings for the size of business that he had. And whether they paid 15 million dollars or 12 million dollars or 13 million dollars, at that time it didn't matter. They got rid of a competitor and they got the best—and they got people there that they don't—that are better than any people that they have, so they took everything into—I'd like to say we had a lot to do with getting 15 million dollars for this company.

This further highlights his beliefs that Public Company Purchaser's motivation was beyond financial, and that Mr. Carnes' reasons for rejecting the first Public Company Purchaser offer were unrelated to the purchase price. Mr. Rice's comments raise the issue of whether Public Company Purchaser paid fair market value for CRS, or paid above fair market value for synergistic and public image reasons. As discussed earlier in this report, fair market value is established between a willing buyer and willing seller, neither party being under compulsion and both having reasonable knowledge of the relevant facts. It appears from the comments of Mr. Rice that he believed that Public Company Purchaser was under compulsion, and that he could exploit that compulsion to the advantage of John Carnes.

This brings about the possibility of a buyer's premium. A buyer's premium is concerned with elements of investment value. According to Pratt, investment value is defined "as value to a particular investor based on individual investment requirements, as distinguished from the concept of market value, which is impersonal and detached."

As Pratt states, investment value is different for different buyers. There are many factors that can influence investment value such as estimates of earning capacity, perceptions of risk, tax statutes, and synergies. Stated differently, the investment value of a closely held company is the value to a particular buyer, as compared to the population of willing buyers, as is the case in fair market value. This value definition would be applicable, when an investor might have specific investment criteria that must be fulfilled in an acquisition.

*(Continued)*



**EXHIBIT 17.1** (Continued)

A valuation analyst will frequently use this standard of value when he or she represents a buyer who wants to know, "How much is the business worth to me?" The fact that the buyer is specific about the business value to him or her changes the standard of value to investment value, as opposed to fair market value, which may be the value to everyone else.

Under such a definition of investment value, certain elements can be quantified numerically in an income stream, and differences between fair market value and investment value can be calculated. Others, like Public Company Purchaser's desire not to let other major competitors into its "backyard" cannot be calculated from an income stream. Typical market data does not allow us to calculate such a premium.

However, one study has provided us with an insight into this type of a premium by comparing the multiples of earnings before interest and tax (EBIT) paid by financial buyers and strategic buyers. The study consisted of a poll of 35 professional investment bankers, lenders, and the managing partners of buyout firms, and covered the manufacturing, retail, communications, services, and healthcare industries, in particular.

As discussed above, hard data is difficult to obtain for such a survey. Accordingly, the study is based on the respondents "feel for the industry based on their experiences in both proprietary deals and auction settings. At times, their answers were categorized as a broad interpretation of the diversity within a sector." Table 1 presents the multiples obtained by the survey for 1989, 1993, and 1995, and calculates the premium that strategic buyers are paying over financial buyers.

	<b>1989</b>	<b>1993</b>	<b>1995</b>
Strategic Buyers	7.76	6.11	7.24
Financial Buyers	7.41	5.40	6.50
Premium	4.72%	13.15%	11.38%

*(Source: Jennifer Lea Reed, "Purchase Multiple Press to Rarefield Heights," Buyouts, February 20, 1995, p.1)*

As can be seen in the data in table 2, the premium for 1995 was 11.38 percent. To apply a buyer's premium to the sale of CRS, the premium is applied to Public Company Purchaser's initial offer of \$13.5 million. The justification for this is two-fold. First, Public Company Purchaser's offer appears to already have included some elements of investment value, as it was significantly greater than the other offers for CRS. Second, Mr. Carnes's reasons for not accepting the offer were unrelated to the purchase price, but rather were related to the non-financial terms of the agreement.

We have applied this premium to Public Company Purchaser's \$13.5 million offer to test to our hypothesis. The results are presented in table 2.

Initial Offer From Public Company Purchaser	\$13,500,000
Times One Plus Strategic Premium	× 1.1138
Price with Buyer's Premium	\$15,036,300
Final Purchase Price	\$15,035,000
Difference	\$ 1,300



## EXHIBIT 17.1

This strongly supports the assertion that Public Company Purchaser was a strategic buyer in its acquisition of CRS, and the assertions made by Mr. Rice in his deposition. To verify this against other known data, we relied on the deposition of Mr. Davidson, Public Company Purchaser's national acquisition program manager. Mr. Davidson indicated that Public Company Purchaser's acquisitions typically occur at 3.5 to 4.0 times free cash flow for the trailing 12 months. Based on Public Company Purchaser's estimate of free cash flow for the trailing 12 months of \$3.5 million, the price to free cash flow multiple paid for CRS using a value of \$13,500,000 was 3.86 ( $\$13,500,000 \div \$3,500,000 = 3.8571$  or 3.86 rounded). Based on this data and the information presented in Mr. Rice's deposition, we conclude that the fair market value of the operating business of Carnes Respiratory Services was \$13,500,000 at March 9, 1995, based on the actual market transaction that was consummated.

In order to test the conclusion reached in the market approach, we then applied an income approach methodology in our analysis. To implement the income approach, we have selected the discounted future benefits method. The discounted future benefits method is one of the most theoretically correct methods of appraisal. It is premised on the concept that value is based on the present value of all future benefits that flow to an owner of a property. These future benefits can consist of current income distributions, appreciation in the property, or a combination of both.

In order to apply this methodology, we began the analysis with a forecast of expected future operating cash flows for CRS. Table 3 presents the forecasted income statement for CRS for the years ended March 9, 1996 through 2000.

**TABLE 3**  
**FORECASTED INCOME STATEMENT AND CASH FLOW**  
**FOR THE YEARS ENDED MARCH 9**

	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
Net Sales <sup>1</sup>	\$6,500,000	\$7,345,000	\$8,299,850	\$9,378,830	\$10,504,290
Less: Cost of Sales <sup>2</sup>	916,500	1,035,645	1,170,279	1,322,415	1,481,105
Equals: Gross Profit	\$5,583,500	\$6,309,355	\$7,129,571	\$8,056,415	\$ 9,023,185
Less: Operating Expenses <sup>3</sup>	2,723,500	3,077,555	3,477,637	3,929,730	4,401,297
Equals: Net Operating Income	\$2,860,000	\$3,231,800	\$3,651,934	\$4,126,685	\$ 4,621,888
Less: Taxes <sup>4</sup>	1,144,000	1,292,720	1,460,774	1,650,674	1,848,755
<b>Net income</b>	<b><u>\$1,716,000</u></b>	<b><u>\$1,939,080</u></b>	<b><u>\$2,191,160</u></b>	<b><u>\$2,476,011</u></b>	<b><u>\$ 2,773,133</u></b>

<sup>1</sup> Revenues for the trailing 12 months in 1995 are based on the Public Company Purchaser pro forma included in this report as exhibit 2. Revenues are grown thereafter to generate a compound annual growth rate for the entire forecast period of 12.7 percent. This is the approximate rate of growth projected for the industry, as previously discussed.

<sup>2</sup> Cost of sales is forecasted as 14.1 percent of sales for each year in the forecast period. This is based on the historical average for the period analyzed.

<sup>3</sup> The historic average operating expenses for the period ended May 30, 1991 through May 30, 1994 and the latest 12 months ended December 31, 1994 were 45.1 percent of sales. For fiscal 1994, operating expenses were 41.9 percent of sales, which we used in each year of the forecast period. The most recent fiscal year's figure was selected over the average, based on the downward trend in operating expenses as a percentage of sales during the historic period analyzed.

<sup>4</sup> We have assumed a combined federal and state tax rate of 40 percent.

Using the forecasted income statements presented in table 3, combined with an analysis of the balance sheet of CRS, we have prepared a forecast of the net cash flow for the years ended March 9, 1996 through 2000. This appears in table 4.

*(Continued)*

## EXHIBIT 17.1 (Continued)

**TABLE 4**  
**FORECASTED NET CASH FLOW FOR THE YEARS ENDED MARCH 9**

	1996	1997	1998	1999	2000
Net Income (Table 14)	\$1,716,000	\$1,939,080	\$2,191,160	\$2,476,011	\$2,773,133
Add: Depreciation <sup>1</sup>	548,422	743,589	964,128	1,213,337	1,492,451
Gross Cash Flow	\$2,264,422	\$2,682,669	\$3,155,288	\$3,689,348	\$4,265,584
Less: Capital Expenditures <sup>2</sup>	1,209,000	1,366,170	1,543,772	1,744,462	1,953,798
Less: Increase in Net Working Capital <sup>3</sup>	43,506	59,150	66,839	75,529	78,782
<b>Net cash flow</b>	<b>\$1,011,916</b>	<b>\$1,257,349</b>	<b>\$1,544,677</b>	<b>\$1,869,357</b>	<b>\$2,233,004</b>

<sup>1</sup> Depreciation is based on two factors: First, depreciating the existing fixed assets as of February 28, 1995 of \$1,878,538 over a remaining useful life of five years, and second, depreciating future fixed asset additions over a useful life of seven years.

<sup>2</sup> Capital expenditures are calculated as 18.6 percent of sales. This is based on capital expenditures as a percentage of sales in fiscal 1994. The calculation is as follows:

Net Fixed Assets at May 31, 1995	\$1,771,669
Less: Net Fixed Assets at May 31, 1994	(1,214,949)
Plus: 1994 Depreciation Expense	375,715
1994 Fixed Asset Additions	\$ 932,435
Divided by 1994 Sales	\$5,018,896
1994 Fixed Assets as a Percent of Sales	<u>18.6%</u>

Our review of prior years' capital expenditures revealed 15.9 percent and 19.3 percent, for 1992 and 1993, respectively. We felt that the 1994 capital expenditures were reasonable under the circumstances.

<sup>3</sup> The increase in working capital is based on the median for medical equipment rental and leasing companies with three to five million dollars in sales, which was 7 percent. Therefore, we have used this figure multiplied by the increase in sales to estimate increases in working capital for each year in the projection period.

Once the cash flow has been forecast, the selection of a proper discount rate becomes necessary. Since the benefit stream being estimated will not occur until some time in the future, the future benefits must be discounted to their present value. In this instance, a discount rate of 19.2 percent has been deemed applicable. This results in the value estimate of CRS being calculated as follows:

Year	Forecasted Cash Flow	×	19.2% Present Value Factors	=	Present Value Future Cash Flow
1996	\$ 1,011,916		0.8389		\$ 848,896
1997	1,257,349		0.7038		884,922
1998	1,544,677		0.5904		911,977
1999	1,869,357		0.4953		925,893
2000	2,233,004		0.4155		927,813
TV	21,636,450		0.4155		8,989,945
<b>Total</b>					<b>\$13,489,446</b>

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In this instance, the terminal value is determined by growing the last year's forecasted net income by a stabilized growth rate. Net income is then converted to cash flow as follows:

Terminal Value Net Income	\$2,939,521
Plus: Depreciation <sup>1</sup>	2,000,000
Less: Capital Expenditures <sup>1</sup>	(2,000,000)
Less: Increase in Working Capital <sup>2</sup>	(83,509)
<b>Terminal value cash flow</b>	<b>\$2,856,011</b>
<sup>1</sup> Depreciation and capital expenditures are set equal in the terminal year.	
<sup>2</sup> The increase in working capital is calculated as the increase in 2000, multiplied by one plus the long-term growth rate of 6 percent.	

Adding the terminal value to the present value of the anticipated interim benefit stream results in the present value of the future benefits of CRS to be \$13,496,690, or \$13,500,000 rounded.

Another reasonableness check was performed based on the deposition transcript of Howard Davidson, Executive Vice President and General Counsel of Public Company Purchaser. As he states in his deposition, Mr. Davidson managed "the acquisition function for the company nationwide." The following excerpt from his deposition gives an overview of how Public Company Purchaser analyzes potential acquisitions, including CRS.

- Q. Okay. Could you tell me what criteria was used by Public Company Purchaser for the purpose of establishing this \$13,500,000 value?
- A. When we value businesses, we typically look at a number of elements, some financial related, others not specifically financial related. We look at the sales revenue. We look at the earnings on a historical basis of the business. We look at the earnings of what we believe to be a pro forma basis after acquisition. We look at the geographic area that the business serves. We look at the product mix that business has in terms of its respiratory and nonrespiratory components. We look at the scope of their business in terms of geography and referral sources. Those would be the principal criteria that we look at.
- Q. Well, is there a rule of thumb that you apply to earnings for the purpose of getting some preliminary feeling as to what a company would be worth to Public Company Purchaser in connection with an acquisition?
- A. It's flexible. And those criteria determine whether or not our interest level is higher or lower and our valuation level is higher or lower with respect to a particular business. If it's got a better geographic situation for us, if there are more synergies, if it's a higher respiratory mix, those would be conditions which would put the value at the higher end of the spectrum. If those situations either singularly or in combination are less desirable compared to what we're looking for, then the business ( then a particular business is at the lower end of the spectrum.

Mr. Davidson further describes the process and the interest Public Company Purchaser had in CRS:

- A. Well, as I said earlier, we look at the financial performance both historically and what it would be on a go-forward basis. And we then look at other elements to determine, you know, whether or not our interest level is at the higher end of the spectrum or the lower end of the spectrum. In this particular case, because of the locations because of the respiratory content, because of the reputation that the company had in the community it was at the higher end of the spectrum.

The key element of this statement is the reasons for Public Company Purchaser's interest in CRS: good locations, high respiratory therapy content, and good company reputation. Mr. Davidson indicates that Mr. Byrnes put together a pro forma income statement based on what he believed Public Company Purchaser would expect to occur at the CRS locations in the 12 months after acquisition by Public Company Purchaser. Mr. Davidson then used this pro forma to derive a value for CRS. Mr. Davidson describes the valuation:

(Continued)

**EXHIBIT 17.1** *(Continued)*

- A. The only thing I can tell is that if you look across the broad range of acquisitions we've done, that based on a pro forma basis, the cash flow and reconciling that with historical performance, and looking at it at our operating center level, not at the corporate level on a consolidated basis, but at that center level, businesses typically tend to fall at about the three and a half to four times cash flow basis depending upon various and intangible factors, some higher and some lower.
- Q. And some of them you've described here earlier today. And you've also indicated that because of the mix of product, the particular area where respiratory—Carnes Respiratory was operating, the reputation of the company, using the higher end of the spectrum to the extent that that rule of thumb has applicability at all would have been what was—would have been Public Company Purchaser's approach in this situation.
- A. I don't have specific recall as to what the pro forma, if any, was done for this reflected. So I don't know what the multiple is in this particular case. But based on the quality of the business and its size and its location, I think it's a fair statement to say that this is at the very high end of the spectrum.

Although Mr. Davidson did not recall the exact pro forma in his deposition, we have been provided a copy of it and it is presented as exhibit 2 to this report. The pro forma indicated that Public Company Purchaser expected \$6.5 million in revenues, earnings before interest, tax depreciation and amortization (EBITDA) of \$3.75 million, and free cash flow of \$3.5 million. Free cash flow is defined as EBITDA less capital expenditures. Dividing the purchase price of \$15,035,000 by \$3,500,000 results in a multiple of price to free cash flow of 4.30. Following Mr. Davidson's testimony, if we divide \$13,500,000 by free cash flow of \$3,500,000, the result is a multiple of 3.86. This is very much in line with the range of 3.5 to 4.0 times cash flow testified to by Mr. Davidson.

This confirms the reasonableness of establishing the fair market value of the operating assets of CRS at \$13.5 million.

**Valuation of the Tangible Assets.** The next step in our analysis is to value the tangible assets of CRS to be used in the allocation of the purchase price. As previously discussed, Public Company Purchaser and CRS negotiated a transaction that included an allocation of the price to different classes of assets. In this instance, we are accepting the allocation of the tangible assets as being reasonable. This results in the tangible assets being valued as follows:

Accounts receivable	\$ 550,000
Inventory	40,000
Fixed assets	712,000
<b>Total</b>	<b>\$1,302,000</b>

**Valuation of the Identifiable Intangible Assets.** The approaches to the valuation of intangible assets are similar to the approaches used to value a business enterprise: market, asset based, and income. Each of these approaches is discussed briefly below.

**The Market Approach.** The market approach, also referred to as the sales comparison approach, entails researching and identifying similar intangible assets to the subject intangibles that have been transacted in the marketplace. These transactions are then used as guidelines in developing the value of the subject intangible asset.

**The Asset Based Approach.** The asset based or cost approach attempts to ascertain the value of the asset by determining its cost. Cost typically can have several definitions. The most common definitions of cost are, reproduction cost, the cost to reproduce an exact copy of the asset; replacement cost, the cost to purchase an identical asset, or the cost to replace the functionality or utility of the asset; creation cost, the original cost to create the asset; and recreation cost, what it would cost to recreate, or duplicate an existing asset. In many circumstances, the definition of cost also includes the concept of obsolescence, or deterioration in value. Obsolescence can result from

### EXHIBIT 17.1

physical deterioration of the asset, functional obsolescence, technical obsolescence, or economic obsolescence. Although not all intangible assets suffer from obsolescence, the identification of obsolescence is important to the cost approach.

**The Income Approach.** As in the case of the valuation of the business enterprise, the income approach for intangible asset valuation determines the present value of the future benefits that will accrue to the owner of the asset. This is generally accomplished by either capitalizing a single period income stream or discounting a series of income streams, based on a multiperiod forecast.

**Identifiable Intangible Assets.** In this appraisal, several intangible assets could be separately identified and valued. These assets include the following:

- Trademark
- Patient records
- Covenant not-to-compete

Although other intangible assets could be identified as existing in CRS, namely trained employee workforce, procedure manuals, and so on, they could not be separately valued. Therefore, these assets are valued under the residual method in the next section of this report.

**The Income Approach.** To value the identifiable intangible assets and the goodwill of CRS, we have used the income approach. To implement the income approach, we have used the residual cash flow methodology. The residual method allocates the cash flows of the business to its component assets. This includes both tangible and identifiable intangible assets. This is accomplished for assets whose values are known by calculating returns to those assets and subtracting the returns from the forecasted cash flows of the business. The cash flow of a business is the product of combining all of the assets of the business in their productive capacities to generate returns to the shareholders. The cash flow that remains after returns to all of the identified assets are subtracted is the cash flow attributable to the unidentified intangible assets.

We started by analyzing the returns being generated by the tangible assets of the business. Since we have previously determined that excess assets existed in CRS at the valuation date, returns to these assets have not been computed, as this analysis focuses on the operating assets of the business. At the valuation date, the tangible operating assets have been valued in addendum 3.4 to the asset purchase and sale agreement between Public Company Purchaser and CRS. The addendum has been attached as exhibit 3 to this report. As per exhibit 3, the value of the tangible assets at the valuation date was as follows:

Accounts receivable	\$ 550,000
Inventory	40,000
Fixed assets	712,000
<b>Total</b>	<b>\$1,302,000</b>

To compute returns from these assets, we have developed rates of returns for each, and applied them to the asset values. The starting point to estimate returns on these assets is the prime rate that banks charged at the valuation date. According to the Federal Reserve Board, the average prime rate for all U.S. commercial banks was 9 percent on March 9, 1995. The prime rate represents the rate of interest banks charge their best customers on the most secure types of loans.

For this analysis, we have added a premium to the prime rate for each of the different classes of assets to arrive at the following rates of return:

*(Continued)*

**EXHIBIT 17.1** (Continued)

<b>Asset Class</b>	<b>Return</b>	<b>After-Tax Return</b>
Accounts Receivable	11%	6.6%
Inventory	12%	7.2%
Fixed Assets	14%	8.4%

Accounts receivable are the most liquid of the three asset classes, making them less risky than the inventory or fixed assets. Yet banks would still charge CRS a premium to lend against the receivables because it still presents risk to the bank. The inventory is less liquid than the accounts receivable and thus presents more risk to the bank. Therefore, we have added an additional 1 percent premium to the inventory rate. The fixed assets of the business are even less liquid than the inventory, and present a greater risk to a bank that is considering lending against the fixed assets of a business. As such, we have added an additional 2 percent over and above the return to inventory.

All of the returns calculated are pretax returns. Since our objective is to allocate after-tax cash flow to these assets, we need to tax effect the returns to put them on an after-tax basis. To accomplish this, we have assumed the tax rate to be 40 percent and multiplied the pre-tax returns by one minus the tax rate, or 60 percent ( $1 - 40\% = 60\%$ ). It should be noted that the returns calculated here are minimum returns. The premise used here is that companies would require a rate of return equal to the cost to finance the asset. In fact, companies want to make profits on their assets and would want to earn an incremental return over and above their financing cost.

To calculate the cash flow that is allocable to each asset, the value of the asset is multiplied by the after-tax return. The calculations are presented in table 5.

<b>Asset</b>	<b>Value</b>	<b>After-Tax</b>	
		<b>Rate of Return</b>	<b>Return</b>
Accounts Receivable	\$550,000	6.6%	\$36,600
Inventory	40,000	7.2%	2,880
Fixed Assets	712,000	8.4%	59,808

Once the returns from the tangible assets have been determined, we can subtract these returns from the cash flow of the business to obtain the cash flow allocable to all of the intangible assets. This is shown in table 6.

	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Cash Flow (Table 15)	\$1,011,916	\$1,257,349	\$1,544,677	\$1,869,357	\$2,233,004
Less Returns On:					
Accounts Receivable (Table 16)	36,300	36,300	36,300	36,300	36,300
Inventory (Table 16)	2,880	2,880	2,880	2,880	2,880
Fixed Assets (Table 16)	59,808	59,808	59,808	59,808	59,808
Cash Flows From					
Intangible Assets	<u>\$ 912,928</u>	<u>\$1,158,361</u>	<u>\$1,445,689</u>	<u>\$1,770,369</u>	<u>\$2,134,016</u>

## EXHIBIT 17.1

**Trademark.** A trademark, or trade name as it is sometimes referred to, is one of the most common types of intangible assets. The trademark is the name that the company is recognized by in the market place. This is the reason trademarks have value, because they are recognized by customers and referral sources. Typically in an acquisition, the use of the trademark by the seller is prohibited to protect the value of the assets purchased by the buyer.

The valuation of a trademark is based on the present value of a stream of royalties that would be paid for the use of the trademark. Royalty rates for such purposes are typically defined as a percentage of sales. To obtain the actual rates, one must observe similar transactions in the marketplace.

A few companies keep databases of royalty rate data. For the purposes of this assignment, we used the database of ASU Consulting and Trademark Licensing Associates. These databases were searched for companies in the medical equipment and respiratory therapy industries and related fields. The searches did not identify any transaction that would be appropriate to the valuation of CRS' trademark.

Our research and discussions with individuals at ASU Consulting and Trademark Licensing Associates leads us to believe that royalty rates typically range between 1 percent and 10 percent across markets and industries. Considering the low level of technology involved in CRS, as well as the company's strength and reputation, we have selected a royalty rate of 4 percent.

Estimating that the trademark has a relatively long term holding period, we have calculated the cash flow for a 25 year life. The strength of the CRS name becomes more and more apparent when the historic sales growth is examined. Table 7 reflects our calculation.

**TABLE 7  
CASH FLOW ALLOCABLE  
TO TRADEMARK**

<b>Year</b>	<b>Sales</b>	<b>Rate</b>	<b>Cash Flow</b>
1996	\$ 6,500,000	4.0%	\$260,000
1997	7,345,000	4.0%	293,800
1998	8,299,850	4.0%	331,994
1999	9,378,831	4.0%	375,153
2000	10,504,290	4.0%	420,172
2001	11,134,548	4.0%	445,382
2002	11,802,620	4.0%	472,105
2003	12,510,778	4.0%	500,431
2004	13,261,424	4.0%	530,457
2005	14,057,110	4.0%	562,284
2006	14,900,536	4.0%	596,021
2007	15,794,569	4.0%	631,783
2008	16,742,243	4.0%	669,690
2009	17,746,777	4.0%	709,871
2010	18,811,584	4.0%	752,463
2011	19,940,279	4.0%	797,611
2012	21,136,696	4.0%	845,468
2013	22,404,897	4.0%	896,196
2014	23,749,191	4.0%	949,968

*(Continued)*



## EXHIBIT 17.1 (Continued)

Year	Sales	Rate	Cash Flow
2015	25,174,143	4.0%	1,006,966
2016	26,684,591	4.0%	1,067,384
2017	28,285,667	4.0%	1,131,427
2018	29,982,807	4.0%	1,199,312
2019	31,781,775	4.0%	1,271,271
2020	33,688,682	4.0%	1,347,547

Once the cash flow has been forecast, the selection of a proper discount rate becomes necessary. Since the cash flow stream being estimated will not occur until some time in the future, the future cash flow must be discounted to its present value.

The CRS trademark is well established in its local markets. The company had an excellent reputation for service and integrity. As Mr. Carnes has said, he did not spend money on advertising, but let CRS' reputation build by word of mouth, from satisfied patient to doctor, and from doctor to doctor. These events have gone a long way in strengthening the trademark of CRS in its marketplaces. CRS had the predominant market position in each of its markets and continually maintained and upgraded its position with diligent marketing efforts. These positive qualities provide value to a trademark and reduce the risk associated with it. As a result, we have selected a 20 percent discount rate.

This results in the value estimate of the trademark being calculated as follows:

Year	Forecasted Cash Flow	20% Present Value Factors	Present Value Future Cash Flow
1996	\$ 260,000	0.8333	\$ 216,658
1997	293,800	0.6944	204,015
1998	331,994	0.5787	192,125
1999	375,153	0.4823	180,936
2000	420,172	0.4019	168,867
2001	445,382	0.3349	149,158
2002	472,105	0.2791	131,764
2003	500,431	0.2326	116,400
2004	530,457	0.1938	102,803
2005	562,284	0.1615	90,809
2006	596,021	0.1346	80,224
2007	631,783	0.1122	70,886
2008	669,690	0.0935	62,616
2009	709,871	0.0779	55,299
2010	752,463	0.0649	8,835
2011	797,611	0.0541	43,151
2012	845,468	0.0451	38,131
2013	896,196	0.0376	3,697
2014	949,968	0.0313	29,734
2015	1,006,966	0.0261	26,282

## EXHIBIT 17.1

Year	Forecasted Cash Flow	20% Present Value Factors	Present Value Future Cash Flow
2016	1,067,384	0.0217	23,162
2017	1,131,427	0.0181	20,479
2018	1,199,312	0.0151	18,110
2019	1,271,271	0.0126	16,018
2020	1,347,547	0.0105	14,149
<b>TOTAL</b>			<b>\$2,134,308</b>

The indicated fair market value of CRS' trademark is \$2,134,308, or \$2,134,000 rounded.

**Patient Records.** One of the important intangible assets of a business like CRS, is the patient records or customer list. These records are important to a potential purchaser because it is this very patient base that generates immediate cash flow to the company. This type of asset is generally valued by reviewing the expected life of the patient relationship, and applying some factor to the sales in order to estimate the cash flow that would be expected to be generated from this relationship. Before applying factors to the cash flow of the company, we must first determine the cash flow available from the patient records and the remaining assets. This is calculated in table 8.

**TABLE 8**  
**CASH FLOWS AVAILABLE TO PATIENT RECORDS**

Year	Cash Flow	Return On				Cash Flow To Other Intangibles
		Accts. Rec.	Inventory	Fixed Assets	Trademark	
1996	\$1,011,916	36,300	2,880	59,808	260,000	\$ 652,928
1997	1,257,349	36,300	2,880	59,808	293,800	864,561
1998	1,544,677	36,300	2,880	59,808	331,994	1,113,695
1999	1,869,357	36,300	2,880	59,808	375,153	1,395,216
2000	2,233,003	36,300	2,880	59,808	420,172	1,713,843
2001	2,366,983	36,300	2,880	59,808	445,382	1,822,613
2002	2,509,002	36,300	2,880	59,808	472,105	1,937,909

Using Iowa curves, we have calculated the following survivorship rates for the life of the patient relationships:

Year	Survivorship %
1	83.88
2	62.43
3	47.22
4	34.57
5	23.13
6	12.32
7	1.87

(Continued)

**EXHIBIT 17.1** (Continued)

Therefore, projected cash flows from the existing patient base are estimated in table 9.

<b>TABLE 9</b>			
<b>Year</b>	<b>Cash Flow to the Residual</b>	<b>× Survivorship Rate</b>	<b>= Cash Flow to Patient Records</b>
1996	\$ 652,928	0.8388	\$547,676
1997	864,561	0.6243	539,745
1998	1,113,695	0.4722	525,887
1999	1,395,216	0.3457	482,326
2000	1,713,843	0.2313	396,412
2001	1,822,613	0.1232	224,546
2002	1,937,909	0.0187	36,236

After calculating the cash flow attributable to the patient records, the next step is to discount these amounts to their present values to determine an estimate of the value of the patient records. In our opinion, the least risky of the identified intangible assets are the patient records, as they are actual physical documents. Possessing these documents allows a buyer to continue servicing the existing patients. The remaining life of these records can and has been estimated. In addition, buyers such as Public Company Purchaser and other large companies in the industry have their own experiences with how long a patient will remain with the company. As these patients are currently availing themselves of CRS' services, they are generating cash flows and will generate a material and predictable portion of CRS' cash flows over the following months and years. This makes the risk of receiving these cash flows low. Therefore, we have applied a 14 percent discount rate to the patient records. This results in an estimate of value as calculated in table 10.

<b>TABLE 10</b>			
<b>CASH FLOWS ALLOCABLE TO PATIENT RECORDS</b>			
<b>Year</b>	<b>Cash Flow to Patient Records</b>	<b>× Present Value Factors</b>	<b>= Present Value</b>
1996	\$547,676	0.8782	\$ 480,421
1997	539,745	0.7695	415,334
1998	525,887	0.6750	354,973
1999	482,326	0.5921	285,585
2000	396,412	0.5194	205,896
2001	224,546	0.4556	102,303
2002	36,239	0.3996	14,481
<b>TOTAL</b>			<b>\$1,858,995</b>

## EXHIBIT 17.1

Therefore, based on our analysis, the value of the patient records is estimated to be \$1,858,995, or \$1,859,000 rounded.

**Covenant Not-To-Compete.** A covenant not-to-competete (noncompete agreement) is an intangible asset based on a contractual agreement. Typically, the seller of a business, the covenantor, agrees not-to-competete with the buyer of the business, the covenantee, in a defined industry or market for a specific period of time, in a geographically defined area. A noncompete agreement has value to the buyer to the degree that it protects the assets (tangible and intangible) from loss of value by restricting competitive actions of the seller. From an economic perspective, the value of a noncompete agreement is dependent on several factors, including the ability of the seller to compete, the derivation of the noncompete agreement, and the losses the company would suffer if the seller competed.

In the instance where the seller has the ability to compete, the relevant question becomes, what impact would competition from the seller have on the business? The answer to this question depends on a myriad of factors. Chief among them are: (1) the seller being in possession of relationships that could redirect business from the company to a new company established or invested into by the seller, and (2) the seller having either sufficient knowledge or technology to allow him or her to bring competitive services to market.

The single most important source document in determining the value of a covenant not-to-competete is the agreement in which the covenant is made. For this reason, we have performed a detailed review of the asset purchase agreement between Public Company Purchaser, CRS, and John W. Carnes, dated March 9, 1995 (the agreement). The following discussion highlights items in the agreement that impact the value of the covenant not-to-competete.

Article 1.1(b) defines business as it applies to the agreement:

*“Business”* shall mean the entire business of Company [CRS], including, but not limited to, the business of marketing, advertising, selling, leasing, renting, distributing or otherwise providing oxygen, oxygen equipment, aerosol inhalation therapy equipment and respiratory medications, nasal continuous positive airway pressure devices, infant monitoring equipment and services, home sleep studies and related therapy equipment, and other respiratory therapy and durable medical equipment, products, supplies and services to customers in their homes or other alternative site care facilities.

Article 1.1(f) defines territory as:

[T]he State of State and a radius of one hundred fifty (150) miles from any of Company’s current operating centers, regardless of which states such radius may include.

Section 3.4 of the agreement pertains to the allocation of the purchase price and states:

The parties agree to allocate the Purchase Price among the Assets as set forth in Addendum 3.4. The values assigned to the Assets as set forth Addendum 3.4 were separately established by the parties in good faith and each party agrees to report the transaction contemplated by this Agreement to the Internal Revenue Service as required by Section 1060 of the Internal Revenue Code in accordance with Addendum 3.4, subject to the approval of Public Company Purchaser’s and Company’s independent auditors.

An important statement in this section is the discussion of the values being “separately established by the parties in good faith.” This indicates that the parties discussed each of the values and negotiated them separately, including the covenant not-to-competete. Addendum 3.4 has been attached to this report as exhibit 3.

Article 8.2 contains a no solicitation clause which states:

- a. From and after the Closing, neither Company nor the Shareholder [John W. Carnes] shall:
  - iv. directly or indirectly, hire, offer to hire, or entice away, or in any other manner persuade or attempt to persuade, any officer, employee or agent of Public Company Purchaser (including, but not limited to, any former officer, employee or agent of Company), or in any manner persuade or attempt to persuade, any officer, employee or agent of Public Company Purchaser (including , but not limited to, any former

(Continued)

**EXHIBIT 17.1** *(Continued)*

officer, employee or agent of Company) to discontinue his or her relationship with Public Company Purchaser. It is understood and agreed that the prohibitions contained in this Section 8.2 (i) shall apply to all current and future officers, employees and agents of Public Company Purchaser (including, but not limited to, any former officer, employee or agent of Company), whether or not any such person is then currently an officer, employee or agent of Public Company Purchaser or whether any such prohibited activity is in connection with employment, an offer of employment or other action within or outside the Territory; or

- v. directly or indirectly solicit, divert or take away, or attempt to solicit, divert or take away any business Company had enjoyed or solicited prior to the date hereof or which Public Company Purchaser may enjoy or solicit in the Territory after the date hereof.
- b. It is expressly understood and agreed by the parties hereto that it shall be a breach hereof for Company or the Shareholder to assist in any way any member of his or her family, any business associate, or any other person, firm, corporation, partnership, joint venture, association, trust or other entity, to engage in any activity which is prohibited by this Section 8.2.

Notice that this article deals with the existing customers and employees being acquired at the time of the agreement. This article acts as protection for Public Company Purchaser with respect to the customers and human capital it is acquiring.

Article 9 is the covenant not-to-compete and is presented in its entirety.

**9.1** *Covenant.*

- a) In consideration of the purchase by Public Company Purchaser of the Assets and the Business pursuant to the terms and conditions of this Agreement, and for other good and valuable consideration, the company and Shareholder, (each hereinafter referred to individually as a "Covenantor" and collectively as the "Covenantors") hereby represent, warrant, covenant and agree, jointly and severally, that commencing on the date hereof and continuing for a period of five (5) years thereafter, none of the Covenantors will, directly or indirectly, engage in the business of marketing, advertising, selling, leasing, renting, distributing, or otherwise providing oxygen, oxygen equipment, aerosol inhalation therapy equipment and respiratory medications, nasal continuous positive airway pressure devices, infant monitoring equipment and services, home sleep studies and related therapy equipment, or any other respiratory therapy or durable medical equipment, products, supplies and services to customers in their homes or other alternative site care facilities within the Territory.
- b) Without limiting the generality of the provisions of Section 9.1 (a) hereof, this Covenant Not-to-compete shall be construed so that Covenantors shall also be in breach hereof if any of them is an employee, officer, director, shareholder, investor, trustee, agent, principal or partner of, or a consultant or advisor to or for, or a subcontractor or manager for, a person, firm, corporation, partnership, joint venture, association, trust or other entity which is engaged in such business in the Territory, or if any of them receives any compensation or remuneration from or owns, directly or indirectly, any outstanding stock or shares or has a beneficial or other financial interest in the stock or assets of any such person, firm, corporation, partnership, joint venture, association, trust or other entity engaged in such business in the Territory. Notwithstanding anything to the contrary contained in this Section 9.1 (b), no Covenantor shall be deemed to be in breach of this Covenant Not-to-compete solely by reason of owning an interest of less than one percent (1%) of the shares of any company traded on a national securities exchange or in the over the counter market.
- c) It is expressly understood and agreed by Covenantors that it shall be a breach of this Covenant Not-to-compete for any Covenantor to assist in any way any family member, any business associate, or any other person, firm, corporation, partnership, joint venture, association, trust or other entity, to engage in any activity which a Covenantor is prohibited from engaging in by this Covenant Not-to-compete.

**9.2** *Remedies.*

Covenantors agree that the remedy at law for any breach of obligation under this Covenant Not-to-compete will be inadequate and that in addition to any other rights and remedies to which it may be entitled hereunder, at law or in equity, Public Company Purchaser shall be entitled to injunctive relief,

**EXHIBIT 17.1**

and reimbursement for all reasonable attorneys' fees and other expenses incurred in connection with the enforcement hereof. It is the intention of Covenantors and Public Company Purchaser that this Covenant Not-to-compete be fully enforceable in accordance with its terms and that the provisions hereof be interpreted so as to be enforceable to the maximum extent permitted by applicable law. To the extent that any obligation to refrain from competing within an area for a period of time as provided in this Covenant Not-to-compete is held invalid or unenforceable, it shall, to the extent that it is invalid or unenforceable, be deemed void ab initio. The remaining obligations imposed by the provisions of this Covenant Not-to-compete shall be fully enforceable as if such invalid or unenforceable provisions had not been included herein and shall be construed to the extent possible, such that the purpose of this Covenant Not-to-compete, as intended by Covenantors and Public Company Purchaser, can be achieved in a lawful manner.

The key elements of the covenant not-to-compete are as follows:

- The covenant is for a term of five years.
- The covenant covers what the Agreement defines as "business."
- The covenant relates to the geographic region defined in the Agreement as the "territory."
- Prohibits partaking in the "business" in the "territory" for the five year period.
- The covenant defines remedies for Public Company Purchaser if the covenant is violated.

The valuation of the covenant not-to-compete is highly dependent on the impact of the seller's ability to compete in the marketplace with the buyer. Therefore, in order to estimate the potential impact of CRS competing with Public Company Purchaser, after the sale, we have performed a lost sales analysis.

A lost sales analysis entails estimating the potential losses to the covenantee from competition from the covenantor. The analysis is used as part of a residual method valuation of a noncompete. As part of a residual method of valuation, the lost sales analysis determines the cash flow that is allocable to the covenant not-to-compete. The cash flow is then valued directly in the residual valuation analysis.

Lost sales analysis can be used to value the subject business' cash flow for the period of the covenant, first assuming the covenant is in place and then a second time without the covenant. The difference in the values in these two scenarios is the value of the non-compete agreement.

Regardless of how it is to be used, there are several steps involved in preparing a lost sales analysis. The first step is to prepare a forecast of the company's income statement and cash flow assuming the covenant is in place, and the covenantor is not in violation of the agreement. This has previously been done to value the entire operating enterprise.

The next step is to ascertain what level of sales would be lost if the covenant was not in place. The impact of the lost sales on the company's income statement and cash flow must then be analyzed and forecasted. Determining the likely level of lost sales is a highly intricate process that typically involves in-depth discussions with management of the acquiring company. The closest information we have to interviews in this case are the depositions of the Public Company Purchaser officials and of Mr. Carnes. Based on our review of the various deposition transcripts provided to us, we determined that the possible range of lost sales would be between 1 and 25 percent. Our analyses follows in tables 11 and 12.

A general rule that is applied to these scenarios is that we have not reduced sales in any one year by more than 10 percent. This has been done to reflect that transferring revenues to a new entity would take Mr. Carnes time to accomplish.

Each of these tables has the same assumptions regarding to cost of sales, operating expenses and income taxes. They are:

1. Cost of sales is forecasted at 14.1 percent of sales based on the historic cost of sales.
2. Operating expenses are forecasted as 41.9 percent of sales.
3. We have assumed a combined federal and state tax rate of 40 percent.

Table 11 presents the forecasted income statements of CRS for the years ended March 9, 1996 through 2000 assuming a one percent loss of revenues due to competition from Mr. Carnes.

*(Continued)*

## EXHIBIT 17.1 (Continued)

**TABLE 11**  
**CRS' FORECASTED INCOME STATEMENTS**  
**ASSUMING A 1 PERCENT LOSS IN REVENUES**

	1996	1997	1998	1999	2000
Net Sales*	\$6,435,000	\$7,271,550	\$8,216,852	\$9,285,042	\$10,399,247
Less: Cost of Sales	907,335	1,025,289	1,158,576	1,309,191	1,466,294
Equals: Gross Profit	\$5,527,665	\$6,246,261	\$7,058,275	\$7,975,851	\$ 8,932,953
Less: Operating Expenses	2,696,265	3,046,779	3,442,861	3,890,433	4,357,285
Equals: Net Operating Income	\$2,831,400	\$3,199,482	\$3,615,415	\$4,085,419	\$ 4,575,669
Less: Taxes	1,132,560	1,279,793	1,446,166	1,634,167	1,830,268
<b>Net income</b>	<b>\$1,698,840</b>	<b>\$1,919,689</b>	<b>\$2,169,249</b>	<b>\$2,451,251</b>	<b>\$ 2,745,401</b>

Note: Figures may be off due to rounding.

\* Sales in 1996 have been multiplied by 99 percent of the \$6,500,000 figure used in the noncompetition forecast analysis (\$6,500,000 × .99 = \$ 6,435,000). Thereafter sales have been grown at the rates used in the non-competition forecast analysis.

 **Author's Note**

The next several tables have been omitted from this exhibit but they were based on a 5, 10, 15, 20 and 25 year analysis similar to this one.

Having presented these analyses, the lost income calculated under each scenario is summarized in table 12.

**TABLE 12**  
**SUMMARY OF LOST INCOME FROM SELLER COMPETITION**

Lost Revenue	1996	1997	1998	1999	2000
1 Percent	\$ 17,160	\$ 19,391	\$ 21,912	\$ 24,760	\$ 27,731
5 Percent	85,800	96,964	109,558	123,801	138,657
10 Percent	171,600	193,908	219,116	247,601	277,313
15 Percent	171,600	281,167	317,718	359,022	402,104
20 Percent	171,600	368,425	416,320	470,442	526,895
25 Percent	171,600	368,425	505,062	570,721	639,207

As can be seen in table 12, the greater the loss of sales, the greater the loss of income, and as a result, loss of cash flow. The question that needs to be answered after an analysis like this is, what is the most likely loss of revenue that would result from the competition of the seller? In order to answer this question, we reviewed numerous documents relating to this matter. We have highlighted that which we consider to be most relevant to our analysis.

The deposition of John Byrnes provided us with a significant amount of relevant information. Mr. Byrnes is, and was at the time of the CRS acquisition, Chief Operating Officer of Public Company Purchaser. From his deposition, it is clear that he is highly experienced in the respiratory therapy business as an industry insider.



### EXHIBIT 17.1

On page 4 of his deposition, Mr. Byrnes explained his involvement in the acquisition of CRS by Public Company Purchaser. Mr. Byrnes indicated that he reviewed a book from Mr. Carnes' business brokers, and then attended a meeting with the brokers, John Carnes and Lori Rodgers. Mr. Byrnes indicated the reason he went to the meeting was "to see if Lori was capable of running the business herself." This is significant because it demonstrates that Public Company Purchaser believed Ms. Rodgers to be a key individual in the operations of CRS.

When asked if he knew of CRS and Mr. Carnes prior to their meeting in December 1994, he said "we knew who they were and we knew that they're at four locations and were a good competitor." Later Mr. Byrnes was asked "Why were you concerned about whether or not Ms. Rodgers would be able to run the company after the acquisition?" His response was "Because the feeling I got was that Mr. Carnes wasn't coming in the acquisition." Mr. Byrnes was asked "Did Public Company Purchaser have an interest in having Mr. Carnes continue on with the business in some capacity, if you recall." Mr. Byrnes' reply was "No," "we did not have an interest." This is a very clear statement that Public Company Purchaser's interest was in Lori Rodgers and not in John Carnes.

Mr. Byrnes was asked what Ms. Rodgers's role has been from the acquisition forward. His response was "Her title is an area manager. She runs the four Carnes locations. We opened up a City E office. She also runs several other locations for us now. She has several locations that report to her." Clearly Ms. Rodgers has shown the capabilities, not only to effectively run what was CRS, but also the ability to take on these new locations, as well.

When asked about the source of referrals that generate revenues for his company, Mr. Byrnes indicated that half come from doctors and half come from hospitals. Mr. Byrnes was asked how these referral relationships were maintained. He replied, "In Carnes' case, we continued to do exactly the same things that they were doing. They had four or five sales reps who called on hospitals, the doctors, the nursing agencies, who were willing to service their indigent patients who provided a high level of service." Mr. Byrnes was then asked, "Did you attempt to ascertain as part of the due diligence who had been responsible for generating the doctors, hospitals and nurse referrals that Carnes Respiratory had?"

Mr. Byrnes responded that Public Company Purchaser had ascertained that information and "that it was the sales people who brought in the business." Mr. Byrnes was then asked "Did you have any reason to believe that the relationships that existed with the doctors, nurses, and hospitals had been of long standing, namely initiated and started by Mr. Carnes himself?" Mr. Byrnes responded "There's probably some in City A. But for the other locations outside of City A, I think it was the salespeople he hired." Mr. Byrnes was then asked a series of questions regarding the percentage of business CRS derived from each of its locations. His response indicated the following:

City A	25%
City D	15%
City B	40%
<b>Total</b>	<b>80%</b>

In regard to the City B store, Mr. Byrnes was asked "did you attempt to ascertain or did you ascertain the role that Mr. Carnes individually had in initially establishing and having continuity in terms of the referral relationship?"

Mr. Byrnes answered "It was Judy Clark that got the business there." Mr. Byrnes was asked how he was aware of this and he responded "because when he opened in City B, I was the center manager there [For Public Company Purchaser]." Mr. Byrnes further commented that he "knew who was out calling on the docs."

From all of these questions and answers, it is clear that Mr. Byrnes is well versed in the local markets where CRS operated, and how the company was generating its referrals. Mr. Byrnes' concerns were about the abilities of Lori Rodgers, as discussed above. Mr. Byrnes was later asked what his determination of Ms. Rodgers's abilities to run the locations was. He responded "I thought she could." When asked why, Mr. Byrnes said, "She knew what was going on. She knew where the business was coming from. She knew what was going on in all four markets. And I just felt confident that she was on top of the business."

Another deposition that was helpful was that of Mr. Davidson, who was specifically asked about the noncompete agreement and how the value was derived. He responded as follows:

*(Continued)*

**EXHIBIT 17.1** (*Continued*)

- A. As you know, we've been on a fairly active acquisition program for a number of years. From the beginning of 1991 through today, we've closed more than 70 acquisitions

Working with our independent auditors, we have determined that during 1995, we were basically allocating \$50,000 per shareholder to the covenant. Because of the size of this transaction, which was—the business was larger than the normal business in the industry and larger than our normal acquisition, we felt it appropriate to increase that from 50,000 to 100,000 in terms of allocation of the purchase price to the covenant. So it was a standard calculation adjusted for the size of the business that we arrived at working with our outside auditors.

Although one could construe this statement as indicating that Public Company Purchaser applies a blind rule of thumb to the allocation of purchase price for a noncompete, we do not believe that is the case. As Mr. Davidson indicated, his company is very experienced in acquiring other companies. Their method of allocating to a non-compete is based on this experience, and as he mentioned, from working with Public Company Purchaser's independent auditors. At some point in this process, Public Company Purchaser, with its outside accountants' assistance, determined this to be an appropriate measure. This should also be held up against Public Company Purchaser's tax and accounting incentives. An allocation of purchase price to a noncompete agreement can be amortized over the life of the agreement. Goodwill on the other hand, is amortizable for financial statement purposes over 40 years. In prior years, goodwill was not at all deductible for income tax purposes. Now, it can be amortized over 15 years.

In addition, Public Company Purchaser is required by law, to submit its financial statements to the Securities and Exchange Commission because of its status as a publicly traded company. These financial statements must fairly represent the financial condition of the company and have been audited by the company's outside accountant. In recording the allocation of purchase price, the company has a duty to fairly report it to its shareholders, and the independent accountant has opined to its fairness. Given these facts and circumstances, we do not believe that Public Company Purchaser's methodology is without merit.

The third Public Company Purchaser deponent was Robert G. Abbott, whose deposition pointed out two issues relevant to our analysis. The first issue is the importance of Lori Rodgers to Public Company Purchaser in the transaction.

- Q. Now, in that regard, is that instrument or Ms. Rodgers's Employment Agreement with Public Company Purchaser pursuant to the terms of the agreement? Because I don't know why, but I was of the impression that Ms. Rodgers did not have a written Employment Agreement with Carnes Respiratory.
- A. No. This is an Employment Agreement between Ms. Rodgers and Public Company Purchaser as a condition precedent to closing the acquisition.

The key is that her employment agreement with Public Company Purchaser was a precondition to the acquisition. Public Company Purchaser was concerned with locking her into the deal from the very beginning. The second issue is over the negotiation of the individual asset values.

- Q. And did Mr. Gonzales or anyone on behalf of Mr. Carnes make any suggestion as to what the allocation should be or was the allocation something that was the product of Public Company Purchaser?
- A. I do not believe anyone representing the seller or the seller himself made any suggestions as to what the allocation should be. I believe the process was we presented our good faith estimate of what the allocation should be and it was accepted by the seller after their review.

The importance of this response is that neither Mr. Carnes nor his representatives commented on the allocation of the asset values. This issue will be taken up again later in this report. The fourth and final Public Company Purchaser official deposed in this matter was Phillip Phillips. Mr. Phillips is Public Company Purchaser's controller. Mr. Phillips was deposed for the purposes of understanding more about Public Company Purchaser's acquisition process, and how Public Company Purchaser values individual assets, particularly covenants not-to-compete.

Mr. Phillips established that Public Company Purchaser does have a written policy as to how it allocates purchase prices. In establishing this, he stated:

We have—using the term *protocol* or methodologies as to how we—how we come up with the end product of a purchase price allocation. That is, from the inception of the early—late 1990, '91 and '92 when we started acquiring businesses with our outside auditors, we developed that methodology.

### EXHIBIT 17.1

And it's been applied over that entire span of our acquisition program with very minor adjustments, very few in form and very few in substance. It's primarily the same methodologies from the time I started with the company in 1993.

The important points in this statement are that the methodology has been developed with Public Company Purchaser's outside auditor and that it has been applied over time with very little modification. Mr. Phillips goes on further to discuss how covenants are valued, and what the trend has been over time.

- A. And the covenant, which is the second item—ready to go to the next one?—if you're in an asset and stock purchase, in each of those transactions, there is normally—with an asset purchase, there is one or more persons that are the influential persons in that business.

In a stock purchase, certainly there are shareholders that are oftentimes participants in the business in our industry, and they are the significant influencing persons involved in the business.

We value covenant based on the same methodology, the number of persons that are involved times an amount. And the amount in the case of March 9th of 1995 was \$100,000 for the significant person involved in the Carnes Respiratory acquisition.

The methodology of using a number of persons involved times a dollar amount has been in place for 1994 through today. The only variation is that the dollar amount that we have assigned to each of those significant persons in the business has changed. It's continued to slide on a downward scale.

In 1994, we were valuing—when we were developing purchase price allocations, we were looking at businesses and saying—and we were buying from a different pool of sellers.

In this case, I don't think Mr. Carnes is a doctor. But in '94, we were buying many physician-owned practices. And you would often be buying for more than one person, and there's a—there's 12 shareholders. We were valuing those in that time frame from 50 to \$100,000 per person.

Through the middle of '95, then we started to change the valuation to more in the \$25,000 per person; in 1996, more in the 10,000, where today and for the last 12 to 18 months, we've been valuing each covenant based on the number of persons at \$5,000 per person.

- Q. Since that is truly the focus of our litigation, let me address that for a few moments.

A. Sure.

- Q. The \$100,000 number or \$50,000 number, or whatever number may be used, where does that number come from?

A. It is purely an estimate based on management's ability to estimate what this covenant is valued to us internally.

There are two factors in this statement. First, that the dollar amount assigned to each shareholder has decreased through time. This indicates that Public Company Purchaser has seen what it believes to be trends in the value of noncompete agreements, and has adjusted its valuations accordingly. This further supports the notion that Public Company Purchaser's allocation is not arbitrary. Second, the value of the covenant is Public Company Purchaser's perception. This indicates that as an active participant in this market Public Company Purchaser does not believe that the owning individual is highly valuable to the success of the business.

A review of the deposition transcript of John Carnes also provides us with important information regarding the covenant not-to-compete. From reviewing Mr. Carnes's deposition transcript, we feel Mr. Carnes was very knowledgeable about his business and his industry. It appears that Mr. Carnes has good marketing skills and is a very effective teacher. These are both important skills in developing and growing a successful business in this industry. In addition, Mr. Carnes describes the importance of his employees and the level of service provided to customers in the success of CRS. The deposition covers topics from opening new locations, competition, and key employees, to marketing and referral development.

Mr. Carnes was asked about and discussed how CRS decided to open new locations. Key factors appeared to be a geographic area with an elderly population, and a sufficient potential referral base. In answering a question about how the actual decision process went, Mr. Carnes said:

We'd take all my marketing people and I would think I'd see an area I thought would be good. I would visit it myself or I would have some kind of contact. And I would send all those marketing reps into the area, and they would talk with doctors about who they were using or how they were doing or how they could be, you know, handled better by a company. If we saw there was potential, then we would go there and open a facility.

*(Continued)*

**EXHIBIT 17.1** *(Continued)*

Mr. Carnes was asked why he opened the City D location. He responded:

- A. Carnes Respiratory continued to expand yearly looking for places that we thought we had potential business. And I had looked at purchasing a company down there one time and didn't. And then I thought it would be a good opportunity for Carnes to expand.

So I expanded down there because I thought there would be some additional business, which, in that business, as always, you look for an older population of people that had some problems. That's why we moved there.

Mr. Carnes later discussed how City C differed in respect to why it was opened.

- A. No sir. We did that a little bit different than that. We had some doctors in City A that also covered City C. And so they were looking for some additional people. They wanted better coverage up there. So that helped make—There's more than just one reason you would decide to go there, but that was one of the major reasons to look at City C.

And, again, it's an older population of people, which is what we were. We were government, Medicare—you needed older people—older sick people.

Training is a very important part of CRS' business. Employees who typically are not highly skilled when they began their employment at CRS must be trained to deliver a high level of service to CRS' patients. CRS' employees were trained in how to educate patients in using oxygen and other equipment. Mr. Carnes discussed the training of these individuals in-depth.

- A. It would be delivered to the patient's home, and they would educate the patient in how the doctor prescribed the oxygen for him, and how the equipment worked.
- Q. Okay. Would this be someone that had been trained in your operation to do this?
- A. Yes, sir.
- Q. This wouldn't be someone out of the labor pool—
- A. No.
- Q. —in City F or City B, would it?
- A. No.
- Q. This would be someone that you would recognize as having the degree of skill necessary to—
- A. We had constant education programs at the company to educate everybody that came onboard. They all had to go through a training period or a training phase to do anything that was related to our company, whether it would be install a bedside commode or a walker. And we were governed by the joint commissions, which said that we were doing it in a proper safe manner for the patient.
- Q. They were skilled people?
- A. Well, you know, you don't hire them skilled. You hire them and then, you know, train them to do the job. So you weren't respiratory therapists or, you know, physical therapists or nurses, no, sir.
- Q. Was there a difference between the truck driver and the person who actually took the tank to the patient?
- A. No.
- Q. Would that person that was trained by you—of course, he'd already know how to drive a truck, but, obviously, that person be trained by you, then, to take the tank inside and help the patient?
- A. Yes, sir. Me or my staff trained them. Ninety percent of them I have trained myself.
- Q. Was there some sort of formalized training you gave them? In other words, did you have some sort of brochure you followed or was it just based on your experience in the business?
- A. Well, initially when we first did it, it was, you know, based around our experience the way—but when we became JCO certified or joint commissioned, then we had protocol that you had to follow, and it was a written procedure. We had a policy and procedure manual that we—Lori Rodgers, matter of fact, wrote our policy and procedure manual that joint commissions came in and inspected us and said, yes, we're following proper procedure with all the safety precautions and everything that should be done to maintain the health and safety for the patients with the equipment.

### EXHIBIT 17.1

The quality of the services provided by CRS differentiated the company from its competition. In discussing the quality of the services provided compared to its competition, Mr. Carnes felt that CRS was superior in all respects.

- A. Not a chance.
- Q. Is this because of the better training you provided your people?
- A. I think it was better training and just simply the way we maintained, you know, our equipment. And there was just never a question just from the physicians and the patients themselves and the referrals from social services workers at hospitals, nurses at hospitals. Your patients and word-of-mouth back to the physicians is what built Carnes Respiratory Services.
- Q. And that's what I was going to ask you. Is it this quality of services that you—to which you attribute the obvious success of Carnes Respiratory Services in these areas?
- A. I think we gave the best out there, yes, sir. Public Company Purchaser must think we gave pretty good, too, because they still carry our name in several of the locations. Even though they bought my company they still have my name on it.

Mr. Carnes answered a series of questions relating to competition from other companies in the oxygen business. Through his responses, he indicated that he did not believe any of the independent companies in his industry offered any significant competition to CRS. Mr. Carnes described CRS' competitive advantage as taking care of patients.

And so you got business based around what your ability—the physician, he wanted his patients taken care of. I mean, that's what he was looking for. So whoever gave the best care to his patients is, you know, who he's normally going to use. And so it was a combination of a lot of things, and it was years. We didn't do it overnight. It took us, you know, 13 years to build that business.

In addition to providing high quality service to patients, Mr. Carnes believed it was crucial to market these services to potential referral sources. When asked, Mr. Carnes discussed the importance of marketing and the marketing staff to CRS.

- A. My marketing people met with me, not just—We had a meeting every week. There is no question about it. But it was daily that my marketing people would get on their radio or they had mobile phones in their car, that I talked to them constantly about, you know, this position, you need to do this. You need to do this. You need to do this hospital.  
So my marketing people were in constant contact with me every day. My marketing people is the backbone and center of this whole thing. So did I spend the majority of my time with my marketing people? There is no question about that.
- Q. How many marketing people did you meet with when you would meet weekly?
- A. Whatever number we had. So what was it? Five maybe.
- Q. That's what I'm asking. I don't know.
- A. Yes, sir.
- Q. Would that include Lori Rodgers or was she in addition to the marketing people that you're referring to?
- A. Lori was a business director. That was her title. But it was not unusual for me to send Lori. If I had a big luncheon somewhere, if I had a special deal going on with a doctor, would I send Lori into one of the doctor's offices with the marketing person? Yes. That wasn't unusual for her to do that. It wasn't unusual for me to go to one myself.

The key to referrals is developing relationships with doctors, nurses, social workers, and certain hospital personnel. Mr. Carnes was asked about how significant referral sources were developed. His response to that question was:

- A. How you develop it was, it's a combination of a lot of things, but a lot of it depends on your reputation when you first did what you said you were going to do back in 1981, when Carnes Respiratory first started. You had to do what you said you were going to do.  
And one of the things that helped us more than anything is, we went out and we said, "We will have equipment in a patient's home within the hour." And so it was a reputation that you built over years of doing exactly what you said you were going to do and taking care of patients better than anybody else could take care of it. And that reputation rested, honest to God, with John Carnes, because it was Carnes Respiratory.

*(Continued)*

**EXHIBIT 17.1** *(Continued)*

Referral development was discussed further with Mr. Carnes.

- Q. When you—your sales personnel would call on a physician or a hospital, did you regard them as engaging in referral development at that point?
- A. That was their job. So anything that they did—They might do a talk for a nursing service. They might go to a nursing service and put on a demonstration. They would take a driver with them and they would do, you know, a demonstration of how oxygen equipment would work, or if a nursing service, you know, wasn't sure where the low air loss mattress how it worked, we would use our marketing people to go put on a demonstration for a nursing service.

Mr. Carnes clearly believed that marketing was the key to his business, as he said "Everything that you do is a marketing tool. Anything that you do good is going to be considered a marketing tool. So everything that we did is geared around making sure that we get referrals."

The discussion moved on to the subject of key personnel. One of the key individuals at CRS was Lori Rodgers. When asked to describe her role at CRS, Mr. Carnes responded:

- A. Lori Rodgers started to work for me in City B for \$5 an hour as a person to run the City B store. And from there she developed and was trained and aggressive about, and she ended up being the director for the business. She ran the businesses just like I would have done from years and years of training.  
How good she is. She just was promoted this week to regional manager for Public Company Purchaser. She has the highest job, other than the CEO, here in State. She covers all of the State operations for them, which is their largest, by far, dollar volume dollarwise in their company. So how good is she? That's how good she is.
- Q. What were her duties with CRS, Carnes Respiratory Services?
- A. Yes, sir. Well, she started out, like I said, as a customer service person, and then, you know, from there, for different jobs, in charge of billing. And just finally, her title—I let her call herself whatever she wanted to—was director of business.
- Q. Was that her title as of December of 1994?
- A. Yes, sir.
- Q. Okay. And what were her duties as of December 31st, 1994?
- A. She had, you know, combination of everything, to make sure that—you know, same as I would do. The drivers did what they were supposed to, the marketing people did what they were supposed to, billing, that we collected our money.  
She met with—Every time we had a marketing meeting, she was part of that. If I had a meeting with drivers, she was part of that. Many a times I would send her to—if I couldn't go to run one of the operations that I had problems, I would send her to City D or send her to City B or send her to City C to handle a situation that, you know, I didn't have time to get to.  
So she did the same kind of things that I would have done if I couldn't get to them, or she was a part of what I wanted done. Like any CEO would do, that they would pass down to a president or someone under them to do things that, you know, needed to be done.  
So did she—One of the biggest things she ever did for Carnes Respiratory, she wrote a manual—policies and procedures manual which was for joint commissions when we decided that we needed to be joint commissioned. Lori actually gathered the information and put this policy and procedure manual together that I would have had to spend \$25,000 to get done. She did it for me in addition to her job. She did it on the weekends and at night and other times. So what did she do? She did everything.
- Q. Did she have any responsibilities concerning the referral development?
- A. Absolutely.
- Q. What were those?
- A. Again, you know, if we had a marketing—if one of the marketing people needed her to help support them in some way, did Lori go from the office into physicians' offices and take care of whatever needed to be done? Yes.
- Q. What was—
- A. That wasn't her major—That was not her major job, no.
- Q. What was her major job?

### EXHIBIT 17.1

- A. All of it. But the marketing part would have just been one of the 10 other things that she did. Her job was to make sure that everything there—that she was part of everything that went on. Somebody that you can count on if you're not there, that you know is going to do everything that you would do, and make sure that if you did go on vacation or you did go skiing or you did something, that you knew it was going to get done right.

Mr. Carnes felt that there were several key people at CRS in addition to Ms. Rodgers, as indicated in the following discussion.

- Q. Who did you regard as the management personnel of Carnes Respiratory Services in December of '94, other than yourself, obviously?
- A. The key people?
- Q. Yeah.
- A. Key people at that point was Lori Rodgers, all of my marketing people. Judy Clark was really important. No question. She had tremendous—
- Q. She is one of those four or five marketing people?
- A. Yes. And Janie Wey; tremendously important.
- Q. Another one of the marketing people?
- A. Caroline Hanken; tremendously important. My other marketing person, Kathy Elston, at that time was fairly new. Wasn't near as effective, because she didn't have the time under her belt. She had a really tough territory. God. Then, you know, my supervisor of my drivers was Johnie Goodson, my brother, a young lady by the name of Brenda Harrell, which ran my billing department for me, Cindy Jacobi.

From the deposition transcript, it is apparent that CRS' success is derived from the collaboration of several key individuals. As Mr. Carnes stated, the marketing representatives are the "backbone" of the company. It also appears that Ms. Rodgers was very important to the business, as she worked in all facets of the business and was essentially interchangeable with Mr. Carnes. It appears that Mr. Carnes's skills lay in marketing and training. Mr. Carnes said that he performed over 90 percent of the training of all employees. This developed the skills of the employees, making them proficient at their jobs.

In addition to the Public Company Purchaser executives and John Carnes depositions, we also searched for other authoritative sources to assist in the valuation of the covenant not-to-compete. The value of noncompete agreements in the purchase and sale of a company has been the subject of numerous court cases involving the Internal Revenue Service (IRS) and taxpayers. According to Neil C. Kelly, ASA, CFA, the IRS maintains a theory called the "mass asset" rule. Prior to tax reform, this theory held that certain intangible assets were "non-depreciable as a matter of law, because such intangible properties are part of a single mass asset, which, in the aggregate, has no determinable useful life and is either inextricably linked to goodwill or self regenerating." According to Mr. Kelly, for a noncompete agreement to not fall under the mass asset rule, it must have the following components:

1. A recital to the effect that it is the intent of the parties that the Covenant not-to-compete is separate and distinct from any goodwill the seller may be selling.
2. That the subject covenant is not merely for the purpose of protecting the purchase goodwill.
3. That the Covenant has an independent basis-value.
4. That the Covenant was expressly bargained for—separate and distinct from the goodwill of the seller.
5. That a specific monetary sum is being paid for the Covenant.
6. That the Covenant is for a specified period of time—which goes to the permissible amortized period.
7. That the Covenant to compete restrains a key individual from competing with the purchaser, and if same is not accomplished, that the purchaser will suffer an economic detriment because of the key person's ability and competitive activities.
8. That even in the event of the death of the grantor of the Covenant, such will not entitle the purchaser to depreciate or recover the cost of such Covenant over a period shorter than the term of such a Covenant.
9. The amount the purchaser is paying for the Covenant not-to-compete is depreciable over the life of the Covenant regardless of whether the purchaser makes payments for such Covenant over a period shorter than the life of the Covenant.

*(Continued)*



**EXHIBIT 17.1** (*Continued*)

10. A recital to the effect that the value allocated to the Covenant has economic reality or substance.

In addition, guidance can be found in the four tests that the courts have historically applied to noncompete agreements in determining whether it could be amortized for federal income taxes. The four tests were summarized in *Forward Communications Corp. v. U.S.*, 78-2 USTC Para. 9542, as follows:

1. Whether the compensation paid for the covenant is severable from the price paid for the acquired goodwill.
2. Whether either party to the contract is attempting to repudiate an amount knowingly fixed by both the buyer and seller as allocable to the covenant.
3. Whether there is proof that both parties actually intended, when they signed the sale agreement, that some portion of the price be assigned to the covenant.
4. Whether the covenant is economically real and meaningful.

The first test was effectively established in *Marsh & McLennan, Inc. v. Commissioner*, 51 T.C. 56 (1968). *aff'd* on other grounds, 420 F.2d 667 (3d Cir. 1969). In this case, the court looked at whether the compensation paid for the covenant is separable from the price for goodwill. Where goodwill and the covenant not-to-compete are closely related, the benefits of the elimination of competition may be permanent or of indefinite duration and, hence, the value of the covenant is not exhaustible or a wasting asset to be amortized over a limited period.

In *Commissioner v. Danielson*, 378 F. 2d 771 (3d. Cir.) cert. Denied 389 US 358 (1967), the courts looked at whether either party was attempting to repudiate an amount knowingly fixed by both as allocable to the covenant, the calculable tax benefit of which may fairly be assumed to have been a factor in determining the final price.

In *Annabelle Candy Co. v. Commissioner*, the courts looked at whether the covenant played a real part in the negotiations.

Although the valuation of a noncompete agreement is not concerned with whether or not the value is amortizable, these tests do provide meaningful guidance in the valuation process. In reviewing Mr. Kelly's points, we have determined the following:

1. Based on the asset purchase agreement, the parties intended for the covenant not-to-compete to have value separate and distinct from the value of goodwill.
2. It appears that Mr. Carnes was skilled in his business and would have the ability to compete with Public Company Purchaser. This does not indicate what level of competition Mr. Carnes might provide.
3. Based on our review, the covenant does have independent basis value as presented in addendum 3.4 to the agreement.
4. The agreement clearly lays out the allocation of purchase price. A series of documents dated between March 1 and March 9, 1995, between Robert G. Abbott, a member of Public Company Purchaser's acquisition group and Associate Corporate Counsel, and Mr. Carnes' attorney, Larry Gonzales, indicates that the asset purchase agreement and lease had been negotiated, as well as the value of the accounts receivable. In fact, Mr. Carnes appears to have been personally involved in this negotiation. In a fax transmittal dated March 1, 1995, from Rick Stevens of Richards & Associates, Inc. to Mr. Abbott, regarding the accounts receivable, Mr. Stevens writes "John believes a fair resolution would be additional consideration of \$332,516. The excess over \$600,000 as of stopping billing on February 28, 1995."

Although there is no indication that Mr. Carnes or his representatives expressly bargained for the value of the covenant not-to-compete, they did negotiate the terms of the deal, as well as particular asset values. From this, we must conclude that Mr. Carnes and his advisors implicitly approved of the value of the covenant not-to-compete.

5. The agreement clearly states that \$100,000 is being paid for the covenant not-to-compete.
6. The covenant is for a period of five years after which it expires.
7. The covenant does constrain Mr. Carnes from competing and the same stated in 2 above holds here, as well.
8. We are unaware of the impact the death of Mr. Carnes would have on Public Company Purchaser's ability to recover the cost over a shorter period of time.
9. The value of the covenant is depreciable over the life of the covenant even though payments for the covenant were made over a shorter period.
10. No recital of the economic reality of the covenant was found.

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In reviewing the four tests put forth in *Forward Communications Corp. v. U.S.*, we found the following in regard to the agreement.

1. The compensation paid is separable from goodwill, as it was expressly laid out in the agreement.
2. We have found no evidence that Mr. Carnes repudiated or attempted to repudiate the allocation to the covenant offered by Public Company Purchaser.
3. Both parties clearly intended an allocation to be made to the covenant not-to-compete, as it is expressly laid out in the agreement.
4. Based on Mr. Carnes's apparent skills and abilities, he appears to have an ability to compete. However, this is in no way an indication of the level of competition he could provide. Therefore, the covenant is economically real and meaningful.

Of particular importance, is whether the covenant was at issue in the negotiation process. This relates to the economic reality of the covenant and its economic significance. According to Kelly, the following are factors which are important in determining the economic reality of a non-compete agreement.

- a. The presence of a grantor of the covenant not-to-compete having business expertise evidencing a formidable capability to compete;
- b. grantor's ownership of technology and machinery necessary to compete;
- c. grantor's possession of sufficient economic resources to compete;
- d. legal enforceability of the covenant for the term of the particular covenant under state law;
- e. grantor's legal capacity to compete;
- f. covenant having sufficient scope to assure non-competition without overreaching;
- g. not too advanced age of grantor;
- h. good health of grantor;
- i. payments for covenant that are not pro-rata to the grantor's stock ownership in the seller;
- j. purchaser's policing of the covenant not-to-compete;
- k. structuring payments under the covenant to occur over time and to cease upon breach of such covenant;
- l. vigorous negotiations over the covenant and negotiations over its value should be recited in the agreement;
- m. detailed, specific, and carefully drafted covenant not-to-compete;
- n. independent appraisal of the value of the covenant not-to-compete;
- o. some degree of reasonableness in the percentage of the considerations allocated to the covenant and other items.

The importance of the covenant not-to-compete having economic substance was further delineated by a Bureau of National Affairs' paper on the subject published in 1992. The paper stated:

The most important factor is whether the covenant is economically real, that is, whether the covenant is the product of bona fide bargaining rather than a sham. The economic reality theory is primarily concerned with business realities which would cause reasonable persons, genuinely concerned with their economic future, to bargain for the covenant not-to-compete.

Among the facts to be considered are whether the seller could actually compete with the purchaser—where the seller is, objectively, likely to be a competitor. The paper states that courts have also looked at the actual contract negotiations to determine if the parties' intentions were for the covenant not-to-compete to have value.

In addition, the amount allocated to the covenant not-to-compete may not reflect economic reality. The taxpayer has the burden of proving that he is entitled to the deduction. *Welch v. Helvering*, 290 U.S. 111 (1933). Courts have frequently found that covenants have no value or, at least, substantially less value than the purchaser attributes to them. The same factors as above have been considered for this purpose. Further, courts have looked at the actual contract negotiations to determine if the parties intended the covenant to have any value. For example, if the parties agreed to pay a certain amount for the assets of the seller and the purchase price is not altered when a covenant not-to-compete is later added, the covenant has no or minimal value.

(Continued)

**EXHIBIT 17.1** (*Continued*)

Other guidance on determining the value of a covenant not-to-compete is given in Revenue Ruling 77-403. The ruling states that the relevant factors for determining the value of a non-compete agreement include:

- 1) Whether in the absence of the covenant the covenantor would desire to compete with the covenantee;
- 2) the ability of the covenantor to compete effectively with the covenantee in the activity in question; and 3) the feasibility, in view of the activity and market in question, of effective competition by the covenantor within the time and area specified in the covenant.

Based on the issues presented by Kelly in regard to the mass asset rule, the covenant is a distinguishable asset that can be valued separately from goodwill. Further, the covenant in the Public Company Purchaser-CRS deal appears to pass the four tests from *Forward Communication Corporation v. U.S.* Tests two and three are of particular importance here. The importance of test two is that after Public Company Purchaser proposed the allocation to the covenant, Mr. Carnes and his advisor did not attempt to repudiate or negotiate it, although they did negotiate several other items in the agreement. As a result, we believe the covenant is economically real. Test three is significant because the allocation to the covenant is clearly made in the agreement.

From the deposition of various Public Company Purchaser executives, we learned that Public Company Purchaser has developed a methodology for allocating a portion of the acquisition price to covenants with the assistance of its outside accountant. In addition, we know that Public Company Purchaser is a major player in the industry and has been undergoing a major acquisition program. Therefore, Public Company Purchaser's actions appear to be reflective of market conditions.

As Mr. Davidson states, "Public Company Purchaser's interest in CRS was due to its good locations, respiratory therapy control, and good reputation." According to Mr. Byrnes, he did not believe that Mr. Carnes held many of the referral relationships personally. In fact, Mr. Byrnes knew first hand that in City B, Judy Clarke was generating the referrals. Mr. Byrnes believed that Mr. Carnes may have originally held some of the relationships in City A. This puts Mr. Carnes's control of the referral base at less than 25 percent.

As we know from Mr. Carnes, additional relationships were developed by the marketing representative in that territory. It was also the marketing person's responsibility to maintain existing relationships. In addition, from Mr. Carnes's deposition, we understand that the marketing people are critical to the success of CRS.

We also learned from Mr. Carnes that he was responsible for over 90 percent of the training of these individuals, as well as the other employees of the company. Mr. Carnes has imparted a great deal of his knowledge and expertise to these individuals. It appears this has occurred to a large extent with Ms. Rodgers, who did everything Mr. Carnes did for the company.

Ms. Rodgers's talents were recognized by Public Company Purchaser, who ensured she was part of the acquisition, by making an employment agreement with her a prerequisite to the acquisition closing. According to Mr. Byrnes, Public Company Purchaser's interest was always in Ms. Rodgers, and Public Company Purchaser had no interest in retaining the services of Mr. Carnes. We believe Mr. Byrnes to be credible on this issue because Public Company Purchaser did not offer Mr. Carnes an employment contract prior to the closing of the acquisition.

If Public Company Purchaser felt that Mr. Carnes was essential to the business because he held many personal relationships, then it would be a prudent business decision to bring Mr. Carnes along with the acquisition, and lock him into an employment contract for a period of time that allows for a transfer of these relationships. In this type of a situation, a buyer needs to ensure the transferability of what it is purchasing. Relationships take time to develop. They cannot be transferred overnight.

An employment contract is typically used to retain the services of the seller as an employee of the acquirer for a specified period of time. Typical time periods range from six months to two years. During the term of the employment contract, the business seller assists the buyer in the transitioning of the business. Prudence dictates that such an agreement should be in place before closing, as was the agreement with Lori Rodgers. Yet Public Company Purchaser had no interest in such an arrangement with Mr. Carnes. From this position, one can reasonably infer that Public Company Purchaser did not believe that Mr. Carnes was important to the successful transition of the customers and referral sources to Public Company Purchaser.

Using all of this information, we have determined that Mr. Carnes would be able to provide a minimal loss of business to the CRS locations acquired by Public Company Purchaser. Mr. Carnes created a company of highly skilled

## EXHIBIT 17.1

individuals and significantly reduced CRS' reliance on himself. In addition, Lori Rodgers, the person who was most crucial to the deal taking place has been tied up in an employment contract by Public Company Purchaser. As a result, we believe that only a small portion of the sales could be diverted if CRS continued to compete with Public Company Purchaser. Therefore, we have selected 10 percent as the percentage of sales that CRS could divert from Public Company Purchaser.

Based on a lost sales analysis of 10 percent, we have determined that the lost income attributable to the covenant not-to-compete is as follows:

1996	1997	1998	1999	2000
\$171,600	\$193,908	\$219,116	\$247,601	\$277,313

The estimated cash flow attributable to the lost income, calculated in a manner similar to what we calculated previously, is as follows:

1996	1997	1998	1999	2000
<b>\$22,471</b>	<b>\$88,164</b>	<b>\$116,897</b>	<b>\$149,365</b>	<b>\$185,730</b>

The major difference between the lost net income and the cash flow is the level of capital expenditures, which far outpaces depreciation expense. These items were treated in a consistent manner when the valuation of CRS was previously performed. However, since management of the company can change the level of capital expenditures, we believe that it would be more prudent to discount the lost earnings, rather than cash flow, in valuing the covenant.

The value of the covenant not-to-compete is the present value of the lost income to the buyer. Using a discount rate of 24 percent, this equates to the value of the covenant being \$578,766, or \$579,000 rounded. The discount rate used is based on a discount rate applicable to cash flow of 18 percent, with a 6 percent premium due to the increased risk of earnings over cash flow.

The covenant not-to-compete is a less predictable asset and has several risk factors associated with it. In reviewing Kelly's factors pertaining to the economic reality of the covenant, we find the following:

1. Mr. Carnes has the expertise necessary to compete. Mr. Carnes has proven to be quite knowledgeable about his business, and by all accounts has been very successful.
2. Mr. Carnes has the financial resources necessary to compete. Given the low cost of doing business and Mr. Carnes's financial assets, Mr. Carnes reasonably has the economic capacity to compete.
3. Mr. Carnes is not advanced in age nor is he of diminished health that would keep him from competing.
4. Very little of the purchase price was structured over time. Only \$500,000 was not paid at closing and this was for accounts receivable. Several of Kelly's factors also serve to reduce the risk associated with the covenant.
5. The covenant has sufficient scope to insure noncompetition. This reduces the risks associated with violation of the covenant.
6. There is no technology or machinery that Mr. Carnes owns that would enable him to compete. In addition, CRS is a marketing-based business, and individuals other than Mr. Carnes are in control of many of the relationships.

As a result of these factors, we have selected an 18 percent discount rate for the covenant not-to-compete. It was increased by 6 percent to reflect the earnings premium. It should be noted that this rate does not reflect the level of competition that could be put forth by Mr. Carnes, but only the risk associated with Mr. Carnes competing.

As a test for reasonableness of the amount allocated to the covenant not-to-compete, we examined information available in the public domain. As a result of the respiratory therapy industry's current consolidation mode, we have

*(Continued)*

**EXHIBIT 17.1** (Continued)

reviewed the Securities and Exchange Commission's filings of publicly-traded companies in the respiratory product and medical equipment sales and rental industry, to gain some insight into their acquisition practices and how they allocate purchase price to intangible assets, and non-compete agreements, in particular.

We reviewed the 1995 10-K filings for Apria Healthcare Group, American Home Patient, Inc., Complete Management, Inc., Interwest Home Medical, Inc., Public Company Purchaser, Pediatric Services of America, Inc., and Rotech Medical Corp. From these documents, we attempted to isolate information relating to how they allocated the purchase prices of their acquisitions. Although all of these companies discuss their acquisition in one form or another, only Public Company Purchaser and Pediatric Services of America (PSA) provided enough detail to be meaningful to our analysis. As a result, we analyzed Public Company Purchaser's 10-Ks for 1993 through 1995, and PSA's 1995 filings.

In the notes to its consolidated financial statements, Public Company Purchaser discloses the purchase price of its acquisitions for the year and the allocation of the total purchase. Public Company Purchaser divides the allocation between current assets, fixed assets, identified intangibles, and goodwill. Table 13 presents this data for 1993 through 1995. Table 14 presents each item as a percentage of the year's total acquisition purchase price.

**TABLE 13**  
**BREAKDOWN OF PUBLIC COMPANY PURCHASER, INC.'S**  
**TOTAL ACQUISITIONS BY YEAR, 1993–1995**

	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>Average</b>
Current Assets	\$ 1,704	\$ 2,915	\$ 8,097	\$ 6,358
Property and Equipment	2,828	4,024	4,731	3,861
Intangible Assets	7,277	11,613	12,056	10,315
Goodwill	14,195	43,000	46,050	34,415
	<b>\$26,004</b>	<b>\$61,552</b>	<b>\$70,934</b>	<b>\$54,949</b>

**TABLE 14**  
**BREAKDOWN OF PUBLIC COMPANY PURCHASER, INC.'S**  
**TOTAL ACQUISITIONS BY YEAR AS A PERCENTAGE OF**  
**TOTAL ACQUISITIONS, 1993–1995**

	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>Average</b>
Current Assets	6.6%	4.7%	11.4%	11.6%
Property and Equipment	10.9%	6.5%	6.7%	7.0%
Intangible Assets	28.0%	18.9%	17.0%	18.8%
Goodwill	54.6%	69.9%	64.9%	62.6%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

From table 13, it is clearly seen that the largest component of the acquisition costs for each year was goodwill, followed by identified intangibles. Of particular importance to this analysis is the allocation to identifiable intangible assets. Public Company Purchaser, as we will show later in this report, typically only identifies patient records and noncompete agreements. Therefore, we have made the assumption that the identified intangible assets line in table 30 contains only these two types of assets. As can be seen in the data, these assets represented 28, 18.9, and 17 percent of the total purchase prices in 1993, 1994, and 1995, respectively.

As a major player in this industry, Public Company Purchaser's economic decisions are reflective of market conditions. Total acquisition purchase price for 1995 was \$70,934,000. This represented the accumulation of 20 separate

**EXHIBIT 17.1**

and distinct transactions. Each of these was negotiated with an arm's-length (nonrelated) party. Most of these businesses were much smaller than CRS, as total revenues for the acquired companies, excluding CRS, was \$38.4 million, or an average of approximately \$2 million. In 1993, Public Company Purchaser acquired 15 companies with revenues of \$18 million or \$1.2 million each. In 1994, Public Company Purchaser acquired 24 companies with \$35 million in revenues, or \$1.46 million each. As a result, the data taken from Public Company Purchaser's 10-Ks provide us with a guide from the marketplace for the combined values of a noncompete agreement and a customer list. This guide indicates that on a combined basis, these assets should constitute 17.0 to 18.8 percent of the purchase price, based on Public Company Purchaser's 1995 acquisitions and the three-year weighted average, respectively.

On October 3, 1994, PSA bought Oxygen Specialties, Inc. (OSI) for \$4.9 million. OSI was a medical equipment company located in New Orleans. According to PSA's Form 10-K, \$200,000 of the purchase price was paid for the noncompete agreement. This represents approximately 4.1 percent of the purchase price.

In our valuation, we determined the value of the covenant not-to-compete and the patient records (customer list) to be \$2,450,000, and the covenant to be \$579,000. Based on a total value of \$13,500,000, the total of the covenant plus the patient records amounts to 18.06 percent of the total, and the covenant alone amounts to 4.3 percent of the total. This demonstrates the reasonableness of our calculations.

**Allocation of the Covenant Not-To-Compete Between CRS and John Carnes, Individually.** In addition to the issue of the economic reality of the covenant, the allocation of the covenant is significant in determining personal goodwill. A common practice in asset purchases is for the noncompete agreement to name the selling company, and its shareholders, as being subject to the noncompete. This is exactly the case in the sale of assets to Public Company Purchaser. The agreement was between Public Company Purchaser as the purchaser and CRS and John W. Carnes as the sellers. The issue becomes one of allocating the noncompete between the company, which results in corporate goodwill, and John Carnes, resulting in personal goodwill.

Carnes Respiratory Services developed an excellent reputation for the services it provided to clients. This reputation is, in large part, the corporation's, and not Mr. Carnes's. Mr. Carnes has done an excellent job, over the years, in training personnel, teaching his marketing people, and transferring his importance to other members of the company. Earlier in the business' formation, there can be no doubt that John Carnes was CRS. However, over the years there has been a clear transition to other members of the company. In fact, it was Lori Rodgers, and not John Carnes, who Public Company Purchaser insisted sign an employment contract with the firm as a prerequisite to a deal.

Recognizing the fact that Mr. Carnes is no longer required to provide a personal service to the patients, referral sources and others, we do not see there being any economic reason to allocate any of the covenant not-to-compete to Mr. Carnes personally. We further believe that the deposition transcripts reviewed and cited throughout our report justify our position.

**Summary.** The fair market value of Carnes Respiratory Services as of March 9, 1995 was \$13,500,000. The allocation of the purchase price of the company as of the same date is as follows:

Accounts Receivable	\$ 550,000
Inventory	40,000
Fixed Assets	712,000
Trademark	2,134,000
Patient Records	1,859,000
Covenant Not-to-compete—CRS	579,000
Covenant Not-to-compete—John W. Carnes	0
Goodwill	7,626,000
<b>Fair Market Value</b>	<b>\$13,500,000</b>
Buyer's Premium	1,535,000
<b>Price Paid by Public Company Purchaser</b>	<b>\$15,035,000</b>

(Continued)



**EXHIBIT 17.1** (Continued)

The equitable distribution value of Carnes Respiratory Services Inc. as of March 9, 1995 was \$16,900,000, consisting of the following:

Price Paid by Public Company Purchaser	\$15,035,000
Retained Assets	1,900,000
Total	\$16,935,000
<b>Rounded</b>	<b>\$16,900,000</b>

I really like this last exhibit because not only does it address issues surrounding personal goodwill, but it also addresses the valuation of a covenant not to compete. If you really think about it, what is the covenant really protecting? More often than not, the covenant is protecting the intangible assets that the seller is transferring to the buyer. Therefore, probably the most valid methodology to determine the value of the personal goodwill is to perform an allocation of value similar to what would be done under an allocation of purchase price assignment. Allocate the tangibles, the identifiable intangibles, and then what is left is the unidentifiable intangibles that are to be allocated between personal and enterprise goodwill.

Before we get off this subject, let's look at another example involving personal goodwill. There are other ways to address personal goodwill, and as a valuation analyst, you should be prepared to use them if the situation calls for it. Exhibit 17.2 is a section from a divorce valuation of a dental practice. This report not only addressed personal goodwill, but it also had to address an incremental value for the marital estate because the dental practice was a premarital asset.

**EXHIBIT 17.2**

**PERSONAL GOODWILL—DENTAL PRACTICE**  
(SOME SECTIONS HAVE BEEN OMITTED FOR SPACE)

**Description of the Assignment.** Trugman Valuation Associates, Inc. was retained by Alan Jones, Esquire on behalf of Jones & Holtz P.A. to appraise the common stock of Scott M. Smith DDS P.A., a Florida corporation as of March 23, 2000 and November 28, 1987. In addition, Trugman Valuation Associates was requested to address the issue of how much of the value relates to the personal goodwill associated with Dr. Scott Smith.

The purpose of this appraisal is to determine the fair market value of this common stock interest as the basis for equitable distribution in the matter of *Scott M. Smith v. Cynthia Smith*.

**History and Background of the Practice.** Scott M. Smith DDS P.A., trading as The Dental Group (hereafter referred to as The Dental Group or the practice) was incorporated in the State of Florida on October 11, 1993. Prior to that time, the practice operated as a sole proprietorship, owned and operated by Dr. Scott Smith.

The practice was purchased in or about November 1983 and has operated at the same location since the time of purchase. The Dental Group is located at 1234 Main Street, Some City, Florida. As the practice grew, The Dental Group occupied more space in its location. Originally, it rented approximately 1,200 square feet and in 1984, it added an additional 1,600 square feet. In 1986, it added an additional 1,600 square feet. In or about August 1994, Dr. Smith began a dental lab which began to service the dental practice. This dental lab is not part of this appraisal. In addition to the Some City practice, Dr. Smith operated a second location as The Dental Group in Second City, Florida. On October 3, 1989, this practice was sold to Dr. Mark Brown. Dr. Smith informed us that he spent approximately one day every two weeks at this location and Mrs. Smith worked there one day per week, or less.

The Dental Group is considered to be a general dentistry practice. However, since about 1987, Dr. Smith has added implants to the services that the practice offers. In addition to Dr. Smith performing implants, he also does endodonture, bone grafting, periodonture, and wisdom teeth surgery. He is the only one in the practice that provides these treatments. The patient base is considered to be average and the only marketing activities that the firm carries on is *Yellow Page*



### EXHIBIT 17.2

advertising. According to the County Areawide Telephone Directory, covering the time period August 1999 to 2000, there were slightly more than 200 dentists listed. In 1983, the practice consisted of Dr. Smith and four office personnel. At the current date of the appraisal, there are approximately 20 people employed, including three dentists.

**Smith to Brown Transaction.** In July 1989, an Asset Purchase Agreement was entered into between Dr. Scott Smith and Dr. Mark Brown. As mentioned previously, the Second City location was sold at this time. According to the agreement, the following assets were sold: equipment, office furniture and fixtures, office and clinical supplies, leasehold improvements, miscellaneous assets (which included the present telephone numbers of the practice, a list of current suppliers of the practice, and the goodwill of the practice) and patient records. In addition, the purchase price included a restrictive covenant. The Asset Purchase Agreement indicates:

this covenant is conveyed by Dr. Smith individually, pursuant to the terms and conditions outlined in this agreement; the parties hereby acknowledge that a portion of the total purchase price, as hereinafter set forth, is compensation to Dr. Smith for this covenant.

The total purchase price was \$366,000. The purchase price was allocated as follows:

Equipment	\$ 73,200
Office Furniture and Fixtures	18,300
Office and Clinical Supplies	21,960
Leasehold Improvements	29,280
Miscellaneous Assets	10,980
Patient Records	131,760
Restrictive Covenant	80,520
<b>Total</b>	<b>\$366,000</b>

The restrictive covenant covered a three mile radius from the business premises for a three year period. The location of the current office is in the central city of Some City, which has a relatively stable population. Most of the patients come from a five mile radius, primarily from the north of the existing location. It is our understanding that the more affluent section of Some City is to the South and East of the current location. This does not tend to be the area that this practice draws from. The demographics of the practice can best be described as retirees and working class people, nonunion laborers, but relatively stable. Many of the patients are older, but there is primarily a mix of patients within the practice.

**Referrals.** Referrals to the practice tend to come to a particular doctor. Dr. Smith described his practice as “almost like running three private practices.” Each dentist has his own responsibility regarding patients and the costs are reduced due to all of them operating under one roof. However, the other two dentists are, in fact, employees of the corporation, as is Dr. Smith. In many instances, Dr. Smith will perform the higher end services that the other dentists are unable to perform and in many instances, Dr. Smith refers new patients to the other doctors.

Less than 10 percent of the practice relates to DMOs (Dental Maintenance Organizations); most of the services are fee for service. The current location has reached its capacity and there is no additional room to expand. Major competition exists within a two block location from this practice. The Dental Group is one of the largest dental practices in the community. A physical examination of the practice’s equipment indicates that much of the equipment is at least 15 years old or older. Although it is in good condition, much of it was bought in the late 1980s. A refurbishment had taken place at around the valuation date, therefore, other than normal maintenance, it is not anticipated that there should be any major repairs on the existing facilities.

**Employees and Office Setup.** The two main professional employees of the practice are Dr. Scott M. Smith and Dr. Paul Rogers. Dr. Smith is a graduate of Case Western Reserve University and his employment history includes The Dental Group at the current location and the Second City location. Dr. Rogers graduated from the University of Iowa, including the University of Iowa Dental School, and has been with the practice since December 1998. Turnover in the practice has been very low at 10 to 15 percent per year. Dr. Smith belongs to the American Society of Osseintegration and the International Congress of Oral Implantologists.

*(Continued)*

**EXHIBIT 17.2** (Continued)

The office is normally staffed from 8:00 a.m. to 5:00 p.m. Monday through Friday, and 8:00 a.m. to 4:00 p.m. on Saturday. Doctors are generally available at the office during these hours as well. Nonowner professionals generally work a 40 hour week, and the other individuals employed by the firm work about the same hours. This includes three and a half hygienists, seven to eight dental assistants, four secretarial/office clerical individuals and one office manager.

Fees charged tend to be relatively modest; a typical new patient fee is \$53, including an exam and a single x-ray. Recall fees for adults and children are \$50 and \$37, respectively. The practice has approximately 6,000 active patient files and sees approximately 125 new patients per month. Overall, this is a well established, mature practice.

**Financial Analysis.** A valuation is a “prophecy of the future.” Although a willing buyer looks at the historical results of a business, he or she will be using these results to determine what the business prospects are in the future. In order to begin our analysis, we analyzed the historic financial statements presented as Schedules 1 and 2 at the back of this report. In addition, the practice provided the appraiser with a balance sheet as of March 23, 2000, one of the valuation dates.

In order to assist in comparing The Dental Group to its industry peer group, we used the database maintained by Integra Information Inc. for Standard Industrial Classification Code 8021, Services-Offices and Clinics of Dentists. In order to have our comparison be as relevant as possible, we only reviewed data for practices with a revenue range from \$1 million to \$2.5 million. Included in this data was 2,558 practices.

Before a proper comparison to industry data can be performed, certain adjustments are required related to the historic financial statements of the practice. These adjustments are intended to “normalize” the financial statements. The process of normalization involves restating the balance sheet or income statement to reflect the economic values included in these statements. The normalization of the balance sheet is reflected in table 7.

**TABLE 7**  
**BALANCE SHEET NORMALIZATION**

	<b>December 1999</b>	<b>Adjustments</b>	<b>March 23, 2000</b>
Current Assets			
Cash <sup>1</sup>	\$(20,834)	\$ 6,339	\$ (14,495)
Accounts Receivable <sup>2</sup>	688,022	(377,093)	310,929
Inventories <sup>3</sup>	—	16,155	16,155
Loan Receivable Costa Rica Lab <sup>4</sup>	32,175	(32,175)	—
Total Current Assets	<u>\$699,363</u>	<u>\$(386,774)</u>	<u>\$312,589</u>
Fixed Assets			
Machinery and Equipment	\$ 23,286	\$ —	\$ 23,286
Office Equipment	61,910	—	61,910
Furniture and Fixtures	14,805	—	14,805
Leasehold Improvements	80,370	—	80,370
Other Fixed Assets <sup>5</sup>	—	(72,943)	(72,943)
Gross Fixed Assets	<u>\$180,371</u>	<u>\$ (72,943)</u>	<u>\$107,428</u>
Accumulated Depreciation <sup>6</sup>	<u>147,280</u>	<u>(147,280)</u>	<u>—</u>
Net Fixed Assets	<u>\$33,091</u>	<u>\$ 74,337</u>	<u>\$107,428</u>
Total Other Assets	<u>\$ 729</u>	<u>\$ —</u>	<u>\$ 729</u>
<b>Total assets</b>	<b><u>\$733,183</u></b>	<b><u>\$(312,437)</u></b>	<b><u>\$420,746</u></b>

## EXHIBIT 17.2

**TABLE 7**  
**BALANCE SHEET NORMALIZATION**

	<b>December 1999</b>	<b>Adjustments</b>	<b>March 23, 2000</b>
<b>Current Liabilities</b>			
Accounts Payable <sup>7</sup>	\$ 5,269	\$ 38,227	\$ 43,496
Long-Term Debt—Current Portion	9,123	—	9,123
Payroll Taxes Payable <sup>8</sup>	7,052	(330)	6,722
<b>Total Current Liabilities</b>	<b>\$ 21,444</b>	<b>\$ 37,897</b>	<b>\$ 59,341</b>
<b>Long-Term Liabilities</b>			
Notes Payable <sup>9</sup>	\$180,587	\$ (26,716)	\$ 153,871
Loans from Stockholders <sup>10</sup>	64,136	(64,136)	—
Notes Payable (A. Smith) <sup>11</sup>	9,479	(9,479)	—
<b>Total Long-Term Liabilities</b>	<b>\$254,202</b>	<b>\$(100,331)</b>	<b>\$ 153,871</b>
<b>Total Liabilities</b>	<b>\$275,646</b>	<b>\$ (62,434)</b>	<b>\$ 213,212</b>
<b>Stockholder's Equity</b>			
Common Stock	\$1,000	\$ —	\$ 1,000
Paid—In Capital	27,712	27,712	—
Retained Earnings <sup>12</sup>	428,825	(250,003)	178,822
<b>Total Stockholder's Equity</b>	<b>\$457,537</b>	<b>\$(250,003)</b>	<b>\$ 207,534</b>
<b>Total liabilities and stockholder's equity</b>	<b>\$733,183</b>	<b>\$(312,437)</b>	<b>\$ 420,746</b>

<sup>1</sup>Cash was adjusted to reflect the overdraft in existence at March 23, 2000.

<sup>2</sup>Several adjustments were made to accounts receivable. Since the practice reports on a cash basis, it normally does not reflect patients' accounts receivable on its balance sheet. The monies reflected were categorized as accounts receivable from Smith Sterling, an affiliated laboratory that is owned by Dr. Smith. In reality, these monies were a capital contribution made by Dr. Smith to this other venture and have nothing to do with the operations of The Dental Group. Therefore, we have removed these items as nonoperating. It is our understanding that this item would not be subject to equitable distribution, so removing it from the balance sheet provides a cleaner analysis relating to the value of The Dental Group. The amount removed at March 23, 2000 was \$688,022.

At the appraiser's request we were provided with accounts receivable from the patients as of March 23, 2000. This amounted to \$519,565. Included in this amount were various accounts receivable turned over to the Coast Collection Bureau. According to a historic analysis dated January 10, 2003, the amount of accounts receivable turned over to the collection agency amounted to \$125,456. We performed an analysis of this report and determined that the amount of receivables turned over to the collection agency at March 2000 was \$45,792. Based on collection history, we estimated that only 10 percent of this amount would be collected and deducted 90 percent of the outstanding amount (\$41,213) from accounts receivable. The balance of collectable accounts receivable is \$478,352.

One additional adjustment is required in order to reflect accounts receivable at its net realizable value. Because the practice reports on a cash basis, it does not pay income taxes, nor would the shareholder pay income taxes on the receivables until these monies are collected. Therefore, in order to properly reflect the true value of these receivables, a provision for income taxes has been subtracted at 35 percent. Therefore, accounts receivable at March 23, 2000 is estimated to be \$310,929.

(Continued)

## EXHIBIT 17.2 (Continued)

**TABLE 7**  
**BALANCE SHEET NORMALIZATION**

<sup>3</sup> An adjustment was made to reflect supply inventory, which is typically expensed as these items are paid for. At the appraiser's request, an inventory was provided to us, which amounts to \$16,155 of supplies.

<sup>4</sup> A loan receivable for a laboratory owned by Dr. Smith in Costa Rica has been removed from the balance sheet. This item is also considered to be a capital contribution and does not have any bearing on the value of The Dental Group. Therefore, it has been removed.

<sup>5</sup> Fixed assets have been adjusted to reflect straight line depreciation based on the class life depreciable lives as permitted under the IRS regulations. This adjustment is consistent with the normalization adjustment that was made to the income statement for depreciation expense. The value of the fixed assets has been estimated at \$107,428.

<sup>6</sup> Accumulated depreciation has been removed in its entirety since the fixed assets were estimated to reflect current value.

<sup>7</sup> Similar to accounts receivable, accounts payable are normally not reflected on the balance sheet of the practice since it reports using the cash method of accounting. In this instance, there was a small balance being carried on the books in the amount of \$5,269. We were provided with an accounts payable aging detail schedule as of March 23, 2000, which reflected total accounts payable at the appraisal date of \$56,917. Once again, to be consistent with our treatment of accounts receivable, there would be a tax benefit received when these items are paid. Therefore, we have reduced the accounts payable by the same 35 percent tax rate as before. Therefore, accounts payable is reflected as being \$43,496 at the appraisal date.

<sup>8</sup> Payroll taxes payable was adjusted to reflect the balance per the March 23, 2000 balance sheet.

<sup>9</sup> Notes payable were adjusted to reflect the balance as of the March 23, 2000 balance sheet. These notes are all to various lending institutions.

<sup>10</sup> Loans from stockholders have been removed from the balance sheet as we considered these items to be capital contributions.

<sup>11</sup> There has been a note payable to "A. Smith" for a number of years. We have removed this item as not being applicable to the dental practice.

<sup>12</sup> The net of the adjustments has been posted to retained earnings to reflect the market value of the net tangible assets of the practice.

As a result of our analysis, the adjusted book value of the net assets of the practice, excluding any intangible value amounts to \$207,534. The next step in the valuation process is to normalize the income statement. Table 8 reflects this normalization.

**TABLE 8**  
**INCOME STATEMENT NORMALIZATION**

	December 31,				
	1995	1996	1997	1998	1999
Historic Net Income (Schedule 2)	\$ 134,906	\$ 208,815	\$ 338,175	\$ 385,025	\$ 330,466
Adjustments					
Depreciation/Amortization Expense <sup>1</sup>	10,392	3,592	4,308	16,043	13,655
Officer's Compensation—Addback <sup>2</sup>	110,000	125,467	78,436	51,820	33,328
Officer's Compensation—Reasonable <sup>3</sup>	(177,059)	(182,535)	(188,180)	(194,000)	(200,000)
<b>Adjusted pretax net income</b>	<b>\$ 78,239</b>	<b>\$ 155,339</b>	<b>\$ 232,739</b>	<b>\$ 258,888</b>	<b>\$ 177,449</b>
Income Taxes <sup>4</sup>	17,787	49,044	81,827	92,902	58,409
<b>Adjusted historic net income</b>	<b>\$ 60,452</b>	<b>\$ 106,295</b>	<b>\$ 150,912</b>	<b>\$ 165,986</b>	<b>\$ 119,040</b>

## EXHIBIT 17.2

**TABLE 8**  
**INCOME STATEMENT NORMALIZATION**

<sup>1</sup> Depreciation expense has been adjusted to reflect the same useful lives as were used to calculate the estimate of fair market value of the fixed assets. Therefore, an add back was in order as the depreciation allowed was considered to be greater than the economic depreciation necessary to reflect the value of these assets.

<sup>2</sup> Officer's compensation has been added back in its entirety as Dr. Smith does not always take salary, but rather sometimes takes distributions of profits which are not considered in the determination of the net income of the practice. Reasonable compensation will be deducted in item number 3 below.

<sup>3</sup> In order to estimate reasonable compensation, we consulted the *1999 Survey of Dental Practice*, published by the American Dental Association. We analyzed the average net income from primary practice several different ways in order to estimate reasonable compensation. First, we looked at general practitioners with 20 to 24 years of experience. The mean compensation was \$159,760, while the median for this group was \$140,000. We also looked at specialists, as Dr. Smith performs endodonture, periodonture and some surgical and implant procedures. Therefore, we considered his compensation as possibly being comparable to specialists. Specialists with 20 to 24 years experience had a mean compensation of \$262,470 and a median of \$256,530. We considered the fact that Dr. Smith spends part of his time performing general dentistry and other times performing services that might be considered to be a specialty. Therefore, we weighted the median 50 percent each in estimating compensation based on this factor, at \$198,265. This equates to the third quartile of general practitioners with 20 to 24 years of experience as the amount reflected in the survey is \$200,500.

We then considered data by region. Using the South Atlantic Region, we found that general practitioners had a mean net income of \$165,960 and a median of \$120,000, with the third quartile being \$180,000. Specialists in this area had a mean net income of \$244,470 and a median of \$206,000. Using the same weighting of the medians amounted to \$163,000.

As an additional source for officer's compensation, we reviewed the information in the Integra Database. Using the 2,558 practices included in this data, having an average revenue in 1999 of \$1,112,000, officer's compensation as a percent of revenue amounted to 20 percent. We considered using this amount, but as a practice gets larger, the percent of officer's compensation generally declines. Even if we reduced this amount to 15 percent of revenues, the 1999 compensation would equal an amount greater than \$286,000. We believe that this amount was too high for a practice of this type.

Therefore, we have estimated reasonable compensation to be approximately \$200,000, an amount similar to the average of the practitioners with Dr. Smith's experience. Prior years were deflated by a 3 percent cost of living factor.

<sup>4</sup> Income taxes were estimated based on a graduated tax structure using C-corporation income tax rates. Although The Dental Group operates as an S-corporation, taxes must be considered due to the economic impact of this item. Whether the taxes are paid by the corporation, or the individual, enough profit must be passed through to the shareholder to allow personal income taxes to be paid. Therefore, these monies would not be available for reinvestment by the practice and can be considered to be the equivalent of a C-corporation income tax.

As a result of our analysis it appears that the adjusted historic net income rose from 1995 through 1998 and then declined in 1999.

**Valuation Calculations.** As indicated previously in this report, the three approaches of valuation to be considered in an appraisal are (1) The Market Approach, (2) The Asset Based Approach, and (3) The Income Approach. The narrative that follows discusses the appraisal methods employed within each approach.

### THE MARKET APPROACH

**Transaction Method.** In order to determine the value of The Dental Group using the market approach, an attempt was made by the appraiser to gather information regarding guideline practices bought and sold in the open market. In order to accomplish this, we researched several sources including the IBA, BizComps, Pratt's Stats, and Done Deals databases to obtain information regarding comparable transactions.

**IBA Database.** The information located is maintained in a market data file compiled by The Institute of Business Appraisers, Inc., a professional appraisal organization, which maintains a proprietary database of actual transactions of closely held businesses and professional practices all over the United States. As a result of our search, 2,426 such transactions were located under Standard Industrial Classification Code 8021, Offices and Clinics of Dentists. Of these 2,426 transactions, 2,014 were eliminated. A portion of these were eliminated based on the description of the practice as they appeared to be something other than a general practice of dentistry; for example, some were engaged in oral surgery and others in orthodontics. All transactions that took place prior to 1996 were also eliminated since financial,

## EXHIBIT 17.2 (Continued)

as well as technological changes, have affected the practice of dentistry. The remaining transactions more adequately reflect The Dental Group's practice. They are presented in table 10.

**TABLE 10**  
**IBA DATA FOR MARKET COMPARISON**

<b>Business Type</b>	<b>Annual Gross \$000's</b>	<b>Discret. Earnings \$000's</b>	<b>Owner's Comp. \$000's</b>	<b>Sales Price \$000's</b>	<b>Price/Gross</b>	<b>Price/Earnings</b>	<b>Geographic</b>	<b>Yr/Mo of Sale</b>
Dentistry	300			210	0.70		FL	95/01
Dentistry	300			175	0.58		VT	96/01
Dentistry	300			52	0.17		FL	96/01
Dentistry	300			70	0.23		LA	97/01
<b>Hundreds of transactions have been omitted from this Exhibit to save space.</b>								
Dentistry	1139			565	0.50		CA	96/01
Dentistry	1180			790	0.67		WA	98/01
Dentistry	1300			1025	0.79		FL	98/01
Dentistry	1319			760	0.58		OH	98/01
Dental	1416	285	157	1200	0.85	4.21	FL	99/08
Dentistry	1428			1250	0.88		NC	99/01
Dentistry	1607			1000	0.62		NC	95/01
Dental Practice	1659			1500	0.90			98/04
General Dentistry	3534	186	58	297	0.08	1.60	CO	97/08

An analysis of the data was performed to see if there was any statistical significance inside this data set. The selected IBA data reflects the following:

**TABLE 11**  
**IBA MARKET DATA BASE TRANSACTION ANALYSIS**

	<b>Price to Revenues</b>					<b>Price to Earnings</b>				
	<b>Size of Revenues</b>					<b>Size of Revenues</b>				
	<b>\$100k to \$250k</b>	<b>\$250k to \$500k</b>	<b>\$500k to \$750k</b>	<b>\$750k to \$1M</b>	<b>\$1M &lt;</b>	<b>\$100k to \$250k</b>	<b>\$250k to \$500k</b>	<b>\$500k to \$750k</b>	<b>\$750k to \$1M</b>	<b>\$1M &lt;</b>
Count	412	248	129	23	12	56	34	15	3	4
Mean	0.62	0.62	0.62	0.55	0.66	3.18	1.91	6.56	1.49	2.58
Standard Deviation	0.13	0.13	0.12	0.17	0.22	9.67	2.21	18.39	0.18	1.32
Coefficient of Variation	0.22	0.21	0.19	0.32	0.33	3.04	1.16	2.80	0.12	0.51
90th Percentile	0.76	0.76	0.76	0.71	0.88	3.05	2.21	3.21	1.64	3.88
75th Percentile	0.70	0.70	0.70	0.69	0.81	1.75	1.66	2.34	1.57	3.38
Median	0.62	0.62	0.63	0.59	0.68	1.47	1.46	1.61	1.45	2.35
25th Percentile	0.55	0.55	0.56	0.47	0.61	1.32	1.30	1.31	1.39	1.55
10th Percentile	0.45	0.46	0.47	0.30	0.51	1.21	1.13	1.26	1.35	1.47

## EXHIBIT 17.2

A statistical analysis indicated an  $R^2$  of 0.48 and 0.30 for the price to revenues and price to earnings multiples, respectively. A linear regression with an  $R^2$  below 0.50 reflects poor correlation of the data. However, the standard deviation for the price to revenue multiple was only 0.13 with a coefficient of variation of 0.22. This means that some degree of confidence can be had in using this data, as long as it is not used alone. The earnings multiples have poor statistical representations and cannot be used.

**Pratt's Stats.** The next database used in our analysis was Pratt's Stats. This database recorded 97 transactions. From this amount, we eliminated 48 transactions for the same reasons as explained previously. Table 12 reflects the transactions considered.

**TABLE 12**  
**PRATT'S STATS ASSET TRANSACTIONS**

Business Name	Revenues	Sale Date	Selling Price	Deal Price	Discretionary Earnings	Equity Price to	
						Revenues	Discretionary Earnings
Brown DDS	540,912	1/22/1999	619,433	619,433	271,386	1.15	2.28
Dental Centers of Ind	3,572,107	8/1/1997	4,249,020	4,249,020	—	1.19	—
N/A	61,263	11/2/1999	25,000	25,000	—	0.41	—
N/A	430,000	4/1/1999	270,000	270,000	202,300	0.63	1.33
<b>Many Transactions Have Been Removed To Save Space</b>							
Gary Provost DDS	424,208	9/8/1999	296,000	296,000	202,429	0.70	1.46
Kent C. Loo DDS	393,619	4/12/1999	245,000	245,000	180,296	0.62	1.36
Maryvale Dental Assoc	226,961	3/18/1999	200,000	200,000	—	0.88	—
Prime Dental Care PC	246,366	7/9/1999	250,180	250,180	—	1.02	—
Douglas Mougey DDS	486,866	1/26/1999	646,031	646,031	—	1.33	—
Peter E. Labadie DDS	182,390	10/22/1999	169,600	169,600	102,355	0.93	1.66

A more detailed statistical analysis was performed on the data included in the results (including data not presented in table 12). It is reflected in table 13.

Based on these results, only two multiples can be used with any degree of confidence: Equity Price to Revenues, Equity Price to Discretionary Earnings.<sup>1</sup>

**Other Databases.** Although we looked for transactions in the other databases, an insufficient amount of data was located.

**Value Estimates—Transaction Method.** Once the pricing multiples have been chosen, the next step is to choose the appropriate multiple to value The Dental Group. Using the available data, we further analyzed these transactions against the performance of The Dental Group.

First we looked at the geographic region. Of the 412 transactions in the IBA data, 27 transactions were specifically in Florida. Seventy-six transactions were in the Southeast. The median of these transactions were 0.65 and 0.66, respectively.

<sup>1</sup> Deal price to revenues and equity price to revenues are the same and therefore only equity price to revenues was utilized.

(Continued)





## EXHIBIT 17.2

Additionally, we performed a ratio analysis from the data included in the Pratt's Stats database which is reflected in table 14.

**TABLE 14**  
**PRATT'S STATS ASSET TRANSACTION**  
**RATIO ANALYSIS**

	<b>Net Profit Margin</b>	<b>Operating Profit Margin</b>
Count	29	33
Mean	24.04%	24.47%
Standard Deviation	13.96%	14.42%
Coefficient of Variation	58.06%	58.94%
90th Percentile	44.20%	45.20%
75th Percentile	37.99%	37.99%
Median	18.74%	21.08%
25th Percentile	13.41%	13.64%
10th Percentile	9.79%	7.52%
<b>The Dental Group</b>	<b>6.23%</b>	<b>10.61%</b>

The table indicates that The Dental Group underperformed compared to the lowest 10th percentile with respect to net profit and between the 10th and 25th percentile for operating profit. This means that The Dental Group would not sell as favorably as many of the practices included in the transaction data.

Therefore, for those multiples used, we have chosen the equivalent of the 10th percentile. Our value indications are as follows:

**TABLE 15**  
**IBA DATABASE VALUE ESTIMATE**

	<b>Price to Revenues</b>
Selected Multiple	0.45
Subject Company Earnings Stream	\$1,911,743
Indication of Value	\$ 860,284
Calculation of Retained Assets	
Cash	\$ (14,495)
Accounts Receivable	310,929
Inventories	16,155
Other Assets	729
Total Liabilities	(213,212)
Add: Net Retained Assets	\$ 100,106
Indication of Value—Control, Non-Marketable	\$ 960,390
Rounded	\$ 960,000

(Continued)

## EXHIBIT 17.2 (Continued)

<b>TABLE 16 PRATT'S STATS VALUE ESTIMATE</b>		
	<b>Equity Price to Revenues</b>	<b>Equity Price to Discretionary Earnings</b>
Selected Multiple	0.48	1.36
Subject Company Earnings Stream	\$1,911,743	\$ 422,062
Indication of Value	\$ 917,637	\$ 574,004
Calculation of Retained Assets		
Cash	\$ (14,495)	\$ (14,495)
Accounts Receivable	310,929	310,929
Other Assets	729	729
Total Liabilities	(213,212)	(213,212)
Plus Net Retained Assets	\$ 83,951	\$ 83,951
Estimate of Value (Equity or Invested Capital)	\$1,001,587	\$ 657,955
Less: Interest Bearing Debt	—	—
Indication of Value—Control, Non-Marketable	\$1,001,587	\$ 657,995
<b>Rounded</b>	<b>\$1,000,000</b>	<b>\$ 658,000</b>

One further explanation is required of the data included in tables 15 and 16. The data presented in the IBA database, as well as the data used from the Pratt's Stats database are asset sales. This means only those assets that are typically sold as part of a transaction would be included in the estimate of value. Therefore, additional assets and liabilities must be taken into consideration. In this report, we call them retained assets. These would be the items that would typically be retained by the seller, or paid for above and beyond the estimate of value that is calculated from the various transactions.

Based on the IBA database, the estimate of The Dental Group as of March 23, 2000 would be approximately \$960,000. Based on the data included in Pratt's Stats, the equity price to revenues results in an estimate of approximately \$1 million, while the equity price to discretionary earnings reflects only a value of \$658,000.

**INCOME APPROACH**

**Capitalization of Earnings Method.** The capitalization of earnings method is premised on the concept that value is based on a stabilized income stream that is capitalized by an appropriate capitalization rate to reflect the risk associated with the income stream. Mathematically, this is presented in the following formula.

$$V = \frac{I}{R}$$

V = Value  
I = Income Stream  
R = Capitalization Rate

The use of this formula requires an estimate of income to be made for the subject practice. The next portion of the application of this method requires the determination of the appropriate capitalization rate to be used for this level of income.

## EXHIBIT 17.2

The Dental Group is a mature practice that has reached its maximum capacity at its present location. Revenues have grown marginally from \$1.8 million to \$1.9 million from 1997 to 1999. A review of the adjusted profitability during this period reflects an up and down scenario. Therefore, we believe that a simple average of the past three years is most representative of the future earnings of the practice.

Applying an inflationary growth rate to the earnings and capitalizing the result by 24 percent (see discussion of discount and capitalization rates) yields the following estimate of value:

	<b>1997</b>	<b>1998</b>	<b>1999</b>
Net Income	\$150,912	\$165,986	\$119,040
3 Year Average Net Income			\$145,313
One Plus the Long-Term Rate of Growth			× 1.03
Net Income for Capitalization			\$149,672
Capitalization Rate			÷ 24.00%
Indication of Value—Control, Marketable			\$623,633
Less: Discount for Lack of Marketability		10.00%	(62,363)
<b>Indication of value—control, non-marketable</b>			<b>\$561,270</b>
<b>Rounded</b>			<b>\$561,000</b>

In estimating the value of The Dental Group using the income approach, a 10 percent discount for lack of marketability has been subtracted. The discount, explained further later in this report, is intended to reflect the closely held nature of the practice after applying a capitalization rate that was derived from the public market. This method results in an estimate of value of \$561,000.

**ASSET APPROACH**

**Excess Earning Method.** The adjusted book value of The Dental Group, without intangible value, was previously determined to be \$207,534 (see balance sheet normalization). In addition to the value of the tangible assets of The Dental Group, it is necessary to determine whether any goodwill exists and if so, what value to place on that goodwill.

Revenue Ruling 59-60, the IRS training manual, and Revenue Ruling 68-609, which the IRS has been using in conjunction with Revenue Ruling 59-60 concerning earnings of an entity to be valued, all stress that potential future income is a major factor in valuing an entity. These sources further state that a review of prior earnings is necessary to predict the future. This is known as the "formula approach."

This approach is described in Revenue Ruling 68-609 as follows:

The percentage return on the average annual value of the tangible assets used in the business is determined using a period of years (preferably not less than five) immediately prior to the valuation date. The amount of the percentage return on tangible assets thus determined is deducted from the average earnings of the business for such period and the remainder, if any, is considered to be the amount of the average annual earnings from the intangible assets of the business for the period. This amount (considered as the average annual earnings from intangibles) capitalized at a percentage of say fifteen percent to twenty percent is the value of the intangible assets of the business determined under the "formula approach."

Revenue Ruling 59-60 also suggests that comparative income statements for a period of five or more years should be used in valuing a closely held business.

*(Continued)*

**EXHIBIT 17.2** (Continued)

The average annual earnings of The Dental Group should be reduced by a reasonable return on the net tangible assets of the practice, which, if placed in the bank or in a different investment, would generate revenue. This return on investment should be subtracted from the average annual earnings of the practice.

The sources previously mentioned indicate that the formula approach should be used only if no other valuation approach for measuring intangibles can be determined. Caution must be exercised when this approach is utilized. It cannot be employed without taking into account outside influences, such as the general economic condition of the industry and whether earnings are increasing or decreasing.

The growth adjusted, normalized net income of the practice has previously been determined to be \$149,672. A weighted average return on tangible assets of 6.92 percent has been calculated based on the composition of the balance sheet yielding a return on tangible assets of \$14,358. Capitalizing the excess earnings by a capitalization rate of 33 percent (see discussion entitled Discount and Capitalization Rates) results in an estimate of value using this methodology as follows:

Normalized Net Income	\$149,672
Less: Return on Tangible Assets	(14,358)
Excess Earnings	\$135,314
Capitalization Rate	÷ 33.0%
Value of Intangibles	\$410,042
Adjusted Tangible Book Value	207,534
Indication of Value—Control, Marketable	\$617,576
Less: Discount for Lack of Marketability (10%)	(61,758)
<b>Indication of Value—Control, Non-Marketable</b>	<b>\$555,818</b>
<b>Rounded</b>	<b>\$556,000</b>

Once again, a 10 percent discount for lack of marketability has been subtracted to take into consideration the fact that The Dental Group is a closely held dental practice. As a result of our computations, the value using this method is approximately \$556,000.

**Reconciliation of Values.** During the appraisal, several methods were used to determine the value of the equity of The Dental Group. The values derived in this appraisal are as follows:

<b>Market Approach</b>	
Transaction Method	
IBA Database	
Price to Revenues	\$ 960,000
Pratt's Stats	
Equity Price to Revenues	1,000,000
Equity Price to Discretionary Earnings	658,000
<b>Income Approach</b>	
Capitalization of Income	561,000
<b>Asset Approach</b>	
Excess Earnings	556,000

## EXHIBIT 17.2

The market approach is normally afforded the greatest amount of weight for a going concern since fair market value is determined by the market and it is the appraiser's role to interpret the market. In this instance, the transaction method was used providing three indications of value. Those indications that utilized a multiple of revenue resulted in a considerably higher value than the method that utilized a multiple that relied on The Dental Group's earnings. The fact is that The Dental Group's earnings were inferior to the target practices based on our analysis of the data included in the Pratt's Stats database. Therefore, we put slightly more weight on the multiple involving earnings than those that involved revenues. Forty-five percent of the total weight in this appraisal has been applied to the market approach.

The income approach utilizes the earnings of the company to arrive at a value. This value is based on the earnings of the practice and looks at the practice from an investment point of view for an owner or operator purchasing the entire operation. Once again, because of low earnings, the result is a lower indication than the market approach. In this instance, we assigned a 30 percent weight to the income approach because it truly values the practice and does not subject the appraiser to as many assumptions as those based on the limited data included in the transaction method.

The asset based approach was utilized using the excess earnings method, which is a commonly used method for valuing professional practices. In this instance, the results are very similar to the income approach, and we have put 25 percent of the weight on this approach.

Revenue Ruling 59-60 suggests that an appraiser not arbitrarily weight different methodologies, but the true intent of the revenue ruling is for the appraiser to consider the advantages and disadvantages of each of the methodologies and to develop an informed opinion using judgment, common sense and the facts and circumstances available to determine how each method should be weighted in the process. As a result of the various weightings, an opinion of value for The Dental Group which is predicated on Dr. Smith issuing a restrictive covenant to a purchaser of The Dental Group is as follows:

Approach	Value	Weight	Weighted Value
<b>Market Approach</b>			
Transaction Method			
IBA Price to Revenue	\$ 960,000	10%	\$ 96,000
Pratt's Stats Equity Price to Revenue	1,000,000	20%	200,000
Pratt's Stats Equity Price to Discretionary Earnings	658,000	15%	98,700
<b>Income Approach</b>			
Capitalization of Income	561,000	30%	168,300
<b>Asset Approach</b>			
Excess Earnings	556,000	25%	139,000
Estimated Value of The Dental Group		100%	\$702,000

**Justification for Purchase Test.** Valuation is not the process of developing capitalization rates or multiples. It is, however, the process of providing the user of the appraisal with an estimate of value within a reasonable range. Recognizing that valuation is not an exact science, a test was performed to substantiate the amount of indebtedness that could be undertaken, using a four year payback period, based on the normalized economic income that would be available to a *willing buyer*.

Assuming typical terms for a business transaction of this kind, a purchaser would use approximately 33.33 percent equity, with the balance being debt, to acquire a business of this type. This means that the pretax income would have to carry debt service and taxes. The appraiser used the average adjusted pretax income from 1997 to 1999 as

(Continued)

## EXHIBIT 17.2 (Continued)

indicative of future pretax income that would be available to service the debt incurred by the prospective buyer when purchasing the practice. This is the same income stream that was used to value the practice. The tax rate has been assumed at 35 percent. Using an 11.0 percent interest rate (prime rate as of the valuation date plus 2 percent), and a \$702,000 purchase price results in the following:

	Year 1	Year 2	Year 3	Year 4
Annual Payments	\$145,156	\$145,156	\$145,156	\$145,156
Interest	46,612	35,207	22,485	8,292
Principal	\$ 98,544	\$109,949	\$122,671	\$136,864
Cash Flow				
Pretax Income	\$229,716	\$236,607	\$243,706	\$251,017
Interest Expense	46,612	35,207	22,485	8,292
Taxable Income	\$183,104	\$201,400	\$221,221	\$242,725
Tax	64,086	70,490	77,427	84,954
Net Income	\$119,018	\$130,910	\$143,794	\$157,771
Principal Payments	98,544	109,949	122,671	136,864
<b>Cash Flow</b>	<b>\$ 20,474</b>	<b>\$ 20,961</b>	<b>\$ 21,123</b>	<b>\$ 20,907</b>
<b>Return on Down Payment</b>	<b>8.75%</b>	<b>8.96%</b>	<b>9.03%</b>	<b>8.94%</b>

The above calculations indicate that a purchaser of this practice could pay \$702,000 and satisfy the debt obligations that would result from the acquisition.

**Personal Goodwill.** The majority of states have ruled that goodwill should be factored into determining a professional practice's value for the purposes of equitable distribution. The courts that choose to include goodwill do so because they consider it to be an asset, while the courts that choose not to include it state that it is because it is too speculative. Trugman Valuation Associates has been requested to address the issue of personal goodwill as it relates to The Dental Group. Before attempting to quantify the issue of personal goodwill, it is important to understand what this concept means.

**Professional Versus Practice Goodwill.** The distinction between *professional goodwill* (sometimes called *personal goodwill*) and *practice goodwill* (sometimes called *business or commercial goodwill*) is that professional goodwill is the goodwill that is associated primarily with the individual, versus practice goodwill, which is the goodwill associated primarily with the entity. This can be demonstrated by assuming John Smith CPA is a partner at PricewaterhouseCoopers. If a new client calls the firm specifically requesting John Smith, then there may be personal goodwill associated with the individual. However, if the client wants a "big four" name on the financial statements and contacts PricewaterhouseCoopers, and ends up with John Smith, there is probably practice goodwill. Sometimes, the two types of goodwill will overlap.

The existence of professional goodwill is based on the fact that clients come to the individual, as opposed to the firm. This may be based on the individual's skills, knowledge, reputation, personality, and other factors. The implied assumption is that if this individual moved to another firm, the clients would go with him or her. Professional goodwill is more difficult to transfer to a new owner, but not impossible. Generally the professional will assist in a smooth transition to a new owner in order to obtain the maximum price for the practice.



## EXHIBIT 17.2

**Goodwill in a Professional Practice.** The issue of personal versus practice goodwill arises most often during the divorce valuation of professional practices. In most instances, there is little reason to separate the two concepts. However, some courts have determined that sole practitioners in any profession can only have personal goodwill since he or she is the practice. A sole practitioner's practice can easily have both forms of goodwill.

To illustrate this point, let's assume that Sarah Jackson, attorney at law, is a personal injury specialist. Her trial skills have allowed her clients to get jury verdicts that begin at \$1,000,000. Her law practice has a book value of \$85,000 and contingent work in progress of \$700,000. Gross revenues for the firm are \$8,000,000. Ms. Jackson draws a salary of \$3,000,000 annually. The question becomes whether Ms. Jackson's goodwill—her reputation and trial skills—can be transferred to another lawyer. If so, we might have many lawyers earning a lot of money. This illustrates personal goodwill.

Let's illustrate practice goodwill. Now assume that Mary Brown, attorney at law, belongs to a prepaid legal services plan, from which she gets client referrals. The fact that the law firm is signed up with the legal services plan, referrals come to the practice regardless of her reputation and skills. This is practice goodwill. However, assuming that Ms. Brown does a good job for these clients, referrals may come to her in the future, which would be an element of personal goodwill.

Most courts have found that goodwill is an asset to be included in the marital estate of a professional for divorce purposes. In many states, professional goodwill is considered to be marital property even though it is not transferable. In such cases, the standard of value is not truly fair market value, but rather intrinsic value to the owner. Several states have taken the position that professional goodwill is not a marital asset subject to division, but practice goodwill is.<sup>2</sup>

One of the most widely cited cases detailing the factors to consider when valuing professional goodwill in a divorce is a California case, *Lopez v. Lopez*.<sup>3</sup> The factors listed in that case include the following:

- The age and health of the professional.
- The professional's demonstrated past earning power.
- The professional's reputation in the community for judgment, skill, and knowledge.
- The professional's comparative professional success.
- The nature and duration of the professional's practice, either as a sole proprietor or as a contributing member of a partnership or professional corporation.

As illustrated previously, it is frequently difficult to distinguish between professional goodwill and practice goodwill. In a Florida case, *Williams v. Williams*,<sup>4</sup> the trial court ruled that the value of Mr. Williams' accounting practice included \$43,200 in practice goodwill. On appeal, the trial court's finding was reversed. In its opinion, the appellate court stated:

the goodwill of [a] professional practice can be a marital asset subject to division in a dissolution proceeding, if it exists and if it was developed during the marriage . . . . However, . . . for goodwill to be a marital asset, it must exist separate and apart from the reputation or continued presence of the marital litigant. . . . When attempting to determine whether goodwill exists in a practice such as this, the evidence should show recent actual sales of a similarly situated practice, or expert testimony as to the existence of goodwill in a similar practice in the relevant market . . . . Moreover, the husband's expert, who testified the practice had no goodwill, stated that no one would buy the practice without a noncompete clause. This is telling evidence of a lack of goodwill.

<sup>2</sup> Some of the cases dealing with personal goodwill around the country include: *Nail v. Nail*, 486 S.W. 2d 761 (Texas Supreme Court 1972); *Geesbreght v. Geesbreght*, 570 S.W. 2d 427 (Texas Civil Appeals Court 1978); *Prahinsky v. Prahinsky*, 540 A.2d 833 (Md. App. 1988) and 582 A.2d 784 (Md. 1990); *Thompson v. Thompson*, 546 So.2d 99 (Fla. App. 4 Dist. 1989); *Hollbrook v. Hollbrook*, 103 Wis. 2d 327, 309 N.W. 2d 343; *Zells v. Zells*, 157 Ill. Dec. 480, 572 N.E. 2d 944 (111.1991); and *DeMasi v. DeMasi*, 366 Pa. Super. 19, 530 A. 2d 871,883.

<sup>3</sup> *In re: Marriage of Lopez*, 113 Cal. Rptr. 58 (38 Cal. App. 3d 1044 (1974))

<sup>4</sup> *Williams v. Williams*, No. 95-00577, 1996 WL 47675 (Fla.App.2 Dist. Feb. 7, 1996)

(Continued)

**EXHIBIT 17.2** *(Continued)*

Clearly, the noncompete clause was the issue in the court's strict interpretation of fair market value. The fact that the expert testified that without a covenant not to compete, no one would buy the practice is an indication that the goodwill was associated with the grantor of the covenant.

**Noncompete Agreements.** (This is the same verbiage as in exhibit 17.1 so I am leaving it out here.)

In essence, a covenant not to compete is used to protect the goodwill that is associated with the practitioner that would allow that individual to compete with the purchaser of the practice. In the valuation performed in this matter, the indicated value of \$702,000 can be broken down between tangible and intangible value as follows:

Tangible Value	\$208,000
Intangible Value	494,000
<b>Total Value</b>	<b>\$702,000</b>

The normalized balance sheet was used to derive the value of the net tangible assets. Therefore, by subtraction, any remaining value would be attributable to intangible assets. This would be the maximum amount that a willing buyer would be looking to protect in an acquisition of The Dental Group. In order to estimate the amount of personal goodwill associated with The Dental Group, the appraiser looked for two separate factors which would provide market evidence as to the value of a non-compete agreement.

**Contract for Sale Between Dr. Scott Smith and Dr. Mark Brown (July 1989).** As indicated earlier in this report, the asset purchase agreement that involved Dr. Smith included a restrictive covenant. In fact, according to the allocation on page three of this agreement, the \$366,000 purchase price was allocated between tangible and intangible assets as follows:

Tangible Assets	\$153,720
Intangible Assets	212,280
<b>Total</b>	<b>\$366,000</b>

The intangible assets were broken down between patient records and restrictive covenant as follows:

Patient Records	\$131,760
Restrictive Covenant	80,520
<b>Total</b>	<b>\$212,280</b>

This indicates that approximately 22 percent of the purchase price was allocated to a restrictive covenant ( $\$80,520 \div \$366,000$ ).

**Market Evidence from the Pratt's Stats Database.** Included in the detail of the Pratt's Stats database is information relating to whether or not a covenant not compete was granted, and if so, how much of the sale price was allocable to this covenant. An analysis was performed of the transactions resulting in the information provided in table 19.

## EXHIBIT 17.2

**TABLE 19**  
**PRATT'S STATS TRANSACTIONS WITH NON COMPETE INFORMATION**

<b>Business Description</b>	<b>Sale Date</b>	<b>Sell Price</b>	<b>Liabilities Assumed</b>	<b>Employ Agree Value</b>	<b>Price-Liabilities &amp; Employment Agreement</b>	<b>Non-compete Value</b>	<b>Non compete to Selling Price</b>
Dental Practice	1/22/1999	443,500			443,500	175,933	39.67%
Dental Practice	11/2/1999	20,000			20,000	5,000	25.00%
Dental Practice— General Family	9/7/1999	314,262			314,262	10,000	3.18%
Dental Practice— General Family	10/5/1999	222,500			222,500	10,000	4.49%
Dentist	10/24/1997	287,000			287,000	1,000	0.35%
Dentist, General	5/1/1997	482,000			482,000	33,000	6.85%
Dentist, General	4/1/1998	150,000			150,000	15,000	10.00%
Dentist, General	4/1/1998	120,000			120,000	20,000	16.67%
Dentist, General	1/1/1998	210,000			210,000	20,000	9.52%
Dentist, General	2/1/1998	210,000			210,000	40,000	19.05%
Dentist, General	4/1/1997	173,000			173,000	20,000	11.56%
Dentist, General	1/1/1998	137,000			137,000	10,000	7.30%
Dentist, General	10/1/1997	147,000			147,000	12,000	8.16%
Dentist, General	2/1/1998	60,000			60,000	20,000	33.33%
Dentist, General	10/1/1997	28,000			28,000	3,000	10.71%
Dentist: Orthodontist	10/15/1998	119,000			119,000	10,000	8.40%
Dentist: Orthodontist	6/15/1999	342,000			342,000	11,000	3.22%
Family Dentistry	5/28/1998	176,677			176,677	5,000	2.83%
Family Dentistry	9/15/1998	105,500			105,500	10,000	9.48%
<b>Many transactions have been omitted from this exhibit to save space</b>							
Orthodontia	7/15/1999	200,000			200,000	20,000	10.00%
Orthodontist	4/1/1998	400,000			400,000	25,000	6.25%
Orthodontist	2/1/1998	175,000			175,000	20,000	11.43%
Pediatric Dentistry	3/1/1998	375,000			375,000	40,000	10.67%
Periodontal Practice	1/5/1998	265,000			265,000	50,000	18.87%
<b>Average</b>							<b>14.29%</b>

(Continued)

**EXHIBIT 17.2** (Continued)

Table 19 reflects the selling price of the practice minus any liabilities assumed and employment agreement values that were specifically allocated as part of the selling price in order to determine the price of the practice, net of the liabilities and of the employment agreement. We then compared this amount to the result that was allocated to the value of the non-compete agreement. The average noncompete agreement value to the net selling price amounted to 14.29 percent. We further analyzed this data and removed all specialty practices to see what impact, if any, these had on the average. The average went up to 14.74 percent. Therefore, the market evidence indicates that of these transactions, between 14 and 15 percent is indicative of the non-compete values.

**Conclusion.** Clearly, the best indication of the value of a noncompete agreement would be using market data involving Dr. Smith himself. Although the transaction was from 1989, clearly, it is within the range of reasonableness (22 percent versus 14.74 percent) based on the other market evidence. Therefore, it appears that approximately 20 percent of the purchase price, or \$140,400 ( $\$702,000 \times 20$  percent) would be a reasonable indication of the value of the noncompete. Therefore, in our opinion the value of The Dental Group that should be subject to equitable distribution as of March 23, 2000 would be \$561,600.

**VALUE—DATE OF MARRIAGE—NOVEMBER 28, 1987**

Trugman Valuation Associates was also asked to estimate the value of the practice as of the date of the marriage, November 28, 1987. We requested financial statements and/or tax returns at around that date including prior years, but the only information that still exists are financial statements for 1989 and 1990. Not anticipating that these records would ever be needed, they were discarded and are no longer available. Therefore, we are attempting to estimate the value based on the information that we have.

For the year ended December 31, 1989, net professional revenues were \$1,564,551 from the practice. Included in this amount is income from not only the Main Street location, but also from the Second City office. That practice was sold under contract dated July 1989 and was effective October 3, 1989. Our review of the 1990 financial statements reflects net professional fees in the amount of \$1,102,408. During this year, the Second City location was no longer in existence. Therefore, with the exception of any possible growth in the practice, the difference between these years could be attributable to the portion of the practice that was sold. The difference in revenue between 1989 and 1990 was \$462,143. Annualizing this amount, one could estimate that the annual difference (again excluding growth) would be \$616,191. Therefore, revenues for the entire 1989 year, including the equivalent full year for Second City, that would have existed in previous years, can be calculated as follows:

1989 Reported Revenues	\$1,564,551
Less: Difference from 1989 to 1990	462,143
Sub Total	\$1,102,408
Add: Annualized Difference	616,191
Total Restated Annualized Revenues for 1989	\$1,718,599

In order to estimate the 1987 revenues, we applied a deflation factor of 5 percent consisting of 3 percent inflation and 2 percent real growth to the restated 1989 revenues. This would approximate 1987 revenues as \$1,551,036. This indicates that the entire practice was generating 81.13 percent of the annual revenues just prior to the divorce ( $\$1,551,036 \div \$1,911,743$ ). Using the relationship of revenues as a proxy for the change in value, an estimate of the value of the practice in 1987 can be performed as follows:

Value—March 23, 2000	\$702,000
Revenue Relationship	$\times$ 81.13%
Value—1987	\$569,533
Rounded	\$570,000

**EXHIBIT 17.2**

Based on these figures, we estimated that the value of the practice at November 28, 1987 was approximately \$570,000. In order to be consistent with the treatment of personal goodwill from the latter date, we estimated that 20 percent of this amount or \$114,000 should be considered nonmarital, personal goodwill. Therefore, the value that should be used as the base to calculate an incremental value would be \$456,000.

## VALUATION OF OTHER MARITAL ASSETS

Over the past several years, new assets are joining the cadre of items being considered in the marital estate. Once again, the courts are trying to be fair to the nonprofessional spouse. Rather than treating certain items as an ability to pay additional support, the courts have found these items to be marital assets. Some of the items included in this group are professional licenses and celebrity goodwill.

### PROFESSIONAL LICENSES

The value of a professional license is frequently considered to be part of professional goodwill. In New York, the *O'Brien*<sup>20</sup> case provided that a professional license had value, even when there was no professional goodwill. In fact, the professional practice had not yet been started. In this case, Mrs. O'Brien worked so that Dr. O'Brien could attend medical school. About two months after Dr. O'Brien received his medical license and was serving a residency in general surgery, he filed for a divorce.

Clearly, there could be no professional goodwill in this case, because Dr. O'Brien had not started his practice yet. However, Mrs. O'Brien's expert valued the professional license on the basis that it had value due to the enhanced earning capacity provided to Dr. O'Brien. A comparison was made between the average income of a college graduate to the average income of a general surgeon. This difference was capitalized over Dr. O'Brien's expected working life adjusted for factors such as the time value of money and mortality.

Because New York started treating professional licenses as marital assets subject to distribution, additional issues have arisen. Arguments have now been raised that where the license holder has maintained a professional practice for a long period of time, the license has merged with the practice and no value should be assigned to the professional license. This concept was challenged in *McSparron v. McSparron*.<sup>21</sup>

In *McSparron*, the court stated:

Application of the merger doctrine is particularly inimical to the statutory purposes because it generally favors the non-licensed spouse in a shorter marriage over the non-licensed spouse who is faced with rebuilding his or her economic life after the break-up of a long-term marriage . . . . In view of these logical and practical difficulties, we conclude that the letter and spirit of our holding in *O'Brien* is best served by eliminating the concept of "merger" from the inquiry. The merger doctrine should be discarded in favor of a common-sense approach that recognizes the ongoing independent vitality that a professional license may have and focuses solely on the problem of valuing that asset in a way that avoids duplicative awards . . . . Care must be taken to ensure that the monetary value assigned to the license does not overlap with the value assigned to other marital assets that are derived from the license such as the licensed spouse's professional practice.

### CELEBRITY GOODWILL

New Jersey was always famous for its Turnpike. In fact, whenever I told someone that I lived in the Garden State, I was asked "near what exit on the Turnpike?" Now, New Jersey is on the map as the home of *The Sopranos*. But New Jersey also started a trend that may be nothing to be proud of. Joe Piscopo, comedian and entertainer,

<sup>20</sup> *O'Brien v. O'Brien*, 66 NY 2d 576 (1985)

<sup>21</sup> *McSparron v. McSparron* No. 260, 1995 WL 722880 (N.Y.App. Dec 7, 1995)

probably did not find it funny or entertaining when the New Jersey Superior Court found that he had a marital asset, with value, called *celebrity goodwill*.<sup>22</sup> The concept of celebrity goodwill is based on the premise that the enhanced earnings capacity of a celebrity is marital property. The determination of value in this case was made by applying a percentage to gross revenues of three of the last five years. New York, once again, not wanting to be too far behind, ended up with two cases of its own, *Golub v. Golub*<sup>23</sup> and *Elkus v. Elkus*.<sup>24</sup> This craziness is catching on like wild fire.

## CONCLUSION

If you plan to do divorce valuations, make sure that you become familiar with the law of the land. Don't get caught up in the craziness of the litigation or the clients will most likely make you nuts. Do your valuation with the integrity and objectivity that is expected in any professional engagement.

If I did my job right, this chapter should have familiarized you with some of the nuances of the divorce valuation process. You should have even gotten a lesson on valuing a covenant not to compete. Remember that really long exhibit? It wasn't that long ago. Since we have had so much fun, let's move on.

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<sup>22</sup> *Piscopo v. Piscopo*, 231 NJ Super 576

<sup>23</sup> *Golub v. Golub*, 527 NYS2d

<sup>24</sup> *Elkus v. Elkus*, 572 NYS2d 901 [App Div 1991, Review Denied 588 NE2d99 (NY 1992)]

# CHAPTER 18

## *Professional Practice Valuations*

### CHAPTER GOALS

In this chapter, I will attempt to

- Discuss the reasons for valuing professional practices.
- Discuss the characteristics of a professional practice.
- Distinguish between professional practice valuations and other types of businesses.
- Discuss engagement specific matters.

### INTRODUCTION

Valuations performed for professional practices frequently have unique aspects associated with them. Professional practices, by their very nature, are different than most businesses. As such, the valuation analyst must truly understand the attributes of each type of practice that may be valued. These professional practices, whether they be an accounting practice, a medical practice, an engineering practice, and so on will all be similar but different. Yes, it is contradictory.

Before you can value a professional practice, a good starting point is to understand what is meant by a profession. The term *profession* means:

A vocation or occupation requiring special, usually advanced, education, knowledge, and skill—for example, law or medical professions. Also refers to whole body of such profession. The labor and skill involved in a profession is predominantly mental or intellectual, rather than physical or manual. The term originally contemplated only theology, law, and medicine, but as applications of science and learning are extended to other departments or affairs, other vocations also receive the name, which implies professed attainments in special knowledge as distinguished from mere skill.<sup>1</sup>

The valuation of professional practices will have many common aspects to the valuation of professional service firms. For example, the valuation techniques used to value a medical practice may be similar to the valuation of a tax preparation service business. Clearly, there will be difference between these two types of firms. Hopefully, by the end of this chapter, you will agree.

### WHY ARE PROFESSIONAL PRACTICES VALUED?

Remember a long time ago, back in chapter 1, I provided you with a box with a list of business valuation engagement considerations (box 1.1)? Well, guess what? Most of these same reasons apply. The reasons that we probably see most often can be narrowed down to the following:

- Mergers and acquisitions
- Estate and gift taxes
- Marital dissolution
- Buy-sell agreements
- Stockholder and partner disputes
- Damages litigation

<sup>1</sup> Henry C. Black, *Black's Law Dictionary* (St. Paul, MN: West Publishing Co., 1997):1210.



These are probably the major reasons for valuing professional practices. Like all other valuations, the purpose and function of the valuation will affect the manner in which you will proceed.

## CHARACTERISTICS OF THE PROFESSIONAL PRACTICE

The professional practice differs from other types of businesses because of its unique characteristics. These include the following:

- It is generally a service business where there are considerably fewer tangible assets than intangible assets.
- There is a strong relationship between the professional and the client or patient, which is based on the professional's reputation.
- The professional practice, more often than not, depends on a strong referral system to get new clients or patients.
- The professional is frequently licensed, regulated, or certified by a governmental or regulatory agencies or professional organizations.
- In order to get licensed or accredited, most professionals are required to obtain an undergraduate degree as well as maintain some level of continuing education to keep his or her license or certification.

Each of these aspects is pretty self explanatory, so there is little need to expand on them.

## PROFESSIONAL PRACTICE VERSUS OTHER BUSINESS VALUATIONS

Valuing professional practices will require the valuation analyst to follow the same general guidelines as with other types of business enterprises. Obviously, with most of the value being in the intangible assets, the professional practice will be much more oriented toward a market or income approach. An asset approach could be used, but you would have to find a suitable manner in which to value the intangible assets. There is the excess earnings method, but I said suitable! All kidding aside, the excess earnings method should result in the same value as in the income approach because the tangible assets are relatively small. Whether you are capitalizing the entire earnings stream or the majority of the earnings stream (the excess earnings), using the proper capitalization rates will get you to the same place. An example appears in exhibit 18.1.

### EXHIBIT 18.1

#### CAPITALIZATION OF EARNINGS VERSUS EXCESS EARNINGS

**ADJUSTED BOOK VALUE.** As of the appraisal date, the adjusted book value of the tangible assets of Dental Associates was as follows:

Total Assets	\$309,703
Total Liabilities	51,118
<b>ADJUSTED BOOK VALUE</b>	<b>\$258,585</b>
<b>ROUNDED</b>	<b>\$259,000</b>

**GOODWILL—EXCESS EARNINGS METHOD.** In addition to the value of the physical assets of Dental Associates, it is necessary to determine whether any goodwill exists and, if so, what value to place on that goodwill.

Now that normalized earnings have been determined, a calculation must be performed to determine a reasonable return on the tangible net assets of the practice. This must be subtracted from the economic net income to determine the excess earnings to be capitalized.

The adjusted tangible net assets of the practice have previously been determined to be approximately \$259,000. If this amount was placed in an investment with similar risk as the components of these net assets, a certain amount of income would be generated, regardless of whether or not the business was operating. For this reason, the goodwill

**EXHIBIT 18.1**

calculation requires the return on the net assets to be removed, as the income that would be generated from an alternative investment would not be part of the intangible value of the practice.

According to our research at the appraisal date, corporate bonds (Aaa) were paying 7.96 percent, on average. A reasonable rate of return on the net assets would be 12 percent, in light of the fact that the net assets are not highly risky, but are more risky than Aaa corporate bonds. This results in excess earnings being calculated as follows:

Normalized Economic Income	\$148,135
Return on Net Assets (\$259,000 × 12%)	31,080
<b>EXCESS EARNINGS</b>	<b>\$117,055</b>

Capitalizing excess earnings (pretax) at a rate of 30 percent results in an intangible value (goodwill) of \$390,183 for this practice.

Combining the tangible and intangible assets and liabilities yields the following result:

Assets Other Than Goodwill	\$309,703
Goodwill	390,183
Total Assets	\$699,886
Less: Liabilities	51,118
<b>ESTIMATE OF VALUE</b>	<b>\$648,768</b>
<b>ROUNDED</b>	<b>\$649,000</b>

**CAPITALIZATION OF HISTORIC EARNINGS.** Another method of valuation, which places an emphasis on the earnings stream of the practice, is the capitalization of historic earnings method. This method capitalizes the entire income stream based on the earnings power of the net assets. As such, an appropriate capitalization rate must be selected that would be appropriate for this income stream.

The normalized economic income for the practice was determined to be \$148,135. Capitalizing this amount by 23 percent results in the value of this practice being \$644,065, or \$644,000 rounded.

The example in exhibit 18.1 reflects the fact that there should not be a major difference between the estimates of value that you get when using the excess earnings method or the capitalization of earnings methods. You should already be familiar with that from previous chapters. However, because most professional practices do not have substantial amounts of assets, most of the income stream will be attributable to the intangible assets of the practice. In these situations, the excess earnings will be very similar to the earnings stream being capitalized in a single period capitalization model. This means that the capitalization rate for the income stream and the excess earnings should be relatively close. In fact, the capitalization rate must be high enough to reflect the risk associated with the income stream being predominantly derived from the intangible assets. They are clearly more risky than the tangible assets.

## BUY-SELL AGREEMENTS

Many professional practices have buy-sell agreements in place to avoid fighting over value in the event that a buyout must occur. Many of these agreements contain formulas that have nothing to do with the economic reality

of the situation. This frequently causes fights among the owners. You should always read the agreement to determine if there is a mandatory provision regarding the determination of value. In certain circumstances, this will have to be the valuation methodology that the valuation analyst will follow. However, in other circumstances, that may not be the case. For example, in certain jurisdictions, these types of agreements will not be considered indicative of value for a marital dissolution case.

Sometimes, the buy-sell agreement may be the manner in which partners or stockholders come and go on a regular basis from a firm, thereby creating internal transactions or a market for the interest. Revenue Ruling 59-60 tells us to consider (factor number 7) the “sales of the stock and the size of the block of stock to be valued.” Internal transactions may be the best indication of fair market value. However, be careful to properly understand the formula contained in these agreements. Many times, they are established to be punitive for owners who leave before retirement, disability, or death. The owners all agree that they do not want to finance each other if they choose to leave the practice and compete with the old firm.

Table 18.1 demonstrates a simple calculation pursuant to a buy-sell agreement. In this example, three owners signed a stockholders’ agreement that included a formula to use to calculate the value of the dental practice in the event one of the shareholders was to be bought out.

50% gross receipts	\$618,700
Plus:	
Fair market value of furniture and equipment	60,175
Inventory	3,500
95% of accounts receivable	186,909
Less:	
Liabilities	(51,118)
Value of Class A Common Stock	\$818,166
Plus:	
Class B Common Stock*	3,500
<b>VALUE OF PRACTICE</b>	<b>\$821,666</b>
<b>ROUNDED</b>	<b>\$822,000</b>

\*According to the agreement, the Class B stock is to be valued at the price of \$1,000 per share. At the date of the valuation, three and a half shares were outstanding.

## INTERNAL TRANSACTIONS

The nature of professional practices is such that there are many times when internal transactions can be used to determine the value of a fractional interest in the firm. Many firms have buy-sell agreements that outline how owners will come and go. In certain types of valuations, for instance divorce, these may not be considered. Check with the attorney about the case law in the jurisdiction that you are working in. Sometimes, a review of prior transactions can also assist the valuation analyst in estimating the value of the firm, or at least the interest in the firm. Let’s look at an example where there was a transaction. Exhibit 18.2 illustrates what happened.

## EXHIBIT 18.2 INTERNAL TRANSACTION

**PRIOR TRANSACTION.** As discussed in the “History of the Dental Practice,” on January 1, 2007, Dr. Black signed an agreement with Drs. Brown and Green to purchase one third of the dental practice. The terms of the purchase were that Dr. Black would receive a reduced salary (\$85,000 in comparison to \$160,000) for a 7.5 year period. At the end of this period, Dr. Black would own 50 shares of the Class A common stock, or one third of the stock.

In order to determine the value of the dental practice at the time of the buy in, it is necessary to discount the payments (the \$75,000 salary differential) back to the date of the original transaction. At the time of the transaction, low grade corporate bonds (Baa) were paying 6.22%. This transaction is considerably riskier than corporate bonds, so the discount rate used was 10 percent.

The value of a one-third interest in Dental Associates at January 1, 2007 is calculated as follows:

Year	Amount	Discounted at 10 Percent
2007	\$75,000	\$ 71,510
2008	75,000	65,009
2009	75,000	59,099
2010	75,000	53,726
2011	75,000	48,842
2012	75,000	44,402
2013	75,000	40,365
2014	37,500	21,168
Value of one-third interest as of January 1, 2007		<u>\$404,121</u>

Exhibit 18.2 contains a calculation of a one-third interest in the dental practice. The problem that the valuation analyst might face is using this information to estimate the value of a controlling interest in the practice. In theory, you could add a control premium to the minority result determined, but practically speaking, where would you get empirical evidence to support the size of the premium? Years ago, we went to *Mergerstat Review* as a basis of the premium. Today, I would not touch that with a 10 foot pole!!! Clearly, the public market strategic premiums cannot offer even a little assistance in determining the correct premium for a local dental practice. You do not have a choice but to be subjective, but reasonable.

## EXTERNAL TRANSACTIONS

Sometimes, instead of there being an internal transaction, the practice may have acquired another practice, or a portion of one that can be used to determine some formula that can be applied to the entire practice. The valuation analyst should obtain as much information about the acquisition as possible. At a minimum, get the contract, closing documents, financial disclosures made by the seller, and any due diligence performed by the acquirer or the acquirer’s accountant. This can assist you in using this data. Exhibit 18.3 illustrates a small portion of a report where there was only limited data supplied by the doctor (nonclient) in a divorce litigation.

### EXHIBIT 18.3 EXTERNAL TRANSACTION

**PURCHASE OF JOHNSON PRACTICE.** In the history section of this report, we discussed Dr. Peter's purchase of Dr. Johnson's practice. Although Dr. Peters did not gain many new patients as a result of this transaction, the transaction itself can be used as a methodology for valuing Dr. Peter's practice.

Dr. Peters bought Dr. Johnson's patient list for \$80 per patient. This did not include any of the other assets of the practice.

Utilizing this methodology results in a calculation of value as follows:

Patient List ( $\$80 \times 4,109$ )	\$328,720
Other Assets (Net)	41,000
Value	<u>\$369,720</u>
Rounded	<u>\$370,000</u>

## SUBSEQUENT EVENTS

This section does not only pertain to professional practices. However, I put it here because I have an example of how it applied in the valuation of a professional practice. In reality, it could have been any kind of business. Although valuation, for the most part, is normally performed based on the events that were known or would have been knowable by the willing buyer and willing seller, there are many times that subsequent events can act as either your friend or your foe. The Tax Court has been known to look at transactions after the valuation date to test the reasonableness of what the valuation analyst has done. While I do not agree with the notion of playing Monday morning quarterback, sometimes it is necessary. For example, getting away from the pure standard of fair market value, sometimes the courts are concerned with doing what is *fair and equitable*. If a subsequent event will assist in that regard, the courts have taken advantage of the information. This does not mean that you can bend the rules to fit your valuation into the actual results. All I am saying is that in some circumstances, it may be appropriate to consider the subsequent event, and in other circumstances, while you may not choose to rely on it, you may want to present it to the court. Be prepared to discuss the factors that might have caused the subsequent event, like a transaction, to be more or less because of other factors that may have affected the subsequent price that was reached between the parties. Sometimes, we just don't know!

Keep in mind that while there are some court cases that rely on subsequent events, the court has used this information in the spirit of determining whether the valuation analyst should have known that the subsequent event would have taken place. The court has tried to determine whether there was information that should have been "known" or "knowable" by the valuation analyst.

Exhibit 18.4 contains a section from a report where we were court appointed in a divorce case.

### EXHIBIT 18.4 SUBSEQUENT EVENTS

After the date of the filing of the divorce (the effective date of the valuation), Dr. Black decided to leave Dental Associates and open his own practice. The effective date of this dissolution was December 31, 2002.

Under the terms of the dissolution agreement, Dr. Black would open his own office by the end of June 2003. He was permitted to continue seeing his patients at Dental Associates' offices at no cost to him until May 15, 2003. When

**EXHIBIT 18.4**

Dr. Black left, he took approximately 1,100 patient files with him, consisting of approximately \$331,000 of annual revenues. In addition, his assistant followed him to his new offices, and he can pay the periodontist as an independent contractor to come to his office to treat patients, if he wishes.

In return, Dr. Black tendered his stock back to the corporation. No monies exchanged hands as a result of this transaction. Clearly, losing approximately one third of the revenues will have an effect on the value of the practice. This is discussed in more detail below.

**ADJUSTED BOOK VALUE.** Per the terms of the dissolution agreement, Dr. Black will not take any of the assets of the practice with him. Therefore, the adjusted book value remains at \$258,585 or \$259,000 rounded.

**CAPITALIZATION OF HISTORIC EARNINGS.** An analysis was done showing the financial effect of Dr. Black leaving the practice. This new income level was then normalized in a manner consistent with what was done in the "Valuation Calculations" section of this report. This analysis is shown below:

2002 Taxable Income	\$ 3,031
Adjustments to 2002 Taxable Income	
Income generated by Dr. Black <sup>1</sup>	(330,810)
Dr. Black's salary	120,027
Assistant's salary	21,368
Supplies <sup>2</sup>	29,800
Lab fees <sup>2</sup>	43,453
Payroll taxes and benefits	14,140
Consulting services <sup>2</sup>	14,453
2002 Income without Dr. Black	\$(84,538)
Normalization adjustments	
Interest and dividends	(718)
Insurance	8,675
Rent	7,520
Depreciation	8,294
Legal and accounting	10,624
Officers' compensation <sup>3</sup>	75,962
Contributions	263
<b>Normalized Net Income</b>	<b>\$ 26,082</b>
<p>(1) Income as reported on Dental Associates' internal Procedure Analysis Report.</p> <p>(2) The assumption was made that Dr. Black accounted for approximately one third of these expenses.</p> <p>(3) Since Dr. Black's salary was added in above, only Dr. Brown's and Dr. Green's salaries were adjusted.</p>	

Using the same methodology as used previously in this report, capitalizing normalized net income results in a value of \$113,400.

**VALUE OF THE 50 PERCENT INTEREST OWNED BY DR. GREEN.** After Dr. Black left, Dr. Green owns 50 percent of the practice, rather than 44 percent. As a result, his interest in the practice is valued at \$129,500 (one-half of \$259,000).

 **Author's Note**

The original report also contained a market approach which was ultimately used in the reconciliation of the values. By removing a chunk of the gross receipts of the practice, an asset approach ended up being the highest value. Go figure!!!

## MORE ABOUT PROFESSIONAL PRACTICE VERSUS OTHER BUSINESS VALUATIONS

One of the key ingredients to a successful professional practice is the ability of the professional to service and keep the clients and patients happy. There tends to be much more dependence on the professional than in other types of businesses. In that regard, the professional is a *key* person. This does not necessarily mean that there should be a discount associated with that professional. During the valuation process, the attributes of the professional must be considered. Unusual skills, long work hours, large referral base, and other similar factors will certainly affect the valuation, whether it ends up as part of reasonable compensation or built into the discount or capitalization rates.

Another factor that differentiates the professional practice from other types of businesses is the fact that the professional, and in some cases the firm, must be licensed or accredited. In most instances, the professional practice is subject to standards and possibly ethics that a normal business may not be subject to. For example, as CPAs, we are subject to the rules promulgated by the board of accountancy in our state.

One other distinction between professional practices and other types of businesses immediately comes to mind—that is, the method of accounting used to keep the books and records. Most smaller professional practices use the cash method of accounting. This will require the valuation analyst to obtain additional information that may normally be available for other types of businesses directly in the financial statements, for example, accounts receivable.

## THE VALUATION PROCESS

In chapter 3, I gave you some checklists that can be used to assist you in gathering information about different types of professional practices. In this chapter, I will demonstrate some of the unique aspects of professional practice reports by showing you sections of reports that contain different types of analyses. Before we get there, however, let's consider the questions that you probably want to ask at a management interview. Figure 18.1 includes a checklist that we have adapted from *PPC's Guide to Business Valuation*.

### FIGURE 18.1

#### PROFESSIONAL PRACTICE QUESTIONNAIRE TRUGMAN VALUATION ASSOCIATES, INC.

#### PROFESSIONAL PRACTICE COMPANY AND INDUSTRY BACKGROUND INFORMATION

Practice Name: \_\_\_\_\_

Completed by: \_\_\_\_\_ Date: \_\_\_\_\_

**INSTRUCTIONS:** This form is designed to be used in place of TVA-4 when valuing a professional practice. It covers the data typically needed to obtain an understanding of the professional practice being valued. This information should be obtained through reviewing practice documents and interviewing practice personnel. Many of these questions are general in nature and will not necessarily apply to all professional practices. Answer only the questions that apply to the practice being valued. Some of these questions may be duplicative if a medical or dental profile was filled out (see form TVA-5a).

Document the requested information in the space provided. Attach additional sheets if necessary. If the information is not relevant, write N/A in that space.

#### PRACTICE BACKGROUND

1. Describe the practice's legal structure.

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**FIGURE 18.1**

Practice's legal name:

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Type of entity (professional corporation, partnership, proprietorship):

---

Date of incorporation or formation:

---

2. List the major stockholders, partners, or owners of the practice and their percentage of ownership or number of shares owned.

Name	% Ownership or Number of Shares Owned

3. List all known related parties (that is, subsidiaries, affiliates, or relatives) that the practice does business with.

Name	Relationship

4. List each location maintained by the practice and the primary activity at each, that is, executive office, practice office, laboratory, and so on.

Location	Activity

*(Continued)*

**FIGURE 18.1** *(Continued)*

5. Discuss evolution of

(a) Services

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---

(b) Customer Base

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(c) Locations

---

---

---

(d) Marketing Activities

---

---

---

(e) Employees

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---

---

(f) Acquisitions

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---

(g) Ownership

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---

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**FIGURE 18.1**

6. Other key dates or events in practice history.

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7. Has the practice ever had any offers to merge with another practice?

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**SERVICE MIX**

8. Description of the practice's service mix (that is, types of engagements, or services performed):

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9. Breakdown of revenue by service (major services).

Service	% of Revenue	% of Recurring Clients and Patients
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>

10. How diversified is the service mix?

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11. Do all revenues depend on the same factors?

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12. Which service area is growing faster? \_\_\_\_\_

The slowest? \_\_\_\_\_

*(Continued)*

**FIGURE 18.1** *(Continued)*

13. Has the practice developed any proprietary products?

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14. Does the practice have patents, technology, or expertise that prevent others from copying the services offered?

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15. Discuss the practice's research and development efforts, the importance of new products or services, and the annual cost of research and development activities.

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16. Are revenues cyclical?

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---

17. What economic factors (inflation, interest rates, and so on) affect revenue?

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---

18. Are revenues seasonal?

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19. Describe the practice's client base.

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20. How many clients or patients are seen per week, on average?

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**FIGURE 18.1**

21. What percentage are seen in the practice office?

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22. Describe the geographic area that client and patients come from (that is, the approximate mile radius from the office).

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23. How would the geographic area be described (that is, urban or rural, growing or declining, affluent or blue collar, stable or transient)?

---

---

24. Are there any special demographic factors that should be considered such as the age of clients or patients?

---

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25. How does the practice obtain clients or patients?

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26. What percentage of total clients or patients are the result of referrals?

---

27. Of this percentage, how many referrals were from other professionals?

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28. How many referrals were from other clients or patients?

---

29. Are referrals to a specific professional or doctor, or to the firm in general?

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30. Does any one referral source account for 10 percent or more of the practice revenue? \_\_\_\_\_

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*(Continued)*

**FIGURE 18.1** *(Continued)*

31. Does any referral source account for 5 percent or more? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

32. Are there any contractual relationships that provide the practice with access to facilities or client referrals?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

33. Briefly describe the relationship and the percentage of revenues provided by the relationship.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

34. Does the practice maintain records to track the source of client or patients?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

35. Does the practice advertise? Describe marketing methods, if any.  
\_\_\_\_\_  
\_\_\_\_\_

36. What is the annual cost of marketing and practice development efforts, including travel and entertainment costs relating to entertaining referral sources or potential clients?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**COMPETITION**

37. Who are the practice's major competitors? Where are they located? How big are they? How diversified are they?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**FIGURE 18.1**

38. How does the practice compare in size to its competitors?

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39. How easy is it to enter the profession? What are the barriers to entry?

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40. What are the practice's competitive strengths and weaknesses?

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**OPERATIONS**

41. Describe the practice's organization structure. (Attach organization chart, if available.)

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42. As of the valuation date, what are the weekly business hours for the practice?

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43. How often does the practice bill? Describe the basis for fees, that is, hourly charge, fixed fee, cost plus, fee schedule, and so on. Provide a copy of the fee schedule, if available.

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44. What is the balance of unbilled work in process? How much of this balance is collectible?

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*(Continued)*



**FIGURE 18.1** *(Continued)*

45. Does any of the work in process represent contingent fees? If so, what percentage?

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46. Complete the following if the information is available:

<b>Service</b>	<b>Gross Fees</b>	<b>Write Down</b>	<b>Net Fee</b>	<b>Paid by Insurance</b>	<b>Paid by Client or Patient</b>	<b>Write Down</b>
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<b>TOTAL</b>	<hr/> <hr/>					

47. What is the practice's percentage of collectibility for accounts receivable?

---



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48. How are fees paid (that is, check, cash, credit cards)?

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49. Are buildings and equipment owned or leased?

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50. Provide details about the facilities. What is the square footage?

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51. How many stories is the building?

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52. Is the current facility adequate for the level of business being projected?

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**FIGURE 18.1**

53. If leased, are the leases renewable and on what terms? Are leases between the practice and related parties?

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54. What is the overall condition of the practice's equipment?

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55. Is there any inefficient or obsolete equipment?

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56. When is the equipment likely to be replaced?

---

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57. What is the likelihood of major repairs?

---

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58. Please provide a listing and approximate value of the drugs and supplies on hand.

---

---

59. Discuss technology trends that affect the profession.

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60. Does the practice have any foreign clients?

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61. If so, does the company have any problems with any foreign governments?

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*(Continued)*

**FIGURE 18.1** *(Continued)*

62. Discuss the effects of any federal or state regulation or subsidies on the practice's operations.

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**MANAGEMENT AND EMPLOYEES**

63. List key members of management.

Name	Title

64. Discuss the practice's key management members (get curriculum vitae for each).

Member	Age	Health

65. List the primary administrative employees.

Employee	Age	Qualifications	Experience	Duties

66. Discuss basis of compensation. Also, describe employee benefits (insurance, profit sharing, and so on).

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67. Discuss any employment contracts.

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**FIGURE 18.1**

68. Briefly describe past and current employee relations (that is, contentious, harmonious, and so on). Also discuss employee turnover.

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69. What is the number of employees on the payroll at the valuation date?

Full-Time \_\_\_\_\_

Part-Time \_\_\_\_\_

70. How has the number of employees changed over the past five years?

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---

71. What are the immediate needs of the company with respect to hiring additional personnel?

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72. Are there any nonworking relatives or friends on the payroll? If so, what are the names and levels of compensation for the years being analyzed?

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73. How extensively are independent contractors used?

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74. Discuss the current labor market. How easy is it to attract qualified employees?

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*(Continued)*

**FIGURE 18.1** *(Continued)*

75. As of the last firm fiscal year (or more recent 12-month period, if available) summarize the time spent by the key management personnel identified in question 60:

Name	-----HOURS-----			Total
	Charged to Clients/Patients	Administrative and Other	Vacations and Holidays	
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

76. How easily can key employees be replaced (that is, is there one or a few key officers on which the success of the company depends that cannot be easily replaced)?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

77. Have the key employees executed noncompete agreements preventing them from taking practice clients without compensation?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**MEDICAL PRACTICES**

78. How many surgical procedures are performed each week?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

79. Which hospitals are used for surgery?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

80. How is the choice of hospitals determined?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**FIGURE 18.1**

81. Does any one type of surgery dominate the others?

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82. Is a surgical diary maintained? If so, please provide a copy.

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83. Are there any types of procedures that the practice will not perform? Is so, what and why?

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84. Does the practice maintain a statistical report that reflects the frequency of services provided by Current Procedural Terminology (CPT) code? If so, please provide a copy for the last 12 months of operations.

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85. What are the top 10 outpatient procedures performed by the practice?

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86. Is the amount of reimbursement received for those procedures declining because of recently negotiated managed care contracts?

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87. Does the practice maintain a detailed appointment book for each physician? If so, please provide copies of the appointment books for the last 12 months.

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*(Continued)*

**FIGURE 18.1** *(Continued)*

88. What percentage of referrals are from patients?

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89. What percentage are from other doctors?

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90. Are patients referred to the practice or to a specific doctor?

---

---

91. How many active patients are seen by the practice?

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92. How many patients are seen in a day, week, and month?

---

---

93. How many new patients are seen in a month?

---

---

94. Are patients seen by the practice once, or are follow-up visits regularly scheduled?

---

---

95. Does the practice primarily treat children, adults, or both?

---

---

96. For nonsurgical procedures, are patients required to pay at the time the procedure is performed?

---

---



**FIGURE 18.1**

97. Is the practice affiliated with any insurance companies as a preferred provider?

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98. Does the practice serve any HMOs?

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---

99. List company names, describe the fee arrangements, and note the percentage of gross fees that comes from such arrangements.

---

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100. What is the time frame for reimbursement from insurance companies, HMOs, PPOs, and Medicare and Medicaid?

---

---

101. What percentage of gross fees is received from Medicare or Medicaid?

---

---

---

102. Discuss the practice's payor mix and how that mix has changed in recent years. For example, has the practice been adversely affected by the shift from reimbursement on a fee-for-service basis to discounted managed care contracts with HMOs, PPOs, and others?

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---

103. If so, is that adverse trend continuing, or has the practice negotiated contracts that increase both revenue and profits?

---

---

---

104. Does the practice have any global capitalization contracts with managed care companies?

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*(Continued)*

**FIGURE 18.1** *(Continued)*

105. If so, does the practice have the expertise to properly manage the risk of providing patient care in return for fixed monthly payments?

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---

---

106. Does the practice have any exclusive contracts with the dominant managed care company in its market?

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---

107. If so, has the practice received satisfactory patient survey results in connection with such contracts?

---

---

---

108. How many of the practice's managed care contracts are currently up for renewal?

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---

---

109. How significant is the risk that the provider will be unable to renew those contracts?

---

---

---

110. Does the practice periodically update its patient fee schedule?

---

---

---

111. When was the last time the fee schedule was updated? Please provide a copy of the current fee schedule.

---

---

112. Has the practice entered into managed care contracts with HMOs, PPOs, or the Medicare program? If so, please provide copies of all managed care contracts.

---

---

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**FIGURE 18.1**

113. Has the practice ever had any associates?

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---

---

114. Were they offered the chance to buy into the practice?

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---

115. If so, why didn't they buy in?

---

---

**VETERINARY PRACTICES**

116. What types of animals does the practice treat (that is, small animal, large animal, mixed, or equine)? Give the estimated percentage of each type of animal treated.

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---

117. Does the practice board animals?

---

118. Does the practice make house calls?

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119. How many animals does the practice see in a day?

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**ACCOUNTING AND LEGAL PRACTICES**

120. Have any new partners or owners been admitted in the last several years? If so, describe the admission process.

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*(Continued)*

**FIGURE 18.1** *(Continued)*

121. Will any of the staff be admitted into the partnership in the near future?

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---

122. Has any partner or owner been bought out?

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---

123. Describe the terms of any recent transactions involving partner or owner admissions or departures.

---

---

---

124. Describe the nature of any financial statement qualifications or unusual matters noted in reviewing the practice's financial statements that may affect the engagement.

---

---

---

125. Has there been any change in accounting principles during the past five years (for example, cash to accrual) or similar changes that might affect the comparability of the financial statements?

---

---

---

126. Describe any relevant specialized accounting practices or principles followed by the profession.

---

---

127. Have there been any nonrecurring or extraordinary income or expenses during the financial review period?

---

---

128. What are the main discretionary expenses (such as bonus, profit sharing, advertising, and research and development)?

---

---

129. How have the levels of those expenses changed during the last five years?

---

---

**FIGURE 18.1**

130. Describe short-term sources of credit and how they were used during the last five years.

---

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131. Describe long-term sources of credit and how they were used during the last five years.

---

---

---

132. Discuss plans for major capital expenditures, how they will be financed, and how much represents expansion versus replacement of existing assets.

---

---

---

133. Discuss any contingent liabilities, including lawsuits and pending or threatened litigation.

---

---

---

134. Describe any nonoperating assets, such as aircraft, boats, and real estate investments.

---

---

---

**FUTURE EXPECTATIONS**

135. Describe relevant past and expected future trends for the practice, such as growth patterns; expansion or cutbacks of business segments; and possible spinoffs, mergers, or acquisitions.

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136. Describe the practice's future expectations, goals, objectives, and long-range plans in the following areas:

Service mix. \_\_\_\_\_

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*(Continued)*

**FIGURE 18.1** *(Continued)*Marketing and customers base. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Research and development and technology. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_137. Is there anything else that we should know in order to perform this valuation?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_**COMMENTS AND OBSERVATIONS**

138. Describe any matters to be considered in applying the valuation methods selected. Factors to consider include the following:

- a. Growth expectations
- b. Financial condition
- c. Management depth and competence
- d. Customer and service diversification

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You can tell from figure 18.1 that many questions asked in a professional practice valuation are similar, if not the same, as those that are asked in other types of business valuation assignments. However, there are some differences. The balance of this chapter is going to concentrate on those differences. Some of the issues that will be covered include the following:

- History of the practice
- Economy and industry analysis
- Cash versus accrual accounting
- Accounts receivable
- Work in process
- Prepaid insurance
- Supplies
- Library costs
- Reasonable compensation

## HISTORY OF THE PRACTICE

A well-written, comprehensive valuation report will generally contain a lot of information in it. Chapter 14 discussed the features that should be in a report. In a professional practice valuation assignment, there is frequently information about the type of profession that is not only important to demonstrate an understanding about the firm, but can also substantially affect the value conclusion. Let's highlight some history sections that would be different depending upon the type of practice being valued. The purpose of the following exhibits is to demonstrate some of the important information that the valuation analyst needs to be concerned about for various professional groups.

Let's start with an accounting practice. In addition to obtaining the normal stuff for inclusion in the history of the company section, accounting practices need to be distinguished from other types of businesses based on the types of services that they provide to their clients. A firm with traditional accounting work will more often be sold at a higher rate than a firm that does more management consulting, or one-shot engagements. Exhibit 18.5 contains several excerpts from the history sections of various reports.

### EXHIBIT 18.5 HISTORY SECTION—ACCOUNTING PRACTICE

*Excerpt 1*

All of the clients of the firm came from relationships developed by the principals of John Smith & Company. Many times, the relationship was established long before any services were provided. Although the senior Mr. Smith was responsible for many of these personal relationships, both Mr. Jones and Mr. Smith Jr. (Bob) had taken over client development and relationship building over the several years prior to the valuation date. Much of this relationship building has been through community affairs in which the firm's principals are involved.

By 2005, the firm's revenues were broken down as follows:

Audit	\$ 450,971	44.2%
Tax	303,915	29.8%
Compilation and Review	147,055	14.4%
Other Services	117,539	11.6%
	<u>\$1,019,480</u>	<u>100.0%</u>

A detailed analysis was conducted by the valuation analyst, on a client by client basis, indicating that approximately 70 percent of the firm's revenues came from 30 clients in 2005. Many of these clients have been, and continue to be served primarily by Bob Smith and Michael Jones. These relationships are key to the generation of revenues.

 **Author's Note**

Not only did we address the breakdown of the services, but we also addressed who services the clients and how the relationships were built. We also looked at the risk of concentration of the client base. In another valuation, the same information looked like this:

*Excerpt 2*

The practice is a conventional accounting firm whose net revenues over the last three years have been derived from the following services:

(Continued)



**EXHIBIT 18.5** (Continued)

	<b>2004</b>	<b>%</b>	<b>2005</b>	<b>%</b>	<b>2006</b>	<b>%</b>
Audit	\$37,385	10.9	\$ 27,956	8.0	\$ 39,737	11.2
Review	4,866	1.4	5,129	1.5	4,982	1.4
Compilation	52,391	15.3	56,890	16.3	55,628	15.7
Tax	244,492	71.4	254,794	73.1	251,603	70.8
Other	3,372	1.0	3,732	1.1	3,268	0.9
<b>TOTAL</b>	<b>\$342,506</b>	<b>100.0</b>	<b>\$348,501</b>	<b>100.0</b>	<b>\$355,218</b>	<b>100.0</b>

The importance of the information contained in exhibit 18.5 should be self explanatory to the accountants reading this book who have bought or sold an accounting practice. The type of services offered to clients makes a big difference. Not only are different amounts paid for different types of clients, but the risk profile also needs to be considered regarding the transferability of the clients.

Just as the various types of services are important to an accounting practice, a medical practice has certain attributes that are important as well. Exhibit 18.6 contains some of them.

**EXHIBIT 18.6****HISTORY SECTION—MEDICAL PRACTICE***Excerpt 1*

One of the services historically offered by the practice has been the taking of x-rays. However in 2007, two events occurred that will eliminate this revenue stream. First, many of the insurance companies have stated that specialists other than approved radiologists will not be reimbursed for these services.\* Second, the x-ray machine is located in a medical office down the hall from the practice. This other medical practice has notified Dr. Smith that as of May 2007, they will no longer have space available for the x-ray equipment. Dr. Smith has determined that it does not make financial sense to attempt to relocate the x-ray machine in light of the lack of future reimbursements from the insurance companies, and therefore, is discontinuing this service. Collections from x-ray services were \$74,145 and \$67,593 in 2005 and 2006, respectively.

**✉ Author's Note**

Another item of importance in a medical practice is the hours that the office is open, the hours that the doctor works, and the hours that the doctor sees patients. This information will allow the valuation analyst to compare this practice to other practices based on the studies published by the American Medical Association.

\*This was confirmed by the valuation analyst by making phone calls to various Health Maintenance Organizations.

**EXHIBIT 18.6***Excerpt 2*

Dr. Smith typically sees patients during the following hours:

Monday	8:00 a.m.–5:00 p.m.
Tuesday	8:00 a.m.–7:00 p.m.
Wednesday	8:00 a.m.–5:00 p.m.
Thursday	8:00 a.m.–5:00 p.m.
Friday	8:00 a.m.–5:00 p.m.
Saturday	8:00 a.m.–12:00 p.m. (every third Saturday)

Dr. Smith's hours often start earlier than his patient hours for paperwork and other administrative activities.

On average, Dr. Smith sees approximately 20 patients per day. However, the number of patients seen per day varies with respect to the type of patient (new versus return). Appointments with new patients, on average, last approximately 45 to 60 minutes, while appointments with return patients last approximately 15 minutes. The fees for new patients range from approximately \$100 to \$150. According to an estimate by Dr. Smith, the practice currently has between 750 and 800 active individual patient files.

 **Author's Note**

No medical practice valuation would be considered complete without a discussion about health maintenance organizations (HMOs). Managed care is an important part of a medical practice valuation because it can severely affect the future cash flows. The valuation analyst should find out about the different types of contracts in place at the valuation date. Are they capitation plans (the doctor is paid so much per month per patient, whether or not they come in for an appointment) or are they fee for service (pay as you go type practice)? Let's look at what we found out.

*Excerpt 3*

According to Dr. Smith, the practice maintains approximately 10 Health Maintenance Organization (HMO) contracts. Dr. Smith's practice primarily consists of Medicare patients, many in HMOs, with the balance consisting mostly of patients who are enrolled in HMOs. Given the nature of the practice, Medicare and HMO reimbursement rates are a critical factor in its financial performance. According to Dr. Smith, these contracts can be canceled with 30 days notice, and most of the practice's new patients are as a result of Dr. Smith being listed as a specialist in the HMO provider books. This can be problematic though because many internists also provide rheumatology services, and they are generally listed as primary care providers in the HMO books. This makes the practice reliant on referrals from these primary care physicians who can often treat these patients as well.

 **Author's Note**

In another medical practice valuation, we were able to get more information about managed care. This is how it was presented:

*Excerpt 4*

We requested a list of the managed care companies that Dr. Peters had contracts with as of the valuation date, but this information was not available. Instead, we were provided with an assortment of lists and contracts for various times during 2007. We were informed that this information is not substantially different than what existed as of the valuation date. A summary of this data appears in table 1.

(Continued)

**EXHIBIT 18.6** (Continued)

**TABLE 1**  
**MANAGED CARE CONTRACTS**

<b>Company</b>	<b>Date</b>	<b>Type of Contract</b>	<b>Number of Patients</b>	<b>Capitation Amount</b>
Blue Cross/Blue Shield of NJ	Oct. 2006	Fee for Service	495	N/A
Mercy Health Plan	Nov. 2006	Capitation	57	\$ 942.96
The Prudential	Oct. 2006	Capitation	233	3,122.45
Aetna U.S. Healthcare	Nov. 2006	Capitation	326	Not Provided
NY/Care	Oct. 2006	Capitation	48	412.02
Keystone	Nov. 2006	Capitation	15	261.95
Amerihealth	Nov. 2006	Capitation	2	24.20
Cigna—NJ	Nov. 2006	Capitation	15	156.65
Cigna—NY	Nov. 2006	Capitation	140	1,571.58
Cigna	Nov. 2006	Capitation	53	731.55
Americaid	Nov. 2006	Capitation	33	293.00
Healthplans of America	Sept. 2005	Fee for Service	21	N/A
Health Network America	Oct. 2005	Capitation	4	Not Provided
American Preferred	Nov. 2006	Capitation	3	71.40
Physicians Healthcare	Oct. 2005	Unknown	4	N/A
Cannot Read	Nov. 2006	Capitation	44	413.27
United Healthcare	Nov. 2006	Both	71	Not Provided
FPA Medical Management	May 2005	Capitation	372	5,033.61

In addition, Dr. Peters has submitted applications to the following companies over the last few years:

- First Option Health Plan of New Jersey
- Seton Health Network Inc./Quality Pediatric Network
- Medichoice Network Inc.
- First Option Health Plan/Medicaid
- Better Health Advantage
- Consumer Health Network
- Sanus Health Plan/New York Life
- Liberty Health Plan
- Metrahealth
- International Union of Operating Engineers
- QualCare
- Harmony Health Plan

The applications and contracts we reviewed for these companies do not provide enough detail to determine the type of contract it is, the reimbursement rates, the number of patients, or if Dr. Peters was participating in the plan as of the valuation date. What it shows is that the list provided in table 1 is probably not complete.

Unfortunately, because of the litigation process, we do not always get all of the information that we ask for. The last excerpt in exhibit 18.6 demonstrates that. In situations like this, the valuation analyst has to make a judgment call concerning whether the missing information will have a material effect on the outcome of the valuation. If it does, **DO NOT ISSUE A REPORT!** Have I made my point? If you do not have enough information to give a reasonable indication of value, and if you do not care about your reputation, you can issue a report. If the information is not material, you can use your judgment by adjusting the risk associated with the practice. In the case presented, we lowered the discount rate slightly to reflect the fact that the practice probably had contracts that we were not told about. This would have the impact of reducing the risk and raising the value (slightly).

Before we change topics, let's also discuss a situation that valuation analysts face on a regular basis if they are preparing a valuation report for a divorce. This could have gone in the divorce chapter, but because my example relates to a medical practice, it's here. Imagine valuing a pain management practice where the doctor claims that his income has gone way down because of Medicare cuts that have eaten away at his ability to make a living (poor, poor doctor!). We call this *RAIDS* (Recently Acquired Income Deficiency Syndrome). Exhibit 18.7 contains a portion of the report of this poor doctor's practice.

**EXHIBIT 18.7**

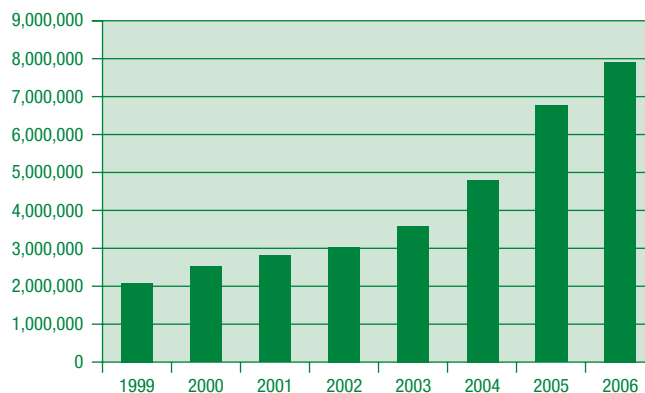
**THE POOR DOCTOR THAT WAS HURT BY MEDICARE**

Historical revenues for the practice have been as follows:

<b>Year</b>	<b>Revenue</b>	<b>Growth</b>
1999	\$2,013,836	
2000	2,437,418	+21.0%
2001	2,767,860	+13.6%
2002	2,998,560	+8.3%
2003	3,508,022	+17.0%
2004	4,759,452	+35.7%
2005	6,723,193	+41.3%
2006	7,891,141	+17.4%
<b>Simple Average</b>		<b>22.0%</b>
<b>Compound Annual Growth Rate</b>		<b>21.5%</b>

The practice has experienced dramatic growth over this seven year period. After analyzing the annual growth, it does not appear that growth came solely from adding doctors. Even before Dr. Jackson joined the practice in mid-2002, the growth in revenues was still in the double-digits. After all four doctors were in place in 2004, the practice experienced a staggering 41 percent increase in 2005. Historical revenues are depicted graphically in figure 1.

**FIGURE 1: REVENUES**



(Continued)

### EXHIBIT 18.7 (Continued)

In Dr. Brown's deposition, the topic of Medicare reimbursement was discussed numerous times.<sup>1</sup> In every instance, Medicare reimbursements were described as going down. In fact, Dr. Brown stated that "we've seen a drop everywhere from Medicare" for "every code we do" and "there's been cuts every year." As for health insurance reimbursements, Dr. Brown states "every time Medicare drops, they drop."

The practice provided us with the list of CPT codes that it uses. In order to analyze the impact on the practice of the reimbursement rates, we reviewed the reimbursement rates for these codes since 2001.

This analysis is reflected in table 5.

**TABLE 5**  
**MEDICARE REIMBURSEMENT ANALYSIS**  
**2001-2007**

CPT Code	2001	2002	2003	2004	2005	2006	2007	2002 Change	2003 Change	2004 Change	2005 Change	2006 Change	2007 Change
10140	118.85	127.84	127.79	131.43	145.03	145.59	145.00	7.56%	-0.04%	2.85%	10.35%	0.39%	-0.41%
10160	106.29	80.42	83	83.08	122.77	122.92	121.70	-24.34%	3.21%	0.10%	47.77%	0.12%	-0.99%
10180	161.40	157.45	158.73	238.94	231.62	233.02	227.91	-2.45%	0.81%	50.53%	-3.06%	0.60%	-2.19%
11900	49.25	52.69	52.69	49.14	50.25	49.96	51.14	6.98%	0.00%	-6.74%	2.26%	-0.58%	2.36%
11901	66.66	68.70	62.58	61.24	61.76	61.76	62.64	3.06%	-8.91%	-2.14%	1.94%	0.00%	1.42%
20550	106.75	70.36	63.42	62.49	63.70	64.05	60.03	-34.09%	-9.86%	-1.47%	1.94%	0.55%	-6.28%
20552		67.43	55.69	59.82	59.55	59.59	55.53		-17.41%	7.42%	-0.45%	0.07%	-6.81%
20553		67.43	62.99	68.10	67.52	67.23	62.34		-6.58%	8.11%	-0.85%	-0.43%	-7.27%
20600	79.57	55.22	55.69	55.94	57.49	57.51	55.21	-30.60%	0.85%	0.45%	2.77%	0.03%	-4.00%
Data was omitted from this table to save space													
62264			665.69	516.44	524.78	526.72	485.42			-22.42%	1.61%	0.37%	-7.84%
62270	172.80	215.78	206.52	179.68	179.22	180.20	176.32	24.87%	-4.29%	-13.00%	-0.26%	0.55%	-2.15%
62273	149.14	152.31	206.66	208.04	209.28	209.61	189.11	2.13%	35.68%	0.67%	0.60%	0.16%	-9.78%
62284	224.65	293.44	278.63	275.19	283.98	285.38	284.25	30.62%	-5.05%	-1.23%	3.19%	0.49%	-7.40%
99211*	22.35	22.71	23.08	23.85	24.26	24.32	22.67	1.61%	1.63%	3.34%	1.72%	0.25%	-6.78%
99212*	39.76	39.98	40.2	41.65	42.63	42.67	40.73	0.55%	0.55%	3.61%	2.35%	0.09%	-4.55%
99213*	55.66	55.39	56.29	57.87	57.94	57.97	65.19	-0.49%	1.62%	2.81%	0.12%	0.05%	12.45%
<b>AVERAGE</b>								<b>-3.96%</b>	<b>6.86%</b>	<b>7.20%</b>	<b>6.51%</b>	<b>1.12%</b>	<b>-4.28%</b>

\*These codes were changed to 99307-99309 in 2006.

(Source: CMS Centers for Medicare & Medicaid Services.)

<sup>1</sup> Deposition of Dr. Brown January 3, 2007, pgs. 7, 37, 41, 42, 51; February 14, 2007, pgs. 202, 203, 204.

**EXHIBIT 18.7**

The data in table 5 reflects the year to year volatility of the reimbursement rates from Medicare.

During Dr. Brown's deposition (January 3, 2007), he indicated that there are a number of CPT codes that are the most commonly used by the practice. We had requested a breakdown of the number of procedures broken down by CPT code, but we were told that the practice's computer systems could not generate the requested report. This is fairly unusual since we generally get this report from almost every practice we value. Despite not having the report, we used the CPT codes that Dr. Brown testified about to test the reimbursement rates for those items. This appears in table 6.

**TABLE 6**  
**COMMONLY USED CPT CODES**  
**PER DR. BROWN**

<b>CPT Code</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2002 Change</b>	<b>2003 Change</b>	<b>2004 Change</b>	<b>2005 Change</b>	<b>2006 Change</b>	<b>2007 Change</b>
<b>20552</b>	-	67.43	55.69	59.82	59.55	59.59	55.53		-17.41%	7.42%	-0.45%	0.07%	-6.81%
<b>20553</b>	-	67.43	62.99	68.10	67.52	67.23	62.34		-6.58%	8.11%	-0.85%	-0.43%	-7.27%
<b>62311</b>	238.06	238.27	276.15	276.13	281.19	282.25	250.91	0.09%	15.90%	-0.01%	1.83%	0.38%	-11.10%
<b>62318</b>	249.49	242.01	318.22	322.68	337.25	338.85	302.09	-3.00%	31.49%	1.40%	4.52%	0.47%	-10.85%
<b>64470</b>	254.34	242.74	287.92	287.17	396.29	397.99	351.92	-4.56%	18.61%	-0.26%	38.00%	0.43%	-11.58%
<b>64472</b>	216.90	215.38	137.65	138.14	156.80	157.23	139.37	-0.70%	-36.09%	0.36%	13.51%	0.27%	-11.36%
<b>64475</b>	227.95	216.59	255.40	255.93	362.77	364.82	322.92	-4.98%	17.92%	0.21%	41.75%	0.57%	-11.49%
<b>64476</b>	226.90	200.87	119.08	119.41	134.60	135.38	119.58	-11.47%	-40.72%	0.28%	12.72%	0.58%	-11.67%
<b>64483</b>	255.45	262.21	407.21	404.38	427.02	429.22	375.65	2.65%	55.30%	-0.69%	5.60%	0.52%	-12.48%
<b>AVERAGE</b>								<b>-3.14%</b>	<b>4.27%</b>	<b>1.87%</b>	<b>12.96%</b>	<b>0.32%</b>	<b>-10.51%</b>

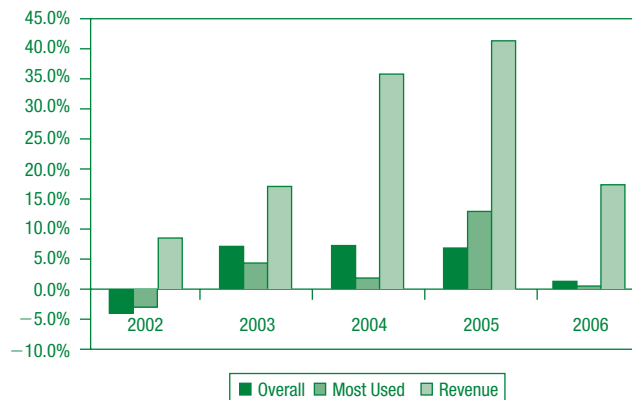
(Continued)

**EXHIBIT 18.7** (Continued)

The volatility reflected in these CPT codes is even greater than what was shown in the previous table. However, despite the changes in the reimbursement rates, the practice has experienced extraordinary revenue growth over the past five years. Table 7 reflects the comparison.

<b>Year</b>	<b>CPT Code Reimbursement</b>	<b>Most Used CPT Code Reimbursement</b>	<b>Actual Revenues</b>
2002	-4.0%	-3.1%	+8.3%
2003	+6.9%	+4.3%	+17.0%
2004	+7.2%	+1.9%	+35.7%
2005	+6.5%	+13.0%	+41.3%
2006	+1.1%	+0.3%	+17.4%

The year to year percentage change for both revenues and reimbursements are depicted graphically in figure 2.

**FIGURE 2: YEAR TO YEAR CHANGE****ECONOMY AND INDUSTRY INFORMATION**

Besides the normal economy and industry stuff, sometimes there may be provisions in the state laws that are unique to a professional practice. Sometimes it may be regulatory issues that you would not even think about in the normal course of your research. Box 18.1 illustrates one of those cases.

**Box 18.1 Economy and Industry Section—Accounting Practice**

In the state of Arkansas, there are two major acts that affect an accounting practice. The Arkansas Professional Corporation Act, which was passed in 1963, provides regulations that are designed for those who provide *professional services*, which includes CPAs. This act states that the officers, directors and shareholders of a corporation must be licensed in their profession. In addition, the act includes regulations for the purchase of stock in a corporation. The act states:

If the articles of incorporation or bylaws of a corporation subject to this subchapter fail to state a price or method of determining a fixed price at which the corporation or its shareholders may purchase the shares of a deceased



**Box 18.1 Economy and Industry Section—Accounting Practice**

shareholder or a shareholder no longer qualified to own shares in the corporation, then the price for the shares shall be the book value as of the end of the month immediately preceding the death or disqualification of the shareholder. Book value shall be determined from the books and records of the corporation in accordance with the regular method of accounting used by the corporation.

In addition, the Arkansas Public Accountancy Act of 1975 presents other regulations for the accounting industry. The purpose of this act was to “promote the dependability of information...” that is provided by the financial and accounting sectors regarding the financial condition of business enterprises. In other words, this act is intended to set standards for those providing accounting and financial services to the public, and to ensure the public that the information is fair, reliable, and that the service was performed by a competent individual. This act also states:

Each shareholder of the corporation must be a certified public accountant or a public accountant of this state in good standing and must be principally employed by the corporation or actively engaged in its business.

**✉ Author’s Note**

The importance of these provisions was that the law required individuals to be licensed and *actively* engaged in the business. It also provided a formula to determine value under certain conditions. These are the types of provisions that a valuation analyst should locate or the valuation may be performed in contradiction to the law.

**CASH VERSUS ACCRUAL ACCOUNTING**

As an accountant, I would like to have all financial statements presented to me in accordance with generally accepted accounting principles. I would like to have these statements prepared on an accrual basis of accounting. I would also like to see Santa Claus come down my chimney! Life is not always that simple. Most professional practices report their financial results on a cash basis. If you are reading this book, I hope it is because you consider yourself to be a valuation analyst (or at least a wannabe). Having financial statements prepared on a cash basis, in many circumstances, should not be too upsetting. Be practical, and unless it is really called for, do not try to restate all of the prior years on an accrual basis. There is a good chance that the information does not exist to allow this to be done easily and in a cost-effective manner. Think about the affect on these statements.

Not that I want to give you a lesson on accounting, but I think I better explain where I am going with this stuff. First of all, as I hope you already know, the concept behind the accrual method of accounting is to provide an appropriate matching of revenues and expenses to the time period in which they belong. For example, under the accrual method of accounting I would record revenues in the period that I provide them (and bill my client) rather than when I collect them. This is just simply a method to make sure that the revenues are recorded when earned rather than when collected and expenses are recorded when incurred rather than when paid.

Now, with that said, many professional practices do not use the accrual method of accounting because they do not want to pay income taxes on revenues that they have yet to collect. Therefore, the financial statements will exclude uncollected revenues. The expenses are frequently not as much of a problem, particularly at the end of a fiscal year because most professional practices will accelerate the payment of every expense that can be found so that it can take advantage of the tax deduction for those expenses. There may be some unpaid bills during an interim valuation date, but generally they are not material (materiality is another accounting concept—I love speaking accounting speak!). If the revenues (and expenses) are omitted from the financial statements of the professional practice, there could be a misstatement of the *true* net income for the period. Many valuation analysts, particularly accountants, try to restate all of the financial statements on an accrual basis to gain better accuracy. What I am really saying is that it just may not matter. If the valuation subject is a relatively mature practice, the impact of the beginning and ending accounts receivable and accounts payable may be so insignificant that adjusting these items may result in higher fees being charged to the client than the impact on the valuation.

Clearly, the balance sheet should be restated to an accrual basis as of the valuation date in order to capture all of the assets and liabilities of the practice. These will possibly be brought to fair market value as explained in chapter 9. The income statement may or may not be adjusted. If there is a consistent trend in the practice, cash basis probably is a good reflection of the cash-generating capabilities of the practice. This is the basis on which these practices are frequently sold. The accrual assets and liabilities are not usually part of the selling price of the practice. The seller keeps the accounts receivable and the liabilities are also his or her responsibility. Therefore, the buyers are really buying the cash

flow stream based on collections. Let's face it, this is all we really care about anyway. How much do I expect to collect? An alternative to converting the financial statements to an accrual basis is to treat the accrual assets and liabilities as nonoperating assets and liabilities (not in the traditional definition of nonoperating, but rather as *excess* assets and liabilities), and add or subtract the values from the income approach determination of value based on the cash basis figures.

Since you want to insure that your valuation is accurate, make sure that you review the billing records of the practice to insure that the future cash flows will not suddenly change dramatically. The most current time period before the valuation date is most important. Let's say you are valuing an accounting practice. Look at billings and work in process to determine the future. In a mature practice, with a steady number of staff, these figures should not change materially from year to year. A staff person can only work so many hours each year. Therefore, the billing should be consistent, other than a possible change in the billing rate.

Since the balance sheet is probably more important than the income statement for these additional assets and liabilities, let's discuss what to do with several types of assets and liabilities for different types of professional practices.

### Accounts Receivable

The nature of most professional practices is that accounts receivable can be fairly high. The valuation analyst must spend an appropriate amount of time in this area because of its magnitude. In most smaller practices, the record keeping may require the valuation analyst to use some accounting skills to figure out how much is outstanding. Exhibit 18.8 reflects how we dealt with accounts receivable in the valuation of a psychology practice.

#### EXHIBIT 18.8

#### ACCOUNTS RECEIVABLE—PSYCHOLOGY PRACTICE

Dr. Lewis submits insurance claims to insurance companies once each calendar quarter. By the time he submits these claims, it is not uncommon for an additional three to four weeks to go by, resulting in accounts receivable and unbilled work-in-process equaling four months of revenue.

In order to estimate the value of this asset as of October 29, 2006, a review of patient charts and appointment books indicated that billing for the period July 1, 2006 through September 30, 2006 was submitted to insurance companies in October 2006 and billing was not done for the period October 1, 2006 through October 29, 2006 until January 2007.

Accounts receivable and unbilled work-in-process has been estimated by the valuation analyst as follows:

Number of Patient Visits	
July	177
August	194
September	182
October 1–29	191
Total Visits	744
Average Fee	× 85
Accounts Receivable and Unbilled Work in Process	<u>\$63,240</u>

Most patients are billed at \$100 per hour but Dr. Lewis's practice has generally accepted insurance assignment without pursuing the balance. A review of the patient files indicate some patients are billed as low as \$45 per hour and others at \$80 to \$90 per hour. Most patients who have insurance (which is the majority of the patients) are covered after their deductible at 50 percent, 80 percent, or 100 percent with the majority being covered at 80 percent. Therefore, in order to compensate for the monies that will not be received by Dr. Lewis, the normal hourly rate of \$100 was reduced by 15 percent.

Exhibit 18.8 shows the manner in which the records were used to estimate the accounts receivable. Under normal circumstances, this balance sheet item would have been tax-affected to recognize that upon receipt, the value is less because taxes would have to be paid. Box 18.2 reflects the language in another valuation where we adjusted for taxes.

### Box 18.2 Accounts Receivable—Tax-Affecting

Accounts receivable, at the appraisal date was \$165,473. However, not all receivables are expected to be collected. Therefore, we have provided a 5 percent allowance for doubtful accounts, resulting in a net realizable value of \$157,199. Since the firm reports its results of operations using the *cash method* of accounting, the actual amount that would be realized by the firm would be net of income taxes. Therefore, an adjustment has been made to reflect the anticipated taxes that would result from the collection of these receivables. Applying a 38 percent tax rate (34 percent federal and 6.5 percent Arkansas, or 4 percent effective state tax) results in a net accounts receivable value of \$97,464.

Here is where being an accountant helps us do better appraisal work. Box 18.3 reflects an explanation of the accounting procedures that were employed and explained as part of our adjustments to the balance sheet of a law firm.

### Box 18.3 Accounts Receivable Procedures—Law Firm

Due to the nature in which the practice maintains its books and records, accounts receivable had not been included on the balance sheet as of April 30, 2003. We were provided with a list of accounts receivable as of this date, which indicated receivables of \$69,341. We verified the reasonableness of this accounts receivable figure by reviewing subsequent cash receipts of the practice.

During our review of the firm's records, we discovered that one file was inadvertently omitted. A receivable should be included for file number 200563 (Adam Jones). This file was the subject of a law suit with a former employee who stole the settlement check. It was finally received by The Law Firm in August 2003. After deducting co-counsel fees, the receivable was \$60,000.

Therefore, accounts receivable should be \$129,341. We have been specifically requested by the court to not tax-affect this item.

## Work in Process

Probably one of the most difficult assets to value on the balance sheet of a professional practice is work in process. Unless the firm keeps really good records, this can be pretty tricky. The worst type of practice is a contingent fee law firm. Many law firms that perform personal injury services or other services where they are paid a percentage of what they collect for the client, do not keep time records to support the number of hours worked. After all, they feel that because their fee is based on a percentage, instead of hourly billings, they do not have to account to the client for the hours spent on the client's matter.

If the law firm does not keep adequate records, the valuation analyst can estimate the work in process by using comparative data published by such companies as Altman Weil Pensa. They publish the *Survey of Law Firm Economics* on an annual basis. The best that you can do in these circumstances is to use an industry average as a percent of revenues or billings. However, when records do exist, the valuation analyst may be able to perform some detailed analysis. Sometimes, 20-20 hindsight may have to be used even though you are not supposed to use subsequent information. Sometimes the parties to a litigation will agree, for the sake of accuracy, to allow both sides to use data after the valuation date. The alternative would be to hire an experienced attorney to review all open cases and estimate the value of these files. This is impractical for a firm that has more than just a few cases.

Exhibit 18.9 reflects part of the appraisal of a contingency fee law firm. Once again, the dates are old but the concepts still apply.

**EXHIBIT 18.9****WORK IN PROCESS—CONTINGENT FEE LAW FIRM**

One component that is normally part of the balance sheet of a law practice is work in process. Work in process is an estimate of the future profit (revenues less direct expenses) anticipated to be earned on cases which are pending but not completed as of the balance sheet date.

Work in process is an estimate of the future profit (revenues less direct expenses) anticipated to be earned on cases that are pending but are not completed as of the balance sheet date. In order to value work in process, the services of an experienced personal injury attorney would normally be required so that each file could be reviewed to answer at least the following questions:

1. How much will the case be worth?
2. What stage of completion is the case in?
3. What expenses will be incurred to complete the case (direct and indirect)?
4. How long will the case take to go to trial?
5. If it is a large case, what is the probability of the judgment being appealed?

Fair market value generally requires the valuation analyst to only consider information that would be available to the willing buyer at the appraisal date. This date is the assumed date of a transaction, and therefore, subsequent knowledge would not be available.

However, this valuation is being performed for a marital dissolution. As such, the notion of fairness must enter into the valuation analyst's analysis so that the court can be assisted in effectuating equitable distribution. Because we have the benefit of 20-20 hindsight in this matter, the valuation analyst has reviewed subsequent information to get a more accurate value of the work in process. This procedure is not only more equitable, but it is also more cost effective than bringing in a personal injury attorney to go through hundreds of files.

In order to determine the value of work in process, we were provided with records pertaining to the practice's clients, including case logs, case files, client ledger cards, closing statements and records of trust account cash receipts, and cash disbursements. The starting point was to review the case logs maintained by the practice. The law firm maintains a list of cases retained by the practice, which includes, among other information, the client's name and case number. We obtained the case logs for all cases retained from 1993 through May 10, 1998. Since this case log includes all cases opened by the practice during this time period, it was necessary to determine which cases were closed as of May 10, 1998, and which cases remained open as of this date which need to be included as part of work in process. In order to determine the closing date of each individual case, we traced the client's name and case number to client ledger cards and case files. All cases remaining open as of May 10, 1998 were included in our schedule of work in process.

The next step was to trace all of the open cases to the corresponding closing statements. As cases are settled, a closing statement is prepared by the practice that indicates the date the gross settlement was received, the total costs to be reimbursed out of the settlement, and the attorney's fees to be deducted from the settlement, resulting in the net amount payable to the plaintiff. Closing statements are prepared for every case settled by the practice with the exception of workman's compensation and personal injury protection cases. As of the date of our field work, which was completed on February 29, 2001, many of the cases that were open as of May 10, 1998 had been closed. For all of the cases that were closed, and that had closing statements prepared, we traced the gross fee earned by the practice, the total costs reimbursed out of the gross settlement on the case, the date the gross settlement was received and the case closed, and the type of case. Recording the type of case enabled us to segregate work in process by major case types.

In several of the cases included in work in process, The law firm was required to split the gross fee earned with cocounsel. Because the actual fee earned by the law firm only represents a portion of the gross fee earned on a case, these co-counsel fees must be deducted in determining the fee that the law firm will ultimately collect. In addition, certain costs reimbursed to the practice were required to be split with co-counsel. Table 5 provides a summary of the co-counsel fees and costs that were deducted from the gross fees and costs in the calculation of gross fees and reimbursed costs of the practice.

## EXHIBIT 18.9

<b>Case #</b>	<b>Party Name</b>	<b>Co-Counsel Fees and Costs</b>
200568	Singer, Z	\$ 12,422
200585	Jones-Gilmore, L.	1,727
200538	Carr, M.	693
200540	Iannou, P.	99,247
<b>TOTAL</b>		<b>\$114,089</b>

The total fees earned by the law firm, and costs reimbursed to the practice, on cases open as of May 10, 1998, and closed as of February 29, 2001, are summarized in table 6.

<b>Case Type</b>	<b># of Cases</b>	<b>Actual</b>		<b>Average</b>	
		<b>Fees</b>	<b>Costs</b>	<b>Fees</b>	<b>Costs</b>
Auto	160	\$1,492,745	\$112,827	\$ 9,330	\$ 705
PIP	36	33,080	5,592	919	155
Premises	52	479,910	87,206	9,229	1,677
Worker's Comp.	32	24,939	668	779	21
Environmental	2	290,055	100,500	145,028	50,250
Other	15	72,618	5,438	4,841	363
<b>TOTALS</b>		<b>\$2,393,347</b>	<b>\$312,231</b>		

Table 6 indicates that the majority of the fees earned by the practice are from automobile liability cases. We have calculated the average fees and costs per case for each of the major categories of cases conducted by the practice. It can be seen that both automobile and premises cases\* make up approximately two-thirds of the total cases in work in process and average approximately \$9,000 per case in fees earned.

The next largest portion of cases handled by the practice are personal injury protection and worker's compensation cases. These cases are much less profitable, averaging under \$1,000 per case. Environmental cases, by far, earn the largest fees, however, these cases generally take a much longer amount of time to complete.

Table 6 provides a starting point for valuing the work in process for cases that have been closed subsequent to May 10, 1998. However, there are additional factors that must be considered before the fair market value can be determined.

\*These cases are also referred to as "slip and fall" cases.

(Continued)

**EXHIBIT 18.9** (Continued)

The more difficult part of the assignment is to value the cases that remain open as of the end of our field work on February 29, 2001. This was accomplished based on our analysis of the cases which have been closed, reviewing open case files, and discussions with management. Table 7 provides a summary of the cases still open as of February 29, 2001.

<b>Case #</b>	<b>Party Name</b>	<b>Type</b>	<b>Estimated</b>	
			<b>Fees</b>	<b>Costs</b>
200637	Brooks, J.	A	\$9,330 <sup>5</sup>	\$ 705
200360	Rencevicz, D.	MISC	12,500 <sup>1</sup>	—
200186	Anderson, L.	A	— <sup>2</sup>	—
200183	Hart, T.	A	— <sup>2</sup>	—
200335	Huff, S.	A	3,500 <sup>3</sup>	710
200428	McFadden, M.	A	4,000 <sup>3</sup>	710
200650	Ramsey, J.	A	9,330 <sup>5</sup>	705
200659	Patrick, A.	WC	779 <sup>5</sup>	21
200686	Earl, J.	A	3,750 <sup>4</sup>	705
200701	Rogers, L.	PRM	9,229 <sup>5</sup>	1,677
200708	Best, N.	PRM	9,229 <sup>5</sup>	1,677
E-999	Flood	ENV	— <sup>6</sup>	—
E-343	Gormley	ENV	— <sup>7</sup>	—
<b>TOTALS</b>			<b>\$61,647</b>	<b>\$6,910</b>

<sup>1</sup> The average fee earned on a worker's compensation case is only \$779. According to Mr. Gravitz, this case is likely to settle for an amount substantially more than the average. Mr. Gravitz has estimated that the fee earned on this case could be as high as \$14,000. Of this amount, \$1,500 is expected to be paid to co-counsel.

<sup>2</sup> According to Mr. Gravitz both of these cases are likely to be limited by the lawsuit threshold. Since these cases are below the lawsuit threshold, it is highly unlikely that a fee will be earned.

<sup>3</sup> These cases have been settled as of February 29, 2001, however closing statements were unavailable. Based on our discussions with Mr. Gravitz and a review of correspondence pertaining to the cases, we believe that these fees will be earned by the law firm.

<sup>4</sup> According to Mr. Gravitz, a tentative settlement has been reached in this case for \$15,000, of which the law firm will get 25 percent.

<sup>5</sup> For each of these cases, this valuation analyst has used the average fees earned per case type in order to determine an approximate fee that will be earned by the practice. Mr. Gravitz provided us with his estimate of the fees that could be earned on each of these cases. For each case, the expected fee was in line with the average fees indicated in table 6.

<sup>6</sup> This environmental case was substantially complete as of May 10, 1998, however, remained open, pending further litigation. Per discussions with Michael Gravitz and a review of case documents, it appears unlikely that any additional fees will be earned. All other fees earned in this case were collected prior to May 10, 1998.

<sup>7</sup> An inquiry was made to Michael Gravitz about this case in the beginning of 1998. It was eventually sent to another law firm. Per discussions with Michael Gravitz and a review of the case files, it appears likely that there may not be a fee earned on this case. It would be highly speculative to estimate a fee at this point in time.

### EXHIBIT 18.9

The costs associated with each of the cases in table 7 were estimated based on the average cost per case type provided in our analysis in table 6.

In order to determine the completeness of work in process, we performed several additional procedures. The first procedure was to review the cash receipts and cash disbursements records from the practice's trust accounts to determine if any cases appeared on those records that were not included in the case logs. All cases appearing on the cash receipts and cash disbursements ledgers were found in the case logs. We also reviewed all of the 1998–2000 closing statements looking for cases that were closed after May 10, 1998 that may have been left off of work in process. Several cases were identified, which were not included on our schedule, however, upon further review of case records, it was determined that all of these cases were not started until after May 10, 1998. Therefore, they were properly excluded from our schedule of work in process.

As a final test, we reviewed subsequent cash receipts records for the practice's trust account. On a test basis, we selected cash receipts subsequent to May 10, 1998 and traced the receipt amounts, case number and client name to our work in process list in order to ensure that no receipts came into the practice for cases that were not included in our schedule. For all receipts that could not be traced into our schedule of work in process, we reviewed the corresponding closing statements in order to verify that the cases were not started until after May 10, 1998, and were therefore properly excluded from our schedule of work in process.

Once the preliminary work in process figures were derived, three additional steps were necessary to reach the fair market value. These steps were as follows:

1. Apply an overhead factor. Because ongoing overhead would be required after the appraisal date to allow the firm to generate the ultimate fees collected, consideration should be given to the costs associated with the collection process. This included direct out of pocket expenses for experts, salaries for lawyers to bring the case to trial, and other overhead costs associated with keeping the practice running.
2. Tax-affect the work in process. Because the work in process will ultimately turn into profit to the firm, taxes should be calculated since they will ultimately be paid (either by the firm, or by the individuals in the form of extra compensation).
3. Calculate the present value of the net profit after taxes. Because the work in process will not be collected for a period of time after the valuation date, the time value of money should be considered.

In order to apply the preceding three steps to this assignment, we started with the determination of an appropriate overhead rate to apply to the work in process. Previously, we calculated the normalized net income before taxes for the practice. These figures were \$52,187 and \$103,216, for 1996 and 1997, respectively. To determine the value of work in process, we have to determine the total overhead that is attributable to work in process. Our review of Schedule 2, in the back of the report, indicates that only two items require further adjustment for this purpose. Eliminating advertising expense, which is a prospective type of expense, and meals and entertainment, which may or may not relate to the work in process, results in a revised normalized net income attributable to work in process of \$106,320 and \$147,577 for these two years.

Applying a weighted average to the most recent year indicates that the law firm's normalized overhead rate is approximately 88.7 percent. This means that for every \$1 of revenue, it costs the firm 88.7 cents. Historically, the law firm has been considerably less profitable than other law firms. However, the reality is that the firm does not generate extraordinary profits.

The next consideration is the manner in which to apply the overhead factor. We have performed an analysis based on the amount of time that each file was open. Based on our discussions with not only Messrs. Gravitz, but also our past experiences with other attorneys regarding similar matters, we have applied the overhead based on the allocation that 50 percent of the expenses are incurred in the last six months of the case, 25 percent of the expenses are incurred during the period between six months and one year of the end of the case, and the balance of the expenses are spread evenly during the remainder of the time that the case stayed open.

*(Continued)*



**EXHIBIT 18.9** (Continued)

In order to perform the necessary calculations, we set up a computer model based on the parameters discussed above. The results appear as schedule 3 at the back of the report. Using a burden rate of 88.7 percent results in an estimate of the expenses incurred after the valuation date to be \$1,298,994. This results in the profit portion of work in process attributable after the business valuation date to be \$975,301.

Applying a 35 percent tax rate and taking the present value of the net income from the date the file was closed to the valuation date results in the value of this portion of the work in process to be \$592,993.

Another portion of the work in process are the reimbursed costs that the law firm received after the valuation date. These expenses had previously been considered in the overhead factor applied against the other work in process, so there is no need to apply another factor to it. However, since these expenses are deducted when paid by the practice, taxes will be paid when the reimbursements are received. These reimbursements must also be discounted back to the valuation date. Applying similar treatment to these expenses, results in an addition to work in process of \$285,328.

The final portion of work in process that needs to be added is the portion attributable to the open files. The gross estimates to be received by the law firm are \$61,647 and \$6,910 for fees and costs, respectively. With the exception of cases numbered 200360, 200335 and 200428, all of the other files were opened up in the beginning of 1998. In order to estimate the value of these cases, we followed similar procedures as was done for the cases that we knew were closed. In this instance, we assumed that these cases would remain open, on average, for four years. The value was estimated as follows:

Total Fees	\$61,647
Overhead Factor (88.7%)	54,681
Profit	\$ 6,966
Taxes (35%)	2,438
Net Profit	<u>\$ 4,528</u>
Present Value	<u>\$ 3,328</u>

The costs were estimated as follows:

Total	\$6,910
Taxes (35%)	2,419
Net Profit	<u>\$4,491</u>
Total	<u>\$6,910</u>
Present Value	<u>\$3,301</u>

As a result of our analysis, work in process is estimated to be:

Cases closed to date	\$592,993
Reimbursed costs for cases closed to date	285,328
Cases still open	3,328
Reimbursed costs for cases still open	3,301
<b>TOTAL WORK IN PROCESS</b>	<b><u>\$884,950</u></b>

Exhibit 18.9 reflects an analysis that took a lot of hours to perform. This is anything but easy. Sometimes, calculating the contingent work in progress makes no sense. Instead, the valuation analyst may be of assistance to the parties by making a recommendation of how to split up this asset, particularly in a matrimonial valuation. Exhibit 18.10 reflects how we handled a major contingent fee in a matrimonial case.

### EXHIBIT 18.10 MAJOR CONTINGENT FEE

Work in process has been calculated from contingent fee schedules in client service agreements, settlement letters, and client ledgers from each case. Where applicable, we have used the actual settlement numbers to derive the actual work in process completed as of the valuation date. At present, the only cases that have been settled are the Rubin and Cohen matters. Due to the complexity of the work in process calculations, we have listed the calculations as follows:

<b>Rubin</b>	
<u>Jones Law Firm Fees Calculation*</u>	
Value of Settlement as of May 2005	\$350,000.00
Less: Disbursements	(25,551.11)
Subtotal To Calculate Contingent Legal Fees	<u>\$324,448.89</u>
<u>Legal Fee</u>	
1/3 of up to \$250,000 in Settlement Value	\$ 83,333.33
25% of Subtotal Amount Over \$250,000	<u>18,612.22</u>
Total Legal Fees as of Settlement	\$101,945.56
Less: 1/3 Referral Fee paid by Jones	<u>(32,430.73)</u>
Total Legal Fees Attributable to Jones	\$ 69,514.83
<u>Work In Process Calculation</u>	
Unbilled hours as of 2/28/04	352.3
Total unbilled hours	<u>÷ 730.5</u>
Percentage of 2/28/04 fees to total unbilled fees	<u>× 48%</u>
Subtotal	\$ 33,525.08
Plus: Pre 2/28/04 Disbursements	<u>0.00</u>
Work In Process as of 3/1/04	\$ 33,525.08
Less: 40% to tax-affect	<u>13,410.03</u>
Tax-Affected Work In Process	<u>\$ 20,115.05</u>
*Note: Figures in these tables may not calculate exactly due to rounding.	

We have calculated work in process based on a percentage of hours worked on each case. In the Rubin matter, approximately 48 percent of the total work completed in settling this case was performed before the valuation date. Multiplying the total monies attributable to the Jones Law Firm by 48 percent results in an untaxed work in process amount of \$33,525. Assuming that these monies are collected, we have tax-affected them at a rate of 40 percent, for a tax-affected work in process amount of \$20,115. A similar calculation has been performed for the Cohen matter.

*(Continued)*

**EXHIBIT 18.10** (Continued)

<b>Cohen*</b>	
<u>Jones Fees Calculation</u>	
Value of Settlement	\$250,000.00
Less: Disbursements	(6,624.06)
Subtotal To Calculate Legal Fees	<u>\$243,375.94</u>
<u>Legal Fee</u>	
Equals 1/3 of up to \$500,000 in Settlement Value	\$ 81,125.31
Less: 1/3 Referral Fee paid by Jones	(27,041.77)
Total Legal Fees Attributable to Jones	\$ 54,083.54
<u>Work In Process Calculation</u>	
Unbilled hours as of 2/28/04	17.2
Total unbilled hours	<u>÷ 138.4</u>
Percentage of 2/28/04 fees to total unbilled fees	× 12%
Legal Fee Estimate as of 2/28/04	\$ 6,721.37
Plus: Disbursements as of 2/28/04	35
Work in Process as of 3/1/04	\$ 6,756.37
Less: Tax affect—40%	2,702.55
Tax affected Work In Process	<u>\$ 4,053.82</u>
*Note: Figures in these tables may not calculate exactly due to rounding.	

During an interview with Mr. Jones, he provided us with his estimates of the time necessary to complete each of the cases that were open as of the valuation date, including the Arney, Warner, Lamant, Port Rooster, and Angel matters, and their prospective settlements. Because of the highly speculative nature of these contingent fees, we have not included these in the work in process figure. These open cases add value to the practice, but because of the highly speculative nature of these cash flows, we could not estimate them with any certainty. Instead, we believe that these monies should be distributed on an “if and when collected” basis. At the bottom of this letter, we have provided you with a worksheet that you can use each time one of these matters is finalized.

As of the valuation date, two inputs into the worksheet are known, namely unbilled hours as of February 28, 2004, and disbursements through the same date. The following table reflects the inputs into the worksheet when you use it.

<b>TABLE 2</b>		
<b>WORKSHEET INPUTS</b>		
	<u>Unbilled Hours</u>	<u>Disbursements</u>
Arney	186.50	\$ 8.95
Warner	126.95	441.15

**EXHIBIT 18.10**

An important note on the Lamant matter is that the client had left the practice as of the valuation date, but had already accrued \$3,486 in legal fees contingent upon settlement. The client has since returned to the practice, but a willing buyer would not know this as of the valuation date, therefore, the most that could be reasonably expected is their unbilled legal fees.

We have not addressed the Port, Rooster and Angel matters. The amounts are contingent on the successful litigation of these matters and are extremely large. In respect to equitable distribution regarding *Jones v. Jones*, the only way that these monies can be divided is on an "if and when collected" basis. At this point in time, it is beyond speculation to place dollar values on these matters due to the size and riskiness of these cash flows.

<b>Tax-Affected Work In Process Worksheet</b>	
Value of Settlement	\$
Less: Disbursements	_____
Subtotal to Calculate Legal Fees	\$
Calculation of Legal Fees	
Contingent Legal Fees	\$
Less Referral Fees Paid By Jones	_____
Calculation of Work in Process	
Calculation of Work in Process	\$
Total Legal Fees Attributable to Jones	\$
Unbilled Hours as of 2/28/04	
Total Unbilled Hours	÷
Percentage of Unbilled Hours as of 2/28/04 to Total Unbilled Hours	_____
Work in Process as of 2/28/04	\$
Less: Tax affect (40%)	_____
Tax-Affected Work in Process	\$

**Prepaid Insurance**

Certain types of professional practices, particularly medical practices, may be paying a significant amount in malpractice premiums. Typically, these items are expensed as they are paid. The valuation analyst needs to be aware of the policy period as this could turn out to be a large prepaid asset on the balance sheet at the appraisal date. Imagine a medical practice that pays \$120,000 in malpractice premiums on February 1 and undergoes a valuation on March 1. Since 11 months of the premium are prepaid, the practice value just increased (on the basis of its assets) by \$110,000. Do not double count this by adjusting the income statement. The entire premium should be

reflected if you are performing an income or market approach. This asset may be considered as an additional item in fair market value appraisals as of a certain date subject to short-rating the policy. But because nothing in life is easy, the valuation analyst must also consider whether the practice would most likely have to purchase what is called a *tail policy* to protect against any malpractice claims that arise during the forward period for prior acts. This could turn out to be a liability rather than an asset. Medical surgical practices and possibly audit firms may need this type of coverage. Who said this stuff is a walk in the park?

## Supplies

Certain types of professional practices maintain a supply inventory that could be material. For example, certain medical practices maintain an inventory of drugs that may have a very substantial value. The valuation analyst should inquire about supplies. Sometime we find out how often supplies are ordered and prorate the supplies expense. We generally only do this when supplies are considered material to the value of the practice.

## Library Costs

Law firms, accounting firms, appraisal firms (like ours), and other professional practices spend a considerable amount of money each year to keep their libraries current. Sometimes the library may have significant value. Other times, the volumes and volumes of books sitting on shelves in the library have been replaced by a CD-ROM or the Internet. In these instances, the value may not be substantial. In fact, it may be worth only pennies. The valuation analyst can make a few telephone calls to find out how much the major publications are worth in the used market.

## Reasonable Compensation

Probably the most important adjustment the valuation analyst makes during the valuation of the professional practice is reasonable compensation. This adjustment can literally make or break the valuation conclusion. The analyst needs to be extremely careful to insure that all reasonable considerations are made about the professional that would affect the amount of compensation that would be required to be paid to an employee doing the same job as the individual currently in the practice. Many factors should be considered. Among them are the following:

1. Job description
2. Hours worked
3. Education
4. Age
5. Special skills
6. Rainmaking ability
7. Size of the practice
8. Profitability of the practice

Exhibit 18.11 illustrates various sections of different types of professional practice compensation considerations.

### EXHIBIT 18.11 REASONABLE COMPENSATION

#### DENTAL PRACTICE

In order to determine reasonable compensation for Drs. Brown, Green, and Black, several sources of information were used. There is much controversy over the issue of reasonable compensation and generally it is determined based on numerous factors. Appraisal theory has taught the valuation analyst to calculate reasonable compensation based on the norm within the industry. The hypothetical willing buyer will have the same qualifications and experience as the hypothetical willing seller, work the same number of hours as the hypothetical seller, and be in the same cost of living area of the country as the hypothetical seller.

In "Professional Practice Goodwill: An Abused Concept," published by the *Journal of the American Academy of Matrimonial Lawyers*, 1986, James T. Friedman found that most lawyers and judges wrongfully equate high earnings

**EXHIBIT 18.11**

and divisible goodwill, and that most highly salaried professionals do not enjoy any more compensation than highly salaried nonprofessionals do.

Friedman attacks the excess earnings method and is highly critical of the methods used to determine reasonable compensation. He states

in calculating excess compensation you must first deduct fair compensation for the individual whose practice you are valuing. The more valuable that individual's contribution, the higher will be, the compensation entitlement, or replacement costs.

Friedman goes further and states that "the hard working, highly skilled specialist probably earns his or her total compensation and derives little excess from the enterprise."

In *Valuing Small Businesses and Professional Practices*, published by Dow Jones-Irwin, Shannon P. Pratt, D.B.A., C.F.A., C.F.P., F.A.S.A., C.R.A., a renown expert in the valuation field, states that

The smaller the business or practice, the more important looms the role of the owner/manager. How much of the success of the operation is due to the talent and efforts of the owner/manager(s)? How much of that success can be transferred to new ownership?

Pratt continues by stating

There is no point in paying a sizable sum for a business or practice from which the customers will disappear as soon as the new owner takes over, or which is dependent on a seller's talent that will not be available to the new owner.

Pratt, in his discussion of goodwill, indicates that "several factors are dominant in determining the existence and value of practice and personal goodwill for professional practices:

1. Earnings levels that can be expected in the future.
2. The level of competition.
3. The referral base.
4. The types of patients or clients the practice serves.
5. Work habits of the practitioner.
6. The fees charged (compared to others in the same specialty).
7. Where the practice is located.
8. The practice's employees.
9. The general marketability of the type of practice being sold."

According to *Financial Studies of the Small Business*, published by Financial Research Associates, officers' salaries in dental practices are approximately 29.71 percent of net sales. Using this information results in officers' compensation as follows:

	<b>2002</b>	<b>2001</b>	<b>2000</b>	<b>1999</b>
Sales	\$1,237,400	\$1,278,449	\$1,257,051	\$1,203,644
Refunds and Allowances	(46,612)	(53,700)	(21,134)	(18,425)
Net Sales	\$1,190,788	\$1,224,749	\$1,235,917	\$1,185,219
Salary Percentage	× 29.71%	× 29.71%	× 29.71%	× 29.71%
Officers' Compensation	<u>\$ 353,783</u>	<u>\$ 363,873</u>	<u>\$ 367,191</u>	<u>\$ 352,129</u>

Another source, *RMA Annual Statement Studies*, published by Risk Management Association, indicates that based on historical data, dentists in the upper quartile earn 32.9 percent of salaries on average. The upper quartile was chosen to reflect the fact that salaries in the Mid-Atlantic/Northeast area tend to be higher than the national average.

Based on the Robert Morris Associates' statistics, reasonable compensation for the officers of Dental Associates would be calculated as follows:

*(Continued)*

## EXHIBIT 18.11 (Continued)

	2002	2001	2000	1999
Net Sales	\$1,190,788	\$ 1,224,749	\$ 1,235,917	\$ 1,185,219
Salary Percentage	× 32.9%	× 32.9%	× 32.9%	× 32.9%
Officers' Compensation	\$ 391,769	\$ 402,942	\$ 406,617	\$ 389,937

In *The Survey of Dental Practice*, the American Dental Association breaks down dentists' incomes by other criteria. Table 5, below, shows net income of general practitioners who earn their money from the primary practice of dentistry.

**TABLE 5**  
**NET INCOME OF INDEPENDENT GENERAL PRACTITIONERS BY AGE AND SOURCE OF DENTAL INCOME**

<i>Source of Net Income</i>	<i>Mean</i>	<i>1st Q</i>	<i>Median</i>	<i>3rd Q</i>	<i>S.D.</i>	<i>n</i>
<b>Primary Private Practice</b>						
<i>Age Group</i>						
Under 30*	\$ —	\$ —	\$ —	\$ —	\$ —	18
30–34	82,000	45,000	69,500	100,000	53,120	166
35–39	98,820	64,500	90,000	124,500	58,740	272
40–44	97,270	60,990	88,700	122,000	52,870	239
45–49	109,090	70,000	100,000	140,060	59,870	204
50–54	102,670	70,000	90,700	125,000	57,550	133
55–59	83,500	50,000	75,630	110,000	44,490	115
60–64	74,580	46,870	66,000	91,000	41,880	100
65 +	61,730	30,000	51,000	86,000	42,380	98

(Source: American Dental Association, Survey Center, *The Survey of Dental Practice*. Used with permission.)  
 \*There were too few respondents in this category to allow for reliable statistical analysis.

According to table 5, the doctors' salaries would be as follows:

	<b>Median</b>	<b>3rd Quartile</b>
Dr. Brown	\$ 75,630	\$110,000
Dr. Green	90,000	124,500
Dr. Black	69,500	100,000
TOTAL	\$235,130	\$334,500



**EXHIBIT 18.11**

In table 6, below, income is determined by the number of years since the doctor graduated from dental school.

<i>Source of Net Income</i>	<i>Mean</i>	<i>1st Q</i>	<i>Median</i>	<i>3rd Q</i>	<i>S.D.</i>	<i>n</i>
<b>Primary Private Practice</b>						
<i>Years Since Graduation</i>						
Under 5	\$ 60,910	\$28,500	\$50,750	\$ 73,750	\$51,140	56
5–9	88,250	50,000	80,640	106,670	56,210	230
10–14	99,660	65,000	90,000	122,000	55,810	274
15–19	103,340	64,500	97,000	136,500	51,630	208
20–24	106,820	69,000	95,000	135,000	61,260	174
25–29	94,120	60,000	87,000	120,000	53,100	133
30–34	85,580	48,000	70,000	115,000	50,840	122
35 +	65,690	35,000	60,660	87,720	41,390	148

(Source: American Dental Association, Survey Center, *The Survey of Dental Practice*. Used with permission.)

According to this data, the dentists would earn the following:

	<b>Median</b>	<b>3rd Quarter</b>
Dr. Brown	\$ 70,000	\$115,000
Dr. Green	97,000	136,500
Dr. Black	80,640	106,670
<b>TOTAL</b>	<b>\$247,640</b>	<b>\$358,170</b>

Table 7 indicates earnings by number of hours worked. Based on the office hours previously discussed, each doctor works 33 hours per week for two weeks, and 41 hours during the third week.

(Continued)

## EXHIBIT 18.11 (Continued)

**TABLE 7**  
**NET INCOME, AGE, AND HOURS WORKED OF**  
**INDEPENDENT GENERAL PRACTITIONERS**  
**BY HOURS WORKED AND SOURCE OF DENTAL INCOME**

<i>Hours per Week</i>	<i>Mean</i>	<i>1st Q</i>	<i>Median</i>	<i>3rd Q</i>	<i>S.D.</i>	<i>n</i>
<b>Less than 32 hours:</b>						
Primary Private Practice	\$62,570	\$30,000	\$51,000	\$ 79,000	\$49,030	201
Total from Private Practice	\$63,560	\$32,000	\$51,000	\$ 82,000	\$49,050	201
Total from Dentistry	\$65,580	\$36,000	\$55,000	\$ 82,000	\$48,850	201
Dentist Age	53.5	42.0	54.0	64.0	13.9	294
Hours worked per week	25.5	24.0	28.0	30.0	5.6	294
<b>32 hours or more:</b>						
Primary Private Practice	\$97,200	\$60,000	\$90,000	\$122,000	\$54,670	1144
Total from Private Practice	\$97,940	\$60,000	\$90,000	\$124,000	\$54,880	1144
Total from Dentistry	\$98,430	\$61,000	\$90,000	\$124,000	\$54,860	1144
Dentist Age	45.1	37.0	43.0	52.0	10.2	1664
Hours worked per week	39.7	35.0	40.0	42.0	6.7	1664
<b>Hours per Year</b>						
<b>Less than 1,600 hours:</b>						
Primary Private Practice	\$80,680	\$41,800	\$72,500	\$106,500	\$54,410	368
Total from Private Practice	\$81,830	\$42,970	\$74,020	\$108,000	\$55,440	368
Total from Dentistry	\$83,360	\$45,000	\$75,000	\$108,500	\$55,300	368
Dentist Age	51.5	42.0	51.0	61.0	12.6	511
Hours worked per year	1322.7	1215.0	1440.0	1536.0	293.7	511
<b>1,600 hours or more:</b>						
Primary Private Practice	\$96,300	\$60,000	\$87,000	\$120,000	\$54,980	977
Total from Private Practice	\$96,930	\$60,000	\$88,000	\$120,000	\$54,850	977
Total from Dentistry	\$97,350	\$60,000	\$90,000	\$120,000	\$54,760	977
Dentist Age	44.5	37.0	43.0	51.0	10.1	1447
Hours worked per year	1995.1	1750.0	1920.0	2156.0	328.6	1447

(Source: American Dental Association, Survey Center, *The Survey of Dental Practice*. Used with permission.)

Based on this, the data in table 7 indicates income levels as follows:

	<b>Median</b>	<b>3rd Quarter</b>
More than 32 hours per week	\$90,000	\$ 22,000
More than 1,600 hours per year	87,000	120,000

## EXHIBIT 18.11

Table 8 shows the different earnings levels based on the dentist's employment status.

<b>TABLE 8</b>						
<b>NET INCOME, AGE, AND HOURS WORKED OF INDEPENDENT GENERAL PRACTITIONERS BY EMPLOYMENT STATUS IN THE PRIMARY PRACTICE AND SOURCE OF DENTAL INCOME</b>						
<i>Source of Net Income</i>	<i>Mean</i>	<i>1st Q</i>	<i>Median</i>	<i>3rd Q</i>	<i>S.D.</i>	<i>n</i>
<b>Unincorporated Sole Proprietor</b>						
Primary Private Practice	\$ 82,920	\$47,250	\$ 76,000	\$109,000	\$49,560	804
Total from Private Practice	\$ 83,530	\$48,000	\$ 77,000	\$110,000	\$49,410	804
Total from Dentistry	\$ 84,320	\$50,000	\$ 77,000	\$110,000	\$49,060	804
Dentist Age	46.4	37.0	44.0	55.0	11.8	1175
Hours worked per year	1826.4	1568.0	1800.0	2040.0	450.6	1175
<b>Unincorporated Partner</b>						
Primary Private Practice	\$ 91,070	\$56,500	\$ 76,500	\$103,000	\$52,910	88
Total from Private Practice	\$ 93,390	\$60,000	\$ 82,000	\$107,970	\$52,500	88
Total from Dentistry	\$ 93,730	\$60,000	\$ 82,000	\$107,970	\$52,380	88
Dentist Age	43.1	33.0	39.0	51.0	12.8	125
Hours worked per year	1789.2	1600.0	1800.0	2000.0	434.2	125
<b>Incorporated Sole Proprietor</b>						
Primary Private Practice	\$109,670	\$66,000	\$100,000	\$138,000	\$63,620	370
Total from Private Practice	\$109,950	\$66,000	\$100,000	\$140,000	\$63,580	370
Total from Dentistry	\$110,320	\$66,000	\$100,000	\$140,000	\$63,610	370
Dentist Age	47.6	41.0	47.0	54.0	9.3	533
Hours worked per year	1820.3	1600.0	1800.0	2000.0	397.8	533
<b>Incorporated Partner</b>						
Primary Private Practice	\$102,630	\$71,000	\$ 95,000	\$125,000	\$49,460	83
Total from Private Practice	\$105,510	\$71,000	\$ 95,000	\$130,000	\$54,370	83
Total from Dentistry	\$107,630	\$72,000	\$ 99,000	\$135,000	\$55,070	83
Dentist Age	44.1	36.0	43.0	52.0	10.4	125
Hours worked per year	1784.0	1536.0	1800.0	2000.0	445.5	125

(Source: American Dental Association, Survey Center, *The Survey of Dental Practice*. Used with permission.)

Dental Associates is a professional corporation, so the dentists are considered to be incorporated partners. The median earnings level for an incorporated partner is \$95,000, while the income in the 3rd quartile is \$125,000.

The ADA survey then broke its statistics down by regions. Tables 9, 10 and 11, highlight some of the regional differences in income, age, and hours worked.

(Continued)

## EXHIBIT 18.11 (Continued)

**TABLE 9**  
**NET INCOME OF INDEPENDENT GENERAL PRACTITIONERS**  
**BY REGION AND SOURCE OF DENTAL INCOME**

<i>Source of Net Income</i>	<i>Mean</i>	<i>1st Q</i>	<i>Median</i>	<i>3rd Q</i>	<i>S.D.</i>	<i>n</i>
<b>Primary Private Practice</b>						
<i>Region</i>						
New England	\$105,350	\$75,000	\$90,000	\$139,000	\$67,570	89
Middle Atlantic	90,150	54,700	82,000	115,500	53,960	208
East North Central	90,050	52,000	85,000	115,000	51,350	246
West North Central	88,780	50,000	79,000	114,000	52,540	106
South Atlantic	98,140	56,000	90,000	130,000	53,650	179
East South Central	84,370	50,000	75,560	110,000	46,500	73
West South Central	81,720	45,000	75,000	97,000	49,050	129
Mountain	81,810	42,940	75,000	110,000	51,450	79
Pacific	100,280	60,000	85,000	126,000	62,570	230

(Source: American Dental Association, Survey Center, *The Survey of Dental Practice*. Used with permission.)

**TABLE 10**  
**AGE OF INDEPENDENT GENERAL PRACTITIONERS BY REGION**

<i>Type of Dentist</i>	<i>Mean</i>	<i>1st Q</i>	<i>Median</i>	<i>3rd Q</i>	<i>S.D.</i>	<i>n</i>
<b>General Practitioners</b>						
<i>Region</i>						
New England	47.1	38.0	45.0	54.0	11.5	120
Middle Atlantic	47.7	38.0	46.0	56.0	12.3	305
East North Central	46.1	37.0	45.0	54.0	11.7	371
West North Central	46.5	39.0	45.0	53.0	10.6	148
South Atlantic	46.2	37.0	44.0	53.0	11.5	277
East South Central	46.6	38.0	43.0	55.0	10.8	106
West South Central	45.7	36.0	44.0	55.0	10.8	195
Mountain	46.4	38.0	45.0	54.0	10.2	112
Pacific	45.8	38.0	45.0	52.0	10.1	314

(Source: American Dental Association, Survey Center *The Survey of Dental Practice*. Used with permission.)

## EXHIBIT 18.11

<i>Type of Dentist</i>	<i>Mean</i>	<i>1st Q</i>	<i>Median</i>	<i>3rd Q</i>	<i>S.D.</i>	<i>n</i>
<b>General Practitioners</b>						
<i>Region</i>						
New England	1833.8	1598.0	1836.0	2028.0	391.0	120
Middle Atlantic	1792.5	1560.0	1824.0	2009.0	486.0	305
East North Central	1830.8	1560.0	1764.0	2058.0	468.3	371
West North Central	1816.7	1673.0	1806.5	2000.0	372.5	148
South Atlantic	1885.1	1620.0	1840.0	2100.0	425.2	277
East South Central	1843.7	1620.0	1862.0	2000.0	330.9	106
West South Central	1802.4	1600.0	1750.0	1960.0	350.5	195
Mountain	1891.5	1584.0	1838.0	2067.0	468.9	112
Pacific	1741.4	1504.0	1728.0	1974.0	450.3	314

(Source: American Dental Association, Survey Center, *The Survey of Dental Practice*. Used with permission.)

The tables shown on the previous pages indicate that general dentists in the Middle Atlantic region earn a median salary of \$82,000, are age 46, and work 1,800 hours per year.

Based on the various statistics shown, the valuation analyst has determined the following reasonable compensation amounts for 2002:

Dr. Brown	\$115,000
Dr. Green	136,500
Dr. Black	106,670

The amounts are based on the salaries shown for years since graduation, because it approximately reflects the number of years each dentist has been practicing. In addition, the third quartile was chosen to reflect a fairly stable practice in the Middle Atlantic area, which has been in existence for almost 30 years.

The salaries chosen approximately reflect the percentages of gross income earned by each doctor in 2002. Dental Associates maintains a Procedure Analysis Report, which is used to track each doctor's productivity. In 2002, the report showed the following breakdown of revenues:

Dr. Brown	\$322,527
Dr. Green	410,381
Dr. Black	330,810

Although Dr. Black's revenues were higher than Dr. Brown's, Dr. Brown is responsible for most of the administrative work of the dental practice, and therefore, should be compensated for those additional duties and responsibilities.

The total compensation determined above represents 30.1 percent of 2002 net sales. This percentage was used to determine reasonable compensation for the other years, and the adjustment in table 4 is calculated as follows:

(Continued)

**EXHIBIT 18.11** (Continued)

	<u>2002</u>	<u>2001</u>	<u>2000</u>	<u>1999</u>
Net Sales	\$1,190,788	\$1,224,729	\$1,235,917	\$1,185,219
Salary Percentage	× 30.1%	× 30.1%	× 0.1%	× 30.1%
Reasonable Compensation	\$ 358,427	\$ 368,643	\$ 372,011	\$ 356,751
Per Tax Return	468,873	594,376	538,742	515,825
Adjustment	<u>\$ 110,446</u>	<u>\$ 225,733</u>	<u>\$ 166,731</u>	<u>\$ 159,074</u>

**LAW FIRM**

One of the difficult components of a business valuation for a law practice is the determination of reasonable compensation for the owner of the practice. The purpose of reflecting reasonable compensation is so that a willing buyer, if purely an investor, would see what he or she would have to pay someone to perform the services that are done by the current owner.

Appraisal theory teaches the valuation analyst to calculate reasonable compensation based on the norm within the industry. The hypothetical willing buyer will have the same qualifications and experience as a hypothetical willing seller, work the same number of hours as the hypothetical seller and be in the same cost of living area of the country as the hypothetical seller. In fact, case law has suggested that the valuation analyst examine the value of goodwill very carefully "for the individual practitioner will be forced to pay the ex-spouse 'tangible' dollars for an intangible asset at a value concededly arrived at on the basis of some uncertain elements."<sup>1</sup> Case law also suggests that the age, health, and professional reputation of the practitioner, the nature of the practice, the length of time the practice has been in existence, its past profits, its comparative professional success, and the value of its other assets should also be taken into consideration in the determination of goodwill.<sup>2</sup>

However, goodwill cannot be measured without properly considering the effort expended by the practitioner. A reasonable level of compensation cannot be determined by merely consulting a salary survey without considering the work habits of the professional. Shannon Pratt states:

It's almost a cliché that professionals work long hours. However, some are willing to work longer hours than others. A practice that requires 80 hours a week of a practitioner's time will not be worth as much per dollar of income to a purchaser as one that requires only 50 hours per week.<sup>3</sup>

A review of the time and billing records of Donald Neal & Associates revealed the following billable hours per individual attorney over the past several years:

	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>
DAN	3486.25	3299.25	3284.00	3208.00	3576.00
KLJ	808.50	—	—	—	—
MFS	—	—	—	—	1422.80
REG	973.40	2096.45	2135.50	629.00	—
LJG	—	—	—	—	627.50
KEN	—	1191.00	2245.75	2105.75	738.75
AMC	317.75	2359.50	1690.25	1734.00	996.00
SCS	888.75	—	—	—	—
BCS	2815.50	2753.50	2097.50	—	—
DRR	2427.50	712.25	—	—	—
LEC	—	—	—	1309.25	650.50

<sup>1</sup> *Dugan v. Dugan*, 92 NJ Super 435, 457 A.2d at 7.

<sup>2</sup> In *re-marriage of Lopez*, 38 Cal. App. 3d 93, 113 Cal. Rptr. 58 (3d Dist. 1974).

<sup>3</sup> Shannon P. Pratt, *Valuing Small Businesses and Professional Practices*, 2nd edition (Business One Irwin: 1993): 414.

**EXHIBIT 18.11**

The billable hours worked by Mr. Neal, far exceed all of the other attorneys in the firm. The nature of this practice requires exceptionally long hours. Turnover in associates has been a problem for this reason. However, as the owner, Mr. Neal does whatever it takes to get the job done. This is typical for a small professional practice.

What makes this practice somewhat unique, is the "emergency room law" type of practice. If a client calls with a problem, it is not uncommon for the firm to dispatch at least one attorney immediately to investigate a situation. For example, if a call comes in about an alleged child molestation, a team of attorneys may be sent hours away to interview students, teachers, and the school administration. This can result in very long hours worked on a particular assignment. Also, school board meetings tend to be at night, and these types of jobs can also make for an exceptionally long day.

In order to determine a reasonable level of compensation for Mr. Neal, this valuation analyst consulted the *Survey of Law Firm Economics*, published by Altman Weil Pensa (AWP). This survey provides the valuation analyst with a benchmark of compensation levels. Various factors, besides the region in which the law practice operates, affect the amount of compensation earned by a practice's owners. These factors include the size of the practice, the type of law performed and the year the owners were admitted to the Bar. AWP provides a breakdown of the salaries for lawyers broken down by each of these categories.

In order to use the survey, the valuation analyst considered several specialties within the legal profession to compare Donald Neal & Associates to. There are no statistics for education law, but there are enough similarities between insurance defense firms and labor/employment specialties that a meaningful comparison could still be made.

Some of the more meaningful data about the owners of the firms includes the following:

	<u>Average</u>	<u>Lower Quartile</u>	<u>Median</u>	<u>Upper Quartile</u>	<u>Ninth Decile</u>
<b>BILLABLE HOURS</b>					
All Firms	1,722	1,471	1,707	1,948	2,216
South	1,759	1,512	1,747	1,976	2,245
Under 9 Lawyers	1,683	1,352	1,664	2,019	2,247
Insurance Defense	1,943	1,693	1,916	2,164	2,540
Labor/Employment	1,782	1,585	1,758	1,990	2,183
Admitted Bar (1978)	1,728	1,479	1,691	1,950	2,246
<b>TOTAL COMPENSATION</b>					
All Firms	\$194,966	\$121,834	\$168,751	\$230,133	\$320,411
South <sup>4</sup>	292,835	189,119	265,360	378,821	458,437
Under 9 Lawyers <sup>5</sup>	187,821	93,870	143,265	239,200	328,410
South	193,813	127,409	171,819	229,416	303,150
Under 9 Lawyers	170,174	96,617	134,294	216,399	318,170
Insurance Defense	176,802	112,516	152,159	218,692	290,883
Labor/Employment	173,284	115,804	157,091	199,227	280,210
Admitted Bar (1978)	206,802	141,236	183,893	241,663	323,290
Admitted Bar (1978) <sup>6</sup>	206,733	148,333	185,334	245,085	314,499
Admitted Bar (1978) <sup>7</sup>	195,584	114,253	176,610	248,943	336,329

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<sup>4</sup> Owners with significant management responsibilities.

<sup>5</sup> Owners with significant management responsibilities.

<sup>6</sup> South only.

<sup>7</sup> Firms with under 9 lawyers.

(Continued)



**EXHIBIT 18.11** (Continued)

A review of the above data indicates that the hours worked by Mr. Neal far exceed his peers. In fact, using 2006 as a comparison to the AWP data reflects the following:

	<b>Median AWP</b>	<b>Ninth Decile</b>	<b>Billable Hours</b>	<b>Percentage Over</b>	
				<b>Median</b>	<b>Ninth Decile</b>
All Firms	1,707.00	2,216.00	3,486.25	+ 104.2%	+ 57.3%
South	1,747.00	2,245.00	3,486.25	+ 99.6%	+ 55.3%
Under 9 Lawyers	1,664.00	2,247.00	3,486.25	+ 109.5%	+ 55.2%
Insurance Defense	1,916.00	2,540.00	3,486.25	+ 81.9%	+ 37.3%
Labor/Employment	1,758.00	2,183.00	3,486.25	+ 98.3%	+ 59.7%
Admitted Bar (1978)	1,691.00	2,246.00	3,486.25	+ 106.2%	+ 55.2%

Mr. Neal worked almost twice the number of hours of any of the attorneys, based on median hours worked. He also worked, on average, 53 percent more hours than the attorneys who made up the ninth decile of the survey. Clearly, the profitability of the firm is attributable, in large part, to the work habits of the owner.

A review of the total compensation for owners of firms reflects various levels, depending on the categorization within the survey. The median total compensation for firms in the south, where the owners have significant management responsibilities was \$265,360, while the ninth decile for this category was \$458,437. It can only be assumed by this valuation analyst, that there are larger firms reflected in these figures.

Firms with under nine lawyers for this same group had a median and ninth decile total compensation of \$143,265 and \$328,410, respectively. Total compensation for owners without significant management responsibilities ranged from a median of \$134,294 to \$183,893 and a ninth decile from \$280,210 to \$336,329.

Whether the median or the ninth decile compensation is used as a base compensation for Mr. Neal, these figures must be adjusted for the significant number of hours that he works. Based on the data presented above, a base amount, before this adjustment, appears to be approximately \$175,000 for the median and \$315,000 for the ninth decile. These figures can then be adjusted as follows:

	<b>Median</b>	<b>Ninth Decile</b>
Base Amount	\$175,000	\$315,000
Excess Billable Hours Percentage	× 100%	× 53%
Extra Compensation	<u>\$175,000</u>	<u>\$166,950</u>
<b>Total Compensation</b>	<b><u>\$350,000</u></b>	<b><u>\$481,950</u></b>

The next part of this analysis is the determination of which group of owners is considered to be applicable to Mr. Neal. Mr. Neal is the firm's "rainmaker." He is the reason that clients come back for more. While repeat patronage is an element of goodwill, the personal component of the goodwill will generally be reflected in the level of compensation that an individual can command. Being a rainmaker adds significant value to the firm. Part of that value is reflected in the salary.

The upper quartile of the survey is a more conservative level of compensation than the ninth decile. We feel that the median does not compensate Mr. Neal for his rainmaking or administrative responsibilities. The average billable hours for the upper quartile was about 2,000 hours, or about 74 percent less than Mr. Neal's billable hours. The survey compensation is about \$230,000. After adjusting for hours worked, compensation is estimated as \$400,200.

**EXHIBIT 18.11**

In our opinion, reasonable compensation appears to be about \$400,000. This represents 26.8 percent of 2005 revenues. In order to check this amount for reasonableness, we consulted *RMA Annual Statement Studies*, published by Risk Management Association, a banking organization that compiles financial information by Standard Industrial Classification Codes. According to this publication, the percentage of officers, directors, or owners' compensation to sales was 28.7 percent for firms with \$1-3 million in revenues.

Prior years' compensation has been calculated as 26.8 percent of revenues, to be consistent with our calculation for 2005.

**ACCOUNTING PRACTICE**

In order to determine reasonable salaries for Messrs. Thomas and Lux, we reviewed several sources of information. The first source was the survey from the Texas Society of CPAs, which indicates that owners of firms with revenues between \$401,000 and \$1,000,000 receive 52 percent of revenues as earnings. For firms with revenues over \$1,000,000 this drops significantly to 38.2 percent of revenues. The second source we reviewed was Risk Management Association's *Annual Statement Studies*. This data indicated salaries for partners of approximately 27.2 to 27.5 percent of revenues.

The third source of information we reviewed was the *Accounting Finance and Information Technology Salary Guide*, published by Robert Half. While this survey does not discuss salaries at partner levels, it does report data for the manager level. According to the survey, managers' salaries could range as high as \$76,000 in accounting firms with revenues under \$15 million. This is based on Robert Half's placement experience. The fourth and final source of information we used was from the firm itself. Brian Edwards, CPA is the firm's manager, who at the valuation date, was making \$86,000 per year. Combined with the Robert Half data, this sets an absolute floor on the compensation of the firm's partners. Since the partners are the ones generating the business, they should naturally be more highly compensated than the individuals strictly servicing the clients.

Since the Texas Society of CPAs survey deals with firms in New Jersey, it is more relevant than the RMA data. As discussed, the partners of firms with over \$1,000,000 in revenues earn 38.2 percent of revenues. This is consistent with the RMA data when pretax profits are factored in; combining salaries and profits results in a 36.4 percent salary level for partners of firms with revenues between \$1 million and \$3 million. Based on this data, we have determined reasonable salaries for Mr. Thomas and Mr. Lux to be approximately 27 percent of revenues for 2007, or \$285,000. We have assumed this to be the appropriate percentage for all years in our analysis to reflect their salaries based on fees generated. These figures are calculated as follows:

<b>Year</b>	<b>Revenues</b>	<b>%</b>	<b>Officers' Compensation</b>
2007	\$1,055,627	27%	\$285,019
2006	901,226	27%	243,331
2005	789,052	27%	213,044
2004	775,066	27%	209,268
2003	861,495	27%	232,604

Given the industry data and the number of hours worked by the two partners, the data appears reasonable.

**ANOTHER ACCOUNTING PRACTICE**

According to the firm's financial statements, none of the firm's partners take an annual salary. Therefore, the income statement must be normalized to account for the number of partners needed to maintain daily operations of the firm, and for an appropriate level of compensation required to replace them. Based on information provided regarding partners billable hours in the first nine months of 2003, on average, each partner's total hours worked consisted of 42 percent billable hours and 58 percent nonbillable hours. In the first nine months of 2002, approximately 47 percent of partners' total hours were billable.

(Continued)

**EXHIBIT 18.11** (Continued)

According to the Texas Society's *Practice Management Survey*, 53 percent of total hours of active owners of large accounting practices are billable. Assuming that the 2002 and 2003 time analysis of the Jackson Greer partners' work is comparable to their billable hours worked as of October 2005, Jackson Greer's partner productivity is below the industry average. As of October 2005, the firm has eight partners. We estimate that six partners would be the number of partners necessary to run the practice at an efficient level compared to its peer group.

Jackson Greer establishes hourly billing rates based on a 0.00225 multiple of the employee's annual salary. For partners of the firm, the hourly billable rate is \$250. Divided by the multiple, this results in an annual salary of approximately \$110,000 per partner.

In order to verify the reasonableness of the level of salary, we performed research regarding salaries paid to partners of accounting firms in order to compare the Jackson Greer partner salary to industry statistics. Our findings are as follows:

Source	Criteria	Salary
<i>CPA Newsletters</i>	CPA Salaries—Partner Mid-Atlantic Region	\$113,000
<i>CPA Newsletters</i>	CPA Salaries—Partner Firm Revenue over \$1,700,000	120,000
<i>Executive Compensation Survey Analysis</i> <sup>8</sup>	CEO President—Median Sales Volume: \$2.5—9.99 Mil.	110,815
Source Finance's <i>Accounting &amp; Finance Salary Survey</i>	Public Accounting Partner-Median	90,000

Utilizing these surveys, the average partner salary is approximately \$108,000. Based on this research, we feel that \$110,000 is a reasonable estimate for a partner's salary at Jackson Greer.

For 2005, a reasonable officers' compensation expense of \$660,000 was added to Jackson Greer's operating expenses. This amount is composed of a \$110,000 salary per partner, multiplied by six partners. In order to account for this expense in previous years, this amount was deflated at an annual rate of 6 percent based on the average of 6.5 percent and 5.4 percent reflected in CPA Newsletters' *Annual Compensation Survey* for the past two years, respectively. Before calculation of reasonable owner's compensation for 2000, two partner's salaries were removed (based on 2001 salary estimates) to accommodate the fact that two partners joined Jackson Greer in the November 2000 to January 2001 period.

**MEDICAL PRACTICE**

Since Dr. Peters operates as a sole proprietorship, he does not take a salary from the practice. Rather, he pays taxes on the net income from the practice.

A willing buyer might not operate the practice as a sole proprietorship, so in order to determine what a reasonable level of earnings will be from the practice, a reasonable level of salary must be factored in.

MGMA produces a second survey entitled *Physician Compensation and Production Survey: Current Year Report Based on Last Year Data*. According to this survey, some median compensation figures are as follows:

Pediatricians: single specialties	\$137,994
Pediatricians: Eastern United States	128,177
Pediatricians: 51%–100% Managed Care	130,998
Primary Care: Eastern United States	129,238
Primary Care: 51%–100% Managed Care	135,598

<sup>8</sup> Published by the National Institute of Business Management.

**EXHIBIT 18.11**

According to the American Medical Association's publication, *Physician Marketplace Statistics*, some median compensation figures are:

Pediatricians: Self-Employed (United States)	\$149,000
Pediatricians: Self-Employed (Mid-Atlantic)	129,000

Some additional information provided in the AMA publication are:

Median Office Hours:	
Pediatricians	35
New Jersey	30
Self-Employed	30

In addition, median hours spent in hospital rounds for all three categories are 5 hours.

The salary range provided above indicates that median salaries for pediatricians range from \$129,000 to \$149,000. Therefore, a salary of \$135,000 appears to be reasonable.

According to the MGMA survey, median compensation rose 2.29 percent from last year to this year, and 2.12 percent from the previous two year period. Therefore, these figures have been used to deflate the current year salaries for the prior years.

## VALUATION CALCULATIONS—UNIQUE ASPECTS OF THE CALCULATIONS

Sometimes, professional practice valuations involve more than the typical calculations. All of the normal methodologies will be employed in the valuation process. However, many professional practices have a greater emphasis placed on the gross revenues of the practice. Obviously, you cannot ignore earnings, but the willing buyer will frequently be purchasing the revenue stream. The willing buyer may often be a strategic or synergistic buyer. This may be the highest value for the practice. For control valuations, this may be the correct value even though it is higher than the other indications of value. Although not a professional practice valuation, read my analysis in chapter 20 regarding the *Newhouse* case.

### RULES OF THUMB

A very popular, but often abused method of valuation for professional practices is the multiple of revenue method. This method is also referred to as the *industry rule of thumb* method. There are many disadvantages to this method. The major disadvantage is the number of different multiples that are used for the same type of practice. A classic example of the danger in applying this method is one of the historical rules of thumb for an accounting practice. Over the years, accounting practices have been sold for a range between 50 percent and 150 percent of gross billings. This means that an accounting practice with gross billings of \$1 million could be valued anywhere from \$500,000 to \$1,500,000. This is clearly too wide a spread to be meaningful. Disparities such as this take place all of the time and must be considered before applying *unsupported* rules of thumb.

Sometimes we will put a rule of thumb section into a report to act as a sanity check on the other methods of valuation. When we do this, we usually start off our reports with the discussion that started off this section of the book. Exhibit 18.12 illustrates a section of a report.

### EXHIBIT 18.12 RULES OF THUMB

There were several "rules of thumb" located for accounting practices. In *Handbook of Small Business Valuation Formulas and Rules of Thumb*, published by Valuation Press, Glenn M. Desmond, A.S.A., M.A.I., suggests two methods:

- (1) A monthly net revenue multiplier of 9 to 15.

As a result of this multiplier, the value of the practice, without considering the retained assets, would be as follows:

	<u>Low</u>	<u>High</u>
Annual Forecasted Revenues	\$602,238	\$ 602,238
	÷ 12	÷ 12
Monthly Revenues	\$ 50,187	\$ 50,187
	× 9	× 15
Indicated Value	\$451,683	\$ 752,805
Retained Assets	(418,417)	(418,417)
Enterprise Value	<u>\$ 33,266</u>	<u>\$ 334,388</u>
Rounded	<u>\$ 33,000</u>	<u>\$ 334,000</u>

- (2) Annual owner's cash flow multiplier, with a multiplier between 2 and 5.

The value range under this method is calculated as follows:

Normalized Owner's Cash Flow	\$420,289	\$ 420,289
Multiplier	x 2.0	x 5.0
Indicated Value	\$840,578	\$2,101,445
Add Retained Assets	(418,417)	(418,417)
Enterprise Value	<u>\$422,161</u>	<u>\$1,683,028</u>
Rounded	<u>\$422,000</u>	<u>\$1,683,000</u>

The problems with using rules of thumb are apparent when reviewing the wide divergence of values that are calculated, with little data supporting the conclusions. Although rules of thumb can sometimes be used as a sanity check on other methodologies employed by a valuation analyst, they should never be considered as a stand alone, viable, appraisal method. In exhibit 18.12, the rules of thumb created values ranging from \$33,000 to \$1,683,000, a 5,000 percent swing in values. Very meaningful, isn't it?

## STATUTORY RULE VALUE

Once in a while, the valuation analyst will find a provision that is built into a professional licensing law that may require a particular methodology to be used in certain circumstances. If there is a statutory valuation method required, use it. Even if it is not required, it may give you one more indication to consider. Box 18.4 contains a section of a report dealing with a statutory methodology.

**Box 18.4 Statutory Valuation Method**

The State of Arkansas has passed laws governing business formation and conduct within Arkansas. The Arkansas Professional Corporation Act, in particular, governs the formation; corporate names; limitations on officers; directors and shareholders; employees; certification; and price of shares of deceased or disqualified shareholders.

Although this valuation does not deal with a deceased or disqualified shareholder, the statute does provide guidance in determining value. The statute states:

**4-29-213. Shares of deceased or disqualified shareholder—Price.**

If the articles of incorporation or bylaws of a corporation subject to this subchapter fail to state a price or method of determining a fixed price at which the corporation or its shareholders may purchase the shares of a deceased shareholder or a shareholder no longer qualified to own shares in the corporation, then the price for the shares shall be the book value as of the end of the month immediately preceding the death or disqualification of the shareholder. Book value shall be determined from the books and records of the corporation in accordance with the regular method of accounting used by the corporation.

In accordance with this statute, the value of John Smith & Company is determined as \$125,186, as stated in the balance sheet dated December 31, 1991, located in Schedule 1 at the end of this report.

While the statutory method discussed in box 18.4 did not provide us with anything that was even remotely close to the values that we derived (other than the low end of the rule of thumb), it turned out to be pretty useful. In this valuation, the IRS was challenging the buyout of the senior partner from this accounting practice. In fact, the IRS agent claimed that the practice was worth a fortune. Unfortunately, he used the high end of a rule of thumb. Even the statutory method showed that it was not worth anywhere near what the agent came up with.

**ASSET BASED APPROACH**

More often than not, an adjusted balance sheet may be created for the purpose of figuring out what the value of the assets and liabilities are that may be retained by the owners if a market approach (transaction method) valuation is performed. Other times, it will be done to allow an excess earnings methodology to be used in the valuation. Using the asset based approach will really depend on the composition of the asset base of the practice. Since so many practices get the majority of their value from the intangible assets, going through the tedious exercise of reviewing each balance sheet item and valuing them separately may make little sense. However, there may be some assets that we discussed earlier that may need to be valued even if a full balance sheet valuation is not performed. You need to use your head. I hope that you don't need this next exhibit, but in case you do, exhibit 18.13 demonstrates the result of an adjusted book value methodology being applied to a professional practice (tangible assets only) without the explanations of each adjustment because you have seen many of them before. This book is already thick enough without repeating this stuff again.

**EXHIBIT 18.13****ADJUSTED BOOK VALUE PRESENTATION TANGIBLE ASSETS ONLY**

**ADJUSTED BOOK VALUE.** The firm's balance sheet was prepared as of December 31, 2006, a couple of days prior to the valuation date. Book value rarely reflects the fair market value of the company's balance sheet, and therefore, certain adjustments were deemed necessary by the valuation analyst. Table 2 reflects this analysis.

*(Continued)*

EXHIBIT 18.13 (Continued)

<b>TABLE 2</b>			
<b>BALANCE SHEET</b>			
	<b>Book Value</b>	<b>Adjustments</b>	<b>Adjusted Book Value</b>
<b>Current Assets</b>			
Cash	\$ 74,365	—	\$ 74,365
Accounts Receivable	—	97,464	97,464
Advances	(14,719)	—	(14,719)
Work-in-Progress	—	51,305	51,305
Prepaid Insurance	—	8,4813	8,481
Other Investments	6,875	—	6,875
<b>Total Current Assets</b>	<b>\$ 66,521</b>	<b>\$ 157,250</b>	<b>\$ 223,771</b>
Gross Fixed Assets	\$ 47,969	\$ (7,739)	\$ 30,230
Accumulated Depreciation	(42,966)	42,966	—
<b>Net Fixed Assets</b>	<b>\$ 5,003</b>	<b>\$ 25,227</b>	<b>\$ 30,230</b>
<b>Other Assets</b>			
Cash Surrender Value of Officer's Life Insurance	75,000	—	75,000
<b>TOTAL ASSETS</b>	<b><u>\$146,524</u></b>	<b><u>\$ 182,477</u></b>	<b><u>\$ 329,001</u></b>
<b>Current Liabilities</b>			
Mortgages and Notes Payable (Current)	\$ 6,519	\$ —	\$ 6,519
Unfunded Deferred Compensation Payable	—	39,059	39,059
Funded Compensation Payable	—	75,000	75,000
Taxes Payable	6,968	—	6,968
<b>Total Current Liabilities</b>	<b>\$ 13,487</b>	<b>\$ 114,059</b>	<b>\$ 127,546</b>
<b>Long-Term Liabilities</b>			
Unfunded Deferred Compensation Payable	\$ —	\$ 530,486	\$ 30,486
Loans from Stockholders	7,851	—	7,851
<b>Total Long-Term Liabilities</b>	<b>\$ 7,851</b>	<b>\$ 530,486</b>	<b>\$ 538,337</b>
<b>Total Liabilities</b>	<b>\$ 21,338</b>	<b>\$ 644,545</b>	<b>\$ 665,883</b>
<b>Stockholders' Equity</b>			
Common Stock	\$ 200	\$ —	\$ 200
Paid—In Capital	8,910	—	8,910
Retained Earnings	116,076	(462,068)	(345,992)
<b>Total Stockholders' Equity</b>	<b>\$125,186</b>	<b>\$(462,068)</b>	<b>\$(336,882)</b>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b><u>\$146,524</u></b>	<b><u>\$ 182,477</u></b>	<b><u>\$ 329,001</u></b>



## CONCLUSION

Valuing a professional practice is not too terribly different than valuing other types of businesses. However, the valuation analyst must understand the unique aspects of each type of practice if a reasonable value is to be determined. I hope that this chapter gave you some things to think about the next time (or the first time) you value a professional practice.



# CHAPTER 19

## Shareholder Disputes

### CHAPTER GOALS

In this chapter, I will attempt to explain the following:

- What causes shareholder disputes
- The difference between dissenting and oppression cases
- The impact of case law on the standard of value
- Valuation methodologies accepted by the courts
- Anything else that comes to me (by now, you should know me)

### INTRODUCTION

Before I begin, let me start off with some attribution for the materials that are included in this chapter. In addition to my own stuff, valuable information came from my reading, and in some instances, from adapting portions of materials from *Valuing a Business*<sup>1</sup> and *The Handbook of Advanced Business Valuation*.<sup>2</sup> I told you earlier, if it ain't broke, don't fix it. These books, in addition to so many other materials, have allowed me to organize this chapter.

I probably should not have to state this up front, but I want to play it safe. Shareholder disputes typically result from a minority owner who feels that he or she (or they) have not been treated fairly by those who have control over the company. A controlling shareholder would probably not have to file a lawsuit against himself or herself. Therefore, individuals who own minority interests in closely held corporations are subject to an additional element of risk solely because they have a minority position in the corporation. The major risk factor is that they cannot exercise the prerogatives of control that were discussed in chapter 12. As such, this significant lack of control causes them to have a lack of liquidity because who in their right mind wants to buy minority shares in a closely held company? As a result, they are prisoners in the company. Box 19.1 indicates what a minority shareholder typically cannot do because he or she does not have exercisable control.

#### Box 19.1 Common Exercisable Majority Shareholder Rights

- Appoint or change operational management
- Appoint or change members of the board of directors
- Determine management compensation and perquisites
- Set operational and strategic policy and change the course of the business
- Acquire, lease, or liquidate business assets, including plant, property, and equipment
- Select suppliers, vendors, and subcontractors with whom to do business and award contracts
- Negotiate and consummate mergers and acquisitions
- Liquidate, dissolve, sell out, or recapitalize the company
- Sell or acquire treasury shares
- Register the company's debt or equity securities for an initial or secondary public offering
- Declare and pay cash or stock dividends, or both
- Change the articles of incorporation or bylaws
- Select joint ventures and enter into joint venture and partnership agreements
- Determine business policy
- Enter into license or sharing agreements regarding intellectual properties
- Block any or all of the above actions

<sup>1</sup> *Valuing a Business*, 4th edition by Pratt, Reilly and Schweis has some excellent materials throughout their book.

<sup>2</sup> *The Handbook of Advanced Business Valuation*, edited by Robert Reilly and Robert Schweis. See in particular chapter 15, authored by Anne C. Singer and Jay E. Fishman.

These items are the prerogatives of control that were previously discussed. These are also the reasons for many shareholder lawsuits. When the minority shareholder feels that the controlling shareholder is taking advantage or mismanaging the company, a lawsuit frequently takes place. There are also times that the shareholder may be squeezed out of the company, triggering a lawsuit. I will attempt to explain this stuff soon.

Many times, in a closely held company, the minority shareholder is an officer or employee of the company, rather than purely an investor. Disputes arise when the controlling shareholder decides to:

- terminate the minority shareholder as an employee, director, or officer of the corporation.
- change his or her salary.
- completely *freeze out* the minority shareholder.
- otherwise abuse him or her (this abuse is called *oppression*).

In order to avoid allowing controlling shareholders to take advantage of the minority shareholders, most jurisdictions have passed laws to protect the underprivileged. These laws provide minority shareholders with remedies for actions regarding fraud, abusive behavior, and mismanagement by the controlling shareholder. These laws are frequently referred to as *oppressed shareholders' statutes* or *dissolution statutes*.

Every jurisdiction has enacted dissenters' rights statutes. These statutes provide an appraisal remedy for the minority shareholder who does not agree with certain types of transactions approved by the controlling shareholders that have a financial impact on the value of the minority shares. In these instances, the statutes generally provide the remedy of allowing the shares to be sold.

Despite the different reasons for dissenting and oppressed shareholder suits, the standard of value in most of these cases is *fair value*. For dissenting shareholders, the purchase of their stock for fair value is usually the only remedy. For minority shareholders, seeking a remedy for oppression, fraud, mismanagement, or similar problems, the courts frequently have more latitude as to the remedy. In most instances, the minority shareholder will be allowed to sell his or her shares back to the corporation at fair value. In some instances, the shareholder may be entitled to compensation as a measure of damages—but for the mismanagement of the company, the shares would have been worth this much. In a very rare situation, the court<sup>3</sup> allowed the minority shareholder to buy out the controlling shareholders. Our firm was actually involved in that case! Justice was truly served when our client was allowed to purchase the shares of the controlling shareholders and keep the company that he had worked so hard to build. Once in a while, there really is justice in our legal system.

Because oppressed and dissenting shareholders rarely, if ever, have a ready market for their stock on the open market, as do stockholders in publicly traded companies, fair value is an important standard of value to insure that the minority shareholders receive adequate consideration for their investment.

As discussed in chapter 4, *fair value* is not clearly defined, but it is used in the vast majority of dissenters' rights<sup>4</sup> and oppressed shareholders' statutes. Unlike the term *fair market value*, this term is rarely, if ever, defined in a statute. Therefore, the definition has been left to judicial interpretation. You must check with your client's attorney for the interpretation in the jurisdiction in which the litigation takes place. This stuff can get very tricky when it comes to control versus minority issues, as well as marketable versus nonmarketable issues.

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## DISSENTING SHAREHOLDER MATTERS

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Minority shareholders who believe that the value of their shares in a company that is undergoing, for example, some form of transaction, recapitalization, or merger, is greater than the proposed consideration to be received by them are entitled, by statute, to dissent from the transaction, recapitalization, or merger. This generally means that they have to file a lawsuit. The lawsuit usually says something like "I'm not getting what I believe to be the fair value of my shares, and I want more." Most of the time, these matters come about because of a merger; however, dissenting shareholders' rights may also come into play when a corporation sells substantially all of its corporate assets or makes certain changes in its basic organizational structure that results in its shareholders being compelled to sell their shares for what is perceived to be an unfair price. Notice the use of the word *compelled*. They

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<sup>3</sup> *Muellerberg v. Bikon Corp.*, 143 N.J. 167, 182, 669 A.2d 1382, 1389 (1996)

<sup>4</sup> Not all states have adopted the fair value standard in dissenters' cases.

usually do not have a choice. Remember the definition of fair market value—neither party is compelled. Here the seller is compelled. In most cases, the dissenting shareholder's only remedy is to seek an independent appraisal as the basis for an alternative cash settlement. A relatively new book that nicely summarizes the case law as it pertains to different definitions of value is *Standards of Value*, which I mentioned previously in this book.

In dissenting shareholder actions, the appropriate standard or premise of value is "fair value." In states that have adopted the Uniform Business Corporation Act, the definition of fair value is "the value of the shares immediately before the effectuation of the corporate action to which the dissenter objects, excluding any appreciation or depreciation in anticipation of the corporate action unless exclusion would be inequitable." However, even in those states that have accepted this definition, there is little guidance as to what this truly means. What is somewhat clear, and actually seems to be agreed upon by most courts, is that fair value is not synonymous with fair market value.

Because the definition of fair market value involves the hypothetical willing buyer and the hypothetical willing seller, where neither party is under any compulsion to buy or sell, there should be little doubt that a minority stockholder of a company involved in a statutory merger is a specific seller (not hypothetical), and is compelled to sell for a unilaterally determined price. In the absence of the right to refuse the "offer," a dissenting shareholder has no choice but to seek fair value with the court's help.

Under the Principle of Alternatives, discussed in chapter 4, the hypothetical willing seller, in a free and open market, has the option of rejecting a tender offer. As a result, the hypothetical buyers are typically motivated to pay a (control) premium in order to entice sellers to forego future participation or ownership. Distinctions between fair market value and fair value notwithstanding, guidance concerning the interpretation and application of fair value as evidenced by case law varies considerably between the jurisdictions.

One of the most important determinations impacting the calculation of fair value is the appropriate level of value—minority or controlling interest, marketable or nonmarketable basis. The case law is literally all over the place. In *Standards of Value*, the authors discuss various interpretations of the courts. I am not going to repeat it here. For the most part, my interpretation of the case law is that in dissenting shareholder suits, typically the shares are valued as a pro rata share of the whole company. Logically, if the entire company was being sold, the minority shareholder would get a proportionate share of the transaction. Minority discounts are a concept applicable to fair market value. Because each shareholder should have the same value per share, minority discounts in fair value cases do not make sense. In fact, at least in the state of Florida, the legislation made sure that this would not be an issue. The law was modified, effective January 1, 2006, to include a provision that states:

- (4) "Fair value" means the value of the corporation's shares determined:
  - (a) Immediately before the effectuation of the corporate action to which the shareholder objects.
  - (b) Using customary and current valuation concepts and techniques generally employed for similar businesses in the context of the transaction requiring appraisal, excluding any appreciation or depreciation in anticipation of the corporate action unless exclusion would be inequitable to the corporation and its remaining shareholders.
  - (c) For a corporation with 10 or fewer shareholders, without discounting for lack of marketability or minority status.<sup>5</sup>

Case law for dissenting shareholder actions also seems to discourage the use of marketability discounts in the calculation of fair value. This is primarily due to the fact that there is some sort of transaction being proposed. This makes a market for the shares. Accordingly, the use of a marketability discount in calculating the fair value of the subject shares is not warranted. However, considering the complexity and contradictory nature of the case law in this arena, you should always rely on the advice of counsel on this issue.

Minority shareholders who believe that certain fundamental or extraordinary corporate changes voted by the controlling shareholders will adversely affect the value of their interest in the company have statutory rights available as dissenters. Currently, the statutes of all states permit such shareholders to dissent from the controlling shareholders' action, compelling the corporation to purchase their stock.

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<sup>5</sup> The 2007 Florida Statutes, Title XXXVI, Chapter 607, Sec. 607.1301 Appraisal Rights; Definitions.

In Delaware, the jurisdiction that sees an awful lot of this type of litigation, only a merger or consolidation triggers dissenters' rights. However, under the statutes of most states, dissenters' rights are triggered by a variety of actions, such as a merger, sale, lease, exchange, or other disposition of all or substantially all of the corporate stock.

Under normal circumstances, shareholders who wish to exercise their rights must give notice in advance of the vote to the corporation that they intend to demand payment for their shares if the proposed action is approved. The stockholder must then make a written demand for payment within some time period of the mailing of notice, advising that the corporate action was approved. In some jurisdictions, once the demand for payment is made, the dissenting shareholder no longer continues "to have any rights of a shareholder, except the right to be paid the fair value of his shares..."<sup>6</sup>

For example, in New Jersey, the applicable statute provides that the corporation must mail to each dissenting shareholder the financial statements of the corporation as of the latest available date and profit and loss statements for a 12-month period ending on the date of the balance sheet. The corporation may, at the time of this mailing, make a written offer to purchase the dissenting shareholders' shares at a specified price, deemed to be the fair value. If no agreement as to fair value is reached within the statutory time period, the dissenting shareholder may serve a demand on the corporation that it commenced an action to determine fair value. Once the action is initiated, the court may appoint a valuation analyst to estimate the fair value of the dissenter's shares.

## OPPRESSED SHAREHOLDER MATTERS

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An oppressed shareholder case is, in effect, the "War of the Roses" between shareholders instead of husband and wife. These types of cases provide relief to a noncontrolling shareholder in a closely held business who seeks such relief for the controlling shareholder's fraud, oppression, or mismanagement. Courts have recognized that relief is frequently necessary for shareholders in closely held corporations because of the unique nature of a closely held entity. In a closely held company

- shareholders who are employed by the company often expect to be active participants in management.
- when disagreements occur, the controlling shareholder usually has the ability to use his or her power to unfairly take advantage of the minority shareholder, preventing the minority shareholder from obtaining a fair return on his or her investment.
- the illiquidity associated with the minority shareholder's stock means that he or she may not be able to get out of the investment that he or she no longer wants.

Although courts usually have a number of equitable remedies available, including corporate dissolution, the most common remedy afforded minority shareholders is an award of fair value for their stock.

The buyout remedy provides the minority shareholder with the ability to liquidate an otherwise relatively illiquid investment. If the system works properly, it provides the minority shareholder with a fair return on his or her investment, and it divorces people who do not want to stay married in business.

Under most of the state statutes, the minority shareholder cannot just waltz into court and get the fair value for his or her stock. The shareholder usually has to prove oppression, fraud, or mismanagement before the court will order a buyout at fair value. In certain jurisdictions, once a minority shareholder files a lawsuit requesting dissolution of the corporation on the basis of oppression or related grounds, the controlling shareholder can automatically elect to purchase the shares of the minority shareholder for fair value.<sup>7</sup> This turns the case into nothing more than a simple stock purchase, eliminating the allegations of oppression or wrongdoing. In some jurisdictions, the alternative of purchasing a minority shareholder's stock is irrevocable, absent court approval. In other states, the corporation may elect not to proceed with the purchase if it is dissatisfied with the value eventually set by the court for the stock. Once again, good, inconsistent laws make our job difficult. But that is why we get paid the big bucks!

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<sup>6</sup> This is the language that appears in N.J.S.A. (14A:11-3(2)).

<sup>7</sup> For example, Rev. Model Act, ( 14.34 (1995 Supp.); Alaska Stat. ( 10.06.628(b) (1998); N.Y. Bus. Corp. Law (1104-a, 1118 (McKinney's 1998 Supp.); Cal. Corp. Code (2000 (West 1995)).

The payment of fair value to an oppressed shareholder has been recognized as a complete and just remedy for oppression. The Delaware Supreme Court has said that fair value “measures that which has been taken from [the shareholder], viz., his proportionate interest in a going concern.”<sup>8</sup>

## FAIR VALUE

A proper understanding and definition of the applicable standard of value is a key to achieving a proper conclusion of value. The failure to stick to the correct standard of value can cause otherwise qualified business valuation analysts to greatly differ in their conclusions.

As mentioned previously, fair value is rarely legislatively defined. As a business valuer, this often leads to confusion about the meaning of fair value in the context of these assignments. Moreover, even when the courts have addressed this issue, legal precedents can be vague or contradictory and, therefore, offer inadequate guidance as to the application of the fair value standard. The dissenters’ rights section of the Model Act does not provide any direction as to how fair value is to be determined, although it contains a definition. This definition states

“Fair value,” with respect to a dissenter’s shares, means the value of the shares immediately before the effectuation of the corporate action to which the dissenter objects, excluding any appreciation or depreciation in anticipation of the corporate action unless exclusion would be inequitable.<sup>9</sup>

The definition contained in the Model Act has varied at the state level. Although some states have adopted that identical definition, other states use the definition without the final phrase “unless exclusion would be inequitable.”<sup>10</sup> Some states use terms such as “fair cash value,”<sup>11</sup> “value,”<sup>12</sup> or even “fair market value.”<sup>13</sup> This is why you must know the rules of the jurisdiction.

The American Law Institute’s concept of fair value as explained in *Principles of Corporate Governance* defines fair value as

... the value of the eligible holder’s proportionate interest in the corporation, without any discount for minority status or, absent extraordinary circumstances, lack of marketability. Fair value should be determined using the customary valuation concepts and techniques generally employed in the relevant securities and financial markets for similar businesses in the context of the transaction giving rise to appraisal.<sup>14</sup>

Fair value will usually be different than fair market value. Because fair market value refers to the price at which stock would be bought and sold in the marketplace, the estimation of the value of a minority shareholder’s stock under this standard may include a discount for lack of marketability and a discount for minority ownership interest. The methodology used in a fair value appraisal may also be different than in a fair market value appraisal. This could be the case where the *market* price of stocks is not reflective of the *true* value of the guideline companies, resulting in a market value, but not a fair value, of the subject interest. If you do not think that this matters, think again. There can be times that the *true* value of what a shareholder is giving up may be miles apart from the fair market value of that interest. Exhibit 19.1 reflects a portion of a fair value report where we were attempting to reconcile the differences between the market approach and the income approach.

<sup>8</sup> *Matter of Shell Oil Co.*, 607 A.2d 1213, 1218 (Del. 1992) (citations omitted), quoting *Tri-Continental Corp. v. Battye*, 74 A. 2d 71, 72 (Del. 1950); see also *Beerly v. Dept. of Treasury*, 768 F. 2d 942 (7th Cir. 1985)

<sup>9</sup> Model Act, §13.01(3).

<sup>10</sup> The statutes of approximately 27 states contain the same definition of fair value. Approximately 14 other states, including New Jersey, N.J.S.A. §14A: 11-3, use the same general concept of fair value without the final phrase “unless exclusion would be inequitable.”

<sup>11</sup> Ohio Rev. Code Ann. §1701.85(C) (Page’s 1997 Supp.) (defined in the same way as fair market value); La. Rev. Stat. Ann. §12:131C(2) (West 1998 Supp.).

<sup>12</sup> Kas. Stat. Ann. §17-6712 (1997 Supp.).

<sup>13</sup> Cal. Corp. Code §1300(a) (West 1998 Supp.).

<sup>14</sup> *Principles of Corporate Governance: Analysis and Recommendations*, Volumes 1 and 2, The American Law Institute, Section 7.22: 315.



### EXHIBIT 19.1

## MEASURING THE TRUE WORTH OF WHAT IS BEING GIVEN UP RECONCILIATION OF VALUES

In this appraisal, various approaches to value were considered. The asset approach was eliminated because it did not consider the earnings potential of the Smith Entities. The remaining approaches resulted in the following:

Income approach	
Discounted cash flow	\$194.0 Million
Market approach	
MVIC to EBIT	148.0 Million
MVIC to debt free net income	159.0 Million

We believe that the income approach results in the closest indication to fair value. The market approach is more indicative of fair market value. The pricing multiples are considerably lower than the intrinsic value of the guideline companies when considering the outlook for the future.

We further researched information in the public domain from the valuation date back, to attempt to resolve the issues of the market price of the stocks in the trucking industry. The following information summarizes our findings:

- *Fortune*—September 18, 2000

These are dark days for the trucking sector. Gas prices are soaring, the economy is slowing down, and interest rates are still one big question mark. Maybe that's why shares of trucking companies linger at about book value. But at least one fund manager—PBHG Small Cap Value's Jerome Heppelmann—thinks it's time to buy. He's boosting his funds' weighting in trucking stocks from 2.5% to 4%, namely, with four companies: Swift Transportation, JB Hunt Transport Services, Covenant Transport, and US Xpress.

- *Morgan Keegan*—November 28, 2000

For regional, less-than-truck-load (LTL) carriers, rate increases have been gained more consistently. The LTL carriers in general pushed through a 4–6% rate increase this fall, which typically covers one-half of their revenue base. The other one-half of the revenue base is typically contractual in nature and rate increases are sought as contracts expire. Truckers report that the pricing environment for LTL service is as good as it has been in recent memory. An estimated \$1.0 to \$1.5 billion in annual revenue/capacity has been taken out of the industry in the past two years as three major regional LTL carriers have ceased operations. This removal of capacity has been good for the remaining players. We believe regional LTL carriers are also benefiting from secular changes in shipping trends. As more and more distributors, manufacturers, and retailers practice just-in-time inventory management, the need for high service freight delivery increases. Just-in-time also means smaller, more frequent shipments. Both of these dynamics favor the service sensitive product offering of the LTL carriers.

A quick review of table 5 shows us that our list of trucking companies, without exception, are all trading at a discount to their respective average P/E calculated over the past three years. Most are trading within earshot of their low P/E over that three-year time period, well below the high P/Es achieved.

## EXHIBIT 19.1

**TABLE 5**  
**COMPARISON OF P/E RATIOS**

	<b>Historical P/E Hi—Low / Avg</b>	<b>P/E on MK 2001 Estimate</b>	<b>P/E on MK EPS w/ (10%) Rev. Shortfall</b>	<b>P/E on MK EPS w/ 2% OR Increase</b>	<b>P/E on MK EPS w/ Both Events</b>
CVTI	24.5–5.3 / 13.2	8.1	9.5	15.2	18.5
HTLD	31.8–11 / 17.3	15.4	16.9	16.9	18.5
KNGT	34.8–11.1 / 21.6	11.8	13.3	13.6	15.3
MSCA	22.8–6.6 / 14	11.6	13.7	21.6	27.4
CRGO	11–4.8 / 8.1	5.4	6.0	7.0	7.8
SWFT	27.9–11.5 / 19.8	16.5	18.6	21.4	24.3
XPRSA	38.6–5 / 16.5	10.0	12.5	NM	NM
USFC	18.4–4.8 / 12.1	7.3	8.1	10.1	11.5
WERN	22.4–8.9 / 15	13.0	14.5	18.0	20.2

In our opinion, current valuations placed on our recommended truckers have assumed a recessionary environment in the year ahead. As industry conditions toughen, whether due to a slowing level of freight activity or higher fuel prices, or other reasons, we believe that consolidation will favor many of the carriers in our list of coverage. Though it is difficult to pound the table with doubt hanging over the growth prospects for 2001, we strongly encourage investors to have some exposure to the truckers on our coverage list.

Therefore, in our opinion, the fair value of the Smith Entities as an operating concern is estimated to be \$194.0 million.

 **Author's Note**

We found that the investment bankers who followed most of the guideline companies had strong buy recommendations for these stocks. This added further proof that the market was undervaluing the companies. The Smith Entities were financially strong, postured for solid growth, and had a proven track record. Our client had also received very substantial dividends over the past 10 years. We believed that just because the stock market was depressed for the guideline companies, it was no reason to undervalue the subject company. This is why we concluded that the income approach better reflected the true or intrinsic value of what was being given up.

P.S. The court agreed with us

Shareholder disputes often include a battle as to which discounts, if any, should be applied in a fair value context. While it is the intention of the court to be equitable, these discounts are the cause of extremely contentious litigation.

The New Jersey Supreme Court decided two separate cases on the same day, one dealing with a dissenting shareholder issue and the other dealing with an oppressed shareholder issue. The contrasting issues of which discounts, if any, should be considered by the court were addressed in these two rulings, which were explained in our firm's newsletter and reproduced here in box 19.2.

**Box 19.2 Trugman Valuation Associates, Inc. Newsletter, *Valuation Trends*, Winter 2000 edition**

In July 1999, the Supreme Court of New Jersey ruled on two fair value cases. One of these cases was filed as a dissenting shareholder action, while the other was filed under the New Jersey Oppressed Shareholder Statute. Although there were several issues on appeal in each case, the commonality between them was the issue of a discount for lack of marketability (DLOM). While we recognize that all of our readers are not from New Jersey, we felt that these two cases are a good follow up to the last issue's article. These cases highlight the differences that can arise under the same standard of value.

The *Lawson Mardon Wheaton, Inc. v. Smith* (A-63/64-98) case deals with a family owned business. After a number of shares of this family owned business were sold or conditionally sold to a British company, the board of directors approved a plan to restructure the corporation. The reason for this restructuring was to keep the stock in the family by restricting future public sales of the company's stock. When the plan was approved in 1991, those stockholders who did not approve were notified of their right to demand payment of the fair value of their shares under N.J.S.A. 14A:11-1 to -11, also known as the Appraisal Statute. Twenty-six shareholders owning approximately 15 percent of the shares dissented and demanded payment for their shares. The corporation offered \$41.50 per share, which included the deduction of a 25 percent DLOM. This discount was based on the belief that there was a limited market of potential buyers for this stock. When the dissenters rejected this offer, this action was instituted.

Both the trial court and the appellate court determined the price of the stock after considering a DLOM finding that there were "extraordinary circumstances" in this situation giving applicability to this discount. The Supreme Court disagreed.

The Supreme Court's opinion stresses the nature of the term *fair value* and states "courts must take fairness and equity in account in deciding to apply a discount to the value of the dissenting shareholders' stock in an appraisal action." The court goes on to say

Indeed, equitable considerations have led the majority of states and commentators to conclude that marketability and minority discounts should not be applied when determining *fair value* of dissenting shareholders' stock in an appraisal action. Although there is no clear consensus, the use of a *fair value* standard, combined with application of equitable principles, has resulted in a majority of jurisdictions holding that a dissenting shareholder is entitled to her proportional share of the fair market value of the corporation. The value of the shares will not be discounted on the ground that the shares are a minority interest or on the related grounds of a lack of liquidity or marketability.

In addressing the issue of extraordinary circumstances, the Supreme Court disagreed with the lower courts. According to the decision, extraordinary circumstances exist when a dissenting shareholder holds out in order to benefit him or herself by doing so. In this case, the court felt that disagreeing (dissenting) to a corporate change was not extraordinary, but rather an ordinary business matter.

In light of the issue of fairness, and the fact that extraordinary circumstances did not appear to exist, the Supreme Court overturned the lower court on these issues and held that a discount for lack of marketability was not applicable in this case.

On the same date, the court ruled in the opposite direction in *Emanuel Balsamides, Sr., et. al. v. Protameen Chemicals, Inc., et. al.* (A-27-1998), which was an action brought under the New Jersey Oppressed Shareholder Statute (N.J.S.A. 14A:12-7).

In this case, Messrs. Balsamides and Perle were equal partners in a manufacturing business. After many years of jointly running the business, the partners began having trouble working together, and over a number of years, this relationship deteriorated. Mr. Balsamides sought relief as an oppressed shareholder. Under this statute, if the court finds the plaintiff to be oppressed, the court "may appoint a custodian, appoint a provisional director, order a sale of the corporations stock [as provided below], or enter a judgment dissolving the corporation..." After a 19-day trial, the court found that Mr. Balsamides was oppressed, that Mr. Perle had conducted himself in such a way as to harm the business, and concluded that Mr. Balsamides should purchase Mr. Perle's share of the business. The trial court determined the purchase price of these shares of stock after the deduction of a 35 percent DLOM.

The case was appealed to the appellate division, which overturned the trial court's decision relating to this discount. The Appellate Court "concluded that such a discount was not appropriate in this case because there was no sale of Perle's stock to the public, nor was Balsamides buying an interest that might result in the later sale of that interest to the public."

The case was then appealed to the Supreme Court, which overturned the appellate division on the issue of the discount for lack of marketability. The decision stated

**Box 19.2 Trugman Valuation Associates, Inc. Newsletter**

The position of the Appellate Division ignores the reality that Balsamides is buying a company that will remain illiquid because it is not publicly traded and public information about it is not widely disseminated. Protameen will continue to have a small base of available purchasers. If it is resold in the future, Balsamides will receive a lower purchase price because of the company's closely held nature.

If Perle and Balsamides sold Protameen together, the price they received would reflect Protameen's illiquidity. They would split the price and also share that detriment. Similarly, if Balsamides pays Perle a discounted price, Perle suffers half the lack-of-marketability now; Balsamides suffers the other half when he eventually sells his closely-held business. Conversely, if Perle is not required to sell his shares at a price that reflects Protameen's lack of marketability, Balsamides will suffer the full effect of Protameen's lack of marketability at the time he sells.

In the *Balsamides* decision, the Supreme Court distinguishes the two cases. In summary, the cases are distinct based on the facts and the different statutes under which these cases arise. Regarding *Wheaton*, the court states, "it would be unfair and inequitable to apply a marketability discount. To allow the major shareholders to buy out the minority dissenters at a discount would penalize the minority for exercising their statutory rights. Moreover, it would create the wrong incentives for shareholders." Regarding the *Balsamides* decision, the court states, "In cases where the oppressing shareholder instigates the problems, as in this case, fairness dictates that the oppressing shareholder should not benefit at the expense of the oppressed. The statute does not allow the oppressor to harm his partner and the company and be rewarded with the right to buy out that partner at a discount. We do not want to afford a shareholder any incentive to oppress other shareholders."

Despite the differences that appear to exist in the cases, the bottom line appears to be that the court is looking for all shareholders to be treated fairly, regardless of the circumstances.

## THE VALUATION DATE

An appraisal is an estimate of value at a given point in time. The date of the appraisal, whether statutorily mandated or otherwise, is of great importance. And by now, you know that. Most state statutes provide that when a dissenting shareholder's stock is to be purchased, fair value is determined as of the day prior to the meeting of shareholders at which the action dissented from was opposed. You must get a copy of the statute and read it. For example, the New Jersey statute provides: "In all cases, fair value shall exclude any appreciation or depreciation resulting from the proposed action."<sup>15</sup> This means that the dissenting shareholder does not get credit for any gain, nor is he or she penalized for any loss that results from the action from which he or she dissented. This actually makes sense when you think about it.

Under the fair market value concept, the valuation analyst only uses information known or knowable as of the date of the valuation. Under the fair value concept, some courts have allowed subsequent information to be used as well. For example, the Delaware Supreme Court has ruled that the language limiting consideration of some post-merger changes in value eliminates the consideration of the speculative elements of value created by the merger. It does not rule out consideration of elements of future value, including the nature of the enterprise, "that are known or susceptible of proof as of the date of the merger and not the product of speculation . . ."<sup>16</sup>

In reading the statutes, pay close attention to the wording. For example, under the New Jersey statute applicable to oppressed shareholders, the purchase price of any shares sold "shall be their fair value as of the date of the commencement of the action plus or minus any adjustments deemed equitable by the court."<sup>17</sup> Notice the phrase "plus or minus any adjustments deemed equitable by the court." This gives the court latitude to do the fair thing. Many times, equitable adjustments will be made by the court. In some instances, it will be the role of the valuation analyst to provide these adjustments to the judge or jury. Exhibit 19.2 demonstrates a section of a valuation report in a fair value litigation. This section was at the end of the valuation. Our client was going to be bought out. The valuation date was determined by the court to be January 31, 1996.

<sup>15</sup> N.J.S.A. '14A: 11-3(3)(c).

<sup>16</sup> *Weinberger v. UOP, Inc.*, 457 A.2d 701 (Del. 1983); see also *Cede & Co. v. Technicolor, Inc.*, 684 A.2d 289 (Del. 1996)

<sup>17</sup> N.J.S.A. '14A: 12-7(8)

## EXHIBIT 19.2

### EQUITABLE ADJUSTMENT ANALYSIS

At the request of Tom Sawyer, Esq., Trugman Valuation Associates, Inc. has performed an analysis that is intended to assist the court regarding the issues raised in *William C. Musto v. Vincent G. Vidas, John S. Degnan, and Semcor, Inc.* (333 N.J. Super. 52 (App. Div. 2000)), particularly regarding the issues of interest and double recovery. Interest is considered under N. J. S. A. 14A:12-7(8)(d).

**Interest.** N.J.S.A. 14A:12-7 (8)(d) provides that:

Interest may be allowed at the rate and from the date determined by the court to be equitable, and if the court finds that the refusal of the shareholder to accept any offer of payment was arbitrary, vexatious, or otherwise not in good faith, no interest shall be allowed.

The court selected January 1996 as the valuation date, but the monies will not be paid to Susan Littleton until sometime in the future, many years after the valuation date. The statute compensates for the time lag through a consideration of interest. We must determine an appropriate interest rate.

In *Musto*, an argument was made regarding the use of an "equitable interest rate."

The court determined that the interest rate to be used should be a rate that pertains to a creditor/lender as opposed to an equity owner. In fact, Judge Gottlieb used the prime lending rate, compounding the interest annually. He stated

Now interest. Defendants urge that it be not available but realistically as—a cutoff as of March 1992. This is when the several motions were made which memorialized a buy-out offer of the other. I'm not going to go on with that because then that overlooks the ultimate fact and that is that defendant had the use of plaintiff's money....

What I have selected for the use of an interest rate payable here is the prime rate and why I have selected the prime rate is, it is most analogous to a corporate borrower and in light of Semcor's solid financial position....

I am not going to use the risk free rates, and by that I refer to the treasury notes, treasury bills, CDs, that sort of thing, since that would be intellectually inconsistent with my earlier determination of fair value where I said the cap rate which I have to apply.... to the income stream or reasonable income in order to arrive at the formulation of value, put a certain amount in there additional for Semcor not being, "risk free."

I have thought about....whether it should be compound or simple.... What I've done is try, since I'm using the prima [sic] rate.... to figure out if it were going to ABC Bank what it would be doing in borrowing X dollars for two years, four years, whatever it is, some period longer than one year.

In that marketplace, to my knowledge, it would be compounded on an annual basis at best, maybe compounded at a shorter period of time. That's why I have chosen compounding as opposed to simple. I have chosen annual as opposed to quarterly compounding only because it seems to me that in the light of the events that occurred if it had been the equivalent circumstance the lending of money to Semcor would have been on probably not a quarterly compounding basis but on an annual.

In this instance, the fair value of Susan Littleton's interest in the Littleton Entities was determined to be \$44,100,000 as of January 31, 1996. Interest should be added from that date.

In *Musto*, the court used the prime rate because "it is most analogous to a corporate borrower and in light of Semcor's solid financial position...." According to the 1995 financial statements for the operating Littleton Entities, the interest rates being paid by these companies were as follows:

Notes payable to banks due in installments through December 2002 at interest rates of 8.75 percent to 9.48 percent.

Notes payable to financial institutions due in installments through August 2002 at interest rates of 7.5 percent to 13.2 percent.

On a weighted average basis, the Littleton Entities were paying about 10.35 percent.\* Since this is the rate of interest being paid by the Littleton Entities, we have applied this rate, with annual compounding through July 31, 2001. This calculation is included in table 55.

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\* It is important to note that these rates represent collateralized loans that are secured. Any interest calculated for unsecured loans would normally be at a higher rate of interest to account for the additional risk to the lender.

## EXHIBIT 19.2

TABLE 55 PRO RATA VALUATION PLUS INTEREST	
Pro rata 1/3 ownership	\$44,100,000
Interest (10.35%)	
1/31/96–1/31/97	4,564,350
	<u>\$48,664,350</u>
1/31/97–1/31/98	5,036,760
	<u>\$53,701,110</u>
1/31/98–1/31/99	5,558,065
	<u>\$59,259,175</u>
1/31/99–1/31/00	6,133,325
	<u>\$65,392,500</u>
1/31/00–1/31/01	6,768,124
	<u>\$72,160,623</u>
1/31/01–7/31/01	3,734,312
<b>Total</b>	<u><u>\$75,894,936</u></u>

**Double Recovery.** After considering interest, the next item to consider is whether any adjustment should be made for the monies received by Susan Littleton after the buyout date to avoid a double recovery. The issue raised in *Musto* was whether the court should have permitted an equitable adjustment of account for the postvaluation growth until the stockholder's interest was actually redeemed. The facts in *Musto* are different than the litigation at hand. In *Musto*, the plaintiff filed his complaint in December 1990. Shortly before the complaint was filed, the plaintiff was terminated from the company. The plaintiff received his year-end 1990 distribution, but received no other bimonthly distributions or paychecks from the company after that. He actually left in February 1991. In July 1991, he received a distribution from the company in the amount of \$200,000 and received an additional \$550,000 in deferred compensation. Value was determined in 1996, although *Musto* was out of the company for more than five years, earning his living elsewhere.

In the most recent appellate decision, Judge Wallace stated,

Defendants maintain the trial judge was correct in not deviating from the presumptive valuation date set forth in the statute (the date of the filing of the complaint) because an award of post-1990 profits under any rationale would constitute an illegal double recovery since the determination of fair value is actually based upon a company's future income stream. Defendants further assert that plaintiff would not have sought a post-1990 valuation date if Semcor's value had decreased after 1990. *Musto*, 333 N.J. Super. at 58-59.

The valuation date was set by the judge in this case as January 31, 1996. This is the date that has been used in our report. However, unlike *Musto*, Susan Littleton continued to work for the Littleton Entities after the valuation date. She continued to assist in creating value for the entities that she is being bought out of. The statute requires the court to consider whether any equitable adjustments should be made to reach a fair and just result for all of the parties to this litigation. N.J.S.A. 14A:12-7(8)(a) provides:

The purchase price of any shares so sold shall be their fair value as of the date of the commencement of the action or such earlier or later date deemed equitable by the court, plus or minus any adjustments deemed equitable by the court if the action was brought in whole or in part under paragraph 14A:12-7(1)(c).

(Continued)

**EXHIBIT 19.2** (Continued)

In the *Musto* decision, Judge Gottlieb subsequently decided against an equitable adjustment for postcomplaint corporate profits. Discussing the trial court's use of discretion, the appellate court stated

Thus, if the judge had allowed an equitable adjustment to account for a company's actual growth in the years following the valuation date, he might as well have accorded plaintiff a double recovery. Consequently, we find no abuse of discretion in the trial judge's denial of plaintiff's request for equitable adjustments to fair value.

*Musto*, 333 N.J. Super. at 64.

To prevent any such double recovery, after applying interest, we must examine the money that Susan Littleton received after the valuation date to see what portion represents compensation for the work that she continued to perform as an employee of the company and what portion represents payment for her equity interest.

In order to respond to this issue, we reviewed the various entities' tax returns and financial information after 1995 (although January 1996 should be excluded from this analysis, we did not have the detail that would allow us to exclude it). Susan Littleton received the following monies from the Littleton Entities:

	<b>Salaries</b>	<b>Commissions</b>	<b>Distributions</b>
1996	\$ 498,429	\$1,425,000	\$ 38,400
1997	898,429	3,510,000	1,000,000
1998	1,172,927	3,380,000	2,638,477
1999	488,726	3,182,500	3,019,607
2000	500,000	1,000,000	1,314,500

In addition to the above, Susan Littleton was allocated profits and losses from the Littleton Entities as follows:

	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Company A	\$ (8,333)	\$ (9,657)	\$ (150)	\$ 2,506	N
Company B	7,979	6,710	10,495	9,637	O
Company C	(320,522)	(568,217)	(133,044)	94,539	T
Company D	17,807	(920,139)	(818,995)	(483,770)	
Company E	221,592	322,836	358,188	372,000	A
Company F	159,756	189,150	177,225	176,206	V
Company G	77,251	54,321	40,676	72,657	A
Company H	22,813	46,068	12,733	50,844	I
Company I	1,225,024	474,501	2,585,351	1,289,664	L
Company J	(171)	—	(200)	15,728	A
Company K	22,370	5,138	(200)	94,643	B
Company L	673,539	(746,437)	110,909	242,849	L
Company M	—	—	1,299,385	1,687,856	E
<b>Total</b>	<b>\$ 2,099,105</b>	<b>\$ (1,145,726)</b>	<b>\$ 3,642,373</b>	<b>\$ 3,625,359</b>	



## EXHIBIT 19.2

Some of the monies received by Susan Littleton may create a similar problem to the one that had to be addressed in *Musto*, namely the court's treatment of the deferred compensation received after the valuation date.

In disallowing the adjustment sought by the defendants, Judge Gottlieb stated

[I]t was characterized by the defendants as deferred compensation. It has been argued to me that . . . that characterization was just a fiction in order to be able to take out of the corporation monies that year and still meet the equal compensation requirements.

[I]t was called deferred compensation . . . to avoid taxes which would otherwise have had to have been paid to the State of New Jersey as a then subchapter S corporation . . .

So, the first concern that I have is the defendants have selected to go that route . . . in order to gain a tax advantage and now having obtained that tax advantage wish to disavow it. I will not permit that. I find that they are estopped from characterizing it as anything other than deferred compensation for efforts before January 1, 1991.

The second basis is . . . that it was paid pursuant to the equal compensation agreement and not for reasons of distributing to plaintiff a share of the corporation.

The appellate court, once again, supported Judge Gottlieb's opinion in stating

As noted above, N.J.S.A. 14A:12-7 (8)(a) authorizes a trial judge to make adjustments to fair value, either plus or minus, which the trial Judge finds equitable. The fact that Semcor was not obligated to make a payment to plaintiff, but did so voluntarily, does not mean the trial judge was obligated to make an equitable adjustment to fair value to account for the payment, or that his failure to do so constitutes an abuse of discretion. *Musto*, 333 N.J. Super. at 76.

In this litigation, Susan Littleton received current compensation (salaries and commissions), as opposed to deferred compensation. She also received some cash distributions. Here also, allocated profits and losses were reflected on the partnership and S corporation tax returns filed by the various companies.

The difficulties in trying to create an equitable adjustment would be determining which of the monies paid to Susan Littleton (salary, commission, or distributions) should be considered as a double recovery, and how the offsetting credit will be applied against these monies for all of the income taxes that have been paid on these items, including the allocated profits and losses.

Using an estimated 45 percent combined personal income tax rate, the net result of all of these items is as follows:

	1996	1997	1998	1999
Salary	\$ 498,429	\$ 898,429	\$ 1,172,927	\$ 488,726
Commissions	1,425,000	3,510,000	3,380,000	3,182,500
Allocations	2,099,105	(1,145,726)	3,642,373	3,625,359
Subtotal	\$ 4,022,534	\$ 3,262,703	\$ 8,195,300	\$ 7,296,585
Tax cost (45%)	1,810,140	1,468,216	3,687,885	3,283,463
Subtotal	\$ 2,212,394	\$ 1,794,487	\$ 4,507,415	\$ 4,013,122
Distributions	38,400	1,000,000	2,638,477	3,019,607
Net after tax	\$ 2,250,794	\$ 2,794,487	\$ 7,145,892	\$ 7,032,729
Noncash allocation	(2,099,105)	1,145,726	(3,642,373)	(3,625,359)
Net cash benefit	\$ 151,689	\$ 3,940,213	\$ 3,503,519	\$ 3,407,370

(Continued)

**EXHIBIT 19.2** (Continued)

In addition to the above, the year 2000 figures have been estimated as follows:

Salary	\$ 500,000
Commissions	1,000,000
Allocations*	3,625,359
Subtotal	<u>\$5,125,359</u>
Tax cost (45%)	2,306,412
Subtotal	<u>\$2,818,947</u>
Distributions	1,314,500
Net after tax	<u>\$4,133,447</u>
Noncash allocation	<u>(3,625,359)</u>
Net cash benefit	<u>\$ 508,088</u>

\* At the time of the preparation of this report, the year 2000 figures were unknown. Because 1998 and 1999 were similar, we have estimated the year 2000 to be the same as 1999.

Assuming that the court wants to offset a portion of Susan Littleton's entitlement to avoid a "double recovery," the most that should be offset is the net cash benefit that has been received by her. The problem with adding back the entire amount is that Susan Littleton would also be giving back her compensation as an employee. The net cash benefit received by Susan Littleton should be reduced by whatever amount the court deems to be reasonable to compensate her for her efforts as an employee during these years. This salary amount should be reduced by 45 percent to be consistent with our calculations.

**Reconciliation Of Interest And Equitable Adjustments.** In the valuation analysis previously presented, a reasonable allowance for officers' compensation was estimated to be 2 percent of sales. This was unallocated between the officers, but if we assume that it was to be split evenly between Joan and Susan Littleton, each would be entitled to the following amounts:

1996	\$1,207,932
1997	1,328,725
1998	1,461,598
1999	1,607,757

The most equitable way to adjust the award to Susan Littleton would be to use the same level of compensation that was used in the valuation. This would avoid a "double recovery," and both value and compensation would be determined in a consistent fashion.

We believe the following calculation to be consistent with the intent of *Musto*.

## EXHIBIT 19.2

Pro rata 1/3 ownership	\$44,100,000
1996 Equitable adjustment	512,674
Subtotal	\$44,612,674
Interest 1/31/96–1/31/97	4,617,412
Subtotal	\$49,230,085
1997 Equitable adjustment	(3,209,414)
Subtotal	\$46,020,671
Interest 1/31/97–1/31/98	4,763,139
Subtotal	\$50,783,811
1998 Equitable adjustment	(2,699,640)
Subtotal	\$48,084,170
Interest 1/31/98–1/31/99	4,976,712
Subtotal	\$53,060,882
1999 Equitable adjustment	(2,523,104)
Subtotal	\$50,537,778
Interest 1/31/99–1/31/00	5,230,660
Subtotal	\$55,768,438
2000 Equitable adjustment	456,566
Subtotal	\$56,225,005
Interest 1/31/00–1/31/01	5,819,288
Subtotal	\$62,044,293
Interest 1/31/01–7/31/01	3,210,792
<b>Total Due To Susan Littleton</b>	<b>\$65,255,085</b>

However, our client continued to be active in the business as a shareholder and employee until December 31, 2000. Significant dividends and distributions were made to the client subsequent to the valuation date, and the issue of double counting came up. Because the valuation was based on the anticipated future income stream, and the shareholder received part of that income stream, the court wanted each side to address the issue of double counting. We performed our analysis in accordance with the case law that the judge and our client's attorney referred us to.

The determination of a valuation date, whether in a dissenters' rights case or an oppressed shareholder case (or any valuation case) is of considerable importance. This is because only those facts known or knowable on the valuation date should generally be considered. Courts have bought into this principle. It has been said that "valuation of securities is 'in essence a prophecy as to the future,' but this prophecy must be based upon facts available at the critical [valuation] date."<sup>18</sup> The Seventh Circuit Court of Appeals has stated that investors would be entitled to the future value "when 'known or susceptible of proof as of the [valuation] date . . .'" The court continued

<sup>18</sup> REV. RUL. 59-60, quoted in *Blass v. United States*, 344 F. Supp. 669, 670 (E.D. Ark. 1972).

Here the subsequent events...were no more than speculation as of the time of the merger... We, like the district court, therefore exclude from consideration the fact that Mobil paid in 1980 more than twice the value implied by the merger in 1979. Only facts known in 1979 count... Any increment of value attributable to changes after August 1979 [the valuation date] in the market for oil and gas, or to Mobil's willingness to make changes or bear special risks, belongs to [the purchasing] shareholders rather than [the selling shareholders]. The investors in a firm are entitled only to what it is worth as it exists, not as it could become in other hands.<sup>19</sup>

Therefore, the choice of a valuation date is essential because it acts as a cutoff date for the information that the valuation analyst may consider in performing the business valuation.

## FAIR VALUE METHODOLOGY

Although business valuation contains many methods for a valuation analyst to use in estimating the value of a business, the valuation methods employed to estimate fair value have been heavily influenced by judicial precedents emerging from the Delaware courts. Delaware is the state where many large companies incorporate and, as such, this jurisdiction sees more litigation in this area than many other jurisdictions. As a result of the case law that has come from these courts, Delaware's holdings have been followed in other jurisdictions. Although Delaware case law suggests that "all factors and elements which reasonably might enter into the fixing of value"<sup>20</sup> are relevant, until 1983, Delaware courts relied heavily on a fairly mechanical method known as the "Delaware Block Method." This method was adopted by a number of other states.

The Delaware Block Method had the valuation analyst

- derive separate values using methods under the income (based on earnings or dividends), asset based and market approaches.
- apply weights to each of the methods depending upon the type of business being valued.
- add the results to determine the final estimate of value.

In the application of this method, the valuation analyst used pricing multiples derived from publicly traded guideline companies for the earnings or dividend methods. For public companies, the market approach would be based on some measure of the market price of the company's stock.

In 1983, the Delaware Supreme Court decided the case of *Weinberger v. UOP, Inc.*<sup>21</sup> In this case, a minority shareholder objected to a *freeze out merger*, and the shares had to be valued. A freeze out merger is where a minority shareholder's interest in a corporation is involuntarily eliminated when controlling shareholders create a dummy corporation, transfer their stock to that corporation, and then agree to merge the old corporation with the new one. The new corporation acquires the assets and liabilities of the original corporation, with the controlling shareholders of the old corporation owning the stock of the surviving corporation. The minority shareholders no longer have any equity interest in the new business and have the right to receive only cash for their shares in the original company.

Although freeze out mergers may be thought to create special valuation problems because minority shareholders subject to a freeze out merger do not have a choice as to whether to sell their stock, this is not the case. The valuation does not take into account any increased value or synergies that may result from the merger, and an ousted shareholder bears no costs or risks of the future enterprise and so should not share in its possible rewards. However, in *Mills v. Electric Auto-Lite Co.*,<sup>22</sup> it was determined that an undervaluation can occur in a freeze out situation.<sup>23</sup>

*Weinberger* became an important case because the Delaware Supreme Court held that the Delaware Block Method was "clearly outmoded" because it "excludes other generally accepted techniques used in the financial com-

<sup>19</sup> *Metlyn Realty Corp. v. Esmart Inc.*, 763 R2d 826, 838 (7th Cir. 1985) at 838. See also *Kastenbaum v. Falstaff Brewing Corp.*, 514F. Supp.690, 698 (5th Cir.1976) (elements to be considered in determining the value of a business are the prospects that profits will continue in to the future, "considering all circumstances existing and known as of the date of the valuation"); *Gratto v. Gratto*, 272 N.J. Super. 140, 639 A.2d 390 (App. Div. 1994); *Bogosian v. Woloohojian Realty Corp.*, 923 E2d 898 (1st Cir. 1991).

<sup>20</sup> *Tri-Continental Corp. v. Battye*, 74A.2d 71, 72 (Del. 1980).

<sup>21</sup> *Weinberger v. UOP, Inc.*, 457 A.2d 701 (Del. 1983).

<sup>22</sup> *Mills v. Electric Auto-Lite Co.*, 552 F.2d 1239, 1248 (7th Cir. 1977)

<sup>23</sup> *The Handbook of Advanced Business Valuation*: p 306.

munity.”<sup>24</sup> While this case did not totally eliminate the use of this method, it seems to have relaxed its exclusivity as a valuation method. Other valuation methods are much more common today. Thus, in most states, courts tend to base their valuation determination on any method accepted in the financial community. The discounted cash flow method has become considerably more prevalent in the recent past.

The general interpretation by most courts in both dissenters’ cases and oppression cases have held that fair value means valuing the business as a going concern, rather than as if in liquidation. This recognizes the fact that the business should be valued based on its status in the hands of the shareholders whose shares have been taken away from them. According to the Delaware Supreme Court, “The basic concept for value under the appraisal statute is that the stockholder is entitled to what has been taken from him, viz., *his proportionate interest in a going concern.*”<sup>25</sup>

The battles that you may find yourself involved in can be truly challenging. You really have to know your appraisal theory if you are going to compete in this business. Exhibit 19.3 is a critique of a very large firm’s appraisal report in a shareholder dispute. It has been edited to only demonstrate the points that have been discussed in this chapter (with a few other educational items thrown in). This firm only used a guideline company method, while we used the guideline company method and the discounted cash flow method (DCF). In this instance, the value derived using the DCF method was substantially greater than the guideline company method value because the guideline companies have a lower market value than intrinsic value.

### EXHIBIT 19.3 PARTIAL CRITIQUE OF FAIR VALUE REPORT

**Page 1.** In the first paragraph of the executive summary, ABC Appraisal Co. says “Judge Harris directed that the purchase price be determined based on the fair value of John’s interest as of January 31, 1996, or the end of the preceding year December 31, 1995 (valuation date), provided that the value not be materially different.” This statement is incorrect. According to the November 1, 2000 Order, Judge Harris specifically determined that the value was to be as of January 31, 1996. There is nothing in that order to indicate a different valuation date. The month does not materially change the value, but it allowed ABC Appraisal Co. to heavily rely on XYZ Appraisal Co., because their report was as of December 31, 1995. Practically speaking, we used December 31, 1995 financial data; however, the multiples and prices from the public market, as well as any known information to be considered in this appraisal, should have included through January 31, 1996.

In the last paragraph on this page, ABC Appraisal Co. mentions reading the XYZ Appraisal Co. report, and they concur with XYZ Appraisal Co. that the market approach is the most reliable methodology to determine “the fair value of the interest.” XYZ Appraisal Co. did not determine fair value, nor did they ever say that they were determining fair value. XYZ Appraisal Co. very clearly in their report determined fair market value, and any reliance by ABC Appraisal Co. on the XYZ Appraisal Co. report for fair value is incorrect.

ABC Appraisal Co. also states “because the Littleton Entities did not prepare financial forecasts, we could not perform a discounted cash flow (DCF) analysis, a form of the income approach.” This statement is nonsense because ABC Appraisal Co. knew that the value would be considerably greater using a DCF because this company was a very profitable company and postured for substantial growth. The fact that the Littleton Entities did not prepare financial forecasts is not a reason for the valuation analyst not to perform a discounted cash flow analysis. We run into this situation, 90 out of 100 times in valuation, when the company does not prepare its own forecasts. Part of being a valuation analyst is working with management to prepare a forecast or preparing your own, or both, because valuation is a prophecy of the future. Reliance on history, which the market approach does, will frequently undervalue the company, unless the valuation analyst is lucky enough to guess at the growth rate of the subject company and have guideline companies that are so comparable that little subjectivity has to be applied in the valuation process. This is rarely the case.

(Continued)

<sup>24</sup> 547 A.2d at 713. See also *Stringer v. Car Data Systems, Inc.*, 314 Or.576, 841 P.2d 1183, 1189 (1992) (fair value includes “all relevant factors”); *Schechter v. Watkins*, 395 Pa. Super. 363, 577 A.2d 585, 592 (1990) (in a forced buyout, the jury is instructed to consider any factor deemed appropriate).

<sup>25</sup> *In re McLoon Oil Co.*, 565 A.2d at 997, 1003 (emphasis in original).

**EXHIBIT 19.3** (Continued)

ABC Appraisal Co. also says “our valuation was based on all information that was known or should have been known as of the valuation date.” This is clearly not true because they should have been able to determine, based on the financial information, that there was a ramping up of fixed assets, that the customer base was growing, that Littleton was coming out of their refinancing mode, and growth was clearly going to happen. All of this was known at the valuation date. They chose to ignore it.

ABC Appraisal Co. also said, “if such company forecasts had existed as of the valuation date, the value derived from a DCF analysis would be consistent with our determination of value.” This is not true if fair market value understates the true value of the company. Clearly, we are dealing with an industry where the market was undervaluing these companies. Even reading the Alex Brown Report attached to ABC Appraisal Co.’s report (which I will discuss later), the intrinsic value of most of these companies was considerably higher than fair market value. Because market perception is undervaluing these companies, a DCF analysis would not be consistent; if anything, the DCF analysis would tend to be considerably higher than the market approach. The DCF analysis actually values Littleton, as opposed to trying to make believe that the various publicly traded companies are a “good fit” in an industry that went through tough times in 1995.

**Page 2.** ABC Appraisal Co. indicates “an analysis of the guideline companies as of the valuation date indicates the market did not forecast any material future earnings growth.” While their statement may be correct regarding investors, and the prices that they are willing to pay for trucking company stocks, clearly growth was being forecasted. Morgan Keegan was forecasting anywhere from 18–35 percent growth (see page 48 of our report) and the analyst expectations regarding growth of guideline companies were substantial (see page 165 of our report). Alex Brown was forecasting 15–30 percent growth. ABC Appraisal Co. should have read their own attachment.

ABC Appraisal Co. also discusses at the bottom of the page that they determined a 35 percent discount for lack of marketability in this valuation. The 35 percent, which will be discussed in more detail later, is appropriate for a minority interest in a fair market value appraisal under certain circumstances. This discount is punitive if applied in a fair value context, if the determination of value is to provide a pro rata interest in the company to the shareholder whose shares are being forced to be sold.

**Page 3.** At the top of the page, ABC Appraisal Co. indicates “John was found by the Court to be the oppressor, and should not gain disproportionately from the forced buyout.” While this may be true, he should also not be punished. The November 1, 2000 order of Judge Harris (on page 2) clearly indicates this.

**Page 5.** ABC Appraisal Co. indicates “we consider fair value to be based on the price that is ‘fair and equitable’ to both parties that would effectuate a transaction in the interest in *The Littleton Entities* on the open market.” This definition is problematic for a number of reasons. First, by treating a partial interest as being sold on the open market, they are clearly indicating that their valuation will be on a minority basis. I do not believe that that is the intent of the New Jersey Statute, as it appears that case law tends to disfavor a minority discount in fair value oppression cases. Therefore, treating an *interest* in *The Littleton Entities* on the open market is very different from treating *The Littleton Entities* on the open market. For this reason, I believe the premise that ABC Appraisal Co. is operating under violates the intent of the New Jersey Statute.

According to Pratt (*Valuing a Business*, page 352) “certain precedents—including those pursuant to California Corporation Code, Section 2000—have suggested that fair value may be interpreted to mean fair market value without a non-controlling ownership interest discount (i.e., a proportionate share of the overall business enterprise value).”

In discussing the difference between fair value and fair market value, Pratt includes a discussion in his book (page 801) on dissenting stockholder and minority oppression court cases. He states, “in most states, the standard value for dissenting stockholder suits and for minority oppression suits is fair value.” Several state statutes indicate that either “fair cash value” or simply “value” is the appropriate standard. While the various states interpret fair value quite differently from one another, and sometimes differently under differing facts and circumstances, they do *not* strictly equate fair value with fair market value.

This point is illustrated well by a New York court’s rejection of an expert’s valuation report based on fair market value in a dissenting stockholder case. The court stated

### EXHIBIT 19.3

Because the petitioner's expert... in its valuation report (on title page) and on 15 occasions refers to its valuation to be based on Fair Market Value, and the Business Corporation Law only uses the term Fair Value... The Court considers it a threshold question as to whether fair value and fair market value are synonymous.

The standard upon which (the company's experts) valuation was based, was market value... the statutory standard is much broader... The Court may give *no weight* (emphasis supplied) to market value if the facts of the case are required.<sup>1</sup>

Pratt indicates that the court ultimately rejected the fair market value of \$52 per share and awarded the dissenting shareholders \$99 per share. This illustrates the potential range of difference between fair market value and fair value. Another case cited by Pratt is *LeBeau v. N.G. Bancorporation, Inc.* (NO.CIV.A. 13414, 1998 WL 44993 (DEL.CH. Jan. 29, 1998)) In this case, when fair market value is used rather than fair value, the Delaware Court of Chancery stated that this was "legally flawed" as evidence regarding fair value.

ABC Appraisal Co. also says "pursuant to Judge Harris's Order, we have used December 31, 1995 as the valuation date." What order are they talking about? The November 1, 2000 order clearly indicates January 31, 1996 to be the valuation date. At the bottom of that same paragraph, ABC Appraisal Co., in discussing using only items that were foreseeable as of the valuation date, feels that this is consistent with Musto, which stated "equitable adjustments to fair value to reflect corporations' growth in the years following the valuation date would have been improper." However, equitable adjustments are very different from excluding anticipated growth. If something happens after the valuation date that caused the company to change, I would agree that this should be excluded if the foundation had not been set prior to the valuation date. In this instance, the economic, industry, and company data all point to the company being positioned for growth, including a substantial investment in rolling stock in the most recent year. This rolling stock was added for new business, as opposed to replacement of existing assets.

Footnote 5 at the bottom of the page refers to the "Zukin book," however, ABC Appraisal Co. does not discuss the context in which this quote is probably made. I have subsequent editions of this book as opposed to the 1990 book, but Zukin discusses dissenters' rights cases and not oppression cases. Their underlying quote in the footnote would be true, except the New Jersey Statute also provides the court with the ability to make any equitable adjustments deemed necessary.

Rather than guessing at certain instances, actual information can be used as a sanity check on what might have been known or was knowable at that time. Based on our analysis of the actual 1996–1999 results, as compared to our forecasts for that same time period, it was reasonably predictable that this company should have been able to accomplish what it actually did. In fact, I believe it could have done better, had management not been distracted by this litigation.

As a side note, getting back to the concept of being "fair and equitable," what ABC Appraisal Co. wants the court to accept is that John gives up the income that he has received historically out of this business for \$8 million. Joe and Jane get to split what John gives up. If we discuss what would have actually been given up during 1996 to 2000, John received salaries, commissions, and distributions totaling \$24,066,995 (see page 191 of our report).

Even if we were to buy into the concept that ABC Appraisal Co.'s reasonable compensation for John of \$250,000 per year is appropriate, five years of compensation, or \$1,250,000 being subtracted from the \$24 million + would result in John receiving excess distributions of \$22,816,995. On average, this is \$4.56 million per year. ABC Appraisal Co. wants the court to believe that someone receiving \$4.56 million per year should give this up for \$8 million. This defies common sense and logic.

What it also excludes is any rights in the future to receive this level of income. If we assume a simple capitalization of the \$4.56 million at 20 percent, this would result in a \$22.8 million value for the terminal period beyond the year 2000. Adding \$22.8 million to the other \$22.8 million that I have come up with would indicate a value of about \$45.6 million without any discounting being taken into consideration. This, in itself, indicates the serious flaw in the \$8 million value that ABC Appraisal Co. derives. It is anything but "fair and equitable" to give up a stream of income averaging \$4.56 million per year for only \$8 million.

<sup>1</sup> *Matter of Slant/Fin. Corp. v. The Chicago Corp.*, (NYSUP. CT Oct. 5, 1995), aff'd 236 A.D. 2d 547, 654 N.Y.S.2d 627 (N.Y. APP. DIV. Feb. 18, 1997).

(Continued)



**EXHIBIT 19.3** *(Continued)*

**Page 9.** Once again, ABC Appraisal Co. indicates that they read pages 21–23 of the XYZ Appraisal Co. report, and that they believe that the XYZ Appraisal Co. discussion depicts an accurate portrayal of the general economic environment as of the valuation date. They also indicate that they agree with XYZ Appraisal Co.’s findings. First, did they do any independent analysis, or did they purely read XYZ Appraisal Co.’s report?

Second, despite the quote appearing at the top of this page, they ignore the fact that on page 23 of the XYZ Appraisal Co. report, it discusses stock market increases, particularly the Dow being up 33.5 percent, and the Nasdaq being almost 40 percent up in that year. What they also ignore is on page 23 of the XYZ Appraisal Co. report, where XYZ Appraisal Co. discusses the Federal Reserve Board lowering interest rates in December 1995 “to recharge the stalled economy.” This would have a positive effect on the value of the Littleton Entities.

ABC Appraisal Co. also states “the slowing economy led to a slowing within the trucking sector as retail sales and manufacturing production had been declining. These economic factors led to a decline in the demand for trucking services and a resulting over-capacity of trucks and service.” While this statement is true for 1995, they totally ignore the fact that it is expected to turn around in 1996 and forward. In fact, according to the Alex Brown report attached to the ABC Appraisal Co. report (on page 6), revenue growth is expected to be anywhere from 15–30 percent for this industry. The growth prospects for the industry look pretty good. ABC Appraisal Co., however, decides to only pick and choose that which serves their purpose in low-balling this valuation.

**Page 10.** According to ABC Appraisal Co., “market multiples in the trucking industry in 1995 were reflective of the economic outlook and other factors specific to the trucking industry.” This statement appears to be absolutely false when reading the Alex Brown report attached to the ABC Appraisal Co. report. In fact, Alex Brown is talking about many trucking stocks looking attractively valued to them, and they even indicate “stock valuations reflect diminished expectations and are at cyclically low levels.” They also indicate “we are 12-month bulls on trucking stocks, as we believe multiples are likely to expand on the prospect of yr/yr earnings growth in 2H 1996.”

Ironically, ABC Appraisal Co. also quotes from the Alex Brown report stating, “(Trucking) stocks with market capitalizations of less than \$100 million were penalized for their illiquidity and are trading at what we consider to be private company valuations (3–5x EBITDA, vs. 6–10x for larger stock).” First of all, we used a multiple of six in our report. What is also interesting is that ABC Appraisal Co. uses this to help try to support their lower earnings before interest, taxes, depreciation, and amortization (EBITDA) multiple, but they ignore the fact that Alex Brown is also talking about the public companies being penalized for their illiquidity, and that they are also trading at what looked like “private company valuations.” Despite all of this, ABC Appraisal Co. still wants to apply a 35 percent discount for lack of marketability (illiquidity). This is a clear case of double counting.

**Page 11.** Once again, ABC Appraisal Co. refers to the XYZ Appraisal Co. report as the basis for the business description. They also acknowledge the breakdown of the company revenues being one-third for each of the following categories: less-than-truckload, truckload, and fleet management. This point becomes important in the search for guideline (comparable) companies because as XYZ Appraisal Co. pointed out in their report, comparability is frequently difficult to achieve.

XYZ Appraisal Co. valued the Littleton Entities separately and used different guideline companies for each because these companies did different types of trucking services. Now, we are comparing a broader category of company to a combined Littleton Entity, which actually makes them a bit less comparable. If anything, because of Littleton’s diversification and the mix of business, they are probably less risky regarding any one aspect of the business, compared to the guideline companies. However, it makes comparability that much more of a problem. This is one more reason for questioning the validity of the outcome of the market approach.

**Page 12.** In discussing all of the nonconsolidated entities that were made part of this report, ABC Appraisal Co. lists Company A as being one of the companies included. One of the major differences between their report and our report is that we treated this valuation of Company A as a nonoperating asset, which added \$12.5 million to the value of the operating entity. It is my understanding from the real estate valuation analyst that this property was not legally zoned for the use, nor would it be necessary to use a \$12.5 million piece of property as a parking lot for trailers.

**EXHIBIT 19.3**

All of the other entities were combined in our report as well, but here, also, there is a significant difference in value because of the treatment of these entities. At the bottom of the page, ABC Appraisal Co. indicates "...we conducted a functional review and benchmarking analysis of the non-consolidating entities contribution to the consolidating entities. This review indicated they were all functional components of the primary business." ABC Appraisal Co. should be questioned regarding the functional use of Company A.

**Page 13.** ABC Appraisal Co. also presents net fixed assets to sales and intangible assets to sales to indicate that the guideline companies have much greater levels of assets to sales than the Littleton Entities. Once again, this is not necessarily a deficiency on the part of the Littleton Entities. In reality, closely held companies have a lower ratio because they utilize their assets for a longer period of time because they do not necessarily have the asset replacement policy of the public companies. Once again, this is not necessarily a weakness. If the assets are in good working order, and if the assets do not require extraordinary repairs, what the private company effectively is doing is becoming more profitable by utilizing their assets for a longer period of time. ABC Appraisal Co. wants to turn this into a negative.

ABC Appraisal Co. also indicates "this analysis further confirms Judge Harris's conclusions that The Littleton Entities represented a single, unified entity." This analysis did not confirm that at all. Quite frankly, the judge is absolutely correct, but it is common sense that dictates that these entities have been operated as a single unified entity. The ABC Appraisal Co. analysis in no way confirms the unification of these companies.

Getting back to ABC Appraisal Co.'s assessment that the Littleton Entities was undercapitalized, nowhere does ABC Appraisal Co. recognize the fact that the officers of the company have been withdrawing extraordinary amounts of money, clearly indicating, as with most closely held companies, that they can operate the company as they wish to. Now, ABC Appraisal Co. wants to penalize the value of the Littleton Entities for this reason. In reality, this company is not undercapitalized; it has had an extraordinary dividend paying capacity that the shareholders have taken advantage of.

It is important for the judge to understand that there is a very big difference between the operation of a public company and the operation of a closely held business. A public company has a board of directors that is charged with maximizing shareholder value. That is typically not the manner in which a private company is operated. A private company operates to not only minimize income taxes, but also to maximize the benefits to the current shareholders. In this instance, while ABC Appraisal Co. talks about the Littleton Entities needing a capital infusion of \$19 million, they fail to recognize the fact that the excess compensation from 1993–1995 alone amounts to almost \$10 million. This is not taking into consideration any other cash distributions that were made to the shareholders during this period of time that were not considered to be compensation.

Clearly, the Littleton family, as a unified group, has elected to operate this company as a cash cow to the owners, rather than reinvesting these monies into the company. This does not necessarily mean that the company is weak. It shows that the company has the ability to operate in this fashion. In 1995, the company purchased or leased, or both, a significant amount of rolling stock to get ready for the next influx of business that was foreseeable in the upcoming year(s).

Overall, the analysis included on this page is extremely misleading, and in my opinion, is intended to deceive the court rather than provide an independent analysis.

**Page 15.** In the discussion of valuation methods, ABC Appraisal Co. provides a brief description of the three basic approaches to valuation. I agree with them regarding not using a net asset approach. However, I clearly disagree with them regarding their lack of using the income approach. In the middle of the page, they state "we agree with XYZ Appraisal Co. that the market approach is the most appropriate methodology to determine the fair value of the interest. The income approach was considered, but not used due to the lack of any contemporaneous projections prepared by The Littleton Entities during the general time frame of, or anytime prior to the valuation date."

There are several problems with this statement. First, while they agree with XYZ Appraisal Co., XYZ Appraisal Co. nowhere in their report refers to the standard of value as fair value. XYZ Appraisal Co. strictly performed a fair market value analysis. Fair market value is very different than fair value. Also, ABC Appraisal Co.'s rejection of the income

*(Continued)*

**EXHIBIT 19.3** (Continued)

approach because the Littleton Entities did not have contemporaneous projections is utter nonsense. As valuation analysts, we prepare projections in valuation reports on a regular basis. I find it hard to believe that ABC Appraisal Co. does not do the same. In fact, it would be interesting to get information from some of their old valuation reports, particularly the smaller, privately held companies, because more often than not, only the large companies have the internal staff to make projections. Valuation, in itself, is a prophecy of the future, and I find it hard to believe that ABC Appraisal Co. never uses the income approach.

ABC Appraisal Co. indicates, "inherent in the market approach are assumptions related to the future growth in cash flows and the associated risks in obtaining that growth." However, they fail to further indicate that the growth inherent in the market approach is typically considered to be short-term growth, as opposed to long-term growth, which is considered in the income approach.

The public market is extremely short-term oriented, and more often than not, the multiples will reflect short-term growth. In fact, if a company has experienced substantial growth over the past several years, there is a good possibility that their multiples will be even lower than you would expect because the marketplace will have perceived that a lot of the growth has taken place, and that future growth will slow down. This is one of the misleading factors in comparing public companies to privately held companies, particularly where the public company has a track record of growing through acquisition.

Pratt discusses the various approaches to value in the context of dissenting rights and oppression suits. He indicates "most Courts embrace all three broad approaches to value (income, market, and asset-based approaches) in dissenting stockholder and judicial dissolution cases. The Chancery Court of Delaware has repeatedly expressed a preference for the discounted cash flow method (citations will be provided in sections to follow on the income approach). However, reliance on the DCF method is dependent on reasonable projections, which are not always available." In discussing a Supreme Court of Utah case, *Oakridge Energy v. Clifton*, No. 960049, 1997 WL 191487 (Utah April 18, 1997), Pratt indicates

The Court noted that the consensus of the cases cited, is that the component elements to be relied on in estimating fair value are market value, net asset value, and investment value, and The Courts have traditionally favored investment value, rather than asset value, as the most important of the three elements. (footnote omitted).

In this instance, Pratt quotes the case which stated "we conclude that the trial court erred in using the stock market price . . . as the sole criterion for determining the fair value . . ."

**Market Approach.** There are a number of cases, however, where the market approach was accepted. For example, Pratt states in *Borruso v. Communications Telesystems International*,<sup>2</sup> "both experts used only the guideline publicly traded company method, both relying primarily on multiples of revenue, because the financial history was insufficient to provide a basis for a DCF analysis, or even multiples of economic income variables, such as EBITDA." Once again, although the market approach was accepted in this instance a DCF could not be performed due to insufficient history. That is certainly not the case regarding the Littleton valuation. All of the cases cited by Pratt relate to dissenting shareholder cases as opposed to oppression cases. This creates a distinction between the court's considering a minority value versus a pro rata share of the entire company.

**Discounted Cash Flow Method.** In discussing the DCF method, Pratt indicates that in *Grimes v. Vitalink*,<sup>3</sup> the Delaware Court of Chancery characterized the DCF method as "increasingly the model of choice for valuations in this Court." Another case where the court favored a DCF method over the guideline company method is *Gilbert v. M.P.M. Enterprises*.<sup>4</sup>

<sup>2</sup> *Karl Borruso and William Lee v. Communications Telesystems International*, C.A.NO.16316-NC, 999LEXIS 197(DELCH. September 24, 1999).

<sup>3</sup> *Charles M. Grimes v. Vitalink Communications Corporation*, NO.C.A.12334,1997 WL538676 (DEL.CH.Aug28,1997), aff'd no.425,1997 (DEL.April 1, 1998).

<sup>4</sup> *Gilbert v. M.P. Enterprises Inc.*, NO. C.A.14416-NC,1998Lexus 60 (DEL.CH.April 24, 1998), aff'd *M.P. Enterprises Inc. v. Jeffrey D. Gilbert*, 731A.2d 790 (DEL.June 24, 1999).

## EXHIBIT 19.3

**Excess Earnings Method.** Although neither of us used the excess earnings method in the Littleton valuation, Pratt discusses *Balsamides* in the context of this method being accepted because the expert could not obtain all of the information needed to perform better valuation methods, but it should be noted that the excess earnings method is considered to be a control valuation. This means that the entire enterprise is valued without consideration to any minority discounts. You may wish to advance this argument as another reason why the use of the guideline company method in the ABC Appraisal Co. report without a control premium effectively penalizes John by valuing his interest on a minority basis as opposed to a pro rata share of the whole.

ABC Appraisal Co. is relying on the XYZ Appraisal Co. report to support the sole use of the market approach. Not only does the XYZ Appraisal Co. report not discuss their lack of use of the income approach, but XYZ Appraisal Co. on page 27 of their report states:

As a practical matter, it became obvious early in our search that it would be impossible to find an adequate number of publicly held businesses corresponding precisely to these definitions. (These definitions relate to the description of the type of business that Company B, Company C, and Company D are engaged in). It thus became necessary for us to broaden our criteria enough to select a group large enough for valuation purposes, but not so much as to impair valuation results by inclusion of companies only little or remotely analogous to Company B, Company C, and Company D. (Parenthetical remark added for explanation).

Even XYZ Appraisal Co. recognizes that they had to reach in order to meet a good definition of comparability. Now, ABC Appraisal Co. wants to solely rely on this method, despite the fact that there are potential problems with its application due to the subjectivity of comparability. Clearly, we ran into the same issue when we applied our market approach, but that is more of a reason to not just stop at a market approach. In fact, ABC Appraisal Co. talks about the market approach taking into consideration future growth and the associated risks in getting to the growth, but they once again fail to discuss the impact, if the market undervalues stocks in the public marketplace.

Substantial support exists for our position on this issue in Pratt's *Valuing a Business*, 4th Edition. In a discussion involving standards of value, Pratt discusses the different definitions of intrinsic or fundamental value. On page 31, he indicates the following:

**Intrinsic or Fundamental Value**

*Intrinsic value* (sometimes called *fundamental value*) differs from *investment value* in that it represents an analytical judgment of value based on the perceived characteristics inherent in the investment, not tempered by characteristics peculiar to any one investor, but rather tempered by how these perceived characteristics are interpreted by one analyst versus another.

In the analysis of stocks, *intrinsic value* is generally considered the appropriate price for a stock according to a security analyst who has completed a *fundamental analysis* of the company's assets, earning power, and other factors.

*Intrinsic Value.* The amount that an investor considers, on the basis of an evaluation of available fact, to be the "true" or "real" worth of an item, usually an *equity security*. The value that will become the market value when other investors reach the same conclusions. The various approaches to determining intrinsic value in the *finance* literature are based on expectations and discounted cash flows. See *expected value; fundamental analysis; discounted cash flow method*.<sup>5</sup>

*Fundamental Analysis.* An approach in security analysis which assumes that a security has an "intrinsic value" that can be determined through a rigorous evaluation of relevant variables. Expected earnings is usually the most important variable in this analysis, but many other variables, such as dividends, capital structure, management quality, and so on, may also be studied. An analyst estimates the "intrinsic value" of a security on the basis of those fundamental variables and compares this value with the current market price of this security to arrive at an investment decision.<sup>6</sup>

<sup>5</sup> Cooper, W.W. and Yuri Ijiri, eds., *Kohler's Dictionary for Accountants*, 6th ed. (Englewood Cliffs, NJ: Prentice Hall, 1983): 285.

<sup>6</sup> *Ibid.*, p. 228.

(Continued)

**EXHIBIT 19.3** (*Continued*)

The purpose of security analysis is to detect differences between the value of a security as determined by the market and a security's "intrinsic value"—that is, the value that the security *ought* to have and will have when other investors have the same insight and knowledge as the analyst.<sup>7</sup>

If the market value is below what the analyst concludes is the intrinsic value, the analyst considers the stock a "buy". If the market value is above the assumed intrinsic value, the analyst suggests selling the stock. (Some analysts also factor market expectations into their fundamental analysis.)

It is important to note that the concept of intrinsic value cannot be entirely divorced from the concept of fair market value because the actions of buyers and sellers based on their *specific* perceptions of intrinsic value eventually lead to the general consensus market value and to the constant and dynamic changes in market value over time.

Case law often refers to the term *intrinsic value*. However, almost universally, such references do not define the term other than by reference to the language in the context in which it appears. Such references to *intrinsic value* can be found both in cases where there is no statutory standard of value and in cases where the statutory standard of value is specified as *fair value* or even *fair market value*. When references to *intrinsic value* appear in the relevant case law, the analyst should heed the notions ascribed to that term as discussed in this section.

As you can see from the above definition, Pratt indicates that "the various approaches to determining intrinsic value in the finance literature are based on expectations and discounted cash flows." Clearly, expected earnings are of critical importance, but other variables such as dividends, capital structure, management quality, and so on, are also considered in a fundamental analysis. What is striking is that Pratt indicates "if the market value is below what the analyst concludes is the intrinsic value, the analyst considers the stock a 'buy.'" This is exactly what is taking place in the Alex Brown report attached to the ABC Appraisal Co. report. In fact, not only does Alex Brown consider certain stocks to be a 'buy,' they, in fact, suggest that certain of these stocks are considered to be a "strong buy."

On the front page of the December 1995 Transportation Report, Alex Brown lists a number of truckload and less-than-truckload public companies that are considered to be strong buys and buys. In fact, eight of these companies were used by us as guideline companies, while three of the seven of ABC Appraisal Co.'s guideline companies are also listed in this category.

ABC Appraisal Co. says "... hence the market approach is a fair proxy for the income approach." Besides the fact that this assumes that the market comparable companies are properly priced, it is also not the case in this situation. We point out at the top of page 166 of our report, that our correlation analysis indicates that there is no direct correlation between earnings growth and the pricing multiples. We say "it appears that the companies with the lowest three year compound growth rate in earnings have the highest earnings estimates, but this is not translating directly into high multiples." Clearly, there are many factors that impact the prices of stocks in the public market, and, in this instance, we have an industry that does not necessarily behave as analysts would expect. Therefore, the results can be extremely misleading, and caution must be exercised by a valuation analyst in using this information, particularly as the sole source of deriving a valuation conclusion for a closely held company. This is one of the reasons why it is suggested that valuation analysts use as many approaches and methods as may be applicable in any given situation; not only to serve as checks and balances upon ourselves, but also because there is a subjective element to the valuation process. Using a single approach can bias the result, and that is not necessarily the intention of the valuation process.

**Page 16.** At the bottom of this page, ABC Appraisal Co. discusses excess compensation. Their analysis refers to a Court Trial Exhibit Number 1707, indicating the total salary and commissions for Joe and John to be approximately \$2.75 million each. We have no problem with the use of this figure because it is the same amount that we reflect on page 74 in table 18 of our report. However, at the very bottom of the page, carrying over to the next page, is a discussion about Judge Harris's perception of Joe being the dominant person in the business.

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<sup>7</sup> Lorie, James H. and Mary T. Hamilton, *The Stock Market: Theories and Evidence* (Burr Ridge, IL: Irwin, 1973): 114.

### EXHIBIT 19.3

ABC Appraisal Co. uses the court's findings as a basis of determining reasonable compensation for Joe to be what he was actually paid and substantially reducing John's salary. There is no empirical basis to support the level of replacement compensation based upon the court's statement. Regardless of who the dominant person is, the issue becomes what would be the cost of replacing this person with someone of equal ability to run this company, if the company was to be sold? In order to support their conclusion, ABC Appraisal Co. refers to a return on equity analysis that they performed showing that an investor would be content paying Joe this huge amount of money because they would continue to get their return. However, what ABC Appraisal Co. has done is an extremely misleading and incorrect analysis.

The return on equity analysis is used as one of the factors to consider in the reasonableness for the deductibility of compensation paid to an officer of a company. There is a large distinction between reasonable compensation from an income tax standpoint and reasonable compensation in an appraisal situation. The partial analysis that ABC Appraisal Co. has included is used frequently to support deductions under Section 162 of the Internal Revenue Code relating to deductibility of ordinary and necessary business expenses.

Two cases that describe the use of a return on equity analysis are *Mad Auto Wrecking Inc. v. The Commissioner* (TC Memo 1995-153) and *Elliotts, Inc. v. Commissioner* (52 AFTR 2d 83-5976). These are both income tax cases dealing with reasonable compensation.

In a valuation context, the issue that we address is what is the replacement cost of the officer and not what is a reasonable amount for past efforts that may be tax deductible? According to Pratt (page 79), "in order to make the appropriate adjustments regarding executive compensation of the closely-held business the valuation analyst identifies the total compensation from all sources being paid to the existing executive and compares that to the total compensation required to attract an executive of similar skills." If public company executives are the appropriate basis for comparison, then total compensation from all sources paid to the public company executive (including stock options, bonus plans, pension plans, and prerequisites) should be evaluated along with the contribution to the company provided by the executive. ABC Appraisal Co. did not do this analysis as part of their report.

**Page 18.** Continuing with the excess compensation analysis, discussing the Littleton Entities's compound annual growth rates, ABC Appraisal Co. indicates at the top of the page that the Littleton Entities exceeded several market indices over the same period. This indicates that Littleton outperformed the market. Once again, while attempting to justify a higher salary for Joe, ABC Appraisal Co. supports the notion that the Littleton Entities are considerably stronger, which should positively impact its value.

In the first full paragraph on the top of page 18, ABC Appraisal Co. states "it seems from the CAGR, since Joe took over the business and the level of dividends received by the shareholders, that all shareholders (particularly John) have been well compensated for their association with this successful business." One of the ethical provisions of the appraisal profession is that we are only supposed to be advocates for our opinion, and we are not supposed to advocate on behalf of a client. ABC Appraisal Co.'s parenthetical remark, as well as numerous remarks throughout this report, borderlines advocacy.

Ironically, when it comes to John's compensation, they pull out a study and support his salary as being \$250,000. The real issue becomes, would it take \$3 million to compensate management in this company, if the company was sold? ABC Appraisal Co. tries to use an "independent investor test" to further support Joe's \$2.75 million. They indicate "... this comparison shows that an independent investor would be willing to pay the level of compensation that we have deemed appropriate for Joe (\$2.75 million)." The question isn't, would they have been willing to pay this, but would they have to pay this? On pages 75-77 of our report, we performed an analysis of reasonable compensation.

Furthermore, we have taken information from the 1995 proxy statements of the public companies, which I am showing below.

(Continued)



**EXHIBIT 19.3** (Continued)

<b>Company</b>	<b>Position</b>	<b>Salary and Bonus</b>	<b>Options Granted</b>	<b>Sales</b>	<b>Salary/Sales</b>
American Freightways	President and CEO	\$ 266,191	50,000	\$ 572,100,000	0.05%
Arkansas Best	Executive V.P.	945,821		1,437,279,000	0.07%
Arnold	President and Chairman	635,140		330,136	0.19%
Builders Transport	CEO	327,014		289,527,000	0.11%
Heartland Transport	Chairman and President	300,000		191,507,000	0.16%
MS Carriers	Chairman and CEO	389,484		333,070,000	0.12%
Old Dominion	Chairman and CEO	474,103		248,079,000	0.19%
OTR Express	President and CEO	142,086	7,455	49,211,000	0.29%
PAM Transportation	President and CEO	294,875	50,000	91,595,000	0.32%
Swift Transportation	Chairman and President	801,303		458,165,000	0.17%
Transportation Corp. of America	CEO	299,890		144,254,000	0.21%
USA Truck	Chairman	380,984		102,400,000	0.37%
US Xpress	Co-Chairman	1,210,127		254,331,000	0.48%
Werner Enterprises	CEO	738,185		576,002,000	0.13%
Anuhco (Transfinancial Holdings)	President	188,264	10,000	97,444,000	0.19%

It should be noted that the options granted in the schedule above were under water at the time of the grant, so looking at these public company executives, the highest paid executive earned \$1.2 million for a company that was twice the size of the Littleton Entities. Clearly, Joe could be replaced by the president, chairman, or CEO of one of these public companies for less than \$2.75 million. This shows the unreasonableness of the unsubstantiated compensation amount.

Table 2 of the ABC Appraisal Co. report, once again, indicates that the Littleton Entities were stronger than the guideline companies because they have a stronger EBIT margin. This further substantiates the fact that Littleton should be valued higher than ABC Appraisal Co. concluded.

**Pages 26–27.** The discussion for the adjustment for lack of marketability is flawed. Pratt includes a brief discussion about the fact that lack of control discounts are rejected in several instances. I am not going to elaborate on these cases because neither valuation analyst in the Littleton valuations actually took a minority discount. However, Pratt also highlights the fact that a control premium had been accepted by the Delaware Chancery Court under two specific circumstances. He lists these as

1. when the base value is a publicly traded equivalent value derived by the guideline publicly traded company method.
2. when valuing a controlling ownership position in this subsidiary company.

In *Borruso* (see footnote 30), both experts agreed that a control premium should be applied. In fact, in *Rapid American Corporation v. Harris*,<sup>8</sup> the Delaware Supreme Court concluded that a control premium was appropriate, explaining “the exclusion of a control premium artificially and unrealistically treated Rapid as a minority shareholder.”

<sup>8</sup> *Rapid American Corporation v. Harris*, 603A.2d796 (DEL.1992).



### EXHIBIT 19.3

In *LeBeau*, the Delaware Court of Chancery implicitly allowed a control premium by allowing the guideline merger and acquisition method to be used.

In *Quantifying Marketability Discounts* written by Z. Christopher Mercer, ASA, CFA, the author discusses various levels of value that are used in the appraisal process. Mercer states

*The controlling interest value* represents the value of the enterprise as a whole. The controlling interest appraisal should, therefore, encompass the rights, risks and rewards of having controlling power in a business. In the context of this discussion, controlling interests and enterprises are considered to be marketable, and a marketability discount is not used. Some valuation analysts, however, do apply a marketability discount, which may reflect the costs of brokerage or transactions costs, to control values.

Basically, Mercer's position is that because a controlling interest can readily be sold, there should not be a discount taken for lack of marketability. This would further suggest that if there is a discount to be taken, it would be no more than a brokerage cost, which for a company the size of Littleton, would probably not exceed about 5 percent. Certainly, the discount for marketability taken by ABC Appraisal Co. represents a discount for a minority value and, as such, we believe that it unfairly penalizes John because we believe he should be entitled to a pro rata share of the entire business.

The real kick in the head in the litigation that the critique came from was that the case went up on appeal for numerous reasons, and when it was remanded for a new trial, the appellate court also changed the valuation date. We got to do the job a second time. Exhibit 19.4 reflects the critique we did of the same expert's report during the second litigation.

### EXHIBIT 19.4

#### CRITIQUE—THE SECOND TIME AROUND

This report is anything but an independent, objective appraisal of the Littleton Entities. ABC Appraisal has relied on the former judge to support their position rather than putting forth an argument to allow the new judge to understand the valuation issues. This report is loaded with advocacy, which is unethical for a valuation analyst.

Let me point out a difference between our two reports. You told me that the valuation date was November 29, 2000, and that for convenience, it was agreed that we could use Littleton's year end financial statements. All other calculations that were done in the guideline company analysis were based on November 29, 2000, meaning that we did not use the guideline companies' year end financial statements or stock prices. ABC Appraisal used December 31 as the basis for their entire report, including stock prices and financial information for their choice of guideline companies in the market approach.

**Page 1.** It is ironic that ABC Appraisal references the previous judge's opinion of November 7, 2001, where the judge concluded that John's interest was worth \$12,423,125. This was at a time that Littleton Trucking was doing about \$100 million in revenues. Now, years later, when the company is doing \$166 million in revenues, ABC Appraisal values John's interest at \$12.8 million.

ABC Appraisal concludes that the market approach is the most reliable methodology to determine the fair value of the interest. This is despite the thinly traded guideline companies, the undervalued guideline companies, and the fact that fair value is intended to measure what John is giving up. This is going to be a major point of difference between ABC Appraisal and me. They are assuming a sale of the company and totally ignore the fact that the business is going to continue in the hands of John's brother, Joe. They attempt to reduce value by assuming that Joe will be gone, but a sale would require Joe to help create a smooth transition so that Joe, as well as the other shareholders,

*(Continued)*

**EXHIBIT 19.4** (*Continued*)

could maximize their sale price. ABC Appraisal treats Joe as if he was going to die suddenly. The entire key person discount is premised on the sudden disappearance of Joe.

In reviewing chapter 15 of the *Guide to Business Valuations* published by Thomson PPC, an interesting definitional issue is discussed relating to fair value. This publication quotes, *In re Shell Oil Co.*, 607 A.2d 1213, 1218 (Del. 1992), quoting *Tri-Continental Corp v. Battye*, 74 A.2d 71,72 (del. 1950) and states:

Another judicial definition states that fair value, 'measures that which has been taken from [the shareholder], viz., his proportionate interest in a going concern.'

This treatise also contains a discussion of the Delaware Block Method, and its applicability to fair value. Although the Delaware Block Method is not at issue in this case, the point was made that

In its decision, the court ruled that the Delaware Block Method was *clearly outmoded* because other valuation methods commonly accepted in the financial community were not considered. **In fact, the methodology used by the court in this case was the discounted cash flow method.** Although the Weinberger decision did not eliminate the use of the Delaware Block Method, it did allow other appropriate valuation methods to be accepted by the courts. See *Rosenblatt v. Getty Oil Co.* [493 A.2d 929 (Del. 1985)]; also *Leader v Hycor, Inc.* [395 Mass. 215, 479 N.E.2d 173 (Mass. 1985)]. **As a result, methods such as the discounted future returns methods, are now commonly used in fair value cases.** (Emphasis added).

This provides support for our use of the DCF. In fact, Shannon Pratt and Jay Fishman, the primary authors of the Thomson PPC treatise indicate, "As a result, methods such as the discounted future returns methods, are now commonly used in fair value cases."

ABC Appraisal states, "Because the Littleton Entities did not prepare financial forecasts, I could not perform a Discounted Cash Flow ("DCF") analysis, a form of the Income Approach." This is complete nonsense. The American Society of Appraisers teaches valuation analysts to do their own forecast if one is not available. I referenced the course materials in my report on page 70. It is also quite common for valuation analysts to prepare their own forecasts.

There are clear differences between the market approach and the income approach, and they are extremely difficult to reconcile if you have a company that is growing. Growth must be adjusted for in the market multiples, which can be very difficult because the publicly traded companies probably have different growth characteristics than the subject company. In the DCF, growth appears in the forecasted revenues and cash flows of the subject company, and then the valuation analyst merely needs to determine a reasonable discount rate to reduce the forecast to present value.

ABC Appraisal then states, "Consistent with standard valuation and appraisal practices, our valuation was based on all information that was known or should have been known as of the Valuation Date." However, numerous times throughout their report, they refer to post valuation date information. This occurs in the following places in their report:

Page No.	Reference
7	Standard and Poor's <i>The Outlook</i> , December 27, 2000
9	Standard and Poor's <i>The Outlook</i> , December 27, 2000
14	Footnote 15 refers to K-Mart bankruptcy in January 2002
16	Footnote 18 Phase II Opinion November 7, 2001
27	Discussion that FedEx bought American Freightways on February 12, 2001
27	Discussion that OTR Express was liquidated in May 2001
36	Reference to article "Personal Goodwill" January/February 2006
36	Reference to article "Key Person Discount" May/June 2000 (this publication date is really 2006)
Sch 3b	Footnote 1 refers to February 2001 acquisition
Sch 3b	Footnote 2 refers to merger August 2001
Sch 3b	Footnote 3 refers to merger June 2001
Sch 3b	Footnote 4 refers to company went private February 2006

### EXHIBIT 19.4

ABC Appraisal states:

The Market Approach utilizes multiples that represent investor expectations for growth and profitability of public companies. Therefore, if such Littleton Entities forecasts had existed as of the Valuation Date, the value derived from a proper DCF analysis should be consistent with our determination of value.

Their statement is partially true, but overall, it is incorrect. I agree that the market approach is *supposed* to utilize multiples that take investor expectations into consideration, but the trucking industry has been an industry that underperformed on Wall Street for a long time. The investment houses that follow this industry have had strong buy recommendations on many of the public company stocks because the market is not valuing these companies based on their “true” worth. I quoted a few sources beginning on page 163 of my report.

Furthermore, in order for the market approach to truly work, the market needs to be active. Pratt states in *The Market Approach to Valuing Businesses*:

The market approach is especially relevant if the standard of value is **fair market value**. (Emphasis added).

Pratt discusses sections of Revenue Ruling 59-60, and points out the following:

Revenue Ruling 59-60 strongly advocates the guideline public company method within the market approach.

Section 3.03 reads as follows:

.03 Valuation of securities is, in essence, a prophesy as to the future and must be based on facts available at the required date of appraisal. As a generalization, the prices of stocks which **are traded in volume** in a free and **active market** by informed persons best reflect the consensus of the investing public as to what the future holds for the corporations and industries represented. When a stock is closely held, is traded infrequently, or is traded in an erratic market, some other measure of value must be used. In many instances, the next best measure may be found in the prices at which the stocks of companies engaged in the same or a similar line of business are selling in a free and open market.

Section 4.02(h) reads as follows:

(h) Section 2031(b) of the Code states, in effect, that in valuing unlisted securities the value of stock or securities of corporations engaged in the same or a similar line of business which are listed on an exchange should be taken into consideration along with all other factors. **An important consideration is that the corporations to be used for comparisons have capital stocks which are actively traded by the public.** In accordance with section 2031(b) of the Code, stocks listed on an exchange are to be considered first. However, if sufficient comparable companies whose stocks are listed on an exchange cannot be found, other comparable companies which have stocks actively traded on the over-the-counter market also may be used. The essential factor is that whether the stocks are sold on an exchange or over-the-counter there is evidence of an active, free public market for the stock as of the valuation date. In selecting corporations for comparative purposes, care should be taken to use only comparable companies. Although the only restrictive requirement as to comparable corporations specified in the statute is that their lines of business be the same or similar, yet it is obvious that consideration must be given to other relevant factors in order that the most valid comparison possible will be obtained. For illustration...a company with a declining business and decreasing markets is not comparable to one with a record of current progress and market expansion.

I highlighted the requirement of active trading because it is important if the valuation analyst is to get a true read of the investing public. We pointed out in our report the thin trading of the guideline companies. ABC Appraisal's selection of guideline companies included two companies that we rejected. The trading activity of their companies was as follows:

Company	Trading Volume
Arnold Industries	1.72%
Old Dominion	0.35%
PAM Transportation	0.05%
Transport Corp	0.64%
US Xpress	0.22%
USA Truck	0.82%

(Continued)

**EXHIBIT 19.4** (*Continued*)

At least some of our guideline companies had trading activity. Their selection could not possibly reflect the active market required to have any confidence that the stock prices were truly reflecting the activity of the investing public. To make matters worse, PAM Transportation reported in its 2000 Form 10K that it only had 284 shareholders at the time that the form was filed. For ABC Appraisal to ignore the active trading requirement indicates that they were negligent in following generally accepted valuation principles, or they were on a mission.

Their statement about a “proper DCF” would have proven to them that the market was not priced correctly at the valuation date. I agree that if the market is properly priced, the values should be close between the market approach and a DCF. Because they never bothered to check their values with another approach, they would not know that their conclusion is wrong.

With respect to ABC Appraisal’s statement “The Market Approach utilizes multiples that represent investor expectations for growth and profitability of public companies,” there can be a tremendous difference between the fair market value of the public company’s stock, as it is trading in the marketplace, and the true worth, or intrinsic value, of the company. When the intrinsic value of the company is different than the market value, fair value cannot be calculated using market multiples.

In *Valuing a Business*, the authors (Pratt, Reilly, and Schweihs) discuss the definition of intrinsic value. In particular, the authors state that intrinsic value is

The amount that an investor considers, on the basis of an evaluation of available facts, to be the ‘true’ or ‘real’ worth of an item, usually an equity security. The value that will become the market value when other investors reach the same conclusions. The various approaches to determining intrinsic value in the *finance* literature are based on expectations and discounted cash flows.

In discussing the purposes of security analysis, the authors state:

The purpose of security analysis is to detect differences between the value of a security as determined by the market and a security’s ‘intrinsic value’—that is, the value that the security *ought* to have and will have when other investors have the same insight and knowledge as the analyst.

This indicates that market value will be different than intrinsic value, but the intrinsic value is really the underlying value of the security. The Littleton case is a situation where ABC Appraisal has ignored the willing seller. They have discounted John’s interest by 15 percent for Joe’s key man status and 35 percent for marketability. I will point out later that these discounts are unreasonable, even if applicable (and I do not concede that they are applicable).

In Thomson PPC’s *Guide to Business Valuations*, the authors make the statement that “the value of a business is equal to the present worth of the future benefits of ownership.” Immediately following, they explain:

That statement is a fundamental principle of business valuations. A rational buyer normally will invest in a company only if the present value of the expected benefits of ownership are at least equal to the purchase price. Likewise, a rational seller normally will not sell if the present value of those expected benefits is more than the selling price. Thus, a sale generally will occur only at an amount equal to the benefits of ownership.

By purely relying on historic information, and only the year 2000 at that, ABC Appraisal has ignored this “fundamental principle” of business valuation. They have chosen to ignore the future benefits of ownership.

In *Valuation of a Closely-Held Business* published by Research Institute of America, there is probably one of the best definitions and discussions of intrinsic value in all of the literature that I have reviewed. I believe that it is very applicable to this case. According to the authors

The intrinsic value of a business refers to the value derived on the basis of an analysis of the fundamental factors related to the business. Such factors as assets, earnings, and future growth are considered in arriving at a ‘pure’ value of the investment. This standard ignores the capriciousness of the market and determines a value which, theoretically, would be arrived at by sophisticated analysts. In this, its rather esoteric form, the intrinsic value standard has relatively little use or application to the real world of business valuation. **Its practical use is most often found within the realm of fair value.** (Emphasis added).

### EXHIBIT 19.4

In *Valuing Small Businesses and Professional Practices*, Pratt discusses intrinsic value. In this instance, he quotes from a book entitled *Financial Decision Making*, which defines intrinsic value as follows:

A security's intrinsic value is the price that is justified for it when the primary factors of value are considered. In other words, it is the real worth of the debt or equity instrument as distinguished from the current market price. The financial manager estimates intrinsic value by carefully appraising the following fundamental factors that affect security values:

**Value of the firm's assets.** The physical assets held by the firm have some market value. They can be liquidated if need be to provide funds to repay debt and distribute to shareholders. In techniques of going concern valuation, asset values are usually omitted.

**Likely future interest and dividends.** For debt, the firm is committed to pay future interest and repay principal. For preferred and common stock, the firm makes attempts to declare and pay dividends. The likelihood of these payments affects present value.

**Likely future earnings.** The expected future earnings of the firm are generally viewed as the most important single factor affecting security value. Without a reasonable level of earnings, interest and dividend payments may be in jeopardy.

**Likely future growth rate.** A firm's prospects for future growth are carefully evaluated by investors and creditors and are a factor influencing intrinsic value.

In Graham and Dodd's *Security Analysis*, the authors discuss three approaches to analysis and valuation. They indicate:

There are three broad concepts or approaches to the analysis and valuation of common stocks. The first and oldest approach places primary emphasis on anticipated market performance. In the true sense, this approach is not based on a valuation concept because it does not seek to value a stock apart from the market. Hence, we term it 'anticipation' approach. The second and third approaches clearly rest on valuation (one on *intrinsic* values, the other on *relative* values.

In essence, these authors discuss intrinsic value and fair value as being synonymous. The authors state:

the *intrinsic value approach* is a normative concept that seeks to determine *what a stock is worth*, that is, the price at which it should sell if *properly* priced in a normal market.

In the fourth chapter of the book, the authors describe, "The traditional definition of intrinsic value emphasizes the role of facts: *the value which is justified by assets, earnings, dividends, definite prospects, and the factor of management.*" In discussing valuation factors, the authors state

These four earnings factors are the major components of the intrinsic value of a going concern:

1. Level of normal earning power and profitability in the employment of assets as distinguished from the reported earnings, which may be, and frequently are, distorted by transient influences
2. Dividends actually paid or the capacity to pay such dividends currently and in the future
3. A realistic expectation about the trend line growth of earning power
4. Stability and predictability of these quantitative and qualitative projections of the future economic value of the enterprise

ABC Appraisal has not addressed any of these factors in their report. They merely took six public companies and accepted the price at which the market was trading, regardless of how these factors impacted the intrinsic value of these companies. They then used their multiples to justify the value of Littleton.

Graham and Dodd also indicate:

Intrinsic value is therefore dynamic in that it is a moving target which can be expected to move forward but in a much less volatile manner than typical cyclical or other gyrations of market price. Thus, if intrinsic value is accurately estimated, price will fluctuate about it.

In discussing the central tendency in pricing, the authors state:

(Continued)

**EXHIBIT 19.4** (*Continued*)

Therefore, intrinsic value is in essence the central tendency in price. Viewed in this manner, the actual coincidence between market price and the more stable central tendency in price will usually be brief.

If we translate what the authors are saying into information that should be used in this case, the market approach does not necessarily reflect the true value of a company, and it is rare that the market approach will be at it's a "correct" level since the reliance on the market prices of stocks of guideline companies will rarely reflect the true value of these companies. This causes the valuation analyst to use data which is applied to the subject company, in this case Littleton, that is questionable. Not only that, but after all of the subjective adjustments that must be made to make these companies comparable, a correct conclusion will be derived only if the valuation analyst is pretty lucky.

In an article that appeared in *Valuation Strategies*, Pratt discusses the fact that the three elements of fair value are investment value, market value and asset value. Pratt states:

Courts have treated investment value (defined in this context as value based on earning capacity) as the most important of the three elements. In fact, in one case, the Delaware Chancery Court stated that the discounted cash flow (DCF) model is 'increasingly the model of choice for valuations in this Court.' (Citing *Grimes v. Vitalink Communications Corp.*, No. 12334. 1997 WL 538676 (Del.Ch., 1997)).

Finally, in an article published in *Business Valuation News*, March 1984, the author discusses the concept of intrinsic value. He discusses several treatises that are cited over and over again in court decisions by Professor Bonbright and Graham, Dodd, and Cottle. Intrinsic value is actually considered to be, "that value which is justified by the facts." In quoting Graham, Dodd, and Cottle, the author states:

The primary objective in using the adjective 'intrinsic' is to emphasize the distinction between *value* and *current market price*, but not to invest this 'value' with an aura of permanence. In truth, the computed intrinsic value is likely to change at least from year to year, as the various factors governing that value are modified. But in most cases intrinsic value changes less rapidly and drastically than market price...

This is another instance that differentiates between value and price, which can be explained by the drastic swings in market price from day to day. The author continues by discussing Professor Bonbright's difference between intrinsic value, commercial value, or justified selling price, and market value:

But if strictly interpreted, the market value of an enterprise means the price at which it could actually be sold by its present owners to some outside buyers. While such an interpretation may be pertinent in an inheritance-tax case where the decedent was the sole owner of a small enterprise, it would hardly serve as a basis of valuation of a large incorporated business, the sale of which is not contemplated and the realization price of which would depend largely on the accident of a favorable negotiation with investment bankers.

In discussing the difference between normal value and its relationship to intrinsic value, Bonbright states:

Just as it is possible to appeal from the prices that are current on the market place to prices that *would* be current if the market acted intelligently, and thus to invoke a concept of 'intrinsic value,' so it is possible to appeal from the price at which a commodity is quoted in today's market, to some average or trend in prices over a longer period of time. When this latter effort is made, it represents an attempt to make use of a concept of *normal* value, as distinct from the evanescent values (many appraisal writers prefer to call them merely 'prices') that are assumed to be of little practical significance.

Probably one of the best quotes cited in this article comes from The United States Tax Court in the *Estate of Oakley J. Hall*, 34 T.C.M. 648, 666 (1975). The Court found:

In times of wide speculation and resulting fluctuations in the stock market we are extremely doubtful that the price at which a stock is traded on the stock exchange on any particular day is a true reflection of what an investor would pay for the stock if he was looking primarily to the historical earnings of the corporation to determine a fair price.

**Page 2.** ABC Appraisal discusses their use of the "independent investor test" for their determination of reasonable compensation. I will address this later in this critique.



## EXHIBIT 19.4

**Page 3.** I will address their 35 percent discount for lack of marketability later in this critique.

**Page 4.** ABC Appraisal ignores loans due from the shareholders even though they amount to \$10,444,659 at the valuation date. This would increase their figure for the entire company by that amount. They discuss the fact that John would have to repay his loans, but they never give the Court the amount that should be on the balance sheet.

ABC Appraisal states the following:

We have used and relied upon the accuracy and completeness of various historical **and prospective** information provided to us.

What prospective information did they use and rely upon? What happened to known or knowable at the valuation date?

**Page 5.** It is ironic that ABC Appraisal references *Wheaton* in assisting them to define *fair value*, but they choose to ignore other parts of that decision where the judge indicated “Even though ‘fair value’ is not synonymous with ‘fair market value,’ consideration of market price still can be a ‘valuable corroborative tool.’” To me, this means that the market price should be used to corroborate value and not necessarily solely to rely on it for the determination.

ABC Appraisal indicates “Based on the statute, cases, and case commentary, We consider Fair Value to be based on the price that is ‘fair and equitable’ to both parties that would effectuate a transaction **in the interest in the Littleton Entities** on the open market.” This definition is problematic for a number of reasons. First, by treating a partial interest as being sold on the open market, they are clearly indicating that their valuation will be on a minority basis (they presented their report with and without a control premium, and their discount for lack of marketability is based on minority studies). This is not the intent of the New Jersey Statute because case law disfavors a minority discount in fair value oppression cases. Therefore, trading an *interest* in the Littleton Entities on the open market is very different from trading *The Littleton Entities* on the open market.

**Page 9.** ABC Appraisal starts their discussion of industry conditions in 2000 by stating “The fundamentals affecting the trucking industry as of the Valuation Date had a negative effect on the valuation and help explain the reduced market multiples relative to earlier periods.” This is the precise reason why fair market value does not necessarily equal fair value. Fair value should look to what the shareholder is giving up, and that is the right to hold the investment—not dispose of it at the time that the market may be down. The value of Littleton was growing based on the company’s own growth and expansion, despite the downturn in the market. Sure, Littleton is impacted, as are the rest of the players in the industry, by industry specific factors, but Littleton has been weathering the storm better than many of the other companies.

**Page 11.** ABC Appraisal starts laying their foundation for Joe’s importance, and in paragraph 8.2, lists the competitive advantage of the company being “Joe’s client relationships.” However, because Joe is not going anywhere, this should be good for the valuation. John was a shareholder of the company who would be entitled to his fair share of the company. What ABC Appraisal wants the court to effectively do is split the company by indicating that the per share value is greater for Joe than it is for John. That is not the intent of fair value.

This paragraph describes the Littleton Entities as a superstar. It has all of these great competitive advantages, but ABC Appraisal wants to reduce the intrinsic value of the company as if all of these positive attributes are going to disappear.

**Page 13.** ABC Appraisal discusses their benchmarking analysis of Littleton to the guideline companies, but they do so in a misleading manner. To begin with, ABC Appraisal totally ignores all years prior to 2000. While the date closest to the valuation date is important, it is common practice to review trends for the subject company. The year 2000 also happens to be the least profitable year over the last several years.

Regardless, ABC Appraisal ignores some important points regarding the year 2000. For example:

1. Joe decided to stop distributions so that he could reinvest heavily in the new facility that came online after the valuation date. Instead of using bank financing, he used the company’s cash flow to fund the investment. This caused the company to have less cash at the end of the year.

(Continued)



**EXHIBIT 19.4** *(Continued)*

2. Being a closely held company, Littleton has, in past years, made major distributions to the shareholders in the form of dividends, loans, and excess compensation, not including the personal expenses that were run through the company. The nature of a closely held corporation will frequently result in lower cash balances because of the sizeable distributions to the owners.
3. The nature of most closely held companies is that fixed assets are used for a longer period of time than the public companies. Because the money comes directly from a few shareholders' pockets, the general attitude is, let's run the assets as long as we can if we are not compromising the business. This is economically sound. ABC Appraisal makes it sound like it is a problem. Somewhere in the depositions, I recall reading, Joe or someone stated that they keep the assets longer.

The box at the bottom of the page indicates "This family business in total had less tangible capital compared to its peers, as of the Valuation Date." This is much ado about nothing. ABC Appraisal highlights it as if it is a big deal.

**Page 14.** ABC Appraisal discusses the concentration of customers, but fails to mention that Littleton deals with many divisions of those customers and, therefore, is not subject to the same level of risk as if it was one company. They also disregard the long-term customer relationships that exist with many of these customers. ABC Appraisal also ignores the fact that even the large companies in the industry that also have customer concentration have not had a problem. ABC Appraisal fails to discuss the longer contracts, the increasing business from these customers, nor do they indicate that many of the guideline companies are in similar situations. This is an industry factor, so Littleton is not in any worse shape than its peers.

ABC Appraisal mentions Federated's bankruptcy in 1990, but fails to mention that currently, Federated is expanding.

ABC Appraisal makes a big deal about bankruptcies. According to some of our follow up research, the number of bankruptcies in the retail sector has been very small compared to the number of companies in the industry. This puts the risk at a fairly low level. You may want to get ABC Appraisal's support for the number of bankruptcies that warranted their putting this in the report. Of course, they are probably referring to K-Mart, which occurred after the valuation date. This was not known or knowable.

In section 8.5 of the report, ABC Appraisal discusses Joe's importance. What we have to make the judge realize is that this situation is no different than what Louis Gerstner was to IBM or what Lee Iacocca was to Chrysler. They were also important, but that does not mean that shares of those companies were worth less to some shareholders than to others. Compensation for these individuals still had to be at market rates.

**Page 15.** The discussion about Joe's importance refers to the time period of 1992–1994 when Joe was away from the business. It is ironic that the reason that Joe was away from the business was because he was in jail. What ABC Appraisal left out of their report is that the country was in a serious recession during this timeframe. In fact, the Northeast did not start seeing daylight from the recession until about 1994, when Joe got out of jail. The decline in revenues from 1991–1992 shown in table 3 of the ABC Appraisal report has nothing to do with John running the company.

The other piece that is missing from ABC Appraisal's report is the fact that a good portion of the growth may have been attributable to the existing customers' growth during the late 90s because the economy was red hot during that period. The true question to find out is if Joe is so good, how many new customers did he pick up during this period?

ABC Appraisal states:

During the full period of Joe's absence, revenue declined 10 percent and EBIT declined 21.6 percent. After Joe's return, revenue grew by 60.8 percent through 2000 and EBIT grew by 201.0 percent.

This should be an indication that the company had considerably more value at November 29, 2000 than in January 1996. If they believe that the previous judge was correct in determining the value of John's interest, then why is their value today the same as the judge's value back then?

**EXHIBIT 19.4****Page 16.** ABC Appraisal states:

The Market Approach and the Income Approach, properly applied, should produce comparable results. The Market Approach incorporates the stock market's outlook on the prospects of the guideline companies, which provides a proxy for the outlook of the Littleton Entities. We believe this approach correctly considers the Littleton Entities' future prospects as of the Valuation Date.

I agree with their first sentence. However, there are times that the market is not properly priced. Fair market value comes from the market. Fair value considers other factors besides the ups and downs of the market at any point in time.

While the market approach is supposed to incorporate the stock market's outlook on the prospects of the guideline companies, it does not always do that. The trucking industry has historically been valued below the true worth of these companies. This has never been seen as a "sexy" industry that investors want to play in. The proof is that the public companies are generally very thinly traded, and many of them have strong buy recommendations by the brokerage firms that follow them. The strong buy is because the market undervalues the stocks. The effect of undervalued stocks on the market approach is to undervalue the subject company. This happened the first time we valued Littleton, and it is happening again this time.

The market approach is not perfect by any means. Its successful application depends on the valuation analyst's ability to

1. select good guideline companies.
2. understand what is driving the guideline company's stock price.
3. compare the subject and guideline companies to eliminate all differences.
4. select the correct type of multiple(s) to use for the subject company.
5. choose the correct multiple (amount) to apply against the subject company's income stream.
6. determine if a control premium is applicable to the result.
7. determine how much of a control premium is applicable by comparing Wall Street transactions to the subject company situation.
8. determine whether a discount for lack of marketability is appropriate.
9. if the discount is appropriate, determine how much to apply.

There is a tremendous amount of subjectivity in the market approach that is frequently overlooked. I believe that in many instances, it is less subjective to perform a forecast and select a reasonable rate of return to discount the forecast to present value. When the income and market approaches are very different, the valuation analyst needs to understand what is causing the difference. Without performing at least two approaches to value in the same appraisal, the valuation analyst does not have the normal checks and balances required to overcome subjectivity that exists in all approaches. This is one of the reasons that the appraisal organizations recommend performing multiple approaches in the same valuation so that there can be checks and balances on the valuation analyst's application of any one approach.

Another question that ABC Appraisal fails to address is how many of the guideline companies were about to go live with a state of the art facility? How do the public company multiples consider this? ABC Appraisal fails to address this in the application of the market approach.

Instead of explaining why ABC Appraisal believes that the market approach is the best proxy for Littleton, they rely on the previous judge's opinion. Where is the independent thinking of the valuation analyst?

**Page 17.** ABC Appraisal states:

Applying the Market Approach provides an indication of the value 'as if publicly traded' because the multiples are all derived from publicly traded stock. To value the Interest, we considered the following adjustments:

- Addition of a control premium;
- Application of a key man discount because the success of the Littleton Entities is dependent upon a key man, Joe Littleton;

*(Continued)*

**EXHIBIT 19.4** (*Continued*)

- Adjustment for Step-up of Pass-Through Entities: Because the guideline companies' profits are taxed at the entity level (the entities are "C" corporations) and dividends and capital gains are taxed a second time at the shareholder level while the Littleton Entities entities are "passthrough" entities and profits are only taxed at the shareholder level, upon sale of the business a buyer could benefit from a step-up in the basis of the underlying assets of the entities; and
- Application of a discount for lack of marketability because the Littleton Entities stock is closely held.

Because ABC Appraisal has put all of their eggs in the market approach basket, there are other areas in the literature that we should address. In an article entitled, "Is the Subject Company Similar?" appearing in *Valuation Strategies*, May/June 1998, the author discusses the differences between private and public companies. The author mentions that

Any comparison between the universes of closely held companies and public companies also makes an assumption that the foundation for pricing between the two markets are indeed similar. There are at least several indications they are different.

One of the differences pointed out by the author is the fact that the public market is much more volatile than the pricing of the private market. The author references a study done by Ray Miles, Founder and Former Executive Director of the Institute of Business Appraisers to show that small companies do not appear to be time sensitive, nor do they shift in price with changes in the economy. Even though the reference is to small companies, much of this argument would also apply to a company the size of Littleton. The author concludes that "Thus, it appears that prices for private and public companies are derived independently and driven, in part, by different factors—market movements vs. static return-on-investment criteria." This represents a big difference between the public company and the private company. This also shows the fact that changes in market movements will impact the market approach, whereas putting in reasonable return on investment criteria, which would allow us to calculate required rates of return or discount rates, would favor using a discounted cash flow methodology for a privately held company.

In an article entitled, "Random Walk and The Close Corporation," appearing in *Business Valuation Review*, September 1988, the author discusses the suitability of using public company stock prices in determining the value of a privately owned company. The author states:

The question we ask is how suitable are stock market transactions in establishing the intrinsic value of a business enterprise. It may be argued that the appraiser wants to determine the hypothetical market *price* rather than market *value*.

This article discusses the volatility of the public market and factors affecting stock prices on a daily basis. The author references Professor Bonbright and states:

The prices that result from stock market trades are generally derived from small lots that represent only minority interests. It is well known that buyers and sellers of securities, no matter how large the sums they command, are not always intelligent in their evaluation of investment merits.

Citing a paper done under the auspices of the National Bureau of Economic Research, he states:

... the authors concluded that stock prices are more volatile than can be justified on the basis of news about underlying fundamentals; a rational investor concerned about the short run may be better off guessing the guesses of others (the 'Keynesian' method); and making assets illiquid, and thus no longer subject to the whims of the market, as is done when a firm goes private, may enhance their value.

An interesting quote from the Council of the Stock Exchange (London) indicates that for valuation purposes

We desire to state authoritatively that Stock Exchange quotations are not related directly to the value of a company's assets, or to the amount of its profits, and consequently these quotations, no matter what date may be chosen for reference, cannot form a fair and equitable, or rational basis for compensation.

[Price is determined by] the actions and opinions of private and institutional investors all over the country and, indeed, the world. The actions and opinions are the result of hope, fear, guesswork, intelligent or otherwise, good or bad investment policy, and many other considerations. The quotations that result definitely do not represent a valuation of a company by reference to its assets and its earning potential.

## EXHIBIT 19.4

In *Financial Valuation* by Zukin, the author of chapter 12, "Start-Ups, IPOs, and Private Placements," discusses the limitations of price earnings multiples. Although this is not the pricing multiple used by ABC Appraisal, it is a multiple used in the application of the market approach. The same holds true for other multiples as well. The author states:

As even a casual follower of the public stock markets knows, price/earnings ratio levels are subject to fairly wide fluctuations, often with very imperfect correlations with the current performance of the economy.

This is further support that the appraiser is required to make subjective judgment calls when using these ratios to value the closely held company.

In a book entitled, *Investments: An Introduction to Analysis & Management*, the author discusses some guidelines in the use of the price to earnings ratio. Item number 13 on his list is "A company that pays a higher dividend tends to have a higher PIE ratio." Although ABC Appraisal did not use a P/E multiple in its analysis, the same would hold true for any pricing multiple in the market approach. ABC Appraisal totally ignored Littleton's history of making substantial distributions to the shareholders whether it was in the form of dividends, excess compensation, loans, or personal expenses that were paid for by the company on their behalf. This is especially true when ABC Appraisal indicates that Littleton is undercapitalized compared to the public companies.

From a valuation standpoint, Littleton has been able to grow and make the necessary investment in its fixed assets and still pay substantial dividends to its owners. This would be justification for a considerably higher multiple under a market approach. This is one of the reasons why ABC Appraisal undervalued the company using a market approach. That is why it was so important to use a secondary approach to valuation in order to really capture the true earnings capacity and cash flow of the company.

**Page 18.** ABC Appraisal starts their discussion about adjustments by referring to their use of the 2000 audited financial statements. It is ironic that they choose to use the year that is least profitable. There is no discussion about trends for Littleton, no discussion about why profitability in 2000 may be different than in prior years, no discussion about the substantial investment in the new facility. I seriously question whether or not they did any analysis of the prior years.

At the bottom of the page, ABC Appraisal addresses their compensation analysis. They only use 2000, partly because prior years had much greater salaries. In fact, salaries were as follows:

	1996	1997	1998	1999	2000
Officers' compensation	\$4,364,000	\$9,614,000	\$10,637,000	\$8,779,000	\$2,114,000

ABC Appraisal avoids the issue that what the shareholders received in previous years was so far above what even they considered to be reasonable, that it does not enter into their valuation. However, this is one more instance where John's loss includes the loss of the level of salary that he was getting, far in excess of the value of the services rendered.

**Page 19.** ABC Appraisal attempts to support the reasonableness of the compensation being added in the dividends and subtracting the total taxes paid on the profits of the company. This is misleading. Reasonable compensation is based on a pretax compensation level. Imputing taxes in the fashion that they did is nothing more than an attempt to justify the fact that there is a considerable amount of money passing through to the owners of the company.

ABC Appraisal relies on the previous judge to support the importance of Joe to the company, and further attempts to use this to support the notion that he deserves a large amount of compensation. Comparing the results of the company from 1979–1991 to show Joe's importance ignores the fact that along the way, Joe received the benefits of his efforts. Besides being compensated through payroll and perquisites, he received dividends, and his investment in the company is worth many times what it was previously.

**Page 20.** ABC Appraisal starts off by stating "Based on the Court's findings, Joe deserves a significant level of compensation for his efforts in leading the Littleton Entities." Because the valuation report is supposed to be an independent opinion, hasn't ABC Appraisal relied on the judge for the judge's opinion, instead of supporting one of their own?

*(Continued)*

**EXHIBIT 19.4** (*Continued*)

ABC Appraisal also states that “Because Joe is the principal contact with the customers, the loss of Joe would leave the Littleton Entities vulnerable to the loss of major customers.” The fact is that Joe is not going anywhere. He will be staying with the company. Even if Joe was to sell the company, a prudent willing buyer would insist on a reasonable employment contract to insure a smooth transition of the customer base. ABC Appraisal uses Joe’s importance to support higher compensation, a key person discount, and lower multiples than the guideline companies. They are effectively triple-counting in order to low-ball the final opinion of value.

ABC Appraisal refers to the “Independent Investor Test” to support reasonable compensation. While this is one way to look at the reasonableness of compensation, it is not the only factor that should be considered. First of all, let’s put this test into perspective. It is generally used to determine the reasonableness of past compensation for income tax purposes. Next, while it has come up in several tax-related cases, other factors have also been raised as being pertinent.

ABC Appraisal footnotes *Exacto Spring Corporation v. Commissioner of Internal Revenue* to support the concept of the reasonable investor test. However, I found a newsletter that cites the following:

in *Metro Leasing and Development Corp. v. Commissioner*, 376 F.3d 1015 (9th Cir. 2004), the Court rejected in substantial part the ‘independent investor’ test for determining reasonable compensation, and held that a payment of income tax that was contested was not deductible from the base on which the accumulated earnings tax is computed. The former holding puts the Circuit in substantial conflict with the Seventh Circuit’s decision in *Exacto Spring Corp. v. Commissioner*, 196 F.3d 833 (7th Cir. 1999), as well as the Second Circuit’s in *Rapco Inc. v. Commissioner*, 85 F.3d 950 (2d Cir. 1996). The latter places the Ninth Circuit in clear conflict with the Fifth Circuit’s decision in *J.H. Rutter Rex Manufacturing Co. v. Commissioner*, 853 F.2d 1275 (5th Cir. 1987).<sup>1</sup>

The basis of ABC Appraisal’s analysis is the return on equity. However, because Littleton is a privately owned company, equity is capable of being manipulated because it is not an important number to the business owner. Public companies are operated to maximize shareholder value and, because of this, the value of equity is important at all times, and returns on equity are very important to the shareholders. Littleton, however, being privately owned, operates the business in the manner in which the Littleton family sees fit.

What is also extremely misleading is that ABC Appraisal uses results from 1979, when the company was considerably smaller, to help justify today’s (2000) compensation. On Schedule 6 of their report, they show returns for the Russell 2000, the Russell 1000, the S&P 500, and the Dow Jones Transportation Average. ABC Appraisal shows the S&P compound annual growth rate (CAGR) at 12.7 percent. According to Ibbotson Associates’ *Cost of Capital*, 2000 Yearbook, the S&P had an average return of 19.92 percent over the last 10 years. This would indicate that Littleton did not do as well during the most recent 10-year period. Ibbotson also shows that the compound annual equity returns for the Standard Industrial Classification (SIC) code 4213, trucking except local, was 14.35 percent for the composite of the 32 companies in this group. Littleton’s rate of 12.9 percent is not as good as the industry overall.

In an attempt to see what the impact of using a shorter period of time would have on the Littleton rates of return, we performed a similar analysis as ABC Appraisal did in their Schedule 6. When we did ABC Appraisal’s analysis from 1990, instead of 1979, the results change dramatically. In fact, using their methodology, Littleton has negative returns of 3.20 percent, considerably below the industry average.

**Page 21.** In the middle of this page, ABC Appraisal starts to discuss their alternative compensation test relating to three positions in the company. This is similar to what we did, but we did more. ABC Appraisal cites data from the Economic Research Institute (ERI) database (see his schedule 9) to establish a reasonable compensation level per position. The source document that ABC Appraisal used is included as the next to the last page in their report.

When ABC Appraisal references the maximum reasonable cash compensation, as defined by the IRS, they are referring to the agreed upon figure that ERI can use in its database—not what the IRS will necessarily allow in a reasonable compensation case. I spoke with ERI about this figure. It represents two standard deviations above the

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<sup>1</sup> A. S. Pratt & Sons, *Community Bank Tax Report*, “Ninth Circuit Decision Limits: Independent Investor’ Test, Deduction of Paid Contested Taxes Against AET Base.”

## EXHIBIT 19.4

mean. As ERI told me, this is a statistical figure that the IRS allowed to provide guidance as to the reasonableness of the maximum compensation that *might* be allowed by the IRS, but the facts and circumstances of every situation must prevail. Therefore, this is not a guaranteed maximum figure.

Another consideration in the ERI figures is that the noncash compensation is frequently estimated, but not necessarily pertinent, to the specific companies in the data set. This makes the information less reliable.

The proxy analysis that ERI does in the data used by ABC Appraisal includes the following companies: CD&L, Forward Air Corp., Mobile Mini, Inc., Pacific CMA, Inc., Planar Systems, Inc., RPC, Inc., Smithway Motor Xpress Corp., Trailer Bridge, Inc., Transport Corporation of America, and U.S. 1 Industries, Inc. Other than Transport Corporation of America, none of these companies were guideline companies. Our analysis of the proxies went as far as to pull the actual proxies of companies that we considered to be relevant to Littleton. ABC Appraisal merely used this program, and it is not inclusive of their comparable companies, despite the SIC code used.

**Page 23.** Once again, ABC Appraisal displays complete advocacy as they discuss the adjustment for nonrecurring items. Discussing the expenses of Walder and Kass, ABC Appraisal states “As a matter of equity, the Court may wish to exclude this adjustment due to its conclusion that John was the oppressor.” This comment has no place in an independent, objective appraisal. This is for legal counsel to argue and not the valuation analyst.

ABC Appraisal discusses their findings and the fact that they narrowed down the selection to only six guideline companies. They say that these are the “most comparable companies.” However, two of their six companies are not comparable. PAM Transportation derives a large percentage of its revenue from the automobile industry. US Xpress was growing through acquisition; it had made numerous acquisitions during the past several years.

They claim to have benchmarked the 24 companies for the latest 12-month period in terms of

- revenues (in terms of size and growth in revenues);
- EBITDA (earnings before interest, income taxes, depreciation and amortization); and
- EBIT (earnings before interest and income taxes).

However, using only these criteria ignores other attributes that make these companies good guideline companies. Some of the factors to consider in selecting guideline companies have been included in the writings of Graham, Dodd, and Cottle;<sup>2</sup> Stockdale;<sup>3</sup> and Bolten, Brockardt, and Mard.<sup>4</sup> The following are some of the factors to consider, though not necessarily in any special order.

- |  |  |
|--|--|
| • Past growth of sales and earnings                            | • Amount of investment in inventory                |
| • Rate of return on invested capital                           | • Level of technology employed                     |
| • Stability of past earnings                                   | • Level of skill required to perform the operation |
| • Dividend rate and record                                     | • Size   |
| • Quality of management  | • Financial position                               |
| • Nature and prospects of the industry                         | • Liquidity  |
| • Competitive position and individual prospects of the company | • Years in business                                |
| • Basic nature of the activity                                 | • Financial market environment                     |
| • General types of goods or services produced                  | • Quality of earnings                              |
| • Relative amounts of labor and capital employed               | • Marketability of shares                          |
| • Extent of materials conversion                               | • Operating efficiency                             |
| • Amount of investment in plant and equipment                  | • Geographical diversification                     |

<sup>2</sup> Graham, B., Dodd, D., and S. Cottle, *Security Principles and Technique*, 4th ed. (New York: McGraw-Hill Book Co., 1962).

<sup>3</sup> John J. Stockdale, “Comparison of Publicly Held Companies With Closely Held Business Entities,” *Business Valuation Review*, 1986: 3–9.

<sup>4</sup> Bolten, Steven E., Brockardt, James W., and Michael J. Mard, “Summary (Built-Up) Capitalization Rates for Retailers,” *Business Valuation Review*, 1987: 6–13.

(Continued)



**EXHIBIT 19.4** (Continued)

It seems that his benchmarking was extremely limited. Personally, I think that it was designed to eliminate many of the guideline companies that, not only they, but we, used in our first reports, but it also eliminated many of the potential guideline companies that had higher multiples. This was one more attempt on their part to low-ball the final value.

**Page 24.** ABC Appraisal refers to their Schedules 3b and 3b.1 for a description of the 24 companies that they considered and why they rejected some. I agree with some of their selections, but disagree with others. I believe that their explanation of why they eliminated some of these companies is ridiculous. They refer to some of these companies being more than seven times Littleton's revenues as a reason for elimination. Knocking out a perfectly acceptable guideline company that is under 10 times the subject is without good justification, especially when these companies are a good fit to the subject. Furthermore, these are the companies that might very conceivably be the willing buyer of Littleton.

For ABC Appraisal's deposition, you probably want to ask them questions regarding their choice of guideline companies, where it differs from ours. For example, they include PAM Transportation, which admittedly gets about 46 percent of its revenues from the automotive industry. However, on Schedule 3b, they eliminate Allied Holdings Inc. While they indicate that the primary reason was that the revenue was more than six times the size of the Littleton, they makes it a point to indicate that this company is automotive focused. With PAM Transportation getting approximately 46 percent of its revenues from the automotive industry, and approximately 33 percent of its revenues from one customer, GM, it seems that this company (PAM) is automotive focused and should have been eliminated in their selection process. This is the reason why we eliminated this company.

With regards to US Xpress, we eliminated this company because according to the disclosures in their Form 10K, they have made approximately 10 acquisitions during the 1990s, with more than half of them coming in the latter half of the decade. We felt that because this company was in acquisition mode, and its growth was through acquisitions as opposed to internal growth, this was a company that was dissimilar to Littleton. Let's find out why ABC Appraisal believes that this company was a good guideline company.

With respect to some of the other companies that we included, that ABC Appraisal omitted, some of these companies do not show up on his Schedule 3b. This indicates that either the company did not show up at all in their search, or they excluded them early in the process. Let's find out which it is. For example, JB Hunt does not show up at all in Schedule 3b. Besides the fact that we found it to be a reasonable guideline company, its multiples are as follows: MVIC to Revenues, 1.93; MVIC to EBITDA, 9.14; MVIC to EBIT, 9.90.

Another company not included on ABC Appraisal's list is Motor Cargo Industries. Once again, we need to find out why. The multiples for this company are as follows: MVIC to Revenues, 0.37; MVIC to EBITDA, 2.66; MVIC to EBIT, 5.33.

**Page 27.** In Section 10.4, ABC Appraisal states:

We determined the multiples of the guideline companies by dividing their adjusted total capital of the guideline companies as of December 31, 2000 by the appropriate adjusted financial parameter as of December 31, 2000.

This will cause a difference in their report from ours. We used Littleton's December 31, 2000 financial statements, but that was it. They used financial statements for the guideline companies *and* their stock prices as of December 31, 2000. Not only does this add an extra quarter of financial data to the analysis (because we cut off at September 30, 2000 to stay with what would have been known or knowable at November 29, 2000), but it also changes the multiples because of the stock price differences.

Before I demonstrate the differences in the multiples between the time periods, there is one other multiple that I need to address. ABC Appraisal calculates what they call "adjusted total capital" in Schedule 12b of their report. This calculation is performed in a relatively unorthodox format. By definition, invested capital typically represents long-term interest bearing debt plus equity of a company. For convenience, many valuation analysts will use total interest bearing debt. ABC Appraisal adds "book debt," which they reference to their Schedule 3. However, in reviewing what they have called book debt, I found that they included a cash overdraft for Transport Corp. of \$4.1 million and \$1.5 million for USA Truck. Cash overdrafts are typically treated as accounts payable, not interest bearing debt under generally accepted accounting principles. Therefore, they have overstated the invested capital for these two guideline companies.



## EXHIBIT 19.4

Another item that needs to be discussed is the fact that ABC Appraisal subtracts nonoperating assets from the guideline companies' equity in the determination of his "adjusted total capital." Because the investors in the public market pay a price for the stock of these companies knowing that these assets are included in the equity of the company, I feel that it is inappropriate to make this subtraction.

The following table shows the differences in the stock prices and multiples based on the information reported in the Forms 10-K (before making the adjustments that ABC Appraisal made regarding the leases and excluding the cash overdraft):

	Stock Price		MVIC/EBITDA		MVIC/EBIT	
	Dec. 31	Nov. 29	Dec. 31	Nov. 29	Dec. 31	Nov. 29
Arnold Industries	18.00	18.73	4.54	4.82	6.91	7.34
Old Dominion	9.50	9.88	3.02	3.06	6.05	5.92
Pam Transportation	8.03	8.00	3.34	3.36	6.58	6.33
Transport Corp.	4.38	4.66	3.38	3.41	9.33	10.24
US Xpress	5.56	6.69	4.78	4.96	13.03	11.10
USA Truck	5.50	6.00	4.01	3.66	23.31	12.54
		Median	3.69	3.53	8.12	8.79

As you can see, the stock price was lower for five of the six guideline companies at December 31, as compared to November 29. The median multiple actually rose slightly for EBITDA, but declined for EBIT. This would cause ABC Appraisal's overall figures to decline again by using the December 31 figures, as compared to November 29 (latest 12 months September 30).

**Page 28.** One of the many problems in using the guideline company method is that you cannot always correlate the multiples. In looking at table 6 of ABC Appraisal's report, let's concentrate on the EBITDA and EBIT multiples. The only difference between these two multiples is that depreciation and amortization is added back in order to derive EBITDA. But look at how different these multiples are when you compare the variance from one multiple to the next for the same company:

	EBITDA	EBIT	EBITDA/EBIT
Arnold Industries	4.43	6.84	64.77%
Old Dominion	2.71	6.32	42.88%
PAM Transportation	3.09	6.06	50.99%
Transport Corp.	2.86	8.19	34.92%
US Xpress	3.05	11.90	25.60%
USA Truck	4.01	22.56	17.77%

This indicates that these guideline companies have such a different degree of depreciation and amortization from each other (and from Littleton) that the use of both of these multiples renders one of them meaningless. This is the reason that we used an EBIT multiple and did not use the EBITDA multiple in this appraisal. We also used debt free net income so that we had a second multiple. This just highlights one more of the problems in determining comparability of Littleton to these public companies. Even the public companies are different.

**Page 30.** ABC Appraisal discusses the analysis of transaction multiples on this page. They indicate that they located 18 transactions but could not use 14 of them. They show the four transactions that are used on Schedule 4. First of all,

(Continued)

**EXHIBIT 19.4** *(Continued)*

there are not enough transactions for this to really be useful, other than at most, a sanity check. However, if you look at the transactions on Schedule 4, you will notice that three of these companies are considerably smaller than Littleton. That eliminates them for comparability. Also, it is known in the valuation field that larger companies typically sell for larger multiples. That is one of the reasons that ABC Appraisal eliminated some of the larger companies from their guideline company analysis.

The four transactions look like this:

Target	Sales	Multiples	
		Sales	EBITDA
Jevic	226.1	0.90	6.70
Bestway	40.9	0.40	1.50
Dedicated	44.0	0.10	3.00
Carco	66.7	0.50	3.60
Average		0.48	3.72
Median		0.44	3.30
<b>Closer to Littleton</b>	<b>226.1</b>	<b>0.90</b>	<b>6.70</b>

ABC Appraisal uses the median and mean to justify the multiple from the public companies, but the reality is that even these transactions are being used by them to mislead the judge. The only transaction above that is remotely similar to Littleton is Jevic, which results in multiples that are almost twice the median and mean. I do want to emphasize, however, that only one transaction cannot be used for much without having a tremendous amount of detail which is not available from the transaction databases. This is another display of trying to mislead the reader of their report that this information is relevant.

They attempt to explain away the higher multiple by indicating that a control premium can be observed for only one transaction. If that is true, which it is not, the premium would be almost 100 percent!

**Page 31.** Table 8 indicates the percentage growth in Littleton compared to the guideline companies. ABC Appraisal uses this information to indicate how Littleton compares to these companies. However, once again, this analysis, by itself, is misleading. ABC Appraisal never discusses the fact that the growth rates for several of the guideline companies are attributable to acquisitions, as opposed to real growth. They also are only looking at historical information (another drawback of using the market approach in this fashion). Historical growth rates do not translate into stock prices. It is the future growth that investors are buying. Merely looking at history does not allow an informed decision to be made about future prospects. What this table shows is that on a revenue basis, Littleton has done incredibly well (except 1998) in comparison to the guideline companies because none of their growth has come from acquisitions.

Based on profitability, Littleton is superior in its EBITDA margin and almost as good in its EBIT margin. Once again, ABC Appraisal attributes this to Joe. Regardless of who caused it, the value is clearly there for Littleton. It seems that every time ABC Appraisal has to say something positive about Littleton, they attribute it to Joe, or they attempt to downplay it. The fact is, John is entitled to the value of his interest, regardless of who runs the company.

**Page 32.** At the top of the page, there is another attempt to downplay the multiples that would be applicable to Littleton. They state:

In addition, an investor would consider an investment in the Littleton Entities more risky than the guideline companies in the following respects:

- The Littleton Entities had a high customer concentration level.
- The Littleton Entities was smaller than the majority of the guideline companies.

## EXHIBIT 19.4

- The Littleton Entities had less net tangible assets per dollar of revenue relative to its peers. An investor may need to invest additional funds relative to the guideline companies to maintain a comparable level of earnings in the future.
- The Littleton Entities has a great reliance on one key person, Joe.

If we look at each one of these statements separately, we can see that it really should not matter that much. According to ABC Appraisal's own description of these companies (beginning on page 24), customer concentration is as follows (for the top five customers):

Arnold Industries	43%
Old Dominion	6%
Pam Transportation	55%
Transport Corp.	43%
US Xpress	4%
USA Truck	31%*
*10 customers	

Many of the guideline companies have customer concentration risk as well.

As far as being small, this is true. However, here also, it is not that much of an issue for all of the companies. Transport Corp., USA Truck, and Pam Transportation have revenues of \$290,611, \$226,585, and \$205,245, respectively, compared to Littleton at \$166,173. When companies are this size, they are very similar. Even the other companies used by ABC Appraisal could be deemed similar to Littleton. The only company in their group that is really larger than Littleton is US Xpress (\$787,085), which we eliminated as a guideline company because it has been on an acquisition spree.

As to having less net tangible assets per dollar of revenue relative to its peers, ABC Appraisal takes the position that "an investor may need to invest additional funds relative to the guideline companies to maintain a comparable level of earnings in the future." I believe that this indicates that Littleton is run more efficiently than the guideline companies, and an investor would see better asset utilization than the other companies.

Once again, the reliability is on Joe. Talent can be purchased. This is the trucking industry and not rocket science. ABC Appraisal cannot really believe that an adequate replacement cannot be found to run a trucking company, as well, if not better, than the manner in which Joe runs the company. There are many CEOs of other trucking companies, both public and private, that can be put in Joe's shoes. This is not as much of an issue as they keep emphasizing.

In the conclusion section of the report, ABC Appraisal states:

While the additional factors above would warrant a reduction in the multiples, we have assumed market multiples at or above the median multiples of the guideline companies in order to be conservative (favorable to John).

They have already eliminated the guideline companies with higher multiples. They have chosen to ignore a DCF because of the growth of Littleton. They have ignored the new state of the art facility. They have overstated Joe's worth to support reasonable compensation. And now, they choose median multiples "in order to be conservative (favorable to John)." Who are they kidding?

They attempt to use the transaction multiples to justify what they have done here. I have already demonstrated why this is not reasonable.

**Pages 33 and 34.** At the bottom of the page and the top of the next page, ABC Appraisal justifies their weighting the multiples, 20 percent for the revenue multiple with the balance split evenly between the other two multiples. They indicate:

But we do not believe a buyer would ignore the value indicated by using the Revenue multiple because the buyer will be concerned whether the profit margins of the Littleton Entities can be maintained and if the profitability will revert to a more average margin in order to retain the customers.

(Continued)

**EXHIBIT 19.4** (*Continued*)

This is nothing more than an attempt to put some weight on a multiple that is lower than the others. It brings down the value. The revenue multiples have a range from 0.38–0.95 (Table 6 of their report). Looking at means and medians without an analysis of what caused growth and profitability for the guideline companies does not prove that there is any correlation between the multiples that these companies are trading at and revenues. In our analysis (using the guideline companies that we selected) we found a very poor correlation in the revenue multiples. That is the reason that we eliminated it from consideration.

We ran a simple regression analysis using ABC Appraisal's multiples to determine if there was any statistical reliability in them. The only multiple that showed any reliability was his EBITDA multiple. The revenue multiple had a  $R^2$  of 0.54 (the closer to one, the better) and the coefficient of variation was 0.36 (the lower the better). The EBIT multiple has a  $R^2$  of 0.77, but a coefficient of variation of 0.62. This means while the  $R^2$  is within an acceptable range, the coefficient of variation shows a wide swing in the multiples. This is evidenced by the fact that the multiples range from 6.06–22.57. This would make this multiple unreliable. Both statistics are acceptable for their EBITDA multiple which indicates consistency in the guideline company multiples. This does not mean, however, that their value is correct because I believe they chose inadequate guideline companies.

**Page 35.** They indicate:

We also believe that giving John the benefit of an additional control premium would be to be unfair to Joe and Mary (the third shareholder), as their ability to receive such a premium would require both that the Littleton Entities be sold, and that it would warrant a premium over its going-concern value in such a sale.

It is interesting that ABC Appraisal makes this remark because their entire valuation is premised on the assertion that the company will be sold. For them to say "such a premium would require both that the Littleton Entities be sold..." seems to be the very premise that they operated under all along. They are being contradictory.

In Table 12, they are, once again, being cute with the transactions. They are showing how close they came to the average and median multiples. Where they fail is in their analysis.

**Page 36.** Section 11.3 is ABC Appraisal's discussion of their key person discount for Joe. They list factors that show that Joe is "great." They omit, of course, the negative impact that Joe probably had on the company because he went to jail. They also discuss the decline in the company during Joe's absence (1992–1994), but again, they forget to mention anything about the serious recession that the country, and particularly the Northeast, was in during that time frame.

ABC Appraisal footnotes an article from *The Business Owner* relating to personal goodwill:

It is harder to sell a business in which the owner is active in the business and, even more so, was hard to replace. Furthermore, such a business will command a lower price.

However, if you read through this article, you will see that it pertains to small businesses and not companies the size of Littleton. The author cites a presentation that I attended at a conference entitled "Separating Personal and Business Goodwill of Operating Companies in Divorce Valuations." This presentation had to do with valuing small companies in a divorce setting. The presenter, Rod Burkert is from Pennsylvania, a state that does not permit personal goodwill to be part of "equitable distribution."

If you answer the many questions in the article with a (p) for personal and a (b) for business, you can see that the vast majority of Littleton Trucking's goodwill is business related and not personal. The questions raised are as follows:

*Type of Service*

- Is the product creation process labor intensive (P) or machine intensive (B)?
- Are orders received by the owner or his staff, or both (P) or automatically (B)?
- Do customers interact with the owner-manager personally (P) or mostly just with employees (B)?
- Do customers associate quality with the owner-manager (P) or with the company (B)?
- If a reputation of quality, honesty, and fair dealing exists, is it attributed to the owner-manager (P) or the business (B)?

## EXHIBIT 19.4

*Customers*

- Do customer referrals come to the owner-manager personally (P) or to the business (B)?
- Do the customers speak of the owner (P) or the business (B)?
- Does most revenue come from repeat business (P) or new customers (B)?
- Are there just a few customers (P) or many (B)?

*The Company*

- Start-up (P) or mature business (B)?
- Is the business named after the owner (P) or not (B)?
- Is there one owner working in the business (P) or many (B)?
- Does the owner-manager handle all core tasks (P) or delegate them to a talented team (B)?
- Are the systems, processes, and methods “in the owners head” (P) or are they documented and carried out by others (B)?

*The Owner*

- Does the owner work many hours in or on the business (P) or few (B)?
- Is the owner well known in the industry and community (P) or not really (B)?
- Does the business require a high level of knowledge, skill, and ability (P) or could the business be run by any one of a great many people (B)?

*Other*

- Can personal relationships influence customer decisions to buy (P) or are customers large and interested only in price, terms, and service quality (B)?
- Is the business financing personally guaranteed by the owner (P) or not (B)?
- If the business was purchased, was a covenant not to compete a part of the terms (P) or not (B)?
- Can the ownership interest be sold without restrictive covenants on the owner (B) or would the buyer likely require the seller to agree to restrictive covenants (P)?
- Would the loss of the owner’s services result in a decline in revenue (P) or not (B)?

With regards to the other article, “Key Person Discount” from *Valuation Strategies*, the full name of the article is “Key Person Discount: Overlooked and Underutilized.” This article starts off with the following sentence:

In **small closely held entities**, it is quite common to find many if not all elements of management concentrated in one or two people. (Emphasis added).

It then states:

The IRS has long recognized the fact that a reduction in value is appropriate and it stated in Rev. Rul. 59-60:

The loss of the manager of a so-called “one-man” business may have a depressing effect on the value of the stock of such business, particularly if there is a lack of trained personnel capable of succeeding to the management of the enterprise. In valuing the stock of this type of business, therefore, the effect of the loss of the manager on the future expectancy of the business and the absence of management succession potentialities are pertinent factors to be taken into consideration.

Littleton trucking is certainly not a “one-man” business. It also has at least \$1 million of life insurance as mitigation of the loss of Joe. By the way, if Joe is so important, why wasn’t this policy amount increased?

The studies included in this article show ranges that are all over the place. There is not enough information to determine how applicable each situation would be to Littleton.

What is also interesting is the court case determinations (and keep in mind that this is all in the context of fair market value and not fair value), and particularly, *The Estate of Paul Mitchell*. The court in *Estate of Mitchell* allowed a 10 percent discount to reflect the value of the decedent’s creativity to the business. Paul Mitchell was considered the heart of the company’s connection with its customers; he was a creative trendsetter, and his hair sculpting techniques revolutionized hair styling.

(Continued)

**EXHIBIT 19.4** (Continued)

According to the author "It appears from the empirical data (although that data is somewhat thin) that a range of 8% to 35% may be appropriate." However, if you look at the table that they include to summarize the cases, they show the following:

<b>Exhibit 2. Summary of Cases</b>	
<b>Case</b>	<b>Discount</b>
Estate of Huntsman	11.2% and 9.1%
Estate of Yeager	10.0%
Estate of Feldmar	25.0%
Estate of Rodriguez	27.4%
Estate of Mitchell	10.0%
Furman	10.0%

In the two cases that allowed higher discounts (Feldmar and Rodriguez), the key person had a tremendous impact on the business. In *Rodriguez*, the company was small (average three year earnings were under \$300,000), and in *Feldmar* (company had about \$31.0 million in revenues), the decedent was responsible for marketing its insurance product in a unique way. Neither of these cases would apply to Littleton.

In Pratt's *Business Valuation Discounts and Premiums*, the author discusses factors to consider in analyzing the key person discount. Pratt states:

Some of the factors to consider in estimating the magnitude of a key person discount, in addition to special characteristics of the person listed above, include:

- Services rendered by the key person and degree of dependence on that person
- Likelihood of loss of the key person (if still active)
- Depth and quality of other company management
- Availability and adequacy of potential replacement
- Compensation paid to key person and probable compensation for replacement
- Value of irreplaceable factors lost, such as vital customer and supplier relationships, insight and recognition, and personal management styles to ensure companywide harmony among employees
- Risks associated with disruption and operation under new management
- Lost debt capacity

Pratt then goes on to discuss items that mitigate the potential loss:

There are three potential offsets to the loss of a key person:

1. Life or disability insurance proceeds payable to the company and not earmarked for other purposes, such as repurchase of a decedent's stock
2. Compensation saved (after any continuing obligations) if the compensation to the key person was greater than the cost of replacement
3. Employment and/or noncompete agreements

Pratt references an article on this subject as follows:

Jerome Osteryoung and Derek Newman propose a fairly rigorous analytical approach to quantifying the key person discount. In the summary to their article, they write:

This paper suggests that the key person impact on the valuation of a business is important. The smaller the business the more important the key person becomes.

The key person impact cannot be thought of as applying a certain percentage to normal valuation of the business. This is not appropriate for two reasons. First, there is no viable research or theory that substantiates this point. Second, the key person loss will be different with each type of business.

In order to evaluate the loss of a key person on the value of a business, each component in the future income and cash-flow stream must be evaluated for the exiting key person. Only by undertaking such a rigorous approach can any losses resulting from [sic] the departure of the key person be quantified?<sup>5</sup>

<sup>5</sup> Osteryoung, Jerome S. and Derek Newman, "Key Person Valuation Issues for Private Businesses," *Business Valuation Review*, 1994: 116.

## EXHIBIT 19.4

Notwithstanding the above, the fact is that most practitioners and most courts do express their estimate of the key person discount as a percentage of the otherwise undiscounted enterprise value.

Note the explanation regarding the methodology for evaluating the key person impact on the valuation. Osteryoung and Newman state:

### Methodology for Evaluating Key Person Impact on Valuation

In this section, a definition of a key person is suggested for the purpose of the appraisal of the privately held firm and methods of evaluating the contribution of the key person are described.

A key person is defined as the owner/manager of a privately held business. It is very important to note that in the discussion of key person valuation issues, the key person is defined as both the owner and manager. This distinction is important because if the owner is not the manager, then the owner is remote from the daily operation of the business and the impact is not as great as that of the owner/manager. Additionally, the manager who is not an owner is not considered as a key person as this person is assumed to be continuing with the business for valuation purposes.

The establishment of the fair market value of a business begins with a forecast of the firm's earnings and cash flows. While there are many approaches for this process, this paper will only highlight the necessary adjustments for this process to account for the key person impact.

Mathematically, the key person discount is the percentage decline in the value of the business resulting from the replacement of the key person. While this is normally thought of as a discount, there are many times when the value of a business will be enhanced with the replacement of a key person. If an owner/manager was ineffective, then the replacement of that person should be considered a key person premium.

In every valuation, the impact of the key person needs to be ascertained. Shown below are the key elements to evaluate the key person's impact on the income stream of the business:

#### **Elements in Key Person Evaluation**

1. the salary paid to the key person,
2. the salary expected to be paid to the replacement of the key person,
3. the perquisites paid to the key person,
4. the perquisites expected to be paid to the replacement of the key person,
5. the ease of finding a replacement for the key person and the time necessary to accomplish such a replacement,
6. the non-replaceable reduction in sales from key person departure, and
7. the non-replaceable reduction in costs from key person departure.

The salary paid to the key person must be compared to the expected salary of the replacement. The salary paid to the key person can either be too high or too low depending on the specifics. What is relevant is the change in salary to the business after the change in ownership takes place. For example, if the key person was extracting an annual salary of \$45,000 a year but the new person would require \$75,000 for an equivalent performance then the \$75,000 is appropriate for the valuation process.

With perks the same type of analysis is required. The perks that the key person is receiving must be compared with those of a replacement. If the key person was taking \$54,000 in perquisites and the new replacement will only extract \$16,000. Then the relevant figure here is the \$16,000 as this will be the figure that impacts the projected income flows of the business.

Very often the key person of the business is performing two or three jobs that any prospective purchaser of the business would not be able to accomplish. Some time in the valuation process must be spent going over the role and responsibility of the key person to ferret out what the job performance really is. This might entail spending a day or two just following the key person around to actually see what he does. Frequently, the key person is the CEO, marketing manager, and the production supervisor. In this case, the marginal expenses of hiring the additional people to perform these jobs must be computed and incorporated into the valuation's projected income flows.

Frequently, it may take months to find an adequate replacement for the key person. It should not be assumed in the valuation process that, automatically, the new purchaser will have the skills to run the business. Rather, the assumption should be made that it will take time, effort, and sometimes a monetary expense to find or train the replacement. All of these elements need to be considered and built into the forecast of future income and cash flows.

*(Continued)*



**EXHIBIT 19.4** *(Continued)*

One critical element in the valuation process is to estimate the amount of sales that will be lost with the departure of the key person. The closer the key person is to the sales function the higher this number will be. For example, a business with a key person in a manufacturing operation who normally does not get involved in marketing but has a marketing manager will not normally lose sales. However, a legal or medical practice will lose substantial revenue if the lead attorney or physician departs from the business. These departures are significant since there is a personal relationship built up between the client and the key person. The closer the key person is to the purchaser of goods or services the greater the loss of revenue.

This key person sales loss must be built into the revenue forecast of the valuation. Of course, the difficulty is in estimating the decrease in revenue because of the key person departure. The following is a list which allows the ascertainment of the amount of the sales declines which occurs with a loss of the key person.

**Elements In Estimating Revenue Change**

1. The clients should be asked discretely how they would respond if the key person was busy, or would another professional in the firm be a satisfactory substitute? The more willing a client would be to let another professional meet his needs, the less the sales decline on the departure of the key person.
2. The effects of actual departures on the revenues of similar firms should be evaluated.
3. The frequency of contact between the customer and the key person should be evaluated. The greater the frequency, the less likely the client will be to willingly and/or automatically stay with the firm.
4. The nature of the service the key person is providing should be evaluated. If this service is highly personal (e.g. lawyer, doctor, and interior designer), then a great majority of these accounts and clients may be lost.

Sometimes the key person can have a dramatic impact on the costs of a business. A key person may be a very knowledgeable buyer and get goods at very reasonable prices. Additionally, the key person, through diligence and knowledge, can shift down the entire cost structure of a business.

One way to evaluate the effectiveness of the key person in reducing costs is to compare the costs of this business on a line by line basis. If the costs are significantly below the industry averages, then one reason for this may be the cost awareness of the key person.

To incorporate these cost savings from the departing key person is important to the valuation in forecasting the future income and cash flows. One way to do this would be to use the costs that would be expected under normal conditions (e.g. industry averages).

While I realize that this quote was long, it really provides a road map of the factors that should be considered. ABC Appraisal probably did not consider any of them. They merely accepted Joe's importance based on their client's say so and of course, the previous judge.

**Page 37.** Continuing their discussion about key person discounts, ABC Appraisal states:

If we assume that approximately 50 percent of this intangible value, or \$14.7 million, is attributable to the key person value of Joe Littleton, this represents approximately 27.2 percent of the total equity value of the Littleton Entities (before applying a control premium).

This is nothing more than grabbing numbers out of the air. There is no basis for an assumption of 50 percent.

ABC Appraisal refers to one of their trucking industry comparables to support the key person discount that resulted because of the death of the founder and chairman of Transport Corp. (TCAM). According to the 1999 Form 10-K filed in March 2000, TCAM's stock prices ranged as follows during 1999 and 1998:

## EXHIBIT 19.4

Period	High	Low
1999		
1st Quarter	13.750	11.250
2nd Quarter	13.438	9.750
3rd Quarter	16.250	12.375
4th Quarter	13.500	10.563
1998		
1st Quarter	18.250	14.250
2nd Quarter	18.250	16.250
3rd Quarter	17.250	10.000
4th Quarter	12.875	10.875

This data demonstrates that this company's stock prices fluctuated widely. In fact, the stock price declined through 1998 and bounced all over the place in 1999. The death of the founder and chairman was of so little importance to the company that it was not mentioned in the Form 10K. Earnings per share dropped by \$0.44 per share from a year earlier. Fully diluted earnings per share for 1999 were as follows:

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
\$0.25	\$0.46	\$0.31	(\$0.05)

Seeing the decline in profitability, the market's reaction had little to do with the death of the founder. Furthermore, according to a *New York Times* article, published on February 10, 2000

Shares of the Transport Corporation of America Inc. fell yesterday after the company said fourth-quarter profit declined more than forecast, and the USFreightways Corporation scrapped a plan to buy the company for \$132.7 million in stock. Stock in Transport, a long distance trucker, slid \$5.625 to \$9.4375 in NASDAQ trading. The stock of both companies tumbled after they said on Jan. 18 that shareholders of Transport, which is based in Eagan, Minn., would receive 0.412 share of USFreightways for each of their shares, a 31 percent premium at the time. The stock of USFreightways was up 75 cents yesterday, to \$39.375, in NASDAQ trading.

The announcement of this transaction took place in January 2000. Once again, there is no mention that the decline had anything to do with the death of Jim Aronson.

ABC Appraisal then tries to justify why they did not think that this discount was important in their earlier report, but it is now. If the previous judge had decided based on a January 31, 1996 valuation that Joe was so important, why is this now justified? Joe's importance has not changed. If anything, it seems that Ray has taken over a lot of the day to day issues as President (at least according to Ray's deposition).

**Page 38.** The only part of the analysis that I disagree with about the pass through status is the concept of prorating the pass-through entities tax shield because they had not elected S status 10 years ago. Because there is no intention of selling the company, this tax benefit will be realized by Joe and Mary. This is another calculation to bring down the value.

(Continued)

**EXHIBIT 19.4** (*Continued*)

**Pages 39 and 40.** The discussion that takes place in this section about the discount for lack of marketability is completely misleading and, in my opinion, inappropriate. First, ABC Appraisal starts off using *Balsamides* to help support a 35 percent discount. What makes matters worse is they intentionally attempt to mislead the court by stating

A 35 percent discount for lack of marketability is also consistent with published research that indicates that private placements typically occur at prices approximately 50 percent below subsequent public offering prices. 'Average differentials between private transactions prices and public market prices varied under different market conditions, ranging from about 40 percent to 63 percent, after eliminating the outliers.' These studies effectively compare the same company under private and public ownership, and indicate a substantial premium when the shares are easily traded in a liquid market. (Footnotes omitted).

ABC Appraisal references studies that appear in Pratt's *Valuing a Business*, but omit one critical item. The last sentence in the conclusion states:

This is very strong support for the hypothesis that the **fair market value of non-controlling ownership interests** in privately held businesses are greatly discounted from their publicly traded counterparts. (Emphasis added).

The error that took place in *Balsamides* was the fact that the court had poor testimony from the experts. While I agree with the notion that you should consider the illiquid nature of the closely held company, the expert whose testimony was accepted used inappropriate data. The studies that he cited were restricted stock studies which pertain to noncontrolling ownership blocks. Effectively, the court allowed a discount for lack of marketability as if the business was being valued on a minority basis.

ABC Appraisal knows better, and they are trying to get the court to go along with this discount which is applicable to minority interests. If the Littleton Enterprise were sold, Joe and Mary would not suffer a discount of 35 percent. Application of this discount would be a windfall for them.

ABC Appraisal also tries to use the Tax Court's benchmarks of 35–45 percent (again minority interests) to support the factors that they considered in this appraisal. The nature of a closely held company that has owner/employees is that the holding period is a long-term investment. This should not come as any great surprise. Considering the other factors that ABC Appraisal listed, there should be little to no discount.

The major mitigating factor to illiquidity is the large distributions (excess salary from previous and current years, and distributions) that provide strong liquidity to the stockholders while the company is on the market. The financial strength of the company and the fact that the new facility is about to start early in the next period also affords strength. There are no shareholder agreements, so there are no restrictions on stock transferability. The company is not going public, so there are no costs associated with a public offering.

**Page 41.** ABC Appraisal states that customer concentration would make it difficult to sell the company. However, they ignore the fact that three of the six guideline companies that they chose had similar situations. They already discounted the company for Joe, but now they want to consider it again. There is no undercapitalization of the company since the owners (Joe) have chosen to distribute large amounts of cash over the years. Finally, the subsegment of the trucking industry will not be a problem given the strength of the company. There is no justification for this discount.

**SOME MISCELLANEOUS POINTS AND REFERENCES FOR TRIAL**

**Discounted Cash Flow.** In *Business Analysis & Valuation*, the authors discuss the concept of detailed valuation versus the use of multiples. They indicate:

Of course, how much is gained (or lost!) by relying on the market's pricing of other firms depends critically on how closely comparable those firms are. Such reliance also involves a certain circularity. If all equity valuation were based solely on comparables, then mispricing of one firm would translate into mispricing in another firm, and so on. To avoid this never-ending spiral, someone must ultimately conduct an analysis based on something other than mere comparables.

Each of the alternatives offers its own set of advantages. There is no 'best' valuation method, which explains why analysts tend to 'triangulate' by applying several methods in the same context.

### EXHIBIT 19.4

In *Valuing Financial Institutions*, Z. Christopher Mercer, a well respected business appraiser and author discusses relating P/Es and other historical valuation approaches to discounted cash flow methodologies. Mercer states:

Discounted cash flow methodologies are, from a theoretical viewpoint, the most correct and precise methods for valuing businesses. After all, what could better describe the value of a business today than the present value (determined at an appropriate discount rate) of all its future cash flows (or earnings)?

In discussing earnings forecasts, Mercer states, “Finally, for existing companies or financial institutions, the analyst must bridge the gap between actual historical performance and projected future performance.” Clearly, you cannot just rely on history, but you need to project the future and then understand the difference between the two.

In the *Valuation Reference Manual*, in the discussion of discounted earnings, the author states, “The real value of any going business is its future earning power. Accordingly, the discounted cash flow approach, more than any other, determines the true value of your business.”

In an article appearing in *Business Week* entitled, “Taking the Measure of a Stock—Discounted Cash Flow Tells What Other Methods Don’t” appearing May 14, 2001, the author discusses a valuation performed by Aswath Damodaran, a New York University finance professor. The article discusses that stock market prices are based on many factors, but the discounted cash flow model really gets to the underlying value of the company itself. In fact, the author says:

What these models really give you is an appreciation for what drives stock values. Changes in the long-term growth rate seem to have the greatest impact on growth companies, with next year’s earnings projection and, of course, changes in interest rates, also making a big difference.

The author then goes on to say

With all the caveats, Damodaran still argues that discounted-cash flow models make the best valuation tools. He says analysts who rely on price-earnings ratios also make assumptions about growth when they decide what p-e is justifiable for a stock. They just don’t bother doing it explicitly. Without weighing all the elements that are in the discounted-cash-flow model, says Damodaran, valuation becomes a beauty contest—with stocks compared with each other rather than judged on intrinsic value. ‘If the companies you are comparing your company to are all overpriced,’ says Damodaran, ‘what you end up with is a stock that drops by 60% or 65%.’ That’s something easier to imagine now than it was two years ago. ‘Besides,’ he says, ‘focusing only on earnings puts investors at the mercy of companies adept at jiggering the bottom line. Cash flows are more difficult to manipulate.’

**Forecasting.** In *Business Analysis & Valuation*, the authors discuss the process of forecasting. Regarding the overall structure of the forecast, they indicate:

The best way to forecast future performance is to do it comprehensively, by producing not only an earnings forecast, but a forecast of cash flows and the balance sheet as well.

They also indicate that

Forecasting represents the first step of prospective analysis, and serves to summarize the forward-looking view that emanates from business strategy analysis, accounting analysis, and financial analysis.

The authors conclude this section of the book by stating

There are a variety of contexts (including but not limited to security analysis) where the forecast is usefully summarized in the form of an estimate of the firm’s value—an estimate that, after all, can be viewed as the best attempt to reflect in a single summary statistic the manager’s or analyst’s view of the firm’s prospects. That process of converting a forecast into a value estimate is labeled valuation.

In Thomson PPC’s *Guide to Business Valuations*, the authors provide a step-by-step summary of how to complete a discounted future returns method. In Step 1, they indicate, “Obtain (or Prepare) a Financial Forecast.” As you can see, the authors tell us that even if we do not obtain one, we certainly prepare one. The argument that ABC Appraisal uses for not using a discounted future returns methodology is because management did not have a forecast available; that is nonsense. Later in the chapter, the authors indicate:

(Continued)

**EXHIBIT 19.4** (*Continued*)

In some cases, the valuation consultant may be able to obtain a forecast of future operations from the company being valued or from that company's independent accountant. This is the preferred approach and should be encouraged whenever feasible. In many cases, however, the consultant may have to prepare the forecast.

As the authors elaborate on forecasts, they indicate:

Since the valuation consultant **prepares the financial forecast in most instances**, (emphasis added) the consultant should base the forecast on normalized assumptions presented in accordance with GAAP.

In the seminar material, *Business Valuation for Accountants, Brokers and Appraisers*, by The Institute of Business Appraisers, the materials discuss forecasting as an "essential part of appraising" and "often overlooked or ignored by otherwise competent appraisers." In discussing forecasting techniques, various methodologies are indicated in these materials. For example, they talk about mathematical analysis of history, however, the materials also state, "but an analysis of history, no matter how sophisticated in the mathematical sense, is not a forecast."

Finally, with regard to the use of judgment, and possibly being wrong about the forecast, these materials indicate:

Fortunately, appraisers are not required to be infallible forecasters; they are expected only to reach conclusions such as would be reached by a reasonable person, given the available information.

These materials end with a quote from Justice Holmes in *Ithaca Trust Co. v. U.S.*:

Values... depend largely on more or less certain prophecies of the future; and the value is not less real at the time if later the prophecy turns out to be false...

In an article entitled, "Traditional Equity Valuation Methods," published by the Association for Investment Management and Research, the author discusses traditional valuation methods versus "new" valuation methods. The traditional methods fall into more of a market approach concept, as the author discusses price to book ratio, price to sales ratio, price to earnings ratio, and a dividend discount model. While discussing the pros and cons of these different methodologies, the author states, "the DDM (Dividend Discount Model) is intellectually and ideally the best model for valuing companies." While they chose to ignore dividend paying capacity because he claimed it was not important for a controlling interest, clearly this dividend model is considered to be important.

In the second article in this series entitled, "New Methodologies for Equity Analysis and Valuation," this presentation discusses "two of the new equity valuation methodologies—economic value added (EVA) and discounted cash flow (DCF)—that have particular appeal in global analysis." These concepts are based on making the forecast and determining the present value of this stream of income.

The author points out

Modern theory has outgrown the old approaches. Finance professors have in some instances stopped teaching the valuation yardsticks of the previous generation, such as P/E, price-to-sales (P/S), and return on-equity approaches. In fact, Putnam Investment Management recruits heavily from one business school where the students are not allowed to discuss P/E but, rather, only the results from PV methodologies. This change is symptomatic of an ongoing evolutionary trend, both in academic circles and among practitioners, toward new methodologies. The old methodologies focus on earnings-based measures, with some consideration of yield; 5 or 10 years ago, the dominant valuation approaches included P/E, P/S, and among a distinct minority of practitioners, the dividend discount model (DDM). The new methodologies focus much more carefully on the creation or destruction of value; they emphasize the future benefits from investing capital now. The PV calculations permit analysts to value the cash flows from a firm as it now exists and from its use of cash and its financing capability, whether that capability is used to expand the business, repurchase stock, or pay dividends.

The author discusses both the EVA and DCF methods and states:

The EVA and DCF disciplines do, however, focus analysts' attention explicitly on economic earnings, rather than on accounting earnings, and on the productive use of capital, rather than on the growth of reported income per share. These disciplines are also more systematic and sophisticated than the ratio approaches (i.e., P/E and P/S) but, admittedly, at the cost of being more labor intensive. In addition, the PV approaches force disciplined thinking and conscious evaluation of appropriate discount rates. Significantly, they provide a lens to look through various accounting systems at underlying real economic phenomena.

### EXHIBIT 19.4

Clearly, what the author is saying is that these approaches are much more difficult and much more labor intensive, but they are clearly the manner in which valuations should be performed. ABC Appraisal took the easy way out by not attempting to perform this labor intensive exercise. ABC Appraisal clearly was looking to lowball their figures, so they wanted to avoid using a DCF methodology.

Another point discussed in this article that is important is the holding period relating to an investment in a company. Clearly, the market approach emphasizes a short term expectation based on the market prices and growth expectations in the public market. An investment in a closely held company, however, has a longer term holding period and, as such, in order to properly value it, a longer holding period needs to be considered. The authors in this article state:

Finally, the new methodologies, by their very focus on future benefits, share an explicitly longer-term view of a firm's prospects than do the more traditional measures. Ratio analysis tends to depend heavily on historical norms and can easily miss changes taking place in companies, as well as the valuation implications of those changes. Because the PV approaches require explicit forecasting of important future variables for several years, at a minimum, they almost force the analyst to have a greater reliance on future rather than present results.

In discussing the advantages and disadvantages of the methodology, the author states:

First, they provide a consistent and clear framework for valuation...Second, the new methodologies do not depend on GAAP financial reporting. Third, the financial inputs are consistent, allowing more realistic company-to-company, industry-to-industry, and cross-border comparisons. The final advantage, which is potentially the most substantial but also the most difficult to make real, is that these disciplines can make the relationship between expected or forecasted returns and the fair price for the stock quantifiable, specific, and sometimes even transparent. The primary advantage of PV-based disciplines, in fact, is the ability to say that a given asset is intrinsically undervalued, overvalued, or fairly valued.

The disadvantage pointed out by the author primarily is the fact that the analysis requires an extensive amount of labor and, therefore, becomes expensive. Clearly, the author also indicates that in performing forecasts, calculating growth rates, and discount rates, a small variation can impact the valuation. However, there is a clear bias towards using the new methodologies.

In the third article in this series entitled, "Cash Flow Analysis and Equity Valuation," the author states, "The basic idea behind any valuation approach is to estimate the intrinsic value of a company." He also states that "The focus is on the business and its ability to generate cash." In discussing problems with an earnings focus, the author points out

In general, earnings realizations depend substantially on generally accepted accounting principles (GAAP), and companies have discretion and can manage their earnings by using their choice of accounting principles.

While the intention of this article is to point out the difference between using cash flow versus earnings in the valuation process, this quote becomes somewhat important because the public companies, that would be responsible for reporting their earnings to their shareholders could, in fact, manipulate their earnings by applying generally accepted accounting principles in a fashion that would be favorable to them. However, this may not prove to be a good comparison to the Littleton Entities, which has concerned itself with its ability to generate as much cash as possible to the shareholders.

The Littleton Entities have been operated for the purpose of generating cash flow to its owners, proven by its track record of large distributions. Using the public companies could end up being somewhat misleading. A better approach to valuation would be relying on the cash flow generated by Littleton because that would provide the intrinsic value of Littleton, not being prejudiced by any of the manipulations or the volatility of the guideline companies.

In an article entitled, "Valuation of Closely-Held Firms" published in *Business Valuation Review*, December 1990, the authors discuss various valuation techniques recommended in the literature. They also provide the results of a survey that they took among practitioners. In discussing the different valuation methodologies, they state:

Respondents 'covered the waterfront' in stating the most practical approach in valuing a small or closely-held business. The single factor that dominates all others is that most replies indicated the use of the net present value approach as offered, discussed and recommended by most theoreticians and practitioners alike.

(Continued)

**EXHIBIT 19.4** (*Continued*)

They also state:

The message is clear that no single approach is the best in all cases. The literature suggests using multiple approaches in each valuation as a check against other approaches, when sufficient data are available to apply different techniques.

This further supports our position that more than one approach should have been used in this valuation.

In an article entitled, "Market Comparables and Valuation: The Lotz Case Revisited," the authors discuss the use of the market approach in this valuation. This was a California Court of Appeal case (*In re Marriage of Lotz* (1981) (120 Cal. App.3d 379, 174 Cal.Rptr. 618)). The essence of the article is that the authors discuss the ruling by saying, "Simply stated, the court held that the valuation of the closely held company using a comparison with public companies was based on an invalid assumption." They go on to state:

In hearing the case, the Court of Appeals ruled that considerable difference exists between public and private companies and that, therefore, the use of the price/earnings method of valuation as a determinant of market value for a closely held corporation was inappropriate. Consequently, a valuation based on a procedure with such a singular focus, which contained an invalid assumption, was also invalid.

The authors discuss the fact that the court, while not outright rejecting the market approach, said that by using it as a sole approach, because of assumptions that could be faulty, it would flaw a valuation.

In Pratt's *Valuing a Business*, he starts a discussion on generally accepted theory by stating

In the simplest sense, the theory surrounding the value of an interest in a business depends upon the future benefits that will accrue to the owner of it. The value of the business interest, then, depends upon an estimate of the future benefits and the required rate of return at which those future benefits are discounted back to the valuation date.

Thus, the theoretically correct approach is to project some category or categories of the future benefits of ownership (usually some measure of economic income, such as cash flow, earnings, or dividends), and estimate the present value of those future benefits by discounting them based upon the time value of money and the risks associated with ownership. Direct implementation of this theoretically correct approach is discussed in chapter 9, Income Approach: Discounted Future Economic Income Method. That chapter focuses heavily on net cash flow as a measure of economic income, both for conceptual reasons and also because it is the focus of most merger and acquisition income value analysis.

Pratt concludes this section of his book by stating

In general, approaches using current or historical data, if properly carried out, should yield a result that is reasonably reconcilable with what a well-implemented discounted economic income method would derive.

Pratt continues his discussion of basic theory by referring to Professor Bonbright's work on the valuation of property. This discussion pertains to the concept of realized earnings (historical earnings) versus prophesied earnings (future earnings). ABC Appraisal's entire valuation was performed based on historical earnings of the company. Pratt quotes Bonbright:

The truth is that, when earnings have once been 'realized,' so that they can be expressed with some approach to accuracy in the company's accounts, they are already water under the mill and have no direct bearing on what the property in question is now worth. Value, under any plausible theory of capitalized earning power, is necessarily forward looking. It is an expression of the advantage that the owner of the property may expect to secure from the ownership in the future. The past earnings are therefore beside the point, save as a possible index of future earnings.

With so many valuation treatises and court cases quoting Professor Bonbright's work, this may be a good treatise to lead the judge to further support our position.

In discussing basic variables affecting value, Pratt states:

One way or another, the financial benefits of ownership of an interest in the business enterprise must come from the following sources:



**EXHIBIT 19.4**

1. Dividends, distributions, or other type of cash flow:
  - a. from operations, or
  - b. from investments (e.g., interest).
2. Liquidation or hypothecation of assets.
3. Sale of the interest.

Therefore, any valuation approach—at least from a financial point of view—must focus on quantifying the ability of the business interest to provide benefits to its owner from one or some combination of the above sources.

In discussing the theory of valuation, Pratt starts off with two quotes; one from *Investment Analysis and Portfolio Management* and one from *Principles of Corporate Finance*. The first quote is

... the value of an asset is the present value of its expected returns. Specifically, you expect an asset to provide a stream of returns during the period of time that you own it. To convert this estimated stream of returns to a value for the security you must discount this stream at your required rate of return. This process of valuation requires estimates of (1) the stream of expected returns, and (2) the required rate of return on the investment.

The second quote is

Value today always equals future cash flow discounted at the opportunity cost of capital.

As I have been saying all along in this matter, value is equal to the present value of the future cash flows. No matter what methodologies are used, if they do not resemble the future cash flows, the appraiser is not truly measuring value. By relying so heavily on the market approach to determine multiples and ignoring the particular attributes of the Littleton contracts, growth rates, and performance measures, ABC Appraisal has ignored the valuation of Littleton. What they have done, instead, is superimposed into their valuation that if the Littleton Entities were a generic company, trading at the same types of multiples as the public companies, they would be worth a particular amount. In fact, the exercise is to value Littleton, and not a generic company, as if it was just going to be sold in the marketplace. Because the measure of fair value that we are trying to achieve is the value that John Littleton will be giving up, it only seems appropriate that we should be valuing the Littleton trucking companies and not some generic enterprise.

Throughout his writing, Pratt emphasizes the fact that future income is what is being purchased, and that the theory clearly says that you should be discounting it to present value. In chapter 11 of *Valuing a Business*, Pratt discusses the guideline publicly traded company method. He indicates that it is clearly most useful when valuing a marketable, minority ownership interest using the premise of value and continued uses of a going concern business. What he indicates though is, "The method can be used in conjunction with a valuation for any standard of value, certainly most importantly for fair market value." In discussing the application of this methodology to the various standards of value, under fair value, Pratt states:

As a generality, in most states it is a broader standard that incorporates market value along with values indicated by income and asset approaches. Therefore, we would state that a guideline publicly traded company method usually would be a part of the analysis when fair value is the standard.

The important concept in this statement is that it should be part of the analysis. It should not be the sole analysis, which, once again, is what ABC Appraisal did.

Referring once again to *Valuing a Business*, Pratt discusses in chapter 19, the reconciliation process performed at the end of the valuation. He states:

If, after careful review, one of the valuation methods that appears to have merit still produces an outlier, then it becomes a matter of the analyst's professional judgment as to the extent to which the factors reflected in the valuation method actually contribute to the estimate of value of the subject business or business interest. And, the analyst will weight that outlier method accordingly in the final value estimate.

Clearly, there is no substitute for judgment if the different methodologies and approaches yield very different results. This is precisely what we did in attempting to reconcile the market approach valuation with the income approach valuation. What is of importance is that Pratt, in discussing the weighting of the results says:

(Continued)

**EXHIBIT 19.4** (*Continued*)

The analyst should ask, 'What attributes of the ownership of the subject business or business interest create the economic value associated with its ownership?' If the income available for distribution to the business owner is the primary value driver, then it may be appropriate that one or more methods within the income approach dominate the value conclusion. Of course, a capitalization (1) of dividends (for a noncontrolling ownership interest) or (2) of dividend paying capacity (for a controlling ownership interest) within the market approach could very well also capture this income-related value.

In an article entitled, "The Myth of Public Company Comparisons" appearing in *Business Valuation Review*, June 1992, the author discusses various problems of using public company methodologies. In fact, he starts off by stating

But the simple fact is, that determining the value of a privately held company based purely on a cursory review of a group of ostensibly comparable public companies can only produce reasonable results quite by accident.

He then states:

The insurmountable problem is that we can never completely discover why investors bought and sold those specific securities for those prices. And without that knowledge we cannot even begin to hypothesize how those transactions may indicate what an investor would pay for the shares of our client's private company.

The author then points out

Another problem with using public market data is that we are compelled to examine historical information while the marketplace is anticipating the future.

The author illustrates a group of P/E ratios for different industries that are very broad. For example, in the electronics industry, the P/E range was from 8.7–72.7 with a mean of 19.5, and a standard deviation of 12.4. What he states is

It is evident that this range permits a great deal of discretion in the ultimate selection of the P/E ratios to be used. Attempts to calculate a hypothetical share value for one of the publicly traded companies using 'comparable' data from the rest of the industry would generally produce ludicrous results when compared to its actual price. And this is for companies with virtually no differences in security attributes (i.e., actively traded, widely held). How then, can the methodology be expected to actually reflect the value of private shares?

Towards the end of the article, the author states:

Let's end the charade. Is it not preferable to determine the value of a controlling interest by examining the expected cash flow to that interest and the risk inherent in holding that interest? Similarly, isn't it better to determine the value of a minority interest by examining the cash flow to that interest and its relative risk? The assessment of risk can be based on investment hurdle rates or long term equity rates of return as adjusted for the specific characteristics of the subject company, the size of the interest relative to other interests, and other factors. This basis is clearly superior to using the P/E ratios of companies that are subject to multi-variate market influences we can have no hope of fathoming.

An article entitled, "Appraising The Close Corporation, Lotz, Hewitson, and Ronald Not Withstanding," appearing in *Business Valuation Review*, December 1986, includes a statement by the author regarding the market approach:

Some of the elements that determine the price earnings ratio (or its reciprocal the capitalization rate) are past growth, profitability, stability of earnings, financial strength, quality of management, prospects for the industry and, most importantly, the expected growth rate of earnings per share; along with such outside factors as the level of interest rates and current stock market conditions. It is evident from the reaction of the public securities markets that stock market valuations are influenced appreciably by the prospects for immediate increase or decrease in earnings. It is the long-range prospects, however, that furnish the basis for intrinsic value. Thus, the appraiser must be alert for what may be temporary aberrations in the stock market. (Footnotes omitted).

Clearly, the long range nature of the closely held investment is more important than the short range, which could lead to aberrations in the public market. This, once again, is a danger in applying the market approach.

Obviously, all of these materials tend to support the theory that we have based our valuation on, and in many instances, negate or show the deficiencies in what ABC Appraisal has done. I hope that these materials are useful in preparing for depositions and trial.

After reading exhibits 19.3 and 19.4, you are probably realizing that I was not overly happy with the work of the opposing valuation analyst. You do have to admit, though, understanding much of the theory that I cite in the earlier chapters of this book showed up in the critique with many quoted sources. Now at least you know that there are many others, besides me, who not only write about this stuff, but also have strong opinions. These exhibits should have served for as a great refresher for so much of the rest of this book.

Because many of the readers of this book are involved with smaller companies, I have included a sample report of an interest in a smaller firm in an oppressed shareholder suit on the enclosed CD-ROM. Happy plagiarism!

## CONCLUSION

If I did my job, you now have a better understanding of valuations to be used in shareholder disputes. If I did not do my job, or if you just want more information on this subject, see Pratt's *Valuing a Business* or *The Handbook of Advanced Business Valuation*. If you are looking for a book that has many of the leading cases included on a CD-ROM, purchase BVR's *Guide to Fair Value in Shareholder Dissent, Oppression, and Marital Dissolution*, published by Business Valuation Resources. These are dandy resources.



## CHAPTER 20

# *My Favorite Court Cases*

### CHAPTER GOALS

In this chapter, I am going to discuss some of my favorite court cases. These include the following:

- *Estate of Joyce C. Hall v. Commissioner*
- *Estate of Samuel I. Newhouse v. IRS Commissioner*
- *Charles S. Foltz et al. v. U.S. News & World Report, Inc., et al.*
- *Bernard Mandelbaum v. IRS Commissioner*
- *Mad Auto Wrecking v. IRS Commissioner*
- *Delaware Open MRI Radiology Associates, P.A. v. Howard B. Kessler, et al.*

The last case in this list is important enough to make this edition of my book. While the others are oldies but goodies, this 2006 case out of the Delaware Chancery Court deserves the attention of the valuation community.

### INTRODUCTION

If you are anything like me, you probably are starving for guidance in the stuff we do for a living. I keep reading everything that I can get my hands on in the hopes that I will get better at it. The one lesson that I have learned over the past 25 years of doing business valuations is that on occasion a court ruling gets issued that is well thought out and well written. I'm not being critical of the judiciary, but most opinions do not really help me understand what they did to reach the opinion.

In all fairness to the judges, many expert reports, and much of the expert testimony rendered before the courts, quite frankly, stinks. These poor judges are being asked to rule, in many cases, using expert testimony and expert reports that are *anything but* expert work. I give the judges a lot of credit (no cash, but a lot of credit) for doing their jobs as well as they do. As valuation analysts, we read court cases and do not fully appreciate how little good information was presented to the court for it to rule on.

In this chapter, I am going to discuss some of the court cases that I have found to be very helpful in doing my job. These are the cases I have found to be very instructional, and I find that I keep going back to them in order to get some really good valuation guidance. Just keep in mind that we are not attorneys, so we should not be relying on these decisions without proper guidance from an attorney.

Although I am only going to cover certain aspects of these cases, you really should read the entire court opinion. Enough of the introduction, let's do it!

### *ESTATE OF JOYCE C. HALL V. COMMISSIONER*<sup>1</sup>

#### ISSUE: WHAT MAKES A GUIDELINE COMPANY?

This case involves a well-known company, Hallmark Cards, Inc. (the greeting card company) and the determination of the decedent's interest in that privately held company. The main issue that I want to discuss is the treatment given to the guideline company method, in particular the search for guideline companies. Revenue Ruling 59-60 states as number 8 on the hit parade that the valuation analyst should consider

<sup>1</sup> *Estate of Joyce C. Hall v. Commissioner*, 92 TC 312(RIA) (1989)

the market price of stocks of corporations engaged in the same or similar line of business and having their stocks actively traded in a free and open market, either on an exchange or over the counter.<sup>2</sup>

If you reread this statement, the guideline companies are supposed to be in the *same or similar* line of business as the subject company. Notice the word *similar*. That's what this case is all about.

In the battle between the experts, all of the experts agreed on one thing: there was only one good publicly traded *comparable* company, American Greetings Corporation. The petitioner's experts selected additional guideline companies from other industries because they believed that using only one guideline company could be misleading—sort of like taking a poll and asking only one person who will win an election. Not a very meaningful result!

The IRS's expert made his determination based only on American Greetings (surprise, surprise!). He also ended up with values per share of the three classes of stock at more than two times those from the other two experts.

The taxpayer's initial expert, from First Boston, selected five companies as guidelines in addition to American Greetings. They were:

- A.T. Cross Co. (the pen and pencil people)
- Avon Products, Inc. (the world's largest manufacturer of cosmetics, fragrances, and fashion jewelry)
- Coca-Cola Co. (the soda people)
- Lenox Inc. (the fine china folks)
- Papercraft Corp. (a manufacturer of gift wrap items)

These companies did not sell greeting cards. However, First Boston felt that these would be good guideline companies because they:

- Produced brand-name consumer goods
- Were leading companies in their respective industries
- Had publicly traded stocks
- Had business and financial characteristics similar to Hallmark

The lesson to be learned from this is if you look for an exact fit, you will probably never find one. However, to apply the guideline company method, you need to use some imagination to set parameters for a search other than the subject company's Standard Industrial Classification (SIC) code. Sometimes better guideline companies may exist in different industries.

The second expert for the estate, Shearson Lehman, believed that considering several guideline companies reduced the probability that individual characteristics, temporary market inefficiencies, or aberrations relating to one company might bias the valuation analysis.

Despite American Greetings being Hallmark's closest publicly held competitor, Shearson looked for a broad group of companies that shared one or more of the following traits with Hallmark:

- Sold low-cost consumer, nondurable goods through channels similar to those used by greeting card companies
- Had a stable, high-profile, quality reputation with the consumer and a leading brand name
- Sold products in which the images of both the product and the company, and the product's function, were differentiable from those of its competitors
- Sold products that involved some element of social expression

In addition to companies that met the above criteria (the opinion does not tell us which companies), Shearson picked four other companies that they considered comparable to Hallmark in that they were leaders in their industries. They were:

- McDonald's
- Anheuser Busch
- IBM
- Coca-Cola

Hamburgers, beer, computers, and soda! Many individuals could argue that these companies are not comparable to Hallmark. This is the reason that we now call them guideline companies. The idea is to get guidance from the market

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<sup>2</sup> Revenue Ruling 59-60 (1959-1 C.B. 237)

as to the investing public's perception of companies that have similar investment characteristics. These companies were highly regarded by the investment community for their quality management, leading market position, and excellent financial condition. Shearson Lehman also believed that if Hallmark was a public company, it would enjoy a similar reputation.

The lesson that comes out of this case can be highlighted through some of the sections of the court's ruling. These are as follows:

- “Moreover, it is inconceivable to us that a potential buyer of Hallmark stock would consider only one alternative ‘comparable,’ i.e., American Greetings stock.”
- “Respondent argues that it is ‘simply wrong as a matter of law’ to look beyond the single, publicly held company engaged in the sale of greeting cards to other companies engaged in the sale of other types of consumer nondurable goods or having similar financial characteristics. Respondent’s argument too narrowly construes the concept of comparability and ignores the use of ‘similar’ as well as ‘same’ in section 2031(b). Respondent relies on *Northern Trust Co., Transferee v. Commissioner*, 87 TC 349, 376 (1986), aff’d sub nom. *Citizens Bank & Trust Co., Transferee v. Commissioner*, 87 TC 349, 376 1249 (7th Cir. 1988). That case, however, rejected expert opinions based on companies that were found to be noncomparable and concluded that ‘the market comparable approach is not available in this case.’ 87 TC at 377. That opinion does not justify using a market comparable approach based on a single competitor.”
- “Overall, we can only conclude that PCA [the IRS expert] was instructed to prepare and did prepare an analysis that led to an artificial and excessive value for the Hallmark stock. In contrast to PCA, petitioner’s experts acted reasonably in selecting comparable companies in the similar business of consumer nondurable goods, in drawing conclusions based upon careful comparisons of Hallmark with individual comparables.”

So what does this tell us? Similar does not mean an exact fit. Using the guideline company method requires the valuation analyst to look beyond the obvious in the search for companies that can provide guidance from the market. This case is excellent in reiterating the very essence of the market approach.

## *ESTATE OF SAMUEL I. NEWHOUSE V. COMMISSIONER*<sup>3</sup>

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### ISSUE: DIFFERENT CLASSES OF WILLING BUYERS RESULT IN DIFFERENT VALUES

This case is another excellent learning tool. The theme that I am going to highlight is only a small part, but an important part, of the case. Valuations that are performed for estate tax purposes must use the *fair market value* standard of value. Valuation theory tells us that fair market value assumes a hypothetical transaction between a hypothetical willing buyer and a hypothetical willing seller. This case addresses the issue of fair market value “to whom.”

Fair market value deals with the hypothetical willing buyer and willing seller. This case addressed the issue of which class of willing buyer should be considered in the determination of fair market value. Valuation analysts frequently use terms such as strategic or synergistic buyer. We immediately respond by stating that if there is a strategic or synergistic buyer involved, the value determined would represent investment value and not fair market value. This is not always correct.

Part of the determination of fair market value requires the valuation analyst to determine the likely market for the property. Clearly, the willing seller, if prudent, will look to sell the property in the market that would bring him or her the greatest price.

The Newhouse case examined four classes of potential investors. They were

- the passive investor,
- the active investor,
- the control investor, and
- the public investor.

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<sup>3</sup> *Estate of Samuel I. Newhouse v. Commissioner*, 94 TC 193(RIA) (1990)



Goldman Sachs analyzed these four categories of investors as all being valid *willing buyers* in the definition of fair market value. The court's opinion discusses the different types of investor. The subject company of the appraisal is referred to as "Advance." Important descriptions from the opinion are excerpted in box 20.1.

### Box 20.1 Classes of Potential Investors

- A *passive investor* would not be interested in managing Advance and would not attempt to wrest control from management. Expecting to realize value from dividends and private resale, the passive investor would not expect to extract value from Advance through liquidation, merger, or public offering. The passive investor would consider that Advance's stock was not publicly traded, which would depress expectations of resale value. Due to this illiquidity, lack of control, and the uncertainties and constraints affecting the purchase, Goldman Sachs concluded that the passive investor would have offered 30 percent less than the public trading market value of the common stock and thus only \$141 million for the common stock.
- The *active investor* would be inclined to pursue action, short of seeking control, that would quickly maximize the return on his investment. One course of action would be to declare a dividend of Advance's excess cash and any funds that could be obtained through borrowing. Because of the high prevailing interest rate and planned capital expenditures, the common shareholder could extract no more than \$74 million of excess cash plus loan proceeds. Advance also had \$145 million of excess cash, which could be distributed with the loan proceeds. Because of the time and uncertainty involved in this plan of action, the active investor would pay no more than 85 percent of the amount he hoped to extract. This figure would be far less than the \$141 million the passive investor would be willing to pay.

Alternatively, the active investor might cause the excess cash to be distributed immediately and then cause Advance to pay dividends at the highest possible level. Assuming that the active investor would insist on an after-tax yield on his investment of about 13 percent or 14 percent, Goldman Sachs concluded that the active investor would be willing to pay \$150 million for the Advance common stock.

- A *control investor* would have purchased the Advance common stock with the goal of acquiring 100 percent of the equity ownership and control of the company. A control investor would hope to realize value from his purchase by dividend distributions, by liquidation, or by merger, but Advance's unusual capital structure would prevent the latter two courses of action without eliminating the preferred stock or securing their consent. The preferred had the right to block liquidation. Because the common's power to effect a merger adverse to the preferred's interests was so uncertain, Goldman Sachs concluded that any willing buyer, as a matter of sound business judgment, would analyze the value of the common as if that option were foreclosed. Goldman Sachs' analysis is persuasive.

Goldman Sachs concluded that only another media company would be interested in acquiring Advance and that none of the major media companies would have considered buying the common stock without first eliminating the claims of the preferred shareholders. Because the control investor would assume that he could not receive anything except 22 percent of the highest level of dividends declared, he would be in the same position as the active investor and would pay no more than what the active investor would pay, that is, \$150 million.

- Goldman Sachs concluded that an underwritten *public offering* would be the best way to sell the Advance common stock, requiring the three different types of stock to be recapitalized into a single class. Goldman Sachs' research indicated that in approximately half of the transactions in which voting control was transferred, the buyers paid a premium for control. Goldman Sachs concluded that no control premium was warranted. Goldman Sachs then determined that, after exchanging the class A common stock one for three, and the class B common and the preferred stock one for one, the offering price would be \$25 per share subject to a 7 percent discount. The price for all of the shares would be \$778 million, and for petitioner's shares it would be \$176 million.

Because the benchmark value for a public offering, \$176 million, was the highest value, Goldman Sachs concluded that the value of petitioner's Advance common stock was \$176 million on February 29, 1980.

In an older AICPA self study program that is no longer being sold, *Business Valuation Methods*, Alan Zipp discussed the categories of investor. He stated the following:

***The Passive Investor***

A passive investor would not be interested in managing the business. He would expect to realize value from dividends and resale and not from liquidation, merger, or public offering. Although, the passive investor neither controls management, business operations, nor cash flow, he would expect to have some influence on management to increase dividends in the future. The passive investor would consider a depressed resale value because a closely held company is not publicly traded. Due to this illiquidity, lack of control, the uncertainties of future dividends, and constraints affecting a resale, a passive investor would be willing to purchase the business only at a substantial discount, of perhaps 30% or more.

***The Active Investor***

The active investor would be inclined to pursue action, short of seeking control, that would quickly maximize the return on his investment. One course of action would be to pressure the control interest to declare a dividend. Continuous pressure on management to promote business growth and to distribute dividends would be the role of the active investor. Because of the time and uncertainty involved in this plan of action, the active investor would pay no more than 85% of the amount he hoped to extract as dividend distributions.

***The Control Investor***

The control investor would purchase an interest in a business with the goal of acquiring 100% of the equity ownership and control of the company. A control investor would hope to realize value from his purchase through excess salary and fringe benefits, dividend distributions, liquidation, merger, or perhaps a public offering. A control investor, being in a position to determine the timing and amount of dividend distributions, salary and fringe benefits, and liquidation or sale prospects, would be willing to pay about 90% of the amount he expects to receive.

***The Public Investor***

The public investor would purchase a business interest with the full acceptance of being a minority stockholder and having no influence over business operations. The public investor would hope to realize value from his purchase in the appreciation in value of the investment, along with dividends received. The public investor would only consider historical dividends, even though the company had the ability to pay higher dividends, because the public investor is not inclined to seek larger distributions. The public investor, unlike the passive investor, would make the investment only if the company planned to make a public or private offering creating a market for the shares. Therefore, in addition to a substantial discount for the lack of control and influence, illiquidity, uncertainty of future dividends, and risk of liquidation, the public investor would want a discount for the costs associated with the underwriting of a public or private offering, from 5% to 20%. Hence, the public investor in a closely held business would expect a discount from 35% to 55% or more.

The importance of this case is that it explicitly contends that the willing buyer of a company can be any number of possible buyers with varying intentions and return on investment requirements. The result of such a conclusion is the creation of an awareness that one type of buyer, based on his or her intentions, will pay a much different price than that of another buyer. As displayed in this analysis, there are many different traits and factors that must be considered. The review of such issues is not relegated only to those mentioned within this case summary. The motivations for investment for the different classes of willing buyers can vary greatly. The difficult part of this exercise is to identify as many of the different classes of buyers as possible. Identifying the numerous reasons why one investor differs from another will support the existence of a difference in value even for the same company.

Although this portion of the willing buyer analysis is rational and sound, it is frequently overlooked. The process of valuation must consider all factors, regardless of whether they are used in the final conclusions of the report. Ensuring that all variables have been analyzed will justify conclusions better than by ignoring them.

The valuation analyst is faced with the challenge of defining the market for the subject interest being valued. Just keep in mind that the market should represent a rational, knowledgeable buyer and not the biggest sucker who will pay the most for the property. Suckers don't count!

## CHARLES S. FOLTZ V. U.S. NEWS & WORLD REPORT, INC.<sup>4</sup>

### ISSUE: EXCESS ASSET AND THE MINORITY INTEREST

These lawsuits are oldies but goodies. They were brought by retirees of *U.S. News & World Report* who felt they were underpaid at retirement because the stock of U.S. News & World Report, Inc., a closely held company, was undervalued by the independent valuation analysts for the nine year period 1973–1981. I wonder why they woke up after nine years?

Well, this case got everyone sued, the company, certain directors, the profit sharing plan that held the stock, and the valuation analyst. Are you sure you really want to do this stuff?

Some quick background—U.S. News had a profit sharing plan that worked like an employee stock ownership plan (ESOP). When employees retired, they were paid for their shares at fair market value. As time went by, the company purchased real estate near its headquarters located in Washington, D.C. The value of this real estate started to climb during the 1970s. There were discussions about developing the real estate for alternative uses, but nothing was done about it until 1981.

In the court's opinion, Judge Barrington D. Parker stated that “the central issue requiring resolution in this litigation has always been the propriety of the methodology employed in appraising the U.S. News stock.” The primary valuation issues in the case are outlined in box 20.2 and discussed below.

#### Box 20.2 Case Issues

- Control versus minority valuation basis
- Discount for lack of marketability (DLOM)
- Importance of real estate and other assets
- Subsequent events

#### *Control Versus Minority Valuation Basis*

The annual appraisals valued the stock on a minority basis. Plaintiffs contended that the stock should have been valued on a control basis.

#### *Discounts for Lack of Marketability (DLOM)*

Almost all of the annual appraisals applied a 10 percent discount for lack of marketability. The plaintiffs contended that no discount for lack of marketability should have been applied. Unlike today's ESOPs, the stock had no put option. The company had a call option at the appraised value, which it exercised consistently to retire stock from the stock bonus plan when employees left. Most of the calls were for cash, but on occasion, the company exercised its option to purchase the stock on extended terms, at a low interest rate, which the call option permitted.

#### *Importance of Real Estate and Other Assets*

The annual appraisals placed various weights on the real estate values in different years, depending on the facts and circumstances at that time. In all valuations, the primary emphasis in the appraisals was on the earning power of the company. Plaintiffs contended that more weight should have been given to the analysis and values of the real estate and other assets.

#### *Subsequent Events*

The annual appraisals valued the stock on a going-concern basis, taking into consideration only facts and circumstances that were known or knowable as of the valuation date. Plaintiffs contended that prospects for future changes, such as a synergistic buyer of the company who might be willing to pay more for the company should have been considered and reflected in the annual appraisals. The company was sold in 1984 for a lot more than the appraised value.

Judge Parker's decision is good reading as a learning tool. The court concluded, “After consideration of the expert testimony presented, The Court is not persuaded that the per-share price arrived at each year by American Appraisal did not fall within a reasonable range of acceptable values.” Let's hear it for the valuation analysts!

<sup>4</sup> *Charles S. Foltz, et al., v. U.S. News & World Report, Inc., et al., and David B. Richardson, et al., v. U.S. News & World Report, Inc., et al. U.S. District Court, District of Columbia, Civil Actions No. 84-0447 and 85-2195, June 22, 1987. (The Foltz case, a class action, dealt with the years 1973–1980; the Richardson case, not a class action, covered 1981.)*

***Control Versus Minority***

On this point, the court stated:

Because the terms of the U.S. News plan did not contemplate anything other than a series of minority-interest transactions, ... the valuation of its stock on a minority basis does not offend ERISA....

Various individuals concurrently held undivided, minority interests in a control block of stock... The mere fact that Plan members' interests, if added together, amounted to a majority of the outstanding shares in the company, does not, standing alone, entitle them to a prorata control value.

The judge not only discussed the control versus minority issue, but he also strongly supported the acceptance of valuation analysts' judgment when reasonable alternatives were available. He said:

Clearly, in the absence of any statutory, administrative, or judicial authority for the proposition that a control value might have been indicated, defendants cannot be faulted for employing a minority valuation... ERISA does not require plan fiduciaries to maximize the benefits of departing employees...; it only requires them to make a reasonable choice from among possible alternatives.

The court also noted that the minority-interest valuation was consistent with the appraisal methodology used when the plan purchased its stock in 1962 and 1966. Consistency is the key in this business. With respect to the voting trust that was part of the profit sharing plan, the court noted:

It is well recognized that, not only does the existence of a voting trust fail to make the underlying stock more valuable, it most often decreases the value of those shares... Defendants would have been justified in reducing the value of the company's stock to reflect the impediment that the trust placed against the full enjoyment of the rights that would ordinarily have attached to the stock.

***Discounts for Lack of Marketability***

Here, the court noted that

the Company was under no obligation to repurchase the stock. It had, rather, an option to call the stock... Moreover, ... the Company could—and from time to time did—exercise its option...to pay for the stock on terms that would not have been accepted gladly by an outside investor.... The modest 10 percent marketability discount that American Appraisal applied generally to the U.S. News stock in the aggregate was perfectly appropriate.

***Real Estate and Other Assets***

Judge Parker said the following:

In a minority valuation,... assets may or may not play an important part in arriving at a per-share figure, because a minority shareholder cannot reach those assets.... Generally speaking, if the valuation being undertaken is of a business, such as U.S. News, that produces goods or services, primary consideration will be given to the earnings of the company and the resultant return on a shareholder's investment.

***Subsequent Events***

In this regard, the court found that

the approach to be used is not retrospective, but prospective. One must look at the situation as of the time that each employee separated from the Company. Therefore, the appropriate inquiry is whether the Company was properly valued during the class period, not whether former employees become eligible for a greater share of benefits upon the contingency of a subsequent sale.

With respect to possible future development of the real estate holdings, Judge Parker cited testimony that:

Any realizable value should be attributed to the real estate only "if it was evident that the controlling interest had a firm and clear intent to dispose of the real estate within a very short or reasonable period of time [, that is,] absolute evidence. ...not mere development plans."

Several valuable lessons can be learned from this case. One of the most important lessons is the concept that because a minority stockholder does not have the ability to reach the underlying assets of the corporation, only a minor amount of weight, if any, should be given to the value of these assets. Modern appraisal theory addresses this as one of the prerogatives of control.

Another lesson is that valuation is a prospective process and not a retrospective process. I strongly urge you to read the entire case. We cite a portion of the opinion when we value minority interests (see exhibit 20.1).

### EXHIBIT 20.1

#### PARTIAL DISCUSSION—MINORITY INTEREST REPORT

**DESCRIPTION OF THE ASSIGNMENT.** Trugman Valuation Associates, Inc. was retained by Howard Bros., Inc. to determine the fair market value of Howard Bros., Inc., a New Jersey Corporation, on a minority basis as of December 19, 2000. The purpose of this valuation is to determine the value of the shares for potential gifts that will be made.

**THE ASSET BASED APPROACH.** The asset based approach, sometimes referred to as the cost approach, is an asset oriented approach rather than a market oriented approach. Each component of a business is valued separately and then summed up to derive the total value of the enterprise.

The valuation analyst estimates value, using this approach, by estimating the cost of duplicating or replacing the individual elements of the business property being appraised, item by item, asset by asset.

The tangible assets of the business are valued using this approach, although it cannot be used alone as many businesses have intangible value as well, to which this approach cannot be applied.

This approach is generally inappropriate for a minority interest unless the shareholder has the right to liquidate or sell off the assets and liabilities of the company. Since minority shareholders cannot realize the value of the net assets, regardless of the amount of appreciation that may have taken place, it is inappropriate for the valuation analyst to apply this methodology for most minority stock valuations. This concept was discussed by The Court in *U.S. News & World Report, Inc.*\* where the plaintiffs claimed that they were underpaid for the value of their shares of stock in the company.

The essence of the case was the fact that there was significantly appreciated real estate that had not been considered by the valuation analyst when the shares of stock were valued on a minority basis. In this matter, the court cited testimony that

Any realizable value should be attributed to the real estate only if it was evident that the controlling interest had a firm and clear intent to dispose of the real estate within a very short or reasonable period of time...

This same process applies to all balance sheet items, since the minority shareholder cannot realize proceeds from an event that he or she cannot control.

\*Charles S. Foltz, et al., v. U.S. News & World Report, Inc., et al., and David B. Richardson, et al., v. U.S. News & World Report, Inc., et al., U.S. District Court, District of Columbia, Civil Actions No. 84-0447 and 85-2195, June 22, 1987.

## *BERNARD MANDELBAUM, ET AL. V. IRS COMMISSIONER*<sup>5</sup>

### ISSUE: DISCOUNT FOR LACK OF MARKETABILITY

Many court cases involve multiple issues. However, *Bernard Mandelbaum et al. v. Commissioner* relates to only one aspect of the valuation universe, namely the DLOM.

In discussing the DLOM, and how it fits in with this case, let's first discuss some of the background regarding the opposing arguments. There were six dates in which shares of the appraisal subject (Big M), were gifted from shareholders to other parties. These gifts required the filing of gift tax returns covering dates from 1986 to 1990.

<sup>5</sup> *Bernard Mandelbaum et al. v. IRS Commissioner*, TC Memo 1995-255(RIA).

One issue needs to be mentioned here. The Big M stock was subject to two shareholder agreements. The first agreement required that any positions on the board that became vacant be filled by current members and that the new directors be either current shareholders or their spouses. Upon death, the shares were to be sold to Big M, and the company had sole discretion over what period of time they would pay for the shares. The company also had a right of first refusal for live shareholders (as opposed to dead ones), and again, could determine that time period for the purchase. The company had 90 days to decide whether it would exercise its purchase option.

The second agreement was pretty similar to the first, but if someone wanted out, they had to offer their shares to family members before they could sell to outsiders. These types of agreements are not terribly unusual except for the provision that allows the company to have sole discretion over the time period for the payout.

To support its determination of value, and therefore calculation of the taxpayers' deficiency, the respondent's expert concluded an applicable DLOM of 30 percent for the gifted shares on the six dates in question. This discount level was calculated relying on three of the restricted stock studies discussed in chapter 12. These studies provided a range of DLOM's between 30 percent and 35 percent.

On the other side, the petitioner, Bernard Mandelbaum and family, utilized the services of another expert to support the values reported on their gift tax returns for the specified dates. To find an applicable DLOM, the petitioner's expert employed a similar analysis to that of the respondent's expert. However, the petitioner's expert used 10 studies, including the 3 used by the respondent's expert, to determine an acceptable range of DLOM's. Furthermore, the petitioner's expert also took into account the details of Big M's shareholder agreements and prior events involving the company and shareholders. Based upon these considerations, and the 10 studies that included 7 restricted stock studies and 3 IPO studies, the petitioner's expert concluded that a 75 percent DLOM applied for the valuation dates in 1986–1989, and a 70 percent DLOM was applicable for the dates in 1990.

The discounts that were concluded were substantially higher than the discounts included in the 10 studies analyzed because of the petitioner's expert's analysis of the restrictions placed upon the company's shares by the shareholders' agreements. Also, he interviewed employees of investment firms to determine the required rate of return of potential investors. These returns ranged from 25 percent to 40 percent. As a result of this, the petitioner's expert determined that a rate between 35 percent and 40 percent would be appropriate for Big M.

After listening to both experts, Judge David Laro gave no weight to either side's expert. First, the court discussed the respondent's expert, his determination of a DLOM, and the resulting value of the gifted shares for the subject dates. Judge Laro did not like the fact that the respondent's expert compared this private company to restricted stocks of public companies, while choosing to ignore the shareholders' agreements.

Also, the court found additional fault with the respondent's expert's conclusions because of his use of such a limited number of restricted stock studies when several others existed. Using the studies for a basis of a range without considering the inherent differences between the subject company and the companies included in the analyses, did not conform to what the court felt was a reasonable and justified comparison. To say the least, the judge did not seem impressed.

Analyzing the petitioner's expert, the court found several faults with the basis of his conclusions. He was less impressed with the petitioner's expert. It was determined that the expert put too much weight on the shareholders' agreement within the conclusion of the DLOM. While Judge Laro stated that the respondent's expert's conclusions mistakenly left out the effect of the agreements, he felt that the petitioner's expert placed too much emphasis upon them.

The biggest problem that the court found with the petitioner's expert's opinion is that his analysis did not look at both the willing seller and a willing buyer, it only considered the hypothetical buyer. Judge Laro felt that no shareholder would be willing to sell Big M stock at such a large discount. He was probably correct! The court also was not too thrilled with the petitioner's expert's analysis that indicated that the shareholders would be stuck holding the stock for a 10 to 20 year period.

The second theme that Judge Laro discusses in his opinion is how closely the experts followed the valuation guidelines set forth by the definition of fair market value. In critiquing the petitioner's expert, the court stated that his analysis lacked the consideration of a willing seller. The judge did not believe that a willing seller would have accepted such a large discount. Also, when trying to reflect the characteristics of a willing buyer, the petitioner's expert erred in developing a comparable group of possible investors. According to the court, the group of investors that the petitioner's



expert attempted to use as a surrogate did not reflect a good sample of willing buyers. For these reasons, Judge Laro did not hold either analysis in high regard and, for the most part, left them out of his resolution of the correct DLOM value.

Because Judge Laro did not find any value in either experts' analysis, he took on the responsibility of concluding a DLOM for application to the value of Big M's share price on each of the valuation dates. This is where I take my hat off to Judge Laro. Although I may not agree with all of the factors that he discusses in his opinion, it is clear that he gave more thought to getting at a reasonable DLOM than either expert did. When you read this opinion, think of the 11 factors from the Moroney article that I discussed in chapter 12. Judge Laro attempted to do a similar analysis with some slightly different factors.

The reason that I like this opinion is not because of the conclusion. Reading this opinion provides me with a great idea of what the judge was thinking when pure mathematics would not allow him (or a valuation analyst) to quantify the DLOM. He looked at qualitative factors and elaborated on each as to the impact on the DLOM. This is exactly what I suggested you do to support your opinion.

Before I tell you what I don't agree with (and why), let's look at the factors considered by Judge Laro (box 20.3). Let's discuss each item.

### Box 20.3 Factors Considered by Judge Laro

- Private versus public sales of stock
- Financial statement analysis
- Company's dividend policy
- Nature of the company, its history, its position in the industry and its economic outlook
- Company's management
- Amount of control in transferred shares
- Restrictions on transferability of stock
- Holding period for stock
- Company's redemption policy
- Costs associated with making a public offering

### *Private Versus Public Sales of the Stock*

This factor was used by the court because the studies reflect transactions of securities with similar attributes to that of privately held stock. Restricted stock is stock of a public corporation, but to avoid dilution and registration costs, is not registered for trading within the public market. However, these shares of stock can be traded privately, mirroring the transaction characteristics of a closely held company. Because these transactions were required to be registered with the SEC until 1990, analysis was permitted, resulting in the creation of the studies. As a result, Judge Laro started his analysis by using the 35 percent to 45 percent discounts from these studies as a benchmark.

### *Financial Statement Analysis*

The purpose of including this factor into the analysis was to reflect the notion that a company with favorable financial characteristics would be attractive to willing investors. This attractiveness will result in added marketability. On the other hand if the company's financial position is weak, it would be less marketable.

Because companies are involved in their own respective industries, this analysis should be done according to publicly traded industry competitors that share similar operating characteristics so that the subject company can be rated accordingly. The purpose of using this factor is to rate and highlight the financial characteristics of a firm according to such items as income, liquidity, and debt. This sounds like a guideline company analysis.

### *Company's Dividend Policy*

In determining a company's attractiveness, most investors will look to see what type of dividend-paying history the company has. Investors purchase a company's stock for one of three reasons:

1. To realize capital appreciation in the stock's price
2. To receive dividend payments over the course of owning the security
3. To realize a combination of reasons 1 and 2

The company's dividend policy, either payment history or capacity for payment, as in this case, will increase the attractiveness and, therefore, marketability of a firm's stock. If an investor can receive dividend payments on top of potential appreciation, there may be additional individuals who want to purchase the stock. This has the potential of increasing marketability, resulting in a decreasing effect upon a DLOM for a privately held stock.



***Nature of the Company, Its History, Its Position in the Industry, and Its Economic Outlook***

In general, business performance varies in relationship to the economy. Businesses can be affected by global, national, and local events. For industry purposes, changes in regulatory environments and market forces will also have an impact upon the attractiveness of a company.

Investors will analyze a company's background, industry, and the economic factors that affect it, so that they will have a better idea of what to base future expectations on. This is done to determine where the company is heading, and how that will affect its attractiveness to potential investors.

***Company's Management***

Because the operations and goals of a company are determined by management, their experience and involvement is fundamental when assessing attractiveness. The management team is responsible for the company's performance. If investors lack confidence in a company's management, the organization will lose marketability because some investors will not be interested in stock ownership. Based upon the conclusion of the management team's effect upon operations and financial performance, according to Judge Laro, this factor's effect upon the DLOM can be determined.

***Amount of Control in Transferred Shares***

When a company's stock is transferred in blocks, a block that represents control will have additional appeal over a block without such control. This is true because, as a block of stock has more control, a potential investor will have the ability to direct and run a company using his or her procedures and guidelines (or whims!).

This will affect the attractiveness of a company's stock, depending on the type of investor. In some, but not all occasions, investors will not address this factor in determining the attractiveness of a company, because control is not an issue.

***Restrictions on Transferability of Stock***

The more restrictive it is to transfer shares, the less marketable the shares will be. This is why we see so many attorneys who draft Family Limited Partnership agreements put in these really stringent restrictions, for example, you cannot sell your shares unless the sky becomes pink with yellow polka dots. In this case, the judge felt that because the shareholder agreements did not fix a price, there was less of a restriction in selling to an outsider.

***Holding Period for Stock***

In some instances, a company's stock may have to be held for a period of time so that the benefits of ownership can accumulate to create a sufficient profit for the investor. Such an event would cause the security to lose some of its marketability because of the need to maintain ownership. This increases market risk while marketability decreases. The holding period is essential for calculating marketability levels and the resulting DLOM, because it is a direct determinant of how quickly an individual can purchase a stock and turn around and sell it in the future.

***Company's Redemption Policy***

This factor is important because it will determine if the company can purchase shares from shareholders so that they can gain access to cash. This analysis will display how the company can aid in, or detract from, its stock's liquidity. This is especially important for privately held firms because of the nonexistence of a ready market. If a company readily buys back shares, this will increase the liquidity of those shares, thereby increasing marketability. However, if the opposite is true, then the stock of the company is less marketable because another option for sale is removed.

***Costs Associated With Making a Public Offering***

When determining the value of a privately held stock, the cost to make a public offering is typically incorporated within the analysis. This is due to the need for determining which party is required to realize the costs of registering the security. In the case where the buyer must bear the expense, marketability will decrease because some investors will not consider such a transaction as an option because of the cost. This event causes the pool of potential investors to decrease. If the investor does not have to absorb this cost when making the purchase, the marketability of the stock will be greater. This factor is directly related to economics because as the expense of purchases go up, demand will decrease and vice-versa.

I told you before that I do not agree with everything in this case. In my humble opinion, I believe that Judge Laro mixed up some issues that affect risk and not liquidity. While there may be a fine line, and possibly an overlap,

I think that many of the factors discussed by Judge Laro affect the freely traded value of the stock, and liquidity to a much lesser degree. The factors that bother me the most are the following:

- Financial statement analysis
- Dividend capacity and growth prospects
- Nature of company, its history, its position in the industry, and its economic outlook
- Management

If you read Revenue Ruling 59-60, the eight factors assist us in the valuation of the closely held stock. The four factors that I have listed above affect the underlying valuation. They should not affect both value as freely traded and liquidity. While I fully agree that dividends will lower the DLOM due to the mitigation of the holding period risk, dividend paying capacity is considered in valuing an interest in a company.

Overall, I still think that this is a great case to read.

## *MAD AUTO WRECKING INC. V. COMMISSIONER*<sup>6</sup>

### ISSUE: REASONABLE COMPENSATION

The case of *MAD Auto Wrecking Inc. v. Commissioner* deals with the subject of reasonable compensation for key personnel within a privately held business. Although this is not a business valuation case, I really like this one because as valuation analysts, we are always dealing with reasonable compensation. Before we begin, let me just make one comment. Reasonable compensation issues arise in a different context for income tax purposes as compared to valuation matters. Income tax cases generally address the reasonableness of the compensation based on the requirements for deductibility under IRC Section 162. The issue becomes one of a historic nature. Valuation, on the other hand, is prospective in nature. The issue that we generally deal with is what *will* be the cost of replacing the officers rather than *what* should they have received in the past.

Despite it being an income tax case, *Mad Auto Wrecking* is a really good case because it gives valuation analysts great guidance about the factors to consider in assessing reasonable compensation. Just remember the context of the case. By the way, you may even find a new area of service to offer your clients.

Mad Auto Wrecking is a high volume, wholesale scrap business that purchases automobiles, removes usable parts, and offers the frames up for sale as scrap metal. The company then takes the reusable parts and sells them at wholesale prices.

As with the vast majority of small businesses, owners must put in a lot of time to ensure that the business remains productive and profitable. This situation was no different. The two, equal owners worked between 60 and 70 hours per week, 52 weeks per year.

The issue in this case involved the reasonableness of the officers' compensation for the years 1989, 1990 and 1991. Table 20.1 indicates Mad's compensation figures.

As you can see from table 20.1, officers' compensation was a pretty high percentage of gross receipts.

<b>Year</b>	<b>Gross Receipts</b>	<b>Taxable Net Income</b>	<b>Officer's Compensation</b>
1989	\$2,554,942	\$67,690	\$856,000
1990	2,169,125	56,974	606,000
1991	1,884,853	(22,199)	711,000

The IRS was not happy with this and felt that less should be allowed, and the excess should be treated as a dividend. We accountants call that double taxation.

The concept of reasonable compensation is something that depends on the facts and circumstances. Judge Laro (the Mandelbaum Judge) wrote another really good opinion in this case. The Judge was very methodical in the opinion and cites other good case law and eventually concludes that the compensation paid was reasonable. The elements considered by the court are summarized in box 20.4.

<sup>6</sup> *Mad Auto Wrecking Inc. v. Commissioner*, TC Memo 1995-153(RIA).

**Box 20.4 Factors Considered by the Court**

- The employee's qualifications
- The nature, extent, and scope of the employee's work
- The size and complexities of the employer's business
- A comparison of salaries paid with the employer's gross and net income
- The prevailing general economic conditions
- A comparison of salaries with distributions to shareholders and retained earnings
- The prevailing rates of compensation for comparable positions in comparable concerns
- The salary policy of the employer as to all employees
- The amount of compensation paid to the particular employee in previous years
- The employer's financial condition
- Whether the employer and employee dealt at arm's length
- Whether the employee guaranteed the employer's debt
- Whether the employer offered a pension plan or profit-sharing plan to its employees
- Whether the employee was reimbursed by the employer for business expenses that the employee paid personally

To effectively understand how each of these factors aided the court in this decision, and how it helps valuation analysts, we will look at the summaries of each below.

***Employee's Qualifications***

The first pertinent factor that requires analysis is to determine whether an employee's background is applicable to the fiscal status of the company which he or she works for. This background includes several aspects of an employee's familiarity with various components of the type of business in which he or she is involved. These essential items include experience, training, and education in a field related to the operations at hand. As with the vast majority of business and organizational positions, these three fundamentals are the basis for a conclusion as to the degree that a worker is qualified for the function in which he or she is delegated. This preliminary detail in the reasonableness of compensation analysis allows a valuation analyst to locate a foundation on which to create an opinion of an employee's value to the organization.

***Nature, Extent, and Scope of the Employee's Work***

This factor is analyzed so that it can be seen how important and involved an employee is in relation to the operations of the business. To analyze this factor, the position(s) and responsibilities of that position(s) are looked at to determine the number and depth of tasks completed by the employee.

In addition to viewing the position(s) held by the employee, and the resulting obligations inherent with the position(s), one must also look at the effects of the employee's activities on the business' bottom line, as well as the consequences if the worker was to leave the organization. By completing these examinations, an analyst will be able to better estimate the employee's impact upon the company, both positive and negative. This will allow the forecast of various scenarios of the employee's employment status so that a clear explanation of the value of the employee can be given.

***Size and Complexities of the Employer's Business***

This element of the overall inspection of reasonable compensation is utilized to further affect the previous two factors. A small, simple operation will require a less-experienced, less-involved employee than one on the opposite side of the spectrum. The degree of an employee's specialization is also affected by this element. The replaceability of an employee can be resolved through the analysis of this factor in relation to the earlier ones.

Also of note within this section of the analysis is how the employee, using his or her qualifications in tandem with the comprehensiveness of the employee's position, affected the actual procedures of the business. With regard to key employees, the skills and abilities they hold are typically not shared by those under their control. Therefore, it is advisable for one doing this analysis to consider how the employee has worked to implement his or her knowledge in

creating efficient and simplified procedures so that other, lower-level employees can be quickly replaced to ensure that the time operations are interrupted, as a result of an employee change, is minimal.

#### ***Comparison of Salaries Paid to Net and Gross Income***

This factor is included to determine whether these values can be considered excessive in light of the concluded status of the previously discussed elements of reasonable compensation. Had those factors necessitated a conclusion that a key employee was not as vital as specified by the company, the values seen in this portion of the analysis would be expected to be low. However, had the employee been favored by inspection of the prior factors, it would be expected that these percentages be somewhat higher. Again, as with the previous factor, this analyzed component is based upon the conclusions reached earlier.

#### ***General Economic Conditions***

Examining whether the employee's involvement affected the operation is completed by reviewing the company's performance during varying economic conditions. Analyzing the results of the business processes will determine whether based upon their degree of involvement, a key employee has important skills to buoy financial results.

This factor is important within the analysis because it enables an analyst to find out how the existence of the employee within the organization can direct and dictate the success of a firm's operations during times of uncertainty.

#### ***Comparison of Salaries with Distributions to Shareholders and Retained Earnings***

This part of the reasonable compensation analysis is done to conclude whether some of the compensation paid is actually dividends. This may be done, especially when the key employee(s) are the only shareholder(s).

This analysis must be done keeping in mind the importance of the key employee(s) in relation to the level of growth realized by the company. Its dividends are paid out of funds that could be kept for reinvestment and expansion. If growth of operations is absent, the conclusion that parts of compensation are really dividend payments may be viable when no dividend history exists.

#### ***Prevailing Rates of Compensation for Comparable Positions in Comparable Companies***

Over the course of this analysis, some weight must be given to the activities of competing comparative companies. This is done to resolve whether, in the specific situation at hand, the levels of compensation of the key employee are normal for the specific industry.

In completing this segment, one should look to find companies that are closest to the subject company in terms of several business characteristics deemed important in the operations, whether it be organizational traits, product type, customers, and so on.

Once this comparison is completed, it will be determined if the levels of compensation for the key employee(s) are reasonable. However, adjustments to this comparison must be made to assess the differing characteristics between the guideline firms and the subject company. After these individual adjustments are completed, then a final conclusion can be made. This almost sounds like valuation, doesn't it?

#### ***Employer's Salary Policy as to All Employees***

Regardless of the employee's involvement, qualifications or ownership status, he or she should be compensated on the same basis as other workers. It is expected that because of his or her key importance, he or she will be given a greater amount of compensation. However, the basis should be relatively the same for all workers. Employees overcompensated in relation to the provisions of their services and the salaries of other employees will be apparent upon completion of this analysis.

These individuals and their respective compensation should be viewed in a framework of substitution. This analysis requires the estimation of the reasonableness of the compensation in the event the position was filled by another individual with more generic attributes. Also, some consideration should be given to the determination of compensation if the employee in question is an owner and decides his or her salary. This characteristic should be removed to conclude whether a hypothetical owner would act in the same way.

#### ***Compensation Paid in Prior Years***

Analyzing the levels realized in previous time periods will allow for the development of a trend analysis. This is done to determine if any of the subject periods show up as exceptions to a developed pattern. If one does exist, it must be somehow related to the performance of the company, as this will almost always affect a key employee's

level of compensation. Also to be viewed is the change in any of the employee's responsibilities, as this will also adversely affect the subject year's compensation value in relation to any developed trend.

Don't overlook whether payments for services are accrued according to services performed in the past, or are expected to be done in the future period. This event would constitute a normalization of compensation to correctly match the payment with the initiation and completion of the services.

#### ***Employer's Past and Present Financial Condition***

The company's fiscal performance will generally be attributable to the actions of a key employee. This consideration is important because the financial condition of the company will allow greater or lesser amounts of compensation to be paid.

Basically, as the performance and profitability of the subject company varies, so should the level of the key employee's salary and bonus. It is rather obvious if a poorly performing company is paying an exorbitant amount of money to a key employee that reasonable compensation is not being paid.

#### ***Whether Employer and Employee Deal at Arm's Length***

This factor is not always applicable, as it usually applies only if the key employee is also a shareholder who determines his or her own level of compensation. If that is the case, a valuation analyst must use a substitute to determine if an independent owner would do the same for the same employee. This portion of the analysis can take into consideration levels seen in comparable companies, as well as the overall effect on the financial standing of the organization of making these payments.

#### ***Whether Employee Guaranteed Employer's Debt***

If an employee assesses the risk of personally guaranteeing his or her employer's debt, it is the general opinion of the courts that this employee does deserve compensation above what would normally have been paid. I certainly could not get my employees to guarantee my debt. If they would, I would pay them more.

#### ***Absence of Pension Plan and Profit-Sharing Plan***

Since World War II, benefits outside of normal salary and bonus considerations have become expected. Because of this, courts have typically opined that the absence of such benefits as pension or profit-sharing plans constitute a certain level of additional payments within normal compensation.

Again, like the previous factor, this element of the analysis will allow for some slack when such plans are nonexistent. This is allowed by the courts primarily because it is understood that such measures must be taken by organizations to keep employees, as chances are, competitors will offer similar, or alternative benefits.

#### ***Lack of Reimbursement of Business Expenses***

In the course of performing services for an employer, employees are sometimes required to pay expenses out of their own pocket. In such instances, it is normal for the employer to require a receipt and the employed to be reimbursed for the amount upon presentation of the documentation of payment. However, in some situations, employees and employers may have an agreement for the worker to receive a fixed amount of additional compensation instead of dealing with expense reimbursements. This is typical when the key employee is also an owner of the company.

As a result of using these factors to develop an analysis of whether a key employee's compensation is reasonable, a logical conclusion can be reached. The early steps form the basis for elements later in the analysis. Exhibit 20.2 contains a reasonable compensation analysis that we performed that addresses these issues.

## EXHIBIT 20.2

### REASONABLE COMPENSATION

**DESCRIPTION OF ASSIGNMENT.** Trugman Valuation Associates, Inc. was retained by Decorative Stone Co., Inc. (hereafter referred to as Decorative Stone or the company) to determine if the level of compensation paid to Bob Richardson, president of the company, for the fiscal years ended December 31, 2002, 2003 and 2004 is reasonable. It is our understanding that this report will be used in regard to an audit of the company by the state taxing authority.

Section 162(a)(1) of the Internal Revenue Code allows a corporation to deduct "a reasonable allowance for salaries or other compensation for personal services actually rendered." In order for compensation to be deductible

*(Continued)*

### EXHIBIT 20.2 (Continued)

under Section 162(a)(1), there is a two-prong test that must be met. The first part is that the amount of compensation must be reasonable. The second part of the test, which is more subjective in nature, is that the payments must be purely for services. This means that it cannot be disguised as a return on equity or some other type of payment.

Many court cases have arisen in the area of reasonable compensation. Guidance can be obtained from the opinions in many of these cases. One of the best cases that can be used for guidance in the determination of reasonable compensation is *Mad Auto Wrecking, Inc. v. Commissioner*, TC Memo 1995-153. This well-thought out opinion by Judge Laro of the U.S. Tax Court provides the necessary guidance for factors to consider in the assessment of reasonable compensation. This case cited numerous other cases that support the judge's opinion. In particular, *Elliotts, Inc. v. Commissioner*, 52 AFTR 2d 83-5976 is cited in this opinion, another excellent case to be used for guidance in this area. In order to allow this report to follow in a logical sequence, the factors outlined in these cases will be addressed.

**FACTUAL HISTORY.** Decorative Stone Co., Inc. began business in about 1952. The company was incorporated in the State on June 25, 1956, and was started by Charles Brown and Bob Richardson. Messrs. Brown and Richardson were stone mason contractors. They installed stone at schools, churches, and other such structures. At the inception of the business, and for several years thereafter, the company used to store materials at Mr. Richardson's home in City, State. After a while, these materials became too voluminous to store at Mr. Richardson's home, and as a result, the business was moved to 123 Main Street, City, State, its present location. At that time, Messrs. Brown and Richardson began bringing in more materials and started to stock a greater amount of inventory. By the early 1960s, they needed trucks, forklifts and other personnel in order to carry on the business.

For years, the company operated with no accounts receivable. Once they moved to their current location and began selling inventory, they started billing for their materials. The company got into financial trouble because of the slow collection of accounts receivable. In fact, the company almost went out of business. The only reason the company survived was that Messrs. Brown and Richardson barely took any salary. Mr. Brown was single, and only took enough money each week to survive. This included food money and money for rent, but not much more than that. Mr. Richardson remembers taking as little as \$100 per week for his compensation, because he had no mortgage. He basically took enough at that time to cover groceries, taxes, and so on. Mr. Richardson remembers the lean years lasting well into the 1970s. In the early 1980s, Mr. Brown retired at age 65, leaving Mr. Richardson to take over his responsibilities, as well as continuing with his own. Mr. Brown had responsibility for being the yard supervisor, assisting with customer sales, and providing some dispatching. Mr. Richardson continues to operate the company today at age 79, working more than a full time job. Decorative Stone, by his own admission, has been his passion in life. He has worked countless hours towards building this business, and creating an exceptionally profitable company.

During the late 1980s and into the early 1990s, business was down, but through Mr. Richardson's efforts of making displays, having seminars, and opening up longer hours, he managed to keep the business going. Mr. Richardson's duties generally remained the same for a considerable number of years. Besides being the CEO and president of the company, he acts as the general manager, sales manager, purchasing manager, dispatcher, and foreman. Mr. Richardson opens the doors of the business at the start of the day and closes the doors at the end of the day. In addition, he performs all required paperwork and analysis at home in the evenings. Store hours are generally from 7:00 a.m. to 4:30 p.m., Monday through Friday, with Saturday hours in the winter months from 7:00 a.m. to 12:00 noon, and during the summer months from 7:00 a.m. to 3:00 p.m. During other times, store hours are frequently expanded to 8:00 or 9:00 p.m. during the week. On average, during the period under examination, store hours were approximately 52 hours per week. Besides the store hours, Mr. Richardson works at least one extra hour at the business each day, and approximately two hours at home in the evenings. Since Mr. Richardson dispatches the trucks, he generally arrives prior to the actual retail store opening.

Mr. Richardson's commitment and management style has benefitted the company, in that the company maintains long-term employees who work long hours resulting from the dedication of Mr. Richardson to his employees. Counting Mr. Richardson, the employee count for the years under examination was as follows:

2002	23
2003	24
2004	26



### EXHIBIT 20.2

Mr. Richardson works 70 hours per week on average. The company's growth has exceeded industry growth and the level of profitability is far beyond the industry. This will be discussed later in the report.

During the tax years in question, Mr. Richardson received the following levels of compensation from Decorative Stone:

2002	\$1,042,713
2003	1,243,912
2004	1,414,200

During the years in question, Mr. Richardson received compensation as follows:

	2002	2003	2004
Base Salary (paid weekly)	\$ 42,713	\$ 43,912	\$ 44,200
Bonus—May	300,000	200,000	300,000
Bonus—July	0	300,000	300,000
Bonus—September	300,000	300,000	300,000
Bonus—October	0	250,000	0
Bonus—November	400,000	125,000	350,000
Bonus—December	0	25,000	120,000
<b>Total</b>	<b><u>\$1,042,713</u></b>	<b><u>\$1,243,912</u></b>	<b><u>\$1,414,200</u></b>

In addition to salary, Mr. Richardson receives the same health insurance coverage as all other employees of Decorative Stone. He also receives the same three weeks vacation as every other employee. He receives no pension benefits, life insurance, disability insurance, travel and entertainment allowances, or automobile allowances. Basically, his compensation is intended to include all forms of compensation that would customarily be paid to an executive of a company.

There are no other employees who have any managerial responsibilities for the company. As such, Mr. Richardson constitutes the entire management team, while continuing to also perform many of the functions in the daily operations of the company. At our visit to the business establishment, we observed the fact that Mr. Richardson does not have a private office and he conducts his sales, purchasing, dispatching, and other functions from a front counter in the retail storefront. In fact, when entering the business establishment, the first person visible from the entrance is Mr. Richardson.

**USING A JUDGE'S METHODOLOGY.** Judge Laro begins his opinion in *Mad Auto Salvage* with the following:

This is another case pertaining to whether amounts paid by a closely held corporation to its shareholders/employees are deductible compensation under section 162(a)(1). Inherently, there is a natural tension between: (1) Shareholders/employees who feel that they are entitled to be paid from a corporation's profits, even to the exhaustion thereof, of an amount that reflects their skills and efforts, and (2) a provision in the tax law that conditions the deductibility of compensation on the concept of reasonableness. What is reasonable to the entrepreneur/employee often may not be to the tax collector. Accordingly, this and other courts are repeatedly asked to examine the relevant facts and circumstances of the business and the underlying employment relationship in order to render an opinion as to whether the compensation paid was reasonable. **In so doing, we must be careful not to define the term "reasonable" too narrowly. The dynamic nature of business, the entrepreneurial spirit, and the dedication of purpose all play a role in the composition of reasonable compensation. We must not rigidly apply form over substance when we measure one's**

(Continued)



**EXHIBIT 20.2** *(Continued)*

**contribution to the success of his or her business.** Of course, it may be argued that when an individual chooses to conduct business in the corporate form, he or she is obligated to observe all of the corporate formalities inherent in that form, including the standard that to be deductible, the compensation paid must be reasonable. The term “reasonable,” however, must reflect the intrinsic value of employees in the broadest and most comprehensive sense. [emphasis added]

Citing the tax law, Judge Laro points out that “Section 162(a)(1) allows a corporation to deduct ‘a reasonable allowance for salaries or other compensation for personal services actually rendered’ as an ordinary and necessary business expense. To be deductible under Section 162(a)(1), compensation must be both: (1) reasonable and, (2) paid purely for services rendered to the corporation.”

**1. Was the Compensation Paid Reasonable?**

According to the judge, “Reasonable compensation is determined by comparing the compensation paid to an employee with the value of the services that he or she performed in return. Such a determination is made with respect to employees individually, rather than with respect to the compensation paid to all employees collectively. Such a determination is a question of fact.”

In discussing the various cases concerning reasonable compensation, the judge indicates that there are many factors to be considered in making this factual determination. He indicated

The factors which may be considered, none of which is controlling in itself, include: (a) The employee’s qualifications; (b) the nature, extent, and scope of the employee’s work; (c) the size and complexities of the employer’s business; (d) a comparison of salaries paid with the employer’s gross and net income; (e) the prevailing general economic conditions; (f) a comparison of salaries with distributions to shareholders and retained earnings; (g) the prevailing rates of compensation for comparable positions in comparable concerns; (h) the salary policy of the employer as to all employees; (i) the amount of compensation paid to the particular employee in previous years; (j) the employer’s financial condition; (k) whether the employer and employee dealt at arm’s length; (l) whether the employee guaranteed the employer’s debt; (m) whether the employer offered a pension plan or profit-sharing plan to its employees; and (n) whether the employee was reimbursed by the employer for business expenses that the employee paid personally.

**a. Employee’s Qualifications**

Mr. Richardson is exceptionally qualified for Decorative Stone’s business by virtue of his experience and dedication, as well as his understanding and control of every aspect of the operations. He is highly motivated and extremely productive as an employee, and is clearly the primary reason for the company’s success. His outstanding qualifications justify high compensation. Decorative Stone’s profitability rests upon its sales, and Mr. Richardson’s ambition, inventiveness during slow times, and energy (as opposed to his investment in capital) are the primary reasons for Decorative Stone’s sales, growth, and success.

**b. Nature, Extent, and Scope of the Employee’s Work**

The nature, extent, and scope of the work performed by Mr. Richardson is fundamental, substantial, and all-encompassing. He performs all of the company’s executive and managerial functions and formerly performed, but now oversees all of its manual labor. Mr. Richardson also supervises the daily operations, including supervising and directing the other employees, and makes all of the business decisions. Given the vital role played by Mr. Richardson in Decorative Stone’s operations and success, and the long hours that he has dedicated to the business, he is indispensable to the business. Decorative Stone’s growth and prosperity are due directly to his skills, dedication, and creativity. If the business was to lose him, it would be in a rough situation until a suitable replacement (if any) could be found.

**c. Size and Complexities of the Employer’s Business**

Decorative Stone is not necessarily the most complex business around, but because it primarily involves building and construction-type materials, its operations demand expertise to compensate for changing

**EXHIBIT 20.2**

economies. The success and growth of the business even during poor economic periods demonstrates the value that has been added by Mr. Richardson. Based on data extracted from Integra Information's *Business Profiler* product for companies in the same Standard Industrial Classification Code as Decorative Stone, the company has grown to be one of the larger businesses of this type. Integra data includes 3,501 companies broken down as follows:

<b>Sales Range</b>	<b>Business Count</b>	<b>Percent of Total</b>
All sales ranges	3,501	100.00%
Less than \$250,000	1,115	31.85%
\$250,000–\$499,999	728	20.79%
\$500,000–\$999,999	346	9.88%
\$1,000,000–\$2,499,999	540	15.42%
\$2,500,000–\$4,999,999	429	12.25%
\$5,000,000–\$9,999,999	207	5.91%
\$10,000,000–\$24,999,999	84	2.40%
\$25,000,000–\$49,999,999	27	0.78%
\$50,000,000–\$99,999,999	17	0.49%
\$100,000,000–\$249,999,999	1	0.03%
\$250,000,000–\$499,999,999	7	0.20%
More than \$500,000,000	0	0.00%

According to the Integra data, Decorative Stone, based on revenues, falls in the top 9.81 percent of its peer group.

*d. Comparison of Salaries Paid to Net and Gross Income*

The percentage of officers' salaries to gross receipts for 2002, 2003, and 2004 was 15.2, 17.0 and 17.5, respectively. The percentage of officers' salaries to book net income (before deducting officers' compensation) for 2002, 2003, and 2004 was 94.7, 100.65 and 92.08, respectively.

Based on the state tax returns reviewed, the entire net income before net operating loss deductions was \$58,218, \$7,236, and \$122,295, despite the deduction of officer's compensation. This means that the company would have been subject to tax, and would have paid taxes based on net income had it not been for the net operating loss deduction that it used as an offset to the income. In addition, Mr. Richardson reported his compensation on his tax returns and paid taxes on these amounts.

*e. General Economic Conditions*

During the years under audit, the economy was reasonably strong. Part of the company's growth during this period could be attributable to the economy. However, a good part of the success is also attributable to the solid foundation that Mr. Richardson has created for the business over the years. Mr. Richardson's financial commitment to this business has also allowed a substantial amount of inventory to be stocked by the company assisting in the production of sales. If the product was not in inventory, the customer may have gone elsewhere.

*f. Comparison of Salaries with Distributions to Shareholders and Retained Earnings*

Quoting from another case, Judge Laro points out "The absence of a dividend history is a significant factor that may suggest that some of the amounts paid as compensation to a shareholder/employee is really a dividend." Although he also said, "Such an absence (and inference), however, does not automatically convert compensation that would otherwise be reasonable into a dividend. Corporations are not required to pay dividends."

Judge Laro went on to state:

Instead, an individual shareholder may participate in the success of a corporation through the appreciation in the value of his or her stock brought on by retained earnings and the possibility

(Continued)

**EXHIBIT 20.2** (Continued)

of a future return. Thus, a corporate employer with little or no dividend history may be able to pay and deduct large amounts of compensation if the court is convinced that a reasonable person would still have invested in the corporation. Courts sometimes apply a hypothetical investor test to determine whether a reasonable person would have invested in the corporation. Critical to this test is whether the shareholders of the corporation received a fair rate of return (without taking into account any compensation) from the total of their initial and subsequent investments.

This analysis was also discussed in detail in *Elliott, Inc. v. Commissioner*, which was referenced by Judge Laro. A financial analysis will be presented later in this report addressing the issue of a hypothetical investor. We believe that this further substantiates the level of compensation that should be deemed reasonable for Mr. Richardson.

*g. Prevailing Rates of Compensation for Comparable Positions in Comparable Companies*

In a perfect world, we could look at other companies that are similar to Decorative Stone to determine what rate of compensation is paid for comparable positions in these *comparable* companies. However, we do not believe that this is possible in this instance. First and foremost, closely held companies do not readily volunteer this information. Secondly, in order for a company to be comparable to Decorative Stone, we believe that consideration must also be given to the level of growth and profitability exhibited by the company. There can be no doubt that management is frequently compensated for success. Stock option plans and bonuses are regularly made available to key executives. In fact, there are many industries where the stock option compensation or the bonuses are much greater than the executive's base pay.

Our review of the Integra industry composite data will be discussed in more detail as part of our financial analysis. It will become obvious that Decorative Stone is not really comparable to its industry peer group. We believe that it is unreasonable to try to compare Mr. Richardson's compensation to another executive in a privately owned company who either brings a different skill set, work ethic, level of expertise or proven track record for success to that company. We do not believe that composite industry data adequately allows a meaningful analysis to be performed.

*h. Employer's Salary Policy Concerning All Employees*

There is no written salary policy concerning all of the company's employees. Since there are also no other employees besides Mr. Richardson who participate in management, we could not determine whether Mr. Richardson was compensated differently than the other employees, merely because of his status as a shareholder.

*i. Compensation Paid in Prior Years*

The compensation (including bonuses) paid by Decorative Stone to Mr. Richardson prior to the years in issue ranged from \$825,797 to \$1,192,713 from 1996 to 2001, with 1997 and 1998 dipping to \$649,203 and \$675,798, respectively. As the company has been growing, Mr. Richardson's compensation has been adjusted to compensate him for his success. During the downturn of the 1990s, Mr. Richardson took less salary.

*j. Employer's Past and Present Financial Condition*

Decorative Stone has grown and is very profitable. Its shareholder's equity has grown from \$1,457,497 in 2001 to \$1,628,841 in 2004. This will be discussed in the financial analysis later in this report.

*k. Whether Employer and Employee Dealt at Arm's Length*

Mr. Richardson was paid high compensation as the company's principal employee. Given his relationship to the company as its only shareholder, consideration should be given to whether an independent investor would have paid Mr. Richardson the amount of compensation that he received during the years in issue. This will be addressed as part of the financial analysis.

An interesting quote from *Mad Auto Salvage* that was referenced by Judge Laro in his opinion was when one of the shareholders discussed the work habits of the other shareholder. The quote was:

Dick [Andrews] is more like a workaholic. And anybody that works that hard has got to be compensated for the work that they do. If you don't do that, your business is going to suffer because the guy that is putting in more hours and not receiving any money—he is definitely going to reject the idea, not work as hard.

## EXHIBIT 20.2

Substituting Mr. Richardson in the above quote accurately describes this situation as well.

### *l. Whether Employee Guaranteed Employer's Debt*

According to Judge Laro, "Courts have considered whether an employee personally guaranteed his or her employer's debt, in determining whether the employee's compensation was reasonable. In certain situations, an employee's personal guarantee of his or her employer's debt may entitle the employer to pay a greater salary to the employee than the employer would otherwise have paid."

In this instance, Mr. Richardson does not guarantee any corporate debt. However, instead of using borrowed funds to provide an extraordinary balance sheet and financial condition, Mr. Richardson has actually loaned the Company over \$3 million, interest free, which the company has used to take advantage of buying opportunities, favorable vendor pricing, and other such items that have significantly contributed to the success of Decorative Stone.

Over the past several years, had interest been paid to Mr. Richardson, his compensation would have been lower, because he would have received interest payments instead. In fact, Mr. Richardson has foregone the following interest to the benefit of the company:

Year	Value of Stockholder Loan	Two Year Average Balance	Prime Rate	Prime Rate + 2%	Interest Saved
2001	\$1,905,074				
2002	2,375,739	2,140,407	8.27%	10.27%	219,820
2003	2,681,945	2,528,842	8.44%	10.44%	264,011
2004	3,135,147	2,908,546	8.35%	10.35%	301,035

This illustrates the fact that Mr. Richardson's compensation should be considered to include at least these amounts because he has loaned this money to the company without interest being paid to him.

### *m. Absence of Pension Plan and Profit-Sharing Plan*

Mr. Richardson was not a participant in any pension plan or profit-sharing plan offered by the company. Courts have considered the absence of a pension plan or a profit-sharing plan in determining reasonable compensation. These same court cases have indicated that "Such an absence may allow the employer to pay the employee more compensation than the employer would have paid had the employer offered the employee a pension plan or a profit-sharing plan."

### *n. Lack of Reimbursement of Business Expenses*

Mr. Richardson does not really incur any material out-of-pocket expenses on behalf of Decorative Stone. This point is insignificant.

## **2. Was Compensation Paid for Services Rendered?**

There can be no doubt that Mr. Richardson works long hours for the company. All of his services are rendered on behalf of Decorative Stone and no other entity.

**FINANCIAL ANALYSIS.** In order to determine whether a hypothetical investor could have received a comparable return on investment from Decorative Stone Co., Inc., a financial analysis of the company was performed. Since specific financial data could not be obtained about similar closely held companies, due to the privacy of the financial data, we turned to the *Business Profiler* CD-ROM product produced by Integra Information for comparative composite data.

Decorative Stone falls into Standard Industrial Classification (SIC) Code 5032, described as Wholesale Trade—Brick, Stone and Related Materials. Using the *Business Profiler* software, we searched for data for companies located in SIC Code 5032, with sales between \$5,000,000 and \$9,999,999 for use in our comparison. There were 207 companies included in this data.

Historically, Decorative Stone's reported profitability has been as follows:

(Continued)

## EXHIBIT 20.2 (Continued)

**TABLE 1**  
**HISTORIC INCOME STATEMENT FOR THE YEARS ENDED DECEMBER 31,**

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total Revenues	\$4,435,719	\$4,041,345	\$4,748,289	\$5,420,974	\$6,243,002	\$6,260,609	\$6,849,980	\$7,324,031	\$8,090,785
Total Cost of Sales	2,557,828	2,453,132	3,199,281	3,433,818	4,105,862	3,943,259	4,761,688	5,219,165	5,571,673
Gross Profit	\$1,877,891	\$1,588,213	\$1,549,008	\$1,987,156	\$2,137,140	\$2,317,350	\$2,088,292	\$2,104,866	\$2,519,112
Total Operating Expenses	1,905,125	1,637,241	1,698,665	2,078,653	2,241,108	2,391,839	2,120,739	2,252,688	2,570,892
Operating Income (Loss)	\$ (27,234)	\$ (49,028)	\$ (149,657)	\$ (91,497)	\$ (103,968)	\$ (74,489)	\$ (32,447)	\$ (147,822)	\$ (51,780)
Total Other Income	113,065	86,275	103,422	91,555	28,230	42,046	90,229	139,772	173,392
<b>Income (Loss) Before Taxes</b>	<b>\$ 85,831</b>	<b>\$ 37,247</b>	<b>\$ (46,235)</b>	<b>\$ 58</b>	<b>\$ (75,738)</b>	<b>\$ (32,443)</b>	<b>\$ 57,782</b>	<b>\$ (8,050)</b>	<b>\$ 121,612</b>

Table 1 reflects the figures reported in the company's tax returns, adjusted for those items that were either reported on Schedule K (directly to the stockholder) or Schedule M-1 (reconciling adjustments). These figures are now comparable to the *Business Profiler* (Integral) figures.

**TABLE 2**  
**HISTORIC COMMON SIZE INCOME STATEMENT FOR THE YEARS ENDED DECEMBER 31,**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	Integra
Total Revenues	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Total Cost of Sales	57.66%	60.70%	67.38%	63.34%	65.77%	62.99%	69.51%	71.26%	68.86%	82.79%
Gross Profit	42.34%	39.30%	32.62%	36.66%	34.23%	37.01%	30.49%	28.74%	31.14%	17.20%
Total Operating Expenses	42.95%	40.51%	35.77%	38.34%	35.90%	38.20%	30.96%	30.76%	31.78%	15.10%
Operating Income (Loss)	-0.61%	-1.21%	-3.15%	-1.69%	-1.67%	-1.19%	-0.47%	-2.02%	-0.64%	2.10%
Interest Expense	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.82%
Total Other Income	2.55%	2.13%	2.18%	1.69%	0.45%	0.67%	1.32%	1.91%	2.14%	0.16%
<b>Income (Loss) Before Taxes</b>	<b>1.93%</b>	<b>-0.92%</b>	<b>-0.97%</b>	<b>0.00%</b>	<b>-21.21%</b>	<b>-20.52%</b>	<b>0.84%</b>	<b>-20.11%</b>	<b>1.50%</b>	<b>1.46%</b>

Note: Figures may not add due to rounding.

(Continued)

**EXHIBIT 20.2** *(Continued)*

Based on the reported figures, Decorative Stone was slightly less profitable before taxes than the peer group. During the years under audit, Decorative Stone was weaker in 2002 and 2003, but stronger in 2004.

However, further analysis is required to properly determine the investment attributes of the company. Officer's compensation has been reported as follows:

		<b>Growth</b>
2001	\$1,192,713	
2002	1,042,713	-12.58%
2003	1,243,912	+19.30%
2004	1,414,200	+13.69%

During this same time period, stockholder's equity grew as follows:

		<b>Growth</b>
2001	\$1,457,497	
2002	1,515,279	+3.96%
2003	1,507,229	-0.53%
2004	1,628,841	+8.07%

Revenue growth for Decorative Stone surpassed the industry group during this same period as depicted in the following table:

	<b>2002</b>	<b>2003</b>	<b>2004</b>
Decorative Stone	9.41%	6.92%	10.47%
Integra	8.93%	2.38%	6.30%

On an unadjusted basis, Decorative Stone was compared to the Integra data in terms of key financial ratios. This is presented in table 3.



## EXHIBIT 20.2

<b>TABLE 3</b>			
<b>HISTORIC FINANCIAL RATIOS</b>			
	<b>2002</b>	<b>2003</b>	<b>2004</b>
<b>LIQUIDITY / SOLVENCY</b>			
Quick Ratio	14.31	16.81	15.49
Quick Ratio—Integra	0.95	0.96	0.97
Current Ratio	21.52	23.90	21.46
Current Ratio—Integra	1.72	1.76	1.76
<b>TURNOVER</b>			
Fixed Asset Turnover	51.44	45.03	41.53
Fixed Asset Turnover—Integra	17.82	18.06	18.51
Payables Turnover	29.55	29.21	28.03
Payables Turnover—Integra	12.71	12.57	13.22
<b>DEBT</b>			
Times Interest Earned	N/A	N/A	N/A
Times Interest Earned—Integra	2.71	2.65	2.58
Total Liabilities to Total Assets	0.63	0.65	0.67
Total Liabilities to Total Assets—Integra	0.64	0.64	0.64
Short-Term Debt to Equity	0.00	0.00	0.00
Short-Term Debt to Equity—Integra	0.43	0.42	0.43
<b>PROFITABILITY</b>			
Pretax Return on Assets	0.01	0.00	0.02
Pretax Return on Assets—Integra	0.03	0.03	0.03
Pretax Return on Equity	0.04	-0.01	0.07
Pretax Return on Equity—Integra	0.09	0.08	0.08
Pretax Return on Net Sales	0.01	0.00	0.02
Pretax Return on Net Sales—Integra	0.01	0.01	0.01

As demonstrated above, Decorative Stone reflects substantially higher liquidity than its peer group. The company is turning over its fixed assets and payables much faster than the industry as well. The debt ratios are solid, particularly because the only debt is financed interest free by Mr. Richardson. Profitability is relatively in line with the industry *even after* Mr. Richardson's compensation.

In order to provide a more meaningful analysis, or what we believe to be more helpful in the assessment of reasonable compensation, we have added back the officer's compensation in its entirety. Table 4 reflects the adjusted common size income statements for 2002–2004 for Decorative Stone.

*(Continued)*

## EXHIBIT 20.2 (Continued)

<b>TABLE 4</b>			
<b>COMMON SIZE INCOME STATEMENT WITH OFFICER'S COMPENSATION REMOVED</b>			
	<b>2002</b>	<b>2003</b>	<b>2004</b>
Total Revenues	100.00%	100.00%	100.00%
Total Cost of Sales	69.51%	71.26%	68.86%
Gross Profit	30.49%	28.74%	31.14%
Total Operating Expenses	15.74%	13.77%	14.30%
Operating Income	14.75%	14.97%	16.84%
Total Other Income	1.32%	1.91%	2.14%
<b>Income Before Taxes</b>	<b>16.07%</b>	<b>16.87%</b>	<b>18.98</b>

In order to compare these figures with the Integra data, we have also added back the officer's compensation reflected by Integra. This appears in table 5.

<b>TABLE 5</b>		
<b>COMMON SIZE ADDBACK OF OFFICER'S COMPENSATION</b>		
	<b>Decorative Stone</b>	<b>Integra</b>
<b>2004</b>		
Pre-Tax Income	1.50%	1.40%
Add: Officer's Compensation	17.48%	1.60%
<b>Adjusted Pre-Tax Income</b>	<b>18.98%</b>	<b>3.00%</b>
<b>2003</b>		
Pre-Tax Income	-0.11%	1.50%
Add: Officer's Compensation	16.98%	1.70%
<b>Adjusted Pre-Tax Income</b>	<b>16.87%</b>	<b>3.20%</b>
<b>2002</b>		
Pre-Tax Income	0.84%	1.50%
Add: Officer's Compensation	15.22%	1.70%
<b>Adjusted Pre-Tax Income</b>	<b>16.06%</b>	<b>3.20%</b>

Officer's compensation, as a percentage, has been added back to both Decorative Stone and Integra. The Integra data provides a percentage for officer's compensation, but cannot be used by itself to properly assess reasonable compensation. The reported data does not allow the analyst to answer many important questions about this percentage; for example, what part of the country are these businesses located in?; are there other individuals

**EXHIBIT 20.2**

who performed various duties that may be reflected in other expense categories (for example, cost of sales or general and administrative) that should be added to officer's salary to be comparable?

After making the adjustment to both sets of data, it becomes obvious that Decorative Stone is substantially more profitable than the industry group. This demonstrates, in part, the effectiveness of Mr. Richardson in running this company.

One test for reasonableness of compensation would be to determine how much compensation the company could afford to pay the officer, rewarding him for his efforts and performance, while continuing to produce a return on equity that would be consistent with the industry. This test is illustrated in table 6.

	<u>2002</u>	<u>2003</u>	<u>2004</u>
Historic Net Income (Table 1)	\$ 57,782	\$ (8,050)	\$121,612
Adjustments			
Officers' Compensation—Addback	\$1,042,713	\$1,243,912	\$1,414,200
Officers' Compensation—Reasonable	(971,696)	(1,110,762)	(1,403,876)
<b>ADJUSTED PRETAX NET INCOME</b>	<b>\$ 128,799</b>	<b>\$ 125,100</b>	<b>\$131,936</b>
Decorative Stone Historic Return on Equity	3.81%	-0.53%	7.47%
Integra Return on Equity	8.50%	8.30%	8.10%
Decorative Stone Return on Equity with Compensation Adjustment	8.50%	8.30%	8.10%

Table 6 illustrates that an investor could get a comparable return on equity to the industry while compensating Mr. Richardson as follows:

2002	\$ 971,696
2003	1,110,762
2004	1,403,876

This would bring Decorative Stone's comparison to the industry as illustrated in table 7. Table 7 reflects the common size comparison to Integra after adjusting Decorative Stone's earnings for the level of officer's compensation that would allow a shareholder to receive a return on equity in line with the industry. After making this adjustment, Decorative Stone becomes more profitable than the industry group in all three years.

*(Continued)*

## EXHIBIT 20.2 (Continued)

	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>Integra</b>
Total Revenues	100.00%	100.00%	100.00%	100.00%
Total Cost of Sales	69.51%	71.26%	68.86%	82.79%
Gross Profit	30.49%	28.74%	31.14%	17.20%
Total Operating Expenses	29.92%	28.94%	31.65%	15.10%
Operating Income (Loss)	0.56%	-0.20%	-0.51%	2.10%
Interest Expense	0.00%	0.00%	0.00%	0.82%
Total Other Income	1.32%	1.91%	2.14%	0.16%
<b>Income Before Taxes</b>	<b><u>1.88%</u></b>	<b><u>1.71%</u></b>	<b><u>1.63%</u></b>	<b><u>1.46%</u></b>

**CONCLUSION.** After considering the facts and circumstances of Decorative Stone, using guidance from the United States Tax Court, we believe that reasonable compensation for Mr. Richardson is as follows:

2002	\$ 971,696
2003	1,110,762
2004	1,403,876

These levels of compensation would provide the shareholder of the company with the same return on equity as other shareholders in the industry, while compensating Mr. Richardson for his long hours, significant contribution to the growth and profitability of the company, as well as the \$200,000 to \$300,000 of foregone interest expense on the substantial loans made to the company over the years.

As you can see from exhibit 20.2, the court case gave great guidance in analyzing reasonable compensation. By the way—the taxing authority accepted our figures!

## ***DELAWARE OPEN MRI RADIOLOGY ASSOCIATES P.A. v. HOWARD B. KESSLER, ET AL.***<sup>7</sup>

### **ISSUE: TREATMENT OF S CORPORATION TAXES IN FAIR VALUE**

This case is a new addition to this book. Among other things, it deals with the issue of how to handle income taxes for a pass through entity in a shareholder dispute. Personally, I think the judge did a great job in deciding this matter. I hope I get to appear in front of him.

<sup>7</sup> *Delaware Open MRI Radiology Associates, P.A., Petitioner, v. Howard B. Kessler, et al., Respondents. and Howard B. Kessler, et al., Plaintiffs, v. George J. Broder, et al., Defendants*, in the Court of Chancery of the State of Delaware, in and for Newcastle County, Consolidated, C.A. No. 275-N.

The issue is should we tax the S Corp. earnings, and by what rate? Sound familiar? In the court's opinion, Chancellor Strine addressed the issue of "Is It Appropriate To Tax Affect The Earnings Of Delaware Radiology In Order To Determine Its Fair Value?"

The expert on one side of this litigation treated Delaware Radiology as if it were a regular tax-paying entity (a C corporation) when he performed the valuation that the Broder Group used to set the merger price. In fact, he applied a 40 percent tax rate. Not to be surprised, the expert on the other side asserted the proposition that because Delaware Radiology was an S corporation, it faced no corporate-level income taxes. Relying on this as Delaware Radiology's operative reality, the expert did not tax affect its earnings in performing his valuation. Any taxes, he reasoned, would be paid at the stockholder level and should not be considered in valuing Delaware Radiology as an entity.

Chancellor Strine opined:

This dispute raises an interesting question of valuation, which has elicited a fair amount of attention from judges, appraisers, and academics.<sup>8</sup> After careful consideration, I conclude that neither of the experts has taken the most reasonable approach to valuing Delaware Radiology.

The problem with Reed's approach of treating Delaware Radiology as a C corporation is obvious. Delaware Radiology is a very small entity. The record reveals no set of circumstances in which it is likely that Delaware Radiology will convert to C corporation status. It is a highly profitable entity that generates and distributes income well in excess of the stockholder level taxes its stockholders must pay. The S corporation tax status is a highly valuable attribute to the shareholders of Delaware Radiology, given its profitability and the affluent status of its physician stockholders, who face top marginal tax rates.

This starts to sound like the facts in the *Gross* case from the tax court. The court indicated that under Delaware law, an appraisal petitioner is "entitled to be paid for that which has been taken from him ...."<sup>9</sup> In trying to reach a fair and equitable solution regarding the tax issue, Chancellor Strine reviewed the U.S. Tax Court cases and decided that an all or none situation, with regards to taxes, was wrong.

In this case, the departing group was involuntarily deprived of the benefits of continuing as stockholders in a profitable S corporation where the benefits were comprised materially of the favorable tax treatment that accompanies S corporation status. As a matter of fairness, the merger price had to take into account these benefits and provide fair compensation for the Kessler Group's loss. The Company's analyst's approach denied the Kessler Group members the value they would have received as continuing S corporation stockholders in Delaware Radiology and, therefore, ensured that the merger price was lower than fair value.

However, Chancellor Strine also found that the Kessler Group's analyst was equally flawed and overstated the value fairly belonging to the Kessler Group. He said:

The value of the S corporation structure is one that is experienced at the stockholder level and that is easy to overstate. If an S corporation is to be sold, for example, it will receive no premium over a C corporation if the universe of buyers is principally comprised of C corporations.<sup>10</sup> There is an obvious reason for this: unless the buyer of the S corporation can retain and benefit from that tax status, then the buyer will value an S corporation at the value it would have as a C corporation. Therefore, it would be highly misleading to do a market-based comparable acquisition valuation of an S corporation using sales of comparable C corporations to C corporations, and then assume that the S corporation would be sold at a higher price because of its tax status. In other words, I am not trying to quantify the value at which Delaware Radiology would sell to a C corporation; **I am trying to quantify the value of Delaware Radiology as**

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<sup>8</sup> See, for example, *In re Radiology Assocs.*, 611 A.2d 485 (Del. Ch. 1991); *Adams v. Commissioner of Internal Revenue*, 2002 WL 467235 (U.S. Tax Ct. Mar. 28, 2002); *Heck v. Commissioner of Internal Revenue*, 2002 WL 180879 (U.S. Tax Ct. Feb. 5, 2002); *Gross v. Commissioner of Internal Revenue*, 1999 WL 549463 (U.S. Tax Court. July 29, 1999); Franklin M. Fisher et. al., *The Sale of the Washington Redskins: Discounted Cash Flow Valuation of S-Corporations, Treatment of Personal Taxes, and Implications for Litigation*, 10 Stan. J.L. Bus. & Fin. 18 (2005) (hereinafter "Fisher"); Z. Christopher Mercer, *S Corporation Valuation Issues*, The American Society of Appraiser's 22nd Annual Business Valuation Conference (Oct. 17, 2003) (hereinafter "Mercer").

<sup>9</sup> *Tri-Continental Corp. v. Batty*, 74 A.2d 71, 72 (Del. 1950).

<sup>10</sup> See *Mercer* 9–14.

**a going concern with an S corporation structure and award the Kessler Group their pro rata share of that value.**[Emphasis added.]

Consistent with today's thinking in the valuation community, Chancellor Strine indicated:

To capture the precise advantage of the S corporation structure to the Kessler Group, it is necessary to use a method that considers the difference between the value that a stockholder of Delaware Radiology would receive in Delaware Radiology as a C corporation and the value that a stockholder would receive in Delaware Radiology as an S corporation. By using that method, I can make my best estimate of the value that is relevant in this case—the going concern value in an S corporation that was taken from the Kessler Group in the merger.

The court not only discussed the reliance on the previous decisions of the Tax Court, but he also cites another Delaware fair value case. He said:

In undertaking this analysis, I embrace the reasoning of prior decisional law that has recognized that an S corporation structure can produce a material increase in economic value for a stockholder and should be given weight in a proper valuation of the stockholder's interest.<sup>11</sup> That reasoning undergirds not only holdings of the *Adams*, *Heck*, and *Gross* cases in the U.S. Tax Court, but an appraisal decision of this court, which coincidentally also involved a radiology business.<sup>12</sup> The opinion in *In re Radiology Associates* noted that “under an earnings valuation analysis, what is important to an investor is what the investor ultimately can keep in his pocket.”<sup>13</sup> In that case, on the record before it, the court held that the way to implement that insight was to ignore tax completely.<sup>14</sup> The *In Re Radiology Associates* decision comported with decisions of the U.S. Tax Court, which has given life to the advantages of S corporation status by refusing to tax affect the corporation's earnings at all.<sup>15</sup>

The difference in this case was at the level of implementation, rather than at the level of principle. In this context, the court found that when minority stockholders have been forcibly denied the future benefits of S corporation status, they should receive compensation for those expected benefits and not an artificially discounted value that disregards the favorable tax treatment available to them. However, the minority shareholders should not receive more than a fair S corporation valuation. It was determined that refusing to tax affect at all produces a windfall.

What can I say? This judge really got it. He truly addressed the tax issues like it was never done before. Rather than paraphrase bits and pieces of the balance of his opinion, this is what he said:

The Internal Revenue Code states that “[t]he taxable income of an S corporation shall be computed in the same manner as in the case of an individual . . .”<sup>16</sup> This tax, though assessed at individual rather than corporate tax rates, is dependent solely upon the corporation's net earnings. Even if Delaware Radiology were to retain 100% of its earnings annually, its stockholders still would owe taxes on Delaware Radiology's income even though they received no distributions. Affording a remedy to the Kessler Group that denies the reality that each shareholder owes taxes on his proportional interest in Delaware Radiology would result in the Kessler Group receiving a higher per share value from the court than it could ever have realized as a continuing shareholder.<sup>17</sup>

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<sup>11</sup> See *Adams*, 2002 WL 467235; *Heck*, 2002 WL 180879; *Gross*, 1999 WL 549463.

<sup>12</sup> *In re Radiology Assocs.*, 611 A.2d at 495.

<sup>13</sup> *Ibid.*

<sup>14</sup> *Ibid.*

<sup>15</sup> In this regard, the case of *Gross v. Commissioner* is a good example. In *Gross*, the Tax Court held that “[w]e believe that the principal benefit that shareholders expect from an S corporation election is a reduction in the total tax burden imposed on the enterprise. The owners expect to save money, and we see no reason why that savings ought to be ignored as a matter of course in valuing the S corporation.” *Gross*, 1999 WL 549463 (page reference unavailable on WL). The Tax Court refused to allow a “hypothetical corporate tax rate in excess of the zero-percent actual corporate tax rate” to be considered in valuing an S corporation and instead required that no corporate tax be applied to the S corporation's earnings.*Id.*

<sup>16</sup> 26 U.S.C.A. § 1363 (2005).

<sup>17</sup> See, for example, *Fisher*.

The amount that should be the basis for an appraisal or entire fairness award is the amount that estimates the company's value to the Kessler Group as S corporation stockholders paying individual income taxes at the highest rates—an amount that is materially more in this case than if Delaware Radiology was a C corporation. In coming to a determination of how the Kessler Group's interest in Delaware Radiology would be valued in a free market comprised of willing buyers and sellers of S corporations, acting without compulsion, it is essential to quantify the actual benefits of the S corporation status. That is also essential in order to determine the value of what was actually taken from the Kessler Group as continuing stockholders.

Assessing corporate taxes to the shareholder at a personal level does not affect the primary tax benefit associated with an S Corporation, which is the avoidance of a dividend tax in addition to a tax on corporate earnings.<sup>18</sup> This benefit can be captured fully while employing an economically rational approach to valuing an S corporation that is net of personal taxes.<sup>19</sup> To ignore personal taxes would overestimate the value of an S corporation and would lead to a value that no rational investor would be willing to pay to acquire control.<sup>20</sup> This is a simple premise—no one should be willing to pay for more than the value of what will actually end up in her pocket—that can best be firmly grasped through a concrete example.

Assume that Delaware Radiology receives \$100 in annual earnings. If Delaware Radiology was organized as a C corporation, its earnings after tax would be \$60, assuming, as is the usual custom, that the effective corporate tax rate is 40%. Then, assume that Delaware Radiology distributes all of its post-tax earnings to its shareholders in the form of a dividend. The shareholders would receive total post-tax distributions of \$51, after an assumed dividend tax of 15% is applied to the \$60 after-tax earnings. That is, a shareholder would experience an effective tax rate of 49% after corporate income and dividend taxes.

Now, consider the post-tax benefits of \$100 in income to Delaware Radiology's stockholders, using its actual status as an S corporation. In that scenario, the shareholders would receive all \$100 in earnings as distributions and be subject only to one shareholder-level tax. Thus, the shareholders would be responsible for paying taxes on the \$100 at their individual tax rates. I will also assume that rate to be 40% because the Broder and Kessler Groups are comprised of affluent physicians who pay at the highest marginal rate.<sup>21</sup> Therefore, every dollar of Delaware Radiology's earnings would be taxable at the stockholder level at the highest marginal tax rate. The shareholders in Delaware Radiology, an S corporation, would be able to pocket \$60 after tax if all earnings were distributed. The difference is clear: Delaware Radiology's status as an S corporation allowed the shareholders to pocket \$60 of \$100, whereas if Delaware Radiology was a C corporation, the shareholders could pocket only \$51 of the \$100.<sup>22</sup>

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<sup>18</sup> See, for example, *Byrne v. Commissioner of Internal Revenue*, 361 F.2d 939, 942 (7th Cir. 1966) (“We agree with the observation of the Tax Court that the [S Corporation] statute is designed to permit a qualified corporation and its shareholders to avoid the double tax normally paid when a corporation distributes its earnings and profits as dividends and this is accomplished in a specified manner which does not involve ignoring the corporate entity.”); Practising Law Institute, 546 PLI/Tax 249 *Organizing the Corporate Venture* § 1301 (2002) (“This re-inversion of rates lessened the S corporation shareholder's advantage of being taxed directly on corporate income. Yet, the primary tax advantage of being an S corporation shareholder—i.e., the ability to receive corporate income with only a single level of tax imposed C remains intact. This must be compared to the double tax paid on a C corporation's income (i.e., once at the corporate level, and again at the shareholder level when distributed) in considering the tax benefit of using an S corporation, rather than a C corporation, for business operations.”); Mercer, 9 (“The S election relieves one layer of taxation at the corporate level, providing the potential for greater cash flow at the shareholder level.”).

<sup>19</sup> Fisher, 22.

<sup>20</sup> *Ibid.*, 18 (“[W]e demonstrate that ignoring taxes in a DCF analysis when valuing an S corporation potentially leads to an overestimation of value.”); 22 (“A rational investor will only pay up to the present value of an investment's expected cash flows, net of personal taxes.”).

<sup>21</sup> Currently, at the federal level, the highest personal tax rate is 35 percent, and the highest corporate tax rate is 38 percent. Thus, taking into account state taxes, it is reasonable to assume a 40 percent personal tax rate.

<sup>22</sup> This would not be the case if 1) no distributions were being paid by the S corporation to its shareholders or 2) distributions only sufficient to cover tax liability were being distributed to shareholders. The relative value of an S corporation, vis-à-vis a C corporation, to its shareholders is dependent upon the level of distributions paid. For a useful model and analysis, see, e.g., Chris Treharne, et. al., *Valuation of Pass-Through Entities*, American Society of Appraisers 23d Annual Advanced Business Valuation Conference (Oct. 8, 2004). As recognition of the fact that their stockholders must pay taxes on nondistributed earnings, most if not all S corporations distribute a sufficient amount of their profits to cover shareholder tax obligations. Mercer, 17 (“S corporations who attempt to retain all earnings and not pass through the shareholders' tax distributions will likely find themselves C corporations again, as their shareholders arrange to become ineligible to hold S corporation stock.”). This makes intuitive and commercial sense. If all earnings are retained, the S corporation's shareholders must dig into their own pockets to fund the tax liability. If all earnings are retained in a C corporation, the entity is responsible for the corporate level tax. If S corporation shareholders elect to receive no distributions, that can be viewed as a reinvestment of their tax savings in that enterprise.



In valuing Delaware Radiology, therefore, it would overstate the value taken from the Kessler Group to require the Broder Group to pay the Kessler Group \$37.50 for its share of every \$100 of future pre-tax earnings. That cash flow, after the favorable S corporation tax treatment, would not be worth \$37.50 to the Broder Group, but only \$22.50. The issue, though, is that tax affecting Delaware Radiology at a 40% level (or C corporation level) would not recognize any S corporation value that flowed to the Kessler Group or compensate the Kessler Group for its involuntarily removal as shareholders in a profitable S corporation. To be consistent with Delaware law, I must tax affect Delaware Radiology's future cash flows at a lower level that recognizes the full effect of the Kessler Group's ability to receive cash dividends that are not subject to dividend taxes.

In order to accurately capture the value to the Kessler Group of Delaware Radiology's S corporation status, I have estimated what an equivalent, hypothetical "predividend" S corporation tax rate would be. The following table presents that calculation:

	<b>C Corp.</b>	<b>S Corp.</b>	<b>S Corp Valuation</b>
Income Before Tax	\$ 100	\$ 100	\$ 100
Corporate Tax Rate	40%	—	29.4%
Available Earnings	\$ 60	\$ 100	\$ 71
Dividend or Personal Income Tax Rate	15%	40%	15%
Available After Dividends	\$ 51	\$ 60	\$ 60

This calculation allows me to treat the S corporation shareholder as receiving the full benefit of untaxed dividends, by equating its after-tax return to the after-dividend return to a C corporation shareholder. I will, therefore, apply an effective tax rate of 29.4% to the earnings of Delaware Radiology to measure with the greatest practicable precision the fair value of the Kessler Group's interest in the going concern value of Delaware Radiology.

I have to commend Chancellor Strine for getting this opinion correct with respect to taxes. Most state court judges shy away from this very complex issue and he really got it dead on. In fact, his opinion was so instructive that our firm has started following this very methodology. In fact, I really like the logic behind these calculations because it is simple and easy to explain. If you look back at exhibit 10.6 you will see my critique of the other analyst's work is similar to this. Then take a look at exhibit 20.3 and you will see it as is. This is an actual excerpt from a report prepared for a shareholder dispute.

### EXHIBIT 20.3

#### S CORPORATION TAXES—NORMALIZED

We have recalculated income taxes based on the fact that The Smith Entities are pass-through entities for income tax purposes. This means that The Smith Entities do not pay tax at the *corporate* level. Over the past several years, the business valuation community has acknowledged that the conventional wisdom of taxing these pass-through entities as if they were taxpaying C corporations is no longer an automatic thing to do. In fact, the United States Tax Court opened up this issue in several court cases.<sup>1</sup> Since that time, many authors have contributed to the valuation literature with ideas about how to treat these nontaxpaying enterprises. In one instance, it was stated

<sup>1</sup> *Gross v. Commissioner*, TC Memo. 1999-254, affd. 272 F.3d 333 (6<sup>th</sup> Cir. 2001), *Heck v. Commissioner*, T.C. Memo. 2002-34, Filed February 5, 2002, and *Adams v. Commissioner*, T.C. Memo. 2002-80, Filed March 28, 2002.

### EXHIBIT 20.3

In valuing a *controlling* ownership interest in an S corporation, the analyst should assess the probability that the likely buyers of a controlling interest will be able to avail themselves of continuing the S corporation status. In other words, is the likely buyer a qualified S corporation shareholder who could continue S corporation status indefinitely? Or, is the likely buyer a C corporation? If the pool of likely buyers is made up of qualified S corporation shareholders, then those buyers of a controlling interest can realize all three of the above-listed economic benefits (i.e., no double taxation, pass-through basis adjustment, and increased proceeds upon sale of assets).<sup>2</sup>

In this valuation, we are valuing an interest in a going concern that is being taken from the departing shareholder. Fair value attempts to place a value on what is being taken from him. In this instance, the remaining shareholders will most likely continue the S status (and other pass-through status of the other entities within the group), particularly since the S election was recently made as of January 1, 1998. This means that the remaining shareholders will continue to enjoy the benefits of the S election. Furthermore, the remaining shareholders have not expressed any intention to sell the company. Therefore, we will proceed with the calculation of taxes based on the reality of the situation.

In many of the court cases that have addressed the issue of tax-affecting an S corporation, the appraisers on opposite sides have taken an *all or none* position. They have either taxed the S corporation as if it was a regular taxpaying C corporation, or they have taken the position that since the S corporation does not pay taxes at the corporate level that no tax should be computed. We do not believe that an *all or none* position is always warranted. We will use a simple illustration to help demonstrate the appropriate level of tax to be applied to The Smith Companies.

Assume that The Smith Entities had a pretax profit of \$100. If 100 percent of the earnings was being distributed to the shareholders, the difference between being a C corporation and an S corporation can be explained by the following table.

	C Corporation		S Corporation	
Annual Earnings		\$100		\$100
Corporate Income Tax	40%	<u>40</u>	0%	<u>0</u>
Net Income Available to Shareholders		<u>\$ 60</u>		<u>\$100</u>
Dividends		\$ 60		\$100
Personal Income Tax	40%	<u>24</u>	40%	<u>40</u>
Net cash flow to Shareholders		<u>\$ 36</u>		<u>\$ 60</u>
<b>Benefit of being an S Corporation</b>				<b><u>\$ 24</u></b>

The above table reflects the fact that in a situation where all of the after corporate tax profits are being distributed to the shareholders, the effective corporate tax rate for an S corporation is 0 percent. At the valuation date, the tax rates in effect would have required the shareholders of a C corporation to pay a 40 percent personal income tax after the corporation would have paid the same rate. The amount of money available to the shareholders after all taxes were paid would have been \$36.

As an S corporation, the shareholders avoid a corporate tax, but they pay personal taxes on the *pass-through* regardless of the amount of dividends. Since only one 40 percent tax is paid, the shareholders would end up with \$60 in their pockets after all taxes are paid.

Now we must deal with the realities of The Smith Entities. Historically, 100 percent of the earnings have not been paid to the owners each year. In fact, we had to analyze the deemed dividends and distributions in order to apply the same type of tax-affecting analysis as above. Dividends and deemed distributions have been as follows:

<sup>2</sup> Roger J. Grabowski, and William P. McFadden, "Applying the Income Approach to S Corporation and Other Pass-Through Entity Valuations," *The Handbook of Business Valuation and Intellectual Property Analysis*, Robert F. Reilly and Robert P. Schweihs, editors, (McGraw Hill: 2004): 97.

(Continued)

## EXHIBIT 20.3 (Continued)

	1996	1997	1998	1999	2000
			(In \$000)		
Financial Statement Dividends	\$ 0	\$ 3,500	\$ 3,500	\$ 5,750	\$ 5,000
Officers' Compensation—Addback	4,364	9,614	10,637	8,779	2,114
Officers' Compensation—Reasonable	(927)	(956)	(985)	(1,016)	(1,047)
Shareholder and Partner Loan Movement: ABC	(662)	(3,959)	(3,669)	7,605	4,012
Unconsolidated Entities	1,141	360	1,518	1,897	6,225
Total Distributions	\$3,916	\$ 8,559	\$11,001	\$23,015	\$16,304
Adjusted Pretax Profits	\$8,776	\$12,219	\$19,090	\$19,308	\$15,375
<b>% Distributions to Pretax Profits</b>	<b>44.63%</b>	<b>70.05%</b>	<b>57.63%</b>	<b>119.20%</b>	<b>106.04%</b>

Note: Figures may not add due to rounding.

Dividends were included based on the amounts reflected on the financial statements for the consolidated entities. Excess officers' compensation was also considered to be a form of dividend for this analysis. In addition, we included the year-to-year movement in the shareholder and partner loan accounts for ABC and the unconsolidated entities. These monies flow to the owners. In reality, they are a form of distribution.

Comparing the total distributions to the adjusted pretax profits reflects the fact that distributions in any given year have ranged from 44.63 percent to 119.20 percent of the adjusted profit. The average for this five year period was about 80 percent. This is the amount of distributions that we will now use to recalculate the effective tax rate as an S corporation. The result is as follows:

	C Corporation		S Corporation	
Annual Earnings		\$100		\$100
Corporate Income Tax	40%	40	0%	0
Net Income Available to Shareholders		<u>\$ 60</u>		<u>\$100</u>
Earnings Retained in Company		\$ 12		\$ 20
Dividends	80%	48	80%	80
Personal Income Tax	40%	19	40%	40
Net Cash Flow to Shareholders		<u>\$ 29</u>		<u>\$ 40</u>
<b>Benefit of being an S Corporation</b>				<b><u>\$ 11</u></b>

	C Corp.	S. Corp.	S Corp. Valuation
Income Before Tax	\$100	\$100	\$100
Corporate Tax Rate	40%	0%	33.33%
Available Earnings For Distributions	<u>\$ 60</u>	<u>\$100</u>	<u>\$ 80</u>
Distributions	\$ 48	\$ 80	\$ 80
Personal Income Tax Rate	40%	40%	40%
Net Available After Dividends	<u>\$ 29</u>	<u>\$ 40</u>	<u>\$ 40</u>

**EXHIBIT 20.3**

Since only about 80 percent of the pretax earnings have been distributed historically, we used this amount in our model. Recalculating the net amount available to the shareholders after taxes considers the benefits of the S election.<sup>3</sup> For the purpose of this valuation, the shareholders should be placed in the same position that they would be in after paying tax as an S corporation shareholder. In the above example, they would end up with 40 cents on the dollar. The mathematical calculation to determine the implied S corporation tax rate is as follows:

$$[(1 - X) \times (1 - 40\%)] = 40\%$$

$$X = 33.33\%$$

In order for the shareholders of The Smith Entities to be placed in a neutral tax position, a 33.33 percent corporate tax rate is appropriate. This is the rate that we have used in the normalization process.

<sup>3</sup> This model does not take into consideration the added benefit that the shareholders will receive as a result of the undistributed income of the companies. Since income taxes are paid, and in this model calculated, on the available earnings, regardless of whether they are actually distributed or not, the shareholders of the S corporation can remove the undistributed profits without taxation in subsequent periods. If they do not remove the distributions, they receive a step-up in the basis of their investment and will pay less capital gains, if and when they sell their interest in the company.

**CONCLUSION**

There are great lessons to be learned from reading court cases. A well-written judicial opinion can provide the valuation analyst with significant guidance on many topics, even when they are not necessarily valuation cases. While it is not our intention to perform legal research, particularly for the purpose of taking a position in a litigation, the well-seasoned valuation analyst will be aware of how the court thinks. These are clearly a few of my favorite court cases.



# CHAPTER 21

## *Economic Damages*

### CHAPTER GOALS

In this chapter, I will attempt to explain the following:

- The similarities of an economic damages analysis to a business valuation assignment
- Types of economic damage claims
- How to perform a lost profits analysis
- Different methodologies available to perform a lost profits analysis

### INTRODUCTION

Business damages can arise from many different situations, and it would be nearly impossible to cover every variation that the CPA, economist, or valuation analyst will encounter. Some damages may relate to lost profits, while others may relate to the diminution in value of the business enterprise. This chapter is intended to address some of the principles of business damages from the perspective of the CPA expert. In many instances, the services offered in this area of practice are similar to the application of business valuation techniques. For example, in a lost profits analysis, the expert may need to project the future income that might have occurred *but for* the actions of the defendant in the litigation. These lost profits are then discounted to present value. This should sound like the same process that I discussed in the application of a multi-period discounting model.

This type of service also may involve the valuation of the business enterprise if it was completely destroyed. Sometimes, both lost profits and lost business value may be applicable in the same assignment. You must be careful not to double count the elements of damages when doing this stuff. I will explain more about this in a little while.

While this book is certainly not intended to cover all aspects of economic damages, I decided to add this chapter because many of us who offer business valuation services, particularly in a litigation setting, also are requested, from time to time, to address economic damages. As an expert, you are, once again, faced with finding out about the case law in the jurisdiction of the litigation. Work with your client's attorney to get the most relevant cases. Enough of the introduction stuff—let's get on to the meat and potatoes.

### LOST PROFITS

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A business enterprise may suffer lost profits when, as a result of the acts of someone, any of the following takes place:

- Revenues are lower than they would have been had the act not occurred
- Costs are higher than they would have been had the act not occurred
- Some combination of revenues being lower and costs being higher

### ELEMENTS OF A LOST PROFITS CLAIM

I'm no lawyer, but let me give you some background on this stuff from my perspective. You can check with a lawyer, and you *should* check with a lawyer about this stuff. To be allowed a claim for lost profits, a plaintiff must generally prove the following:

- The defendant breached a legal duty to the plaintiff
- The defendant's actions or failures to act damaged the plaintiff
- The plaintiff's damages are directly related to the defendant's actions or failures to act

## Breach of a Legal Duty

A claim for lost profits can arise from either a broken contract between two parties, or a *tort* (that’s “tort” and not “tart”—a tart is something you eat!). A breach of contract claim involves the alleged breach of an agreement between the parties. For example, a company might sue a general contractor for its lost profits due to the contractor’s delay in completing renovations on the company’s facility. A sales person may sue a manufacturer for breaching its exclusive marketing agreement in the designated territory. A doctor’s group might sue a former doctor for violating a noncompete agreement. Box 21.1 lists the most common types of contractual disputes that lead to lost profit claims.

In a tort claim, the plaintiff accuses the defendant of owing a legal duty to the plaintiff and that the defendant breached that duty. For example, a self-employed individual might sue a gas company for the profits lost as a result of an explosion caused by the gas company’s negligent repair that destroyed the plaintiff’s business. I did a job once for a pizza joint that got blown up because the gas company goofed. A movie studio might sue a movie critic for its lost profits resulting from the critic’s malicious attempt to damage the movie studio by printing false allegations rather than honest opinions. See, if the movie really stinks, it is O.K. to say it. Honesty is a defense. However, you cannot just say the movie was horrible if the intent is to intentionally get others not to go and see it. Box 21.2 lists the most common types of torts that lead to lost profit claims.

### Box 21.1 Breaches of Contract That May Lead to Lost Profit Claims

- Agency agreements, such as manufacturer’s sales representatives
- Breaches of express or implied warranties
- Construction contracts
- Noncompete agreements
- Employment contracts
- Failures to pay or to provide services
- Franchise agreements
- Insurance contracts
- Real estate transactions
- Sales of businesses
- Sales of goods (to which the Uniform Commercial Code may apply)
- Sales of stock

### Box 21.2 Torts That May Lead To Lost Profit Claims

- Acts of simple or gross negligence
- Conversion or theft of funds
- Damage to income producing property
- Defamation
- Fraud (for example, when a supplier pays kickbacks to a company’s employees resulting in higher costs)
- Intentional interference with business or contractual relationships
- Malicious prosecution
- Patent or trademark infringement
- Professional malpractice
- Unfair trade practices

## Causation

The second element of a lost profits claim is causation. Whether a claim relates to a tort or a breach of contract, the plaintiff must prove that the defendant’s actions caused the damage to the plaintiff. While causation may seem obvious, proving this element of damage can frequently be challenging. For example, assume a defendant admits responsibility for the fire that closed the plaintiff’s hardware store for six months. Also assume, however, that The Home Depot opened across the street from the plaintiff’s business six weeks before the fire. Although the plaintiff can demonstrate that the business was closed for six months and lost profits during this period of time, the amount of profits lost due to the fire, and the amount of profits that would have been lost in any event due to the increased competition, is a matter of great uncertainty. At least three or four times since the last edition of this book was published someone has called me to claim that the telephone company left an ad out of the telephone book. Think about how to prove that there is a direct link between the ad being left out and the loss of earnings for the business. Unless really good records are maintained by the business as to where the customers come from, this is not easy.



## Damages Must Be Directly Related to the Defendant's Actions

The third element of proof that must be demonstrated by the plaintiff is the amount of damages that are directly related to the defendant's actions. This causal relationship is sometimes referred to as the *but for* rule. In other words, *but for* the actions of the defendant, the plaintiff would have made an additional \$2,000,000 in profits. *But for* the defendant's negligence, the plaintiff would not have incurred \$650,000 in replacement costs and property damage. *But for* the breach of the contract, the plaintiff would have earned royalties of \$300,000. *But for* writing this book, I would be spending more time on vacation. (I'm only kidding!!!)

In theory, a well-prepared *but for* analysis of the plaintiff's claim calculates the limit of damages related to the defendant's actions. However, even though we think the client got royally shafted, the law rarely allows the plaintiff's recovery to go that far. For example, assume a dairy farmer intentionally pollutes a competing dairy farmer's land in hopes of driving him out of business. The polluter does not know, however, that the competing farmer has a heart condition and that, upon seeing hundreds of his cows lying dead in the field, he has a heart attack and drops dead himself. There is probably no question that the polluter breached a legal duty to the poor guy who died and that his actions are what caused the decedent's loss of profits on the sale of dairy products, as well as his death. However, the law generally allows the decedent's estate to only recover for his loss of profits because the decedent's death was not a foreseeable consequence of polluting the field. Therefore, it can be said that damages are directly related to an act when they are foreseeable. You have to love this legal stuff to do these assignments. Some guy causes another guy to croak and the jury has to worry about his lost profits because of dead cows. So what if he had a heart attack along the way!!

## TYPES OF DAMAGES

A typical lawsuit includes many types of damages. Some damages that might be awarded are classified as compensatory or punitive. Damages can be compensatory or punitive in nature, depending on whether they are awarded as a measure of actual loss suffered or punishment for the behavior of the defendant. Let's hang the guy who killed the cows. Compensatory damages consist of what are referred to as general and special damages.

Consequential damages represent a special type of compensatory damages. *Consequential damages* do not flow directly and immediately from the act of the party, but only from some of the consequences or results of the act. Lost profits as discussed in this chapter are consequential damages.

## THE LOST PROFITS ANALYSIS

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Experts will frequently participate in many types of lost profits cases. Since the rules of recovery will vary from one jurisdiction to the next, and from one type of case to the next, the specific procedures that the expert will apply will vary also from case to case. Make sure that you are working with a lawyer when you do this stuff. Many similarities are common to all lost profits engagements. In fact, the procedures that should be applied are basically the same, regardless of the facts of the case. (Dead cows, lost sheep, who cares!) Let's discuss the procedures for a lost profits analysis.

## MEET WITH THE CLIENT AND CLIENT'S ATTORNEY TO DETERMINE THE OBJECTIVES OF THE ASSIGNMENT

A good place to start is at the beginning. Sometimes, I start in the middle, but I get confused and lose track of what I am doing. You probably do not have to be a genius to realize that the plaintiff and the defendant have different objectives in the case. The plaintiff seeks to maximize the damages of his or her claim (the dead farmer's family wants lots of money or maybe revenge), while the defendant seeks to minimize or deny damages (the cows would have died from foot and mouth disease, so I did that farmer a favor). The expert's job in working with the plaintiff's attorney is to develop a carefully reasoned, well-justified damages estimate using accepted methodology in the field that will withstand pointed cross-examination and potential challenge by the other side. In other words, no "junk science" type of stuff.

In working with the defendant's attorney, the expert's job is to challenge the estimate prepared by the plaintiff's expert when it does not meet these objectives. For example, a four month old business gets destroyed in an explosion of the business next door. The owners of the destroyed business purchased the assets of the particular business four months ago for about \$200,000. The expert for the plaintiff comes up with damages for this four month old business totaling \$7 million. If you were working for the defendant's attorney, your job would be to show how absurd the other expert's opinion is. Think about it: a four month old business, with no history, and an investment of about \$200,000 with damages of \$7 million? What is wrong with this picture?

## Determine the Known Facts and Assumptions of the Case

The client will usually have a pretty good idea of what is going on in the case, including details of the contract that was breached (or the nature of the tort that was committed) and the extent of financial damages that have been incurred. Therefore, you should discuss the known facts of the case with the client and the client's attorney as a means of gaining an overview of the situation.

If you end up testifying to this stuff, you will probably have to make a series of assumptions. It is really important for the client's attorney to know all of the key assumptions, as well as the basis for those assumptions. I like to lay them out in my report so that it is clear to the reader of my report what I did. This is not too different from including assumptions when you do a forecast. Common assumptions that you may rely on include the following:

- Assumptions about the facts
- Assumptions involving the opinions of other experts
- Economic and financial assumptions

## Assumptions About the Facts

Depending on the case, the expert will obtain certain information that is purported to be factual and be asked to assume it is correct. Generally, the attorney will give this stuff to you or you may pick it up by reading the complaint that alleges what happened. Sometimes, the information will be presented during a deposition or trial testimony. Some of these facts may need to be verified. You will have to use judgment to decide which of these to verify.

## Assumptions Involving the Opinions of Other Experts

Additional experts may be employed to analyze different aspects of the damage claim. Other experts may include valuation analysts, industry experts, and engineering experts, among others. You may need to consolidate all of these other opinions into an overall conclusion of the amount of damages.

## Economic and Financial Assumptions

You also may find yourself having to make general economic and financial assumptions during your analyses. This is the same stuff that we do in a business valuation assignment: research and support your assumptions.

## PLASTER YOUR FILES WITH SUPPORT

Documentary evidence is a critical element of all litigation services, including those involving lost profits. Make sure your working papers are loaded with support. The primary source of the documentation may be the plaintiff's business records. If you are representing the plaintiff, getting these records will generally not be a problem (unless, of course, the job is like the pizza joint that I did where the records all got blown up in the explosion). If, however, you are engaged to represent the defendant, your client's attorney may need to use a request for production of documents or a subpoena to get this stuff. There should be some documentation that is available to everybody, which may be useful in a lost profits case, including the following:

- The plaintiff's verified complaint, the defendant's answer, all counterclaims, and all third party demands.
- The answers to all interrogatories and requests for production of documents of all parties to the proceeding.
- Transcripts of the deposition testimony of all parties and witnesses.

- The plaintiff's financial and tax information for a period of years before the breach or tort occurred and for all subsequent periods through the present. This information would include income tax returns, sales tax returns, payroll tax returns, quarterly and annual financial statements, adjusted trial balances and detailed general ledgers (including adjusting journal entries), accounts receivable and payable subsidiary ledgers, depreciation schedules and other fixed asset reports, business plans and financial forecasts, loan documents and agreements, contracts involving the sales of assets, lease agreements, employment contracts, and all of the other stuff that we discussed in the valuation checklist in chapter 3.

Usually, you will only get this type of financial information for the plaintiff. You don't really need this stuff for the defendant's business because the claim relates to the plaintiff's loss of profits. However, sometimes you may be able to measure the plaintiff's lost profits by the defendant's results of operations. For example, the defendant may have breached an agreement not to compete against the plaintiff for a period of time in a specified area. The easiest way for the plaintiff to prove its loss of profits may be to determine the amount of profits made by the defendant during the prohibited time in the prohibited location. Obviously, in this case, the plaintiff must have access to the defendant's records in order to prove the amount of the defendant's profits. This usually requires the lawyers to do their thing. No one seems to voluntarily turn over these records.

## OBTAINING DOCUMENTS AND RECORDS FROM THE OPPOSING SIDE

Ask for the records that you think you need from the other side of the litigation. Documents and records may be obtained from the other side by having the attorney send out a request for production of documents. This is really no different than using an information request in a business valuation assignment. You may need some different types of records because of the nature of the case.

Sometimes, the other side will object to the production of the information on the grounds that it contains proprietary or trade secret information. For example, you may request the source code from a rival software company to prove the rival copied your client's source code. Disclosure of the source code will require the disclosure of proprietary and trade secret information. When this kind of information is involved, do not be surprised if you are requested to sign a confidentiality agreement, or you also may find yourself subject to a court imposed protective order, limiting the use of the materials to only the disputed issue. The protective order usually provides that the parties (including their attorneys or experts, or both) will return all information produced subject to the order to the producing party at the conclusion of the litigation. In addition, you also cannot blab about the substance of the information in any manner other than in using it to prove the claim or defense in your assignment. Be careful not to violate a protective order. That's not a good thing.

## SHOULD YOU WORK WITH ORIGINAL DOCUMENTS OR COPIES?

Courts do not always require original documents to be presented as evidence. Generally, photocopies may serve as evidence unless the authenticity of a document is challenged. Your client's attorney has to guide you on this one. For example, in a lost profits case involving an alleged breach of contract, the defense may assert that the contract presented by the plaintiff has been forged or altered in some way. When one side to a dispute doubts the authenticity of a document that the opposing side presents as evidence, the court will usually insist that the original document, rather than a photocopy, be presented as evidence.

## GET INFORMATION FROM THE CLIENT AND THE OTHER SIDE

In addition to the written documentation, you can use your interview skills to conduct management interviews aimed at getting more information that is needed to do your job. This stuff begins to look like a business valuation assignment. I told you before—it really is similar in many respects.

## Interviewing Client and Opposing Personnel

Rarely will you be able to draw accurate conclusions if you only look at a bunch of documents. You really want to interview client personnel. These are the folks who can explain the documents to you and answer any questions that you might have about the documents. Client interviews are especially important when you represent the plaintiff. Be careful, however, because your client may provide you with information that in many cases needs to be

reviewed for reasonableness. For example, your client tells you that *but for* the actions of the defendant, the business could have achieved \$10 million in sales in the next two years. When you look at the history of the business, the best year reflected sales of \$1.5 million. How realistic is the growth being forecasted if you find out that the industry is expecting a downturn because of a change in a regulation affecting the use of the company's product?

In some cases, you also may be able to interview officers and employees of the other side. These interviews may help you to understand their positions. The interviews may enable you to uncover important information that should be considered in your analysis. If you can't interview officers or employees of the other side, don't start to cry. You may have to depend on interrogatories and depositions to obtain needed information. Get the information with the help of the attorney.

## PERFORMING THE LOST PROFITS COMPUTATION

Once you have received the documentation that has been requested (or at least once you realize that you are not going to get any more documentation) and all of your interviews are completed, you should be in a position to start your number crunching. The assignment will probably require you to estimate the lost revenues, relevant costs, and determine if there is any appropriate mitigation of the damages. This process will require you also to determine these items by estimating the appropriate period of loss, possibly an appropriate discounting method, and the appropriate discount rate.

The specific components of the lost profits computation will vary somewhat from one engagement to the next, but you will almost always be dealing with a pre-trial and an after trial component. The first step in computing lost profits is to determine the amount of lost revenues before the trial. This process also can be described as determining the revenues that the plaintiff could have earned *but for* the defendant's actions. There are three generally accepted ways to estimate lost revenues:

1. The before and after method
2. The yardstick method
3. The but for method

### The Before and After Method

The simplest way to estimate revenues lost by the plaintiff as a result of the defendant's actions is to conduct a *before and after* analysis. Just like the name implies, the expert compares the plaintiff's revenues before the alleged breach or tort to the revenues after the event. Any reduction in revenues after the alleged breach or tort is presumed to be caused by the event. This, of course, assumes that the plaintiff's operations before and after the event were comparable. The expert will usually analyze the business before and after the event to ensure comparability. Important differences (such as an owner who worked 60 hours per week in the business before the event and only works 20 hours per week after the event) should be considered in estimating the amount of lost revenues that relate to the event. You also should make sure that the business results are reported in a consistent manner. Somehow, our training as accountants gets us into this consistency thing.

To illustrate the use of the *before and after* method, assume John Smith is a salesman for ABC Electronics and he breaches his employment contract to establish a competing business on January 1, 2006. Mr. Smith's contract required him to provide services to the company through December 31, 2007. The contract also contained a three year noncompete clause. Therefore, under the terms of the contract, Mr. Smith was not supposed to compete with ABC Electronics through December 31, 2010. Mr. Smith is liable to the company for any damages from the breach. Assume the company's gross revenues were \$14 million in 2005 (the year before Mr. Smith began competing with the company) and dropped to \$10 million in 2006. Further assume that the company recruited and hired a new salesman on January 1, 2007, to take Mr. Smith's place and revenues returned to \$14 million in 2007.

Before Mr. Smith's breach, the company had revenues of \$14 million. After Mr. Smith's breach, the company had revenues of \$10 million. Under this fact pattern, it appears that Mr. Smith's actions caused the company to lose \$4 million of revenues in 2006. Damages in subsequent years were mitigated by the fact that the company hired a

replacement for Mr. Smith in 2007, resulting in revenues returning to \$14 million in 2007. The before and after approach gives a quick and easy approximation of the amount of revenues lost by the company as a result of Mr. Smith's breach of contract. This, of course, assumes that all else remained constant during this time.

### The Yardstick Method

Another common approach to estimating revenues lost in this type of litigation assignment is known as the *yardstick* method. This method compares the plaintiff's earnings against those of a similar business, product, or comparable measure. Let's assume from the previous example that the company demonstrated that Mr. Smith's 2006 and 2007 revenues were derived from former customers of the business. These revenues may approximate the amount of revenues the business lost as a result of Mr. Smith's breach of contract.

The best yardstick for a closely held business is a business of similar size and nature in the same geographic area as the plaintiff. If the plaintiff has multiple locations, the expert can compare a related entity's results of operations to the plaintiff's. The plaintiff's competitors are also a good source of comparative information, but they will not usually disclose confidential financial information. If the competitors are public companies, you can use the great skills that were discussed in chapter 7 to find good guideline companies. This also can be a perfect time to use Integra Information's *Business Profiler* database. Gee, we can really get our money's worth from this product if we use it for all of the different types of engagements that we perform (and no, I still do not own a piece of Integra).

### The But For Method

The methods already discussed can be used when the facts are fairly straightforward and the amount in controversy does not justify a more precise estimation of the revenues lost by the plaintiff *but for* the actions of the defendant. The problem with those methods is that they don't always consider other factors that might increase or decrease the amount of the plaintiff's lost earnings. To illustrate again using the same example, if Mr. Smith had not breached his employment contract, the revenue of the company could have far exceeded \$14 million in 2006 and 2007. Mr. Smith's efforts could have increased the company's customer base, leading to new referral business. What might really happen is that the other sales people's attention may be diverted from the business to help the attorney make the case for the lawsuit against Mr. Smith. On the other hand, other factors that reduced the company's revenues may have nothing to do with Mr. Smith's departure. For example, a change in the economy could have reduced sales.

In a perfect world, a good *but for* analysis will consider as many of the potential factors working in concert with each other that affect the plaintiff's earnings during the period under consideration and will, in turn, segregate those that were caused by the defendant from those that were not. This sometimes is easier said than done.

## MITIGATION OF DAMAGES

The plaintiff has a duty to mitigate its damages. This means that the plaintiff has a responsibility to do whatever it takes to reasonably overcome the damage caused by the defendant's breach or tort. In determining the plaintiff's lost earnings, the amount of earnings lost as a result of the plaintiff's failure to mitigate its own damages are not recoverable. You probably should speak to the client's attorney about this.

Returning to the ABC Electronics example previously discussed, the company mitigated its damages by replacing Mr. Smith on January 1, 2007. Had the company not replaced Mr. Smith, its claim for lost earnings might be reduced by the amount of money the replacement salesman could have generated over and above his or her salary and other benefits.

## PERIOD OF RECOVERY

Because the plaintiff has a duty to mitigate damages, the plaintiff cannot expect to be awarded lost profits from the date of the harmful event until the end of time (although, I have seen some experts forecast damages until the plaintiff's great grandchildren might be born and become president). Somehow projections of lost earnings for the next 62 years may be hard to swallow. The plaintiff is entitled to recover earnings lost as a result of the defendant's actions for that period of time directly related to those actions. The shorter the period, the easier it is

to demonstrate a direct link to the defendant's acts. As the period increases, other factors may be responsible for the plaintiff's losses. These may include general economic conditions, increased competition, poor business judgment, or the plaintiff's failure to mitigate its damages. Other than in real special circumstances, the direct link is usually difficult to establish between current earnings and the actions of a defendant more than only a few years into the past. Likewise, lost earnings are equally difficult to project more than a few years into the future without losing a direct link to the cause of the future losses. There are just too many variables that can impact the projections.

## VARIABLE COST OF LOST REVENUES

Once the lost revenues have been determined, the next step is to estimate the variable costs that would have been incurred had the revenues not been lost. For example, assume that a plumbing distributor lost \$350,000 in gross revenues as a result of a breach of an exclusive distribution agreement by one of its major suppliers. Under the agreement, the distributor was to be the exclusive source for the supplier's merchandise in a particular market area. When the agreement was breached, the distributor didn't suffer \$350,000 in damages. Instead, the distributor really lost revenues of \$350,000 less whatever variable costs (including cost of goods sold) it would have incurred to sell the \$350,000 of merchandise.

For the nonaccountants reading this book, a company's costs are usually divided into fixed and variable categories. Sometimes costs also may be semi-fixed or semi-variable. Fixed costs remain the same regardless of how much revenue a company generates. Rent is an example of a fixed cost. You sign a lease and pay the rent whether you produce one widget or 200 widgets. Variable costs, on the other hand, vary with the company's revenues. The higher the company's sales, the higher the variable costs. Cost of goods sold, for example, is a variable cost.

In reality, many costs have both a fixed and a variable component and are referred to as *mixed* costs (semi-fixed or semi-variable—it's like asking, "Is the glass half full or half empty?"). For example, business rent may be a fixed cost assuming the current level of production. Once the level of production increases to a certain point, the existing facility may need to be expanded, thereby raising the rent expense.

Usually, mixed costs tend to be fixed when the damage period is short, but exhibit mixed characteristics when the damage period is long. For example, if the defendant failed to supply goods to the plaintiff, which caused a 30 day shutdown of the plaintiff's production line, the rent paid by the plaintiff on its physical plant would probably remain fixed during this 30 day period. Rent, therefore, would not be a variable cost saved by the plaintiff as a result of the defendant's actions. On the other hand, if the defendant's failure to supply goods prevented the plaintiff from opening a new production line in a new manufacturing plant, the rent saved by the plaintiff would be a variable cost, which must be netted against the plaintiff's lost revenues.

Determining whether an expense will vary with the level of revenues takes a great deal of judgment. You need to analyze each expense item during the damage period and carefully assess whether the expense is fixed or variable. For those that are variable (or are mixed with a variable component), try to estimate the amount of the expense that would have been incurred during the damage period if the lost revenues had actually been generated. In many cases, the estimate can be based on historical ratios or percentages. For example, if a company's gross profit percentage has traditionally been 35 percent, it may be reasonable for the expert to estimate that cost of goods sold will be 65 percent (100 percent - 35 percent) of lost revenues.

## INCREMENTAL REVENUES AND EXPENSES—NOT FIXED OR VARIABLE

There will be some assignments where you will have to be concerned about incremental revenues and expenses rather than variable or fixed. The business may have expenses that would normally be considered variable, but adding revenues may not add all that much in expenses. Exhibit 21.1 contains an analysis from a report that we did. In this assignment, we were asked to critique the work of another expert. Not only will you see the incorrect treatment of incremental expenses, but a whole lot of other errors. This is a good example of what not to do in an assignment.



## EXHIBIT 21.1

## DAMAGES CRITIQUE ADDRESSING INCREMENTAL COSTS

Pursuant to your request, we have reviewed the calculation of lost profits prepared by Dewey, Cheatum and Howe, CPAs. Lost profits were calculated in conjunction with the litigation entitled *Larry Mann v. ABCD, Inc. et al.*, filed in the Court of Common Pleas, Fourth Judicial District of South Carolina, Chesterfield County, Docket No. 01-CP-12-345. The purpose of our review is to allow us to opine on damages allegedly incurred by Black Bear Trading Company, S.A.

Based upon our review of the Dewey Report and the source documents upon which it is based, we have concluded that Mr. Dewey's methodology is inherently flawed, that his calculations are unverified and unverifiable for a number of reasons, and that, as a result, his calculations cannot be relied upon.

**METHODOLOGICAL DEFECTS**

The defects in the methodology of Mr. Dewey's report are as follows.

**Mistaken Reliance on Black Bear Shipments.** Larry Mann, the President of Black Bear Trading Company, claims that ABCD breached an initial agreement to supply sufficient shirt parts to Black Bear for 3,000 dozen shirts per week, and that the quantity to be supplied was later allegedly orally increased to 7,000 dozen per week. Mr. Dewey's calculations, however, are not based upon quantities shipped by ABCD as the contract required, but upon the number of shirts sewn by Black Bear each week. He stated in his deposition that he assumed that the quantities shipped by ABCD each week corresponded exactly to the number of dozens sewn that week.<sup>1</sup> Mr. Dewey assumed as well that when shirt parts were received by Black Bear, they were sewn immediately. Finally, Mr. Dewey assumed that all shirt parts shipped by ABCD were actually sewn into shirts by Black Bear with no allowance for waste. All three assumptions were factually incorrect and invalidate the entire Dewey report.

First, the assumption that what came from ABCD in each week corresponded exactly to what was sewn by Black Bear is incorrect because there is no necessary correlation between what came in from ABCD during a given week and what was sewn during that week. For example, if a shipment of parts came in toward the end of the week, sewing could not be completed until the following week. Moreover, multiple containers were often received during the same week. Mann himself acknowledged the absence of correlation when he stated:

It really didn't matter what came in because Mr. Kaplan and Mr. Brown scheduled the work as to what was sewn, what order it was sewn, and when it was shipped. There were emergencies that we had to push up front. There was work that wasn't needed that we put in the warehouse and sometimes sat for three or four months.<sup>2</sup>

The above quotation from Mr. Mann's deposition also disproves Dewey's assumption that what came in during a given week was immediately sewn. Finally, Black Bear, like any other production company, experienced some waste of material, whether due to machine failure, employee error, or theft, among other things. As a result, there were necessarily a number of weeks in which everything that was received by Black Bear from ABCD was not sewn into shirts. Indeed, all or part of Black Bear's failure not to sew during a given week the quantity allegedly required by the contract may have been caused by inventory waste or shrinkage and not by a failure to deliver by ABCD.

Because of those fatal errors in the Dewey Report, conclusions regarding ABCD weekly shipments and the causes of shortages in Black Bear's weekly production are not possible. Notwithstanding this problem, we did use Black Bear shipments to ABCD in order to illustrate the myriad of other errors in Mr. Dewey's Report.

**Incorrect Start Date for Damage Period.** Dewey improperly assumed that Black Bear would be capable of immediately producing 7,000 dozen shirts per week on April 1, 2004, because that was the date of Black Bear's lease of new space needed to accommodate increased production. He ignores documents that were provided to him that reflect that most of the up-fitting of the new space was not completed until several months later, that new machines had not yet been received from ABCD, and, thus, that production could not possibly have started on April 1, 2004. We have chosen a May 15, 2004, start date even though documents show that actual completion did not occur until June or July.

**Erroneous Exclusion of Relevant Expenses.** Mr. Dewey made fundamental errors in characterizing certain expenses that resulted in expenses being grossly understated and profits being grossly overstated. His errors stem from his failure to realize that the actual intention of his analysis should have been to determine precisely how much net profit Black Bear lost as a result of the supposed breach of contract. The goal of awarding damages in a breach

<sup>1</sup> Dewey deposition at 66:18-21.

<sup>2</sup> Deposition at 192.

(Continued)



**EXHIBIT 21.1** (Continued)

of contract case is to put the plaintiff in the same position monetarily as it would have been had the contract been fully performed. In simple terms, two calculations are required. First, one must calculate how much sales revenue would have been earned from full performance of the contract. Second, the total expense the plaintiff will necessarily incur in order to perform the contract must be calculated. Expenses that are necessitated by the contract are called *incremental expenses*. They are new expenses and increases in existing expenses that the plaintiff would not have incurred had it not entered into the contract. Once all of the incremental expenses are totaled, they are deducted from the revenue expected to be earned from full performance. These are the profits that the plaintiff would have expected to earn from full performance. These expected profits are then compared to profits actually earned by the plaintiff. If expected profits are more than actual profits earned, the difference equals the plaintiff's damages. In this case, Mr. Dewey conveniently mischaracterized various expenses as not incremental, with the result that incremental expense was grossly understated and profit grossly overstated.

Mr. Dewey performed damage calculations at the 3,000 dozen per week and 7,000 dozen per week levels. The start-date chosen by Dewey for the damage period is April 1, 2004. He assumes that starting on April 1, 2004, ABCD was obligated to supply to Black Bear enough shirt parts each week so that Black Bear could sew 7,000 dozen shirts per week for every week through and including December 31, 2007. The second calculation is the same as the first, except that it assumes a lower production level of 3,000 dozen per week. Mr. Dewey then calculated Black Bear's allegedly expected profits at the 7,000 dozen and 3,000 dozen levels, compares them to actual profits, and computes a loss. It is in his computation of incremental expenses that Mr. Dewey's errors are most pronounced.

The factual context that highlights Mr. Dewey's errors is as follows. Prior to doing business with ABCD, Black Bear was a small operation housed in a building of about 16,000 square feet and having a capacity of less than 1,600 dozen garments per week. The polo-type golf shirts required by ABCD constituted a new product for Black Bear. According to Mr. Mann, in order for Black Bear to place itself in a position to perform its contract with ABCD, it had no choice but to incur a number of significant expenses that it would not have otherwise incurred. For example, the written contract required Black Bear *to double its production capacity*. In order to do so, Black Bear was required to lease an additional 52,000 square feet of space, to buy \$300,000 worth of machines needed to produce polo-type shirts, to increase the number of employees, and to expand office operations, among other actions. Then, in order to perform the alleged oral agreement for a further increase to 7,000 dozen, a 400% increase in capacity, Black Bear leased another 20,000 square feet of space and purchased an additional \$100,000 of machines from ABCD. This expansion was also attended by increased operational and administrative needs. As a result, there were increases in virtually every expense incurred by Black Bear—increases that would not have occurred had there been no contract with ABCD. Those expenses were, therefore, true incremental costs of performing the contract and should have been deducted from revenue in order to arrive at a true net profit figure.

Mr. Dewey, however, instead of looking to see whether or not an expense was attributable to the contract or whether the expense had in fact varied over time, arbitrarily categorized expenses as fixed and excluded them from the profit computation.

The more obvious errors made by Mr. Dewey in his classification of expenses as incremental or fixed are as follows:

**Methodological Errors.** During his deposition, Mr. Dewey made a number of very surprising statements. First, he testified that on repeated occasions when he considered an expense that was a small percentage of over-all expenses, he arbitrarily classified it as fixed, making no real analysis of its true nature.<sup>3</sup> Second, he admitted with respect to a number of expense accounts that he did not know what types of expenditures were booked in those accounts.<sup>4</sup> Certain of these accounts were treated as fixed expenses even though Mr. Dewey had insufficient information to render a judgment on the nature of the expenses. Third, he could not explain precisely why certain necessarily recurring expenses were absent from certain years, stating only that he *assumed* that they were accounted for in other unnamed accounts.<sup>5</sup> Mr. Dewey's hit and miss classification procedure falls far short of classification standards adhered to by CPAs.

**Rent.** Mr. Dewey treated rent as a fixed expense, despite the fact that the addition of the 52,000 square foot and 20,000 square foot facilities was directly attributable to and necessitated by the ABCD contract and product change. The rent excluded was \$236,214 and \$255,177, in 2004 and 2005, respectively.

<sup>3</sup> Deposition at 94:19-25, 102:2 to 103:2.

<sup>4</sup> Deposition at 108:5-11, 114:9 to 115:21, 180:9-14, 181:4-16, 183:21 to 184:6.

<sup>5</sup> Deposition at 148:5-12, 182:2-5, 109:2 to 111:4, 124:22 to 125:4, 148:5-12, 148:24 to 149:17.

**EXHIBIT 21.1**

**Miami Office-Overhead.** According to Mr. Mann, this expense includes office overhead, wages, and salaries for sales and administrative personnel located in Miami. Mr. Mann testified that virtually every area of Black Bear’s operation was expanded in order to perform the contract with ABCD, to include office operations, payroll, personnel, and production.<sup>6</sup> In addition, because Mr. Dewey treated other sales and administrative expenses as variable, it was incorrect to exclude Miami Office Overhead from the profit computation, especially in view of the fact that there is no evidence that a similar expense was incurred by Black Bear prior to the ABCD contract. Miami Office Overhead expense was \$264,340 and \$267,737, in 2004 and 2005, respectively.

**Insurance.** Insurance was incorrectly characterized as a fixed expense despite the fact that the more buildings, the more machines, the more vehicles, and the more employees required by Black Bear, the more insurance the company would need. Excluded insurance expense was \$20,062 and \$39,754, in 2004 and 2005, respectively.

**Depreciation.** Various depreciation accounts listed in Appendix B of the Dewey Report (nos. 18, 19, 20, 21, 73, 74, and 75) were treated as fixed expenses. In this case, however, Mr. Mann testified that in order to perform its contract with ABCD, Black Bear purchased additional computers, office furniture, and typewriters, among other things. The additional items were depreciated and a large portion of the depreciation was attributable to the contract. Depreciation appears to have resulted from functional wear and tear and not obsolescence. Therefore, Mr. Dewey was in error in excluding all depreciation expenses. The amount excluded was \$19,506 and \$7,999, in 2004 and 2005, respectively.

**Maintenance.** Just as increases in buildings, equipment, and office equipment result in increased depreciation, they also result in increased maintenance needs. Maintenance expenses should be deducted from revenue. The amounts excluded were \$9,808 and \$9,761, in 2004 and 2005, respectively.

**Advisor Fee.** There is no indication as to why this expense was treated as fixed. In 2004, it was \$1,637, and in 2005 it had increased 25 times to \$50,597. Logically, the increase had to be related directly to the ABCD contract and, therefore, this expense should be deducted from revenue. Mr. Dewey believes that this was a fee incurred for the redesign of the physical plan necessitated by the contract. If so, he should have treated it as incremental.

**Security.** Mr. Dewey treated security expense as fixed despite the fact that it increased from \$1,198 in 2004 to \$4,789 in 2005 and that as the space occupied increased, so did the cost of securing that space. Furthermore, portions of the line item “security” were misclassified in the Dewey Report. In fact, portions of these expenses grouped as security should have been classified as insurance, vehicle insurance, medical insurance, service charge, security system and employer’s contribution In-Home Supportive Services (IHSS). We have corrected the misclassifications in our report.

**Housing Expense.** Mr. Mann testified that housing expense was incurred in order to house outside engineers who were needed in order to set up the expanded production lines.<sup>7</sup> It was, therefore, a direct cost of performing the contract. While negligible in 2004, it was \$4,080 in 2005.

**Interest Expense.** For the sole purpose of performing the contract with ABCD, Black Bear purchased almost \$400,000 worth of sewing equipment on credit from ABCD and received a revolving line of credit of almost \$240,000. We have been informed that it paid interest on these debts as follows:

2003	\$ 48,193
2004	55,935
2005	44,716
2006	28,738
2007	17,617
<b>Total</b>	<b>\$195,199</b>

None of these interest payments made their way to the Black Bear income statements, but they should have been deducted from revenue as incremental interest expense.

<sup>6</sup> Deposition at 55.

<sup>7</sup> Deposition at 60.

(Continued)

### EXHIBIT 21.1 (Continued)

**Discretionary Costs.** There are a large number of discretionary costs that Mr. Dewey treated as fixed that would have been more properly treated as variable. They include contributions, dues and subscriptions, funeral expense, publicity, and surveillance. These costs should have been treated as incremental and deducted from revenue.

**Travel and Salary—Oliva.** There is no indication as to what Mr. Oliva, Black Bear's general manager, was being paid in 2002 prior to the ABCD contract. Mr. Mann testified, however, that much of the \$124,345 that was paid to Mr. Oliva in 2005 was a performance bonus. Finally, in 2005, ABCD accounted for virtually all of Black Bear's production. For all of these reasons, Mr. Oliva's salary and travel expense were incremental. Mr. Dewey stated in his deposition that a general manager's salary is incremental.<sup>8</sup>

#### UNVERIFIED OR UNVERIFIABLE, OR BOTH, CALCULATIONS

Even if Mr. Dewey's methodology was capable of producing a reliable result, the information upon which he relied is virtually worthless. This conclusion is based as follows.

**Unverified Financial Information.** Dewey principally relied upon the following documents in performing his damage calculations:

- Black Bear invoice registers
- Detailed expense listings for the years 2004–2007
- Unaudited Black Bear income statements for the years 2004–2007

The invoice register was prepared by Mr. Mann's secretary. The detailed expense listings and the financial statements were prepared by Black Bear's in-house accountant, who was not a CPA. In performing his analysis, Mr. Dewey assumed the accuracy of all of these documents, and he made no effort to spot-check them against the source documents. In addition, he did not review checkbook ledgers, deposit records, general ledgers, trial balances, or vendor invoices. While CPAs must often rely upon internal company documents in performing their normal work, CPAs do not produce financial statements for a client without either verifying the accuracy of information provided to them or disclaiming any intention to make any representation regarding the accuracy of client documents. Similarly, CPAs, when serving as experts, do not blindly assume the accuracy of information provided to them and will qualify their opinions when underlying documentation is not reliable.

**Inconsistencies and Omissions in Source Documents.** One major inconsistency, as discussed above, is the fact that Mr. Dewey used expense information only for the years 2004 and 2005, ignoring available information for 2003, 1999, and 2000. In addition, expense information for 1995, the year immediately preceding the contract period, is also missing. Finally, in the expense information for the years 2004 through 2000, there are numerous unexplained omissions and inconsistencies. We itemize them as follows:

**Using Simple Average in Order to Estimate Expenses.** Mr. Dewey, for some reason, did not use the actual expense information that was available for 2006 and 2007, but instead used a simple average of other years in order to estimate expenses for those two years. For example, although he had per unit direct labor rates per dozen for the years 2003–2007, Mr. Dewey used an average of the rates for 2004 and 2005 as the direct labor rate for the years 2004–2007. Use of this average understated expenses and overstated profits for the years 2005–2007. Similarly, Mr. Dewey did not use available information for indirect production costs and administrative costs for the years 2006 and 2007. Instead, he calculated what he considered to be the incremental costs per dozen for 2004 and 2005 and then averaged them. He then applied that average to the years 2004–2007. Again, this use of an average understates expenses and overstates net profits for the years 2005–2007. Finally, information derived from averages was not adjusted for Honduras' rampant inflation, which ranged from 11% to 20% per year.

**Incorrect Exchange Rates.** Mr. Dewey does not supply the source for the exchange rates that he used in order to convert Honduran lempiras to dollars. Official rates published by the Central Bank of Honduras are higher than those used by him. Differences are as follows:

	2003	2004	2005	2006	2007
Mr. Dewey	10.77	12.88	13.40	14.24	14.89
Central Bank of Honduras	11.84	13.14	13.54	14.35	15.01

<sup>8</sup> Deposition at 18:17-20.

**EXHIBIT 21.1**

By using the lower rates, Mr. Dewey overstated Black Bear’s net profits in certain years.

**Omitted or Inconsistent, or Both, Recurring Expenses.** It is the nature of any business that certain expenses are necessarily incurred every year. The expense data supplied by Black Bear omits many obviously recurring expenses without apparent reason. True net profit cannot be determined unless the non-reoccurrence of recurring expenses is clearly explained or the gaps are filled in with new expense figures. With other expenses, there are unexplained sizeable decreases that run counter to all other data that suggests that there should be increases. For example, severance pay increased from \$96,703 in 2004 to \$175,664 in 2005, but it inexplicably decreased to \$70 in 2006. Salaries and wages, however, only decreased from \$302,730 to \$253,936.

The specific expenses for which I have found unexplained and illogical discrepancies are as follows:

**INDIRECT PRODUCTION COSTS**

**Advisor Fee.** Account No. 8. In 2005–2007, the advisor fee ranged from \$49,670 to \$65,418, but it was only \$31 in 2004. The vast differences in these figures need to be explained or adjusted accordingly.

In an attempt to adjust the 2004 amount (\$31) within our analysis to provide a more realistic basis of what the number actually was, an average was taken of this account balance between the years of 2005 and 2007, and resulted in the new estimation of \$59,217. Furthermore, these fees were reclassified from fixed to variable.

**14th Month.** Account No. 13. This is a yearly charge required by Honduran law that is calculated from annual payroll. No expense was recognized in 2006, whereas other years ranged from \$39,505 to \$57,150. This item should have been estimated for 2006. Therefore, we estimated this expense by taking a simple average of the remaining three years (2004, 2005, and 2007). As a result, we included an estimated 14<sup>th</sup> month 2006 expense as \$49,907.

**Depreciation Accounts for Machinery, Auto, Furnishings, Security Equipment, and Kitchen Equipment.** Account Nos. 18, 19, 20, and 21. These expenses are recurring every year; yet, they are not recorded for 2005. Furthermore, auto depreciation was also not estimated for 2006. Therefore, we calculated an estimate of these expenses in order to provide a more realistic view of Black Bear’s expenses, rather than accepting that they did not occur at all.

We were not provided with the methodology that Black Bear uses to depreciate its autos, machinery, and equipment. Therefore, we estimated this amount assuming that depreciation is a result of functional wear and tear, in relation to the increase in sales. See below for a summary of this calculated estimate.

Year	Units
2004	2,909,796
2005	2,637,168
2006	2,173,908
2007	2,486,256

For the years we were provided with, we took an average of the account balances for depreciation as a percentage of units of production based on Mr. Dewey’s figures. Such averages were as follows:

Account	Average Account Balance as a % of Production
Depreciation—Machinery	1.04%
Depreciation—Auto	0.06%
Depreciation—Furnishings	0.21%
Depreciation—Security Equipment	0.04%

We then multiplied these average balances times the number of units produced for that respective year to create the depreciation estimate. Results are as follows:

*(Continued)*

## EXHIBIT 21.1 (Continued)

Account	New Estimate
Depreciation—Machinery (2005)	\$ 27,413
Depreciation—Auto (2005)	1,647
Depreciation—Auto (2006)	1,358
Depreciation—Furnishings	5,615
Depreciation—Security Equipment (2005)	1,004

**Severance Pay.** Account No. 33. In 2004, severance pay was \$96,703; in 2005, it was \$175,664; and in 2007, it was \$50,113. In 2006, however, only \$70 was charged to this account. Black Bear's employment levels shrank between 2005 and 2006, indicating that, if anything, severance pay should have increased.

**Maintenance—Equipment.** Account No. 38. This account went from \$165,982 in 2005 to \$0 in 2006, even though equipment levels were the same. Mr. Dewey testified that he was informed by Black Bear's in-house accountant that in 2005 this account included \$120,000 for the purchase of four new air conditioners.<sup>9</sup> Because there is good reason to doubt this explanation,<sup>10</sup> we considered it reasonable that there should have been at least some maintenance cost for the year. An estimation was made by taking a simple average for the remaining three years listed, and resulted in an ending amount of \$58,354.

**Supplies.** Account No. 41. In 2006, this expense was half of what it was in 2005. In 2007, it rises to the 2005 level, all of which is illogical given the level of sales.

**Paper and Office Supplies.** Account No. 42. This decreased from 2004 on, even though activities that require usage increase each year after 2004. This is illogical and unexplained.

**Salaries and Wages.** Account No. 105. This item actually decreases from 2004–2006, even though production increases; then it increases to its highest level in 2007 when production is the least. There was also an unexplained drop of \$48,794 in 2006, even though severance pay was negligible and the 13th month pay is high compared to previous years.

**ADMINISTRATIVE EXPENSES**

**Depreciation Vehicles.** Account No. 73. This item is \$0 for 2007. We corrected this omission using the same method as used above for omissions in depreciation. We calculated this amount as follows: 2,486,256 (units of production)  $\times$  0.3149% (average account balance as a percent of production) = \$7,830 (new estimate for 2007).

**Depreciation—Furnishings and Equipment, Security Equipment, and Kitchen Equipment.** Account Nos. 74 and 75. There is no charge for these expenses in 2005; yet, it should have been recorded. The omissions were recalculated using the same logic as other missing depreciation accounts already noted.

**Depreciation—Security Equipment.** For 2005,  $2,637,168 \times .0250\% = \$659$ .

**Depreciation—Furnishings and Equipment.** For 2005,  $2,637,168 \times .3080\% = \$8,124$ .

**Travel and Representation Expense.** Account No. 81. This expense ranges from \$52,422 in 2004 to \$136,778 in 2006, but it is \$0 in 2005 without explanation. Therefore, we calculated an estimated expense for 2005 by taking a simple average of the remaining three years (2004, 2006 and 2007). The ending result of this average created an estimate of \$102,935.

**Insurance Expense.** Account No. 90. There is no expense recorded for 2006 and 2007. It increases yearly; therefore, it is not a fixed expense. In order to create a reasonable estimate for this account, we took the 2005 balance of this account as a percentage of sales and applied this percentage to sales for 2006 and 2007. Note that the sales levels in 2005 were more consistent with 2006 and 2007. Therefore, the percentage of sales in 2005 was used to estimate levels in 2006 and 2007 as follows:

<sup>9</sup> Dewey Deposition at 134:20 to 135:5.

<sup>10</sup> We find it curious that this expense was booked into account no. 38 "Maintenance-Equipment" when there are two other accounts entitled "Maintenance-Air Conditioner": account numbers 36 and 93. Moreover, the purchase of \$120,000 of air conditioners would not be an expensed item but an asset purchase producing only an annual depreciation expense. See Dewey Dep. at 134:20 to 135:5.

## EXHIBIT 21.1

2005 Insurance:	\$	39,754
2005 Sales:		2,771,594
Balance as a % of sales		.0144
2006	$\$2,330,291 \times 0.0144 =$	\$33,556
2007	$\$2,231,583 \times 0.0144 =$	\$32,135

**Interest Expense.** Account No. 92. This expense category omits interest paid on the ABCD contract. Therefore, we included interest expense in the amounts as previously indicated.

**Miami Office—JFC.** Account No. 97. In 2004, approximately \$264,000 in overhead expenses were booked into this account, with \$267,000 being booked in 2005. The balance of this account in 2006 and 2007, however, was \$0. Mr. Dewey stated in his deposition that he treated “Miami Office—JFC” as fixed because Mann told him it was really a method to withdraw \$5,000 a week in profit from Black Bear.<sup>11</sup> Mr. Mann, on the other had, claimed that JFC and its successor corporation, Jost, were formed in order “to market and perform essential services for Black Bear in Honduras.”<sup>12</sup> Among those services were marketing, machinery purchases, parts purchasing, supply purchasing, billing, accounts receivable, lease negotiations, customer negotiations, and handling customers work.<sup>13</sup> Black Bear paid Jost/JFC on average \$200,000 to \$250,000 per year for these services.<sup>14</sup> It also included salaries for employees of Jost and JFC.<sup>15</sup> This overhead, according to Mr. Mann, was also paid in 2006.<sup>16</sup> Indeed, Mr. Mann confirmed that there was a Miami Office overhead expense of \$260,000 per year during the entire damage period.<sup>17</sup> Therefore, estimation was made by taking the percentage increase (1.0114%) in office overhead for the years of 2004 and 2005 and applying that increase to create an expectation for 2006 and 2007. The ending result was \$270,044 for 2006 and \$273,122 in 2007.

**Salaries and Wages.** Account No. 105. This item decreases from approximately \$115,000 in 2004 to \$39,000 in 2006, even though 13th and 14th month payments consistently increase from 2004–2007, which is totally inconsistent.

**Organizational Expenditures and Professional Fees.** Account Nos. 86 and 87. These items should be treated as incremental because they were incurred in order to create and to implement the 2002 agreement. Therefore, these expenditures were reclassified as incremental.

### RECALCULATION OF LOSSES

As mentioned above, it is not possible to make a reliable, nonspeculative damage estimate based upon the information on which Mr. Dewey relied. That information is incomplete, unverifiable, and contains numerous unexplained and illogical inconsistencies and omissions. Nonetheless, in order to illustrate the degree to which Mr. Dewey’s faulty methodology can overstate Black Bear’s net profits, we have re-analyzed the data after correcting or minimizing as many errors as possible.

Specifically, we performed the following calculations:

1. We corrected Mr. Dewey’s expense classification errors.
2. We identified those expenses that, in whole or in part, should be treated as incremental. Below is a list of such reclassifications:

*Production*

- a. Sporting activities
- b. Rent
- c. Advisor fee
- d. Dues and subscriptions

<sup>11</sup> Dewey Deposition at 182:15 to 183:20.

<sup>12</sup> Mann Deposition at 24:7-10 (Vol. I).

<sup>13</sup> Mann Deposition at 24:11-24 (Vol. I).

<sup>14</sup> Mann Deposition at 25:3-12 (Vol. I).

<sup>15</sup> Mann Deposition at 64:2-7 (Vol. II).

<sup>16</sup> Mann Dep. at 84:16 to 85:5 (Vol. II).

<sup>17</sup> Mann Dep. at 100:19 to 101:4 and Exhibit 26 (Vol. II).

(Continued)



**EXHIBIT 21.1** *(Continued)*

- e. Depreciation (all accounts)
- f. Organizational expense
- g. Severance pay
- h. Maintenance—air conditioning, building, and rented property
- i. Publicity

*Administrative*

- a. Post office box
  - b. Advisor fee
  - c. Depreciation (all accounts)
  - d. Donations and contributions
  - e. Travel and salary expense—Tony Olivia
  - f. Funeral expense
  - g. Professional fees
  - h. Insurance
  - i. Interest expense
  - j. Maintenance—air conditioner, building, and office equipment
  - k. Cleaning supplies
  - l. Miami office overhead
  - m. Paper and office supplies
  - n. Tolls
  - o. Publicity
  - p. Repairs and maintenance—Vehicles
  - q. Vehicle insurance
  - r. Surveillance
3. We attempted to identify those expenses that Black Bear was likely to have incurred prior to the Black Bear-ABCD contract, and we then estimated the portions, if any, of each expense that, in fact, was incremental. For example, of the 72,000 square feet that Black Bear leased in 2004 and after, we treated the rent on 18 percent of that footage (16,000 sq. ft.) as fixed, and the rent on the remaining 56,000 square feet, or 82 percent, as incremental.
4. In addressing incremental expenses that necessarily had to be incurred at a certain level but were inexplicably missing or understated on the financials during a given year, we attempted to estimate what their actual levels were for those years through reference to other years. We realize that this is an inexact approach; however, we believe it will produce a much truer picture than simply ignoring the unexplained absences of those expenses.
5. Having produced as true an estimate as possible of Black Bear's actual incremental cost structure, given the absence of data or explanations, we calculated a revised total incremental cost per year.

<b>INCREMENTAL EXPENSES</b>	
2004	\$2,278,022
2005	2,714,508
2006	2,416,947
2007	2,399,683

6. We then adjusted that total downward in order to eliminate expenses incurred on non-ABCD work. For the years 2004, 2005, and 2006, we reduced expenses by the percentage that non-ABCD production was of Black Bear's total production, or 2.3 percent, 7.9 percent, 12.6 percent, and 51.2 percent respectively.



## EXHIBIT 21.1

ABCD ADJUSTED INCREMENTAL EXPENSES	
2004	\$2,225,627
2005	2,500,062
2006	2,112,412
2007	1,171,045

7. We then obtained the actual annual revenue that Black Bear earned on sales to ABCD from the Black Bear Invoice Registers.

ABCD REVENUES	
2004	\$2,997,536
2005	2,538,784
2006	1,945,420
2007	1,274,488

8. We then calculated the incremental cost and price per dozen for each year as indicated in the following tables.

INCREMENTAL EXPENSES PER DOZEN			
Year	(1) Adjusted Incremental Expense(a)	(2) ABCD Dozens	(1)/(2) = Inc. Exp/ Dozen
2004	\$2,225,627	236,905	\$ 9.39
2005	2,500,062	202,463	12.35
2006	2,112,412	158,392	13.34
2007	1,171,045	101,086	11.58

\*All expenses are adjusted based upon ratios of ABCD to total sales, except for certain other expenses such as rent for which a more precise allocation was possible, as explained above.

AVERAGE PRICE PER DOZEN			
Year	(1) Sales of ABCD	(2) Dozens	(1)/(2) = Prize/Dozen
2004*	\$2,062,964	163,203	\$13.64
2005	2,538,784	202,463	13.54
2006	1,945,420	158,392	13.28
2007	1,274,488	101,086	13.61

\*Actual dozens and sales dollars for the period May 15, 1997, through December 31, 1997, were calculated from the Dewey Invoice Register and monthly report of lost sales.

(Continued)

**EXHIBIT 21.1** *(Continued)*

9. For each year, we calculated the actual net operating income from sales to ABCD for each year and the expected net operating income at the 7,000 dozen per week and 6,000 dozen per week levels.

**NET OPERATING INCOME  
FROM ABCD SALES**

<b>Year</b>	<b>Net Operating Income</b>
2004*	\$692,936
2005	241,185
2006	(8,600)
2007	204,529

\*Derived by multiplying dozens sold from May 15, 2004 through December 31, 2004, of 163,203 times the difference between the 2004 sales price and the incremental cost per dozen ( $13.64 - 9.39 = \$4.25$ ). Profit or loss in other years were computed in the same fashion, except that the full 12 month period was used.

**EXPECTED NET OPERATING INCOME  
AT 7,000 DOZEN PER WEEK**

<b>Year</b>	<b>Expected Net Operating Income*</b>
2004	\$980,790
2005	433,617
2006	(19,764)
2007	736,486

\*Computed in 2004 for the period May 15 through December 31, a period of 33 weeks times 7000 dozen per week, for a total of 231,000 dozen. In 2005, 2006, 2007, 364,000 dozen per year were used.

**EXPECTED NET OPERATING INCOME  
AT 6,000 DOZEN PER WEEK**

<b>Year</b>	<b>Expected Net Operating Income*</b>
2004	\$840,677
2005	371,672
2006	(16,940)
2007	631,274

\*6,000 dozen per week were calculated in conjunction with document 458 mentioned at Mr. Dewey's deposition page 176.

**EXHIBIT 21.1**

10. We then calculated the average profit or (loss) for each year at the 7,000 dozen level and adjusted that number due to changes in exchange rates.

<b>7,000 DOZEN PER WEEK</b>			
<b>A. UNADJUSTED ANNUAL LOST NET OPERATING INCOME</b>			
<b>Year</b>	<b>(1) Expected Net Operating Income</b>	<b>(2) Actual Net Operating Income</b>	<b>(1) – (2) = Lost Income</b>
2004	\$980,790	\$692,936	\$287,854
2005	433,617	241,185	192,432
2006	(19,764)	(8,600)	(11,164)
2007	736,486	204,529	531,957
<b>B. ADJUSTMENT FOR CORRECTION IN EXCHANGE RATES</b>			
<b>Year</b>	<b>(1) Adjustment Factor</b>	<b>(2) Unadjusted Lost Income</b>	<b>(1) × (2) = Adjusted Lost Income</b>
2004	.9802	\$287,854	\$282,158
2005	.9897	192,432	190,442
2006	.9923	(11,164)	(11,078)
2007	.9920	531,957	527,704
Total			<u>\$989,227</u>

11. We performed the same calculation at the 6,000 dozen level.

<b>6,000 DOZEN PER WEEK</b>			
<b>A. UNADJUSTED ANNUAL LOST NET OPERATING INCOME</b>			
<b>Year</b>	<b>(1) Expected Net Operating Income</b>	<b>(2) Actual Net Operating Income</b>	<b>(1) – (2) = Lost Income</b>
2004	\$840,677	\$692,936	\$147,741
2005	371,672	241,185	130,487
2006	(16,940)	(8,600)	(8,340)
2007	631,274	204,529	426,745
<b>B. ADJUSTMENT FOR CORRECTION IN EXCHANGE RATES</b>			
<b>Year</b>	<b>(1) Adjustment Factor</b>	<b>(2) Unadjusted Lost Income</b>	<b>(1) – (2) = Adjusted Lost Income</b>
2004	.9802	\$287,854	\$282,158
2004	.9802	\$147,741	\$144,818
2005	.9897	130,487	129,137
2006	.9923	(8,340)	(8,276)
2007	.9920	426,745	423,333
Total			<u>\$689,012</u>

(Continued)

**EXHIBIT 21.1** (Continued)**MITIGATION**

Due to the business relationship between ABCD and Black Bear ending in September 2007, we do not have a full year's performance for that year. As a result, we took into account non-ABCD sales that would mitigate damages for that year.

For the year 2007, when non-ABCD income from sales is used to mitigate damages at the 7,000 level, \$314,743 was calculated as lost income. At the 6,000 level, \$210,372 was calculated as lost income.

As a result, total damages at the 7,000 and 6,000 dozen per week level taking into account non-ABCD sales mitigation are as follows:

<b>7,000 DOZEN PER WEEK</b>	
<b>Year</b>	<b>Adjusted Lost Income</b>
2004	\$282,158
2005	190,442
2006	(11,078)
2007	314,743
<b>Total</b>	<b>\$776,265</b>

<b>6,000 DOZEN PER WEEK</b>	
<b>Year</b>	<b>Adjusted Lost Income</b>
2004	\$144,818
2005	129,137
2006	(8,276)
2007	210,372
<b>Total</b>	<b>\$476,051</b>

**SUMMARY**

- Losses when non-ABCD sales in 2007 are used in order to mitigate damages:
  - at 7,000 dozen per week = \$ 776,265
  - at 6,000 dozen per week = \$ 476,051
- Losses when non-ABCD sales in 2007 are not used to mitigate damages:
  - at 7,000 dozen per week = \$ 989,227
  - at 6,000 dozen per week = \$ 689,012

We then determined whether there were any damages at the 3,000 dozen per week and 2,500 dozen per week levels, assuming that the ABCD contract was enforceable and had not been terminated by Black Bear prior to December 31, 2007. Damages were calculated at the 2,500 level in order to show the relevant range of contract obligations. According to a letter written by Steve Williams dated October 2002, in which the terms of the agreement were set forth, ABCD's obligation was to supply one container of approximately 2,500 to 3,000 dozen per week. When translated into a contract by Mr. Mann's Honduran attorney, only 3,000 dozen appeared, which was not correct according to Mr. Williams, who negotiated the deal.

**Damages at 3,000 Dozen Per Week**

- Damages as per the contract:
  - Damages on total four-year obligation at 3,000 dozen per week
    - 4 years × 52 weeks = 208 weeks
    - 208 weeks × 3,000 dozen = 624,000 dozen
    - Actual number of dozens sewn for ABCD = 698,846
    - Damages = \$0.00 because more than promised was supplied

**EXHIBIT 21.1**

## 2. Damages by year:

2004: \$0.00 because more than 3,000 per week supplied

2005: \$0.00 because more than 3,000 per week supplied

2006: \$0.00 because more than 3,000 per week supplied

2007: damage period ends December 31, 2007

Dozens required = 156,000

Dozens supplied = 101,086

Difference = 54,914

Lost profit =  $54,914 \times 2.02$  (operating profit/dozen) = \$110,926**Damages at 2,500 Dozen Per Week**

1. No damages on total 4-year obligation
2. 2004–2006: no damages because minimum always exceeded
3. 2007: damage period ends December 31, 2007

Dozens required = 130,000

Dozens supplied = 101,086

Difference = 28,914

Lost profit =  $28,914 \times 2.02 = \$58,406$ **OPINIONS**

- 1) Financial information upon which Mr. Dewey relied is untrustworthy and incapable of producing an accurate estimate of Black Bear's results during any year.
- 2) The results set forth in the Dewey Report are untrustworthy and speculative because they are based upon inaccurate assumptions, a defective methodology, and unverified data.
- 3) Employment of a proper methodology and proper assumptions indicates that Black Bear would have had losses that were considerably less than that which was indicated in the Dewey Report. However, this assumes that the data was reliable enough to support a conclusion, which it clearly was not.
- 4) At the 3,000 dozen per week and 2,500 dozen per week levels, Black Bear suffered no losses because quantity requirements during the damage period were met. Under the assumption that damage can be isolated to a particular year and under the further assumption that the contract was enforceable by Black Bear through December 31, 2007, damages at the 3,000 dozen per week level were \$110,926, and at the 2,500 dozen per week level were \$58,406.

**SHOULD LOST NET EARNINGS BE REDUCED FOR INCOME TAXES?**

Remember the discussion that we had before in the conventional business valuation chapters about pre-tax and after tax stuff? Here it really matters. Although income tax is considered to be a variable expense, it is usually not subtracted from lost revenues to arrive at lost net earnings. Most lost profits calculations are based on pre-tax amounts because damage awards are usually taxable to the plaintiff. You now have the extent of the tax stuff that I plan to discuss. Make sure that you find out how the jurisdiction of the litigation handles taxes, but don't forget to remember Uncle Sam. Ask your client's attorney!

**PREJUDGMENT INTEREST**

Once the lost profits are calculated, you may need to calculate prejudgment interest. This is intended to compensate the plaintiff for not having the use of the lost profits from the time that the damages were sustained until the recovery of the damages (usually the trial) is made. However, prejudgment interest is not allowed in all jurisdictions. In addition, many attorneys would rather keep the interest out of the calculations, even though they expect the courts to award it. Before computing prejudgment interest, find out from the attorney if you should calculate it. You also may want to find out if there is a statutory percentage that is required to be used. I had one case where the statutory rate was 11 percent at a time when interest rates were at about 4 percent. The damage

recovery was a good investment once the client got past the aggravation of the litigation. Other items that you probably should talk to the attorney about include: when does the interest begin to run and should the interest be compound or simple?

## PROJECTED LOST REVENUES AFTER TRIAL

Many times, the damages will extend to after the trial date. This component of the damages involves obtaining estimated future revenue and expense amounts from the plaintiff and reviewing the estimates for reasonableness. In some cases, if financial forecasts are not available from the plaintiff, you may have to prepare them. Because such estimates are based on events that have not yet occurred, you better be careful. This is like doing a discounted cash flow analysis under the income approach. Make sure that the assumptions that enter into the forecast are reasonable. If they are too speculative, the judge may throw them out.

When you estimate future damages, a two step approach can be used. First, project the future gross revenues, assuming the breach of contract or tort had never occurred. This projection should reflect gross revenues *but for* the defendant's acts. Second, a forecast of the future gross revenues actually expected to be realized should be prepared. This forecast should reflect the reduced gross revenues that result from the defendant's acts.

## AICPA STANDARDS RELATING TO FORECASTS AND PROJECTIONS

This is probably a good time to throw this in: The AICPA's Statement on Standards for Accountants' Services on Prospective Financial Information entitled *Financial Forecasts and Projections* defines a *financial projection* as follows:

Prospective financial statements that present, to the best of the responsible party's knowledge and belief, given one or more hypothetical assumptions, an entity's expected financial position, results of operations, and cash flows.

The AICPA standard defines a *financial forecast* in exactly the same way, except that the definition of a forecast leaves out the words "given one or more hypothetical assumptions." This AICPA standard typically *does not* have to be followed by CPAs in a litigation engagement. However, it provides excellent guidance relating to preparing and reviewing financial forecasts and projections, and should be used for guidance by the CPA or expert.

## Factors to Consider in Preparing Financial Forecasts and Projections

The preparation of financial forecasts and projections is beyond the scope of this book. Certain factors to consider, however, are summarized as follows:

- *Inflation.* Inflation should be considered in estimating future gross revenues. When current rates are extreme, relative to historical ranges, the expert should usually reflect gradual increases or decreases toward more normal rates during the forecast period.
- *Product demand.* Products typically go through a life cycle that includes four distinct phases: introduction, growth, maturity, and decline. In estimating future revenues, the CPA should consider the life cycle stage of the plaintiff's primary products. This is the same as the business valuation stuff that we discussed before.
- *Competition.* Within each industry, many companies usually compete for a share of the market, and such competitive pressures must be considered in estimating future revenues. Some factors to consider in estimating the effect of competition are the following:
  - The plaintiff's current market share.
  - The plaintiff's trend in market share. (Is it increasing or decreasing?)
  - The plaintiff's business plan. This should specifically address how the company proposes to keep or increase market share through such means as reduced prices, increased promotional expenditures, and product improvements supported by increased research and development expenditures.

## Revenue Factors for Certain Industries

When estimating future revenues, it is always helpful to understand the key drivers for the particular industry in which you are working. This will allow you to formulate numbers that make sense and test the reasonableness of the result. Box 21.3 includes some of the factors to consider for certain industries.

### Box 21.3 Industry Revenue Factors for Consideration

Consider the following industry revenue factors when performing a forecast:

- Professional service businesses, such as engineering, accounting, and law firms' chargeable hours and average billing rates
- Nursing homes and hospitals' beds available, occupancy rates, and average charge per patient
- Homebuilders' number of home sales closed and average closing prices
- Apartment lessors' units available, expected occupancy rates, and average rent per unit
- Restaurants' tables turned per day and average charge per table
- Commercial real estate lessors' net rentable area and average annual rent per square foot
- Manufacturers' units shipped and average selling prices
- Retail stores' floor space and sales per square foot
- Agricultural producers' acres planted, yield per acre, and selling price
- Associations' number of members and annual dues

Go to a book on rules of thumb for business valuation and you can generally figure out the driver for that type of business. It really is a big help. If the plaintiff has several major product lines or several locations, it may be necessary to develop assumptions by product line or location.

### Discounting Projected Lost Profits after Trial to Present Value

After estimating the amount of future lost revenues and variable expenses that relate to the defendant's actions, you will probably have to discount the projected lost net earnings to present value as of the trial date. This can be done in a number of ways.

There is a great deal of controversy as to what discount rate should be used in a lost profits case. Some practitioners prefer to apply a risk free rate of return (that is, a personal injury type model). Others prefer to include business risk in their calculations (that is, use a business valuation model). Use the guidance from chapter 11 to help you develop the appropriate discount rate. The only decision that I cannot help you with is: should you be using a risk free rate or an equity discount rate? This will depend on the jurisdiction, as well as the facts and circumstances of the case.

### DON'T FORGET TO CHECK THE LOST PROFITS COMPUTATION FOR REASONABLENESS

After completing the last step, you should have an idea of the damages involved in the case. Before reporting the results to the client and the client's attorney, however, you must review the results of the computations and make sure that the results are reasonable. After all, you may have to defend the computations and their underlying assumptions under aggressive cross-examination from the opposing attorney if the case goes to trial.

### OTHER SITUATIONS

Sometimes you may be faced with more than just a lost profits calculation. The entire business may have been destroyed. Other times, you may have a relatively new business that has been impacted by a defendant. Here are some tips about those situations.

#### Destruction of a Business

If the business has been completely destroyed, most courts have ruled that the proper measure of damages is the fair market value of the business on the day of the loss. The theory behind this rule is that the plaintiff who recovers damages equal to the value of the business has, in effect, sold the business to the defendant. The plaintiff should not be able to recover future lost profits after the imputed sale as well.

In this instance, you will most likely be asked to value the business. Use all of the stuff that you learned in the earlier chapters of this book to get you there. If you have already forgotten what you read, re-read it!

#### Start-up Businesses

In a lost profits case, the plaintiff's damages must be proved to a reasonable certainty and may not be based merely on speculation or conjecture. Most new business ventures fail. Accordingly, the *new business rule* generally precludes a start-up business from recovering lost profits, because there is usually no evidence that the business would have been able to generate a profit, but for the defendant's actions.



The new business rule does, however, have some exceptions. Some of the more common exceptions include the following:

- If the new business has begun operations, it may be able to demonstrate that it is capable of producing revenues and profits. If this is the case, its projection of lost revenues and profits may be based on more than mere speculation.
- If the new business is a franchise operation or a new location of an existing business, it may be able to demonstrate the historical revenue and profit results of similar franchises or locations. If the plaintiff has a demonstrated track record of success with similar endeavors, its projection of profits lost from the new business may rise to the level of a reasonable certainty.
- If the new business would have enjoyed a competitive advantage over existing businesses in the industry, projecting this advantage in terms of lost profits over and above existing competitors' results of operations may be accepted as reasonable. Any such projection should be limited to the period of time it would have taken the competition to "catch up" to the new business.

If you represent the plaintiff, you must be extremely creative to overcome the new business rule. All financial data that implies that the plaintiff's new business could have made a profit should be referred to and relied upon in projecting the lost profits of a start-up business.

## PLAINTIFF OR DEFENSE?

You may be called upon to work for the plaintiff or the defense in a damages litigation. Obviously, as stated earlier, the objectives of both sides are very different. If you represent the plaintiff, your job is to help establish how much the damages really are. You are not the liability expert, so keep your analysis to the economics of the situation (unless your role is also as a liability expert). It is always a good idea to state early in your report that your report assumes that there is liability, but you are not offering an opinion in that regard. If there is no liability found, your numbers are meaningless.

When you work for the defense, your job will frequently be to shoot holes in the plaintiff's expert's report and, sometimes, conclude your own estimate of damages. You saw that in the last exhibit. You can use your skills and resources as a business valuer to your advantage if you really try.

Exhibits 21.2–21.4 provide you with some sample analyses that were performed in actual assignments. In all instances, the identities of the parties and the locations have been changed to protect the guilty. If there are inconsistencies because of location changes, they only exist because of the changes made in the exhibits to protect the identity of the players. The last exhibit is a critique of the plaintiff's expert's work when we worked for the defense team. These should at least provide you with a starting point if you have never done this stuff before.

### EXHIBIT 21.2 SAMPLE REPORT SECTION

The issue in this case was that our client had an idea stolen by a large retailer. Negotiations were ongoing until the retailer cut them off. All of a sudden, our client's concept appeared in the retailer's stores and Web site.

#### **DAMAGES CALCULATIONS**

Given the background of this matter, we are providing two different scenarios for our damages calculations. They are as follows:

1. Internet sales data as provided by The Big Retailer for the years 2003 and 2004 (only two complete years provided) were assumed to be the initial sales that would have been made by Designs By Our Client, Inc. Thereafter, sales were grown through 2008 from that level based on the growth rates that were estimated in accordance with the business plan prepared by The Big Retailer. After that, sales growth was gradually reduced through the year 2012.
2. Internet sales data as provided by the Big Retailer for the years 2003 and 2004 (only two complete years provided) were assumed to be the initial sales that would have been made by Designs By Our Client, Inc.

**EXHIBIT 21.2**

Beginning in 2004, additional sales were estimated for the in-store and in-store catalog categories in accordance with the business plan prepared by The Big Retailer. Sales growth through 2008 was based on the business plan. Thereafter, sales growth was gradually reduced through the year 2012.

In order to estimate the economic damages suffered by Designs By Our Client, Inc., we performed the following steps:

1. Estimate annual sales, including average price per unit and number of units sold.
2. Estimate the incremental costs that would have been incurred by Designs By Our Client, Inc., as a result of making the additional sales that would have resulted from the relationship between The Big Retailer and Designs By Our Client, Inc.
3. Determine the annual lost profit for each year in the forecast.
4. Discount the result to present value.

The assumptions that entered into our calculations are listed below.

1. Sales have been estimated as follows:

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>Scenario 1</b>										
Sales	1,083,822	1,729,097	2,023,044	2,326,500	2,605,680	2,866,248	3,095,548	3,281,281	3,412,532	3,549,034
Growth rate		59.54%	17.00%	15.00%	12.00%	10.00%	8.00%	6.00%	4.00%	4.00%
<b>Scenario 2</b>										
Internet	1,083,822	1,729,097	2,023,044	2,326,500	2,605,680	2,866,248	3,095,548	3,281,281	3,412,532	3,549,034
In-store		3,807,596	4,569,115	5,391,556	6,254,205	7,004,709	7,565,086	8,018,991	8,339,750	8,673,341
In-store catalog		1,000,000	1,150,000	1,299,500	1,455,440	1,600,984	1,729,063	1,832,806	1,906,119	1,982,363
Total	1,083,822	6,536,693	7,742,159	9,017,556	10,315,325	11,471,941	12,389,697	13,133,079	13,658,402	14,204,738

2. The average sales price per unit was calculated from the information supplied by The Big Retailer. We calculated the average sales price as follows:

Year	# Sold	Gross Sales	Average Sales/Unit
2005	36,547	\$ 731,374	\$20.01
2004	86,335	1,729,097	20.03
2003	44,236	1,083,822	24.50
		Average	\$21.51

(Continued)

**EXHIBIT 21.2** (Continued)

3. The numbers of units estimated to be sold are as follows:

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Average price per unit	\$ 24.50	\$ 20.03	\$ 20.01	\$ 21.51	\$ 21.51	\$ 21.51	\$ 21.51	\$ 21.51	\$ 21.51	\$ 21.51
<b>Scenario 1</b>										
Number of units sold	44,236	86,335	101,092	108,141	121,118	133,230	143,889	152,522	158,623	164,968
<b>Scenario 2</b>										
Number of units sold	44,236	326,382	386,878	419,158	479,481	533,243	575,903	610,457	634,875	660,270

Units sold were taken from the data provided by The Big Retailer for 2003 and 2004; for 2005, we assumed the projected sales divided by the actual average sales price per unit for the partial year data; and, thereafter, we calculated monthly units sold based on total sales divided by the average sales price per unit.

4. Purchases of goods for resale have been calculated based on the average purchases to sales relationship from the 2004 and 2005 tax returns of Designs By Our Client, Inc. The following information was taken from these tax returns:

	2004		2005		Average 2004–2005
	\$	%	\$	%	
Sales	174,092	100.00%	200,838	100.00%	100.00%
Purchases	60,516	34.76%	60,346	30.05%	32.40%

Therefore, we used 32.4 percent of sales to calculate the purchases of the goods.

5. Freight was estimated based on the average freight to sales relationship from the 2004 and 2005 tax returns of Designs By Our Client, Inc. The following information was taken from these tax returns:

	2004		2005		Average 2004–2005
	\$	%	\$	%	
Sales	174,092	100.00%	200,838	100.00%	100.00%
Freight	19,029	10.93%	19,624	9.77%	10.35%

Therefore, we used 10.35 percent of sales to calculate the freight costs.

6. In order to determine the breakdown of sales between embroidered goods and painted goods, we interviewed Mr. Jackson. According to Mr. Jackson, the estimated breakdown of personalized sales products sold requires embroidery on 80 percent of the products and painting on the remaining 20 percent. We have used this breakdown to estimate embroidery labor and painting expenses.

**EXHIBIT 21.2**

7. In order to estimate machine capacity, we questioned Mr. Jackson about how long it takes to embroider a single unit. He informed us that the set up and production process takes under five minutes per unit. He also informed us that Designs By Our Client, Inc. owns a machine with six heads. This means that up to six of the same units can be embroidered at any one time.

In order to be conservative, we estimated that every order would be a single unit and, therefore, no efficiencies would be provided for in our calculations. We used five minutes per unit, running up to two shifts per day, 250 days per year, at 90 percent capacity to determine when an additional piece of equipment would be required. These calculations indicate that a single machine can handle 44,928 units.

We calculated an equipment lease cost into the calculations for all machines beyond the current machine that is currently owned by Designs By Our Client, Inc. Based on our discussion with Mr. Jackson, our assumption about the cost of each machine, with computers and software would be \$20,000. Financing was based on a five year term at 10 percent interest. This results in an annual lease cost of \$5,100 per machine.

- 8. Embroidery labor has been estimated based on five minutes per item with one employee being able to oversee up to two embroidery machines at one time. Labor costs have been based on \$8 per hour plus payroll costs, or \$10 per hour, fully loaded. We have also assumed that there would be a 10 percent inefficiency rate requiring more labor hours due to employee inefficiencies.
- 9. Painting labor has been subcontracted out in the past. It is assumed that this would continue. The average cost per unit for painting a product has been about \$7 per unit. We reviewed invoices for these costs and spoke with Designs By Our Client, Inc.'s subcontractor, Alyssa Houseman.
- 10. Packaging and shipping labor has been estimated at 10 minutes per unit. Labor costs have been estimated at \$10 per hour, fully loaded.
- 11. Office help has been estimated at 1.5 persons per \$1 million of incremental sales. The cost has been based on \$19 per hour, fully loaded.
- 12. According to the agreement that was being negotiated with The Big Retailer, Designs By Our Client, Inc., would pay a 15 percent commission to The Big Retailer.
- 13. We estimated merchant credit card expenses at 2 percent of sales. Historically, average bank and credit card fees were 2.64 percent, but these fees frequently are reduced with volume. The relationship with The Big Retailer would have resulted in lower fees.
- 14. Repairs and maintenance expenses were estimated based on the 2005 percent of repairs to sales that was actually experienced by Designs By Our Client, Inc. There were no repairs reported in the previous year. Our calculation is based on the following:

	2004		2005	
	\$	%	\$	%
Sales	174,092	100.00%	200,838	100.00%
Repairs and maintenance	0	0.00%	1,139	0.57%

15. Insurance, office expenses, and utilities were estimated based on the average expense to sales from the 2004 and 2005 tax returns. Our calculation is based on the following:

	2004		2005		Average 2004-2005
	\$	%	\$	%	
Sales	174,092	100.00%	200,838	100.00%	100.00%
Insurance	3,179	1.83%	3,518	1.75%	1.79%
Office expenses	1,627	0.93%	708	0.35%	0.64%
Utilities	3,101	1.78%	3,562	1.77%	1.78%

We used the average percentages as additional incremental expenses.

*(Continued)*

## EXHIBIT 21.2 (Continued)

16. Currently, Designs By Our Client, Inc., operates out of a building owned by Mr. Jackson. We have estimated the cost of a rental facility that would be required to operate the business with an increased amount of sales. Initially, we assumed that 1,500 square feet would suffice for the business operating up to two machines. Thereafter, we assumed that an additional 1,000 square feet would be required in the first damage scenario. We estimated that 5,000 total feet would be needed to accommodate growth in the second scenario. The costs used in our calculations were \$15 per square feet for the first 1,500 square feet, rising to \$17 per square foot when the space is increased to 2,500 square feet, and then being reduced to \$15 per square foot when the company rents the 5,000 foot facility.

Based on the preceding assumptions, we calculated damages in tables 1 and 2.

**TABLE 1**  
**DAMAGES SCENARIO 1**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sales	\$1,083,822	\$1,729,097	\$2,023,044	\$2,326,500	\$2,605,680	\$2,866,248	\$3,095,548	\$3,281,281	\$3,412,532	\$3,549,034
Cost of sales										
Purchases	\$ 351,202	\$ 560,297	\$ 655,547	\$ 753,880	\$ 844,345	\$ 928,780	\$1,003,082	\$1,063,267	\$1,105,798	\$1,150,030
Freight	112,184	178,974	209,400	240,810	269,707	296,678	320,412	339,637	353,222	367,351
Labor										
Embroidery	32,440	31,656	37,067	39,652	47,220	56,102	63,918	70,249	74,723	60,488
Painting	61,930	120,869	141,529	151,398	169,566	186,522	201,444	213,531	222,072	230,955
Total cost of sales	\$ 557,756	\$ 891,797	\$1,043,544	\$1,185,739	\$1,330,838	\$1,468,082	\$1,588,856	\$1,686,684	\$1,755,815	\$1,808,824
Gross profit	\$ 526,066	\$ 837,301	\$ 979,500	\$1,140,761	\$1,274,842	\$1,398,167	\$1,506,692	\$1,594,597	\$1,656,717	\$1,740,210
Gross profit %	48.54%	48.42%	48.42%	49.03%	48.93%	48.78%	48.67%	48.60%	48.55%	49.03%
<b>Incremental operating expenses</b>										
BRU commission	\$162,573	\$259,365	\$303,457	\$348,975	\$ 390,852	\$ 429,937	\$ 464,332	\$ 492,192	\$ 511,880	\$ 532,355
Office labor	64,249	102,501	119,926	137,915	154,465	169,911	183,504	194,514	202,295	210,387
Packaging and shipping	73,727	143,892	168,487	180,236	201,864	222,050	239,814	254,203	264,371	274,946
Credit card expenses (2%)	21,676	34,582	40,461	46,530	52,114	57,325	61,911	65,626	68,251	70,981
Repairs and maintenance	6,147	9,806	11,473	13,194	14,777	16,255	17,556	18,609	19,353	20,127
Insurance	19,388	30,931	36,189	41,618	46,612	51,273	55,375	58,697	61,045	63,487
Office expenses	6,975	11,127	13,019	14,972	16,769	18,446	19,921	21,116	21,961	22,840
Utilities	19,264	30,733	35,958	41,351	46,314	50,945	55,020	58,322	60,655	63,081
Rent	22,500	22,500	22,500	22,500	42,500	42,500	42,500	42,500	42,500	42,500
Equipment lease	0	5,100	5,100	5,100	10,200	10,200	5,100	5,100	5,100	0
Total incremental expenses	\$396,499	\$650,537	\$756,570	\$852,391	\$ 976,466	\$1,068,842	\$1,145,034	\$1,210,880	\$1,257,411	\$1,300,703
Lost profits	\$129,568	\$186,764	\$222,931	\$288,370	\$ 298,377	\$ 329,324	\$ 361,658	\$ 383,718	\$ 399,307	\$ 439,507
Present value at 5%	\$153,695	\$210,992	\$239,858	\$295,492	\$ 291,186	\$ 306,084	\$ 320,129	\$ 323,482	\$ 320,593	\$ 336,066
Cumulative		\$364,687	\$604,545	\$900,036	\$1,191,222	\$1,497,306	\$1,817,435	\$2,140,916	\$2,461,510	\$2,797,576

Damages resulting from lost profits under this scenario amount to approximately \$2.8 million.

## EXHIBIT 21.2

**TABLE 2**  
**DAMAGES SCENARIO 2**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sales	\$1,083,822	\$6,536,693	\$7,742,159	\$9,017,556	\$10,315,325	\$11,471,941	\$12,389,697	\$13,133,079	\$13,658,402	\$14,204,738
Cost of sales										
Purchases	351,202	2,118,151	2,508,770	2,922,050	3,342,580	3,717,370	4,014,759	4,255,645	4,425,871	4,602,906
Freight	112,184	676,596	801,371	933,384	1,067,713	1,187,431	1,282,426	1,359,371	1,413,746	1,470,296
Labor										
Embroidery	32,440	119,673	141,855	153,691	185,219	195,523	214,329	223,834	232,788	255,398
Painting	61,930	456,934	541,629	586,821	671,274	746,541	806,264	854,640	888,825	924,378
Total cost of sales	\$ 557,756	\$3,371,355	\$3,993,626	\$4,595,946	\$ 5,266,786	\$ 5,846,864	\$ 6,317,778	\$ 6,693,490	\$ 6,961,230	\$ 7,252,978
Gross profit	\$ 526,066	\$3,165,338	\$3,748,533	\$4,421,610	\$ 5,048,540	\$ 5,625,077	\$ 6,071,919	\$ 6,439,588	\$ 6,697,172	\$ 6,951,760
Gross profit %	48.54%	48.42%	48.42%	49.03%	48.94%	49.03%	49.01%	49.03%	49.03%	48.94%
<b>Incremental operating expenses</b>										
BRU commission	\$162,573	\$ 980,504	\$1,161,324	\$1,352,633	\$1,547,299	\$1,720,791	\$1,858,455	\$1,969,962	\$ 2,048,760	\$ 2,130,711
Office labor	64,249	387,495	458,955	534,561	611,492	680,057	734,461	778,529	809,670	842,057
Packaging and shipping	73,727	543,969	644,797	698,596	799,135	888,739	959,838	1,017,428	1,058,125	1,100,450
Credit card expenses (2%)	21,676	130,734	154,843	180,351	206,307	229,439	247,794	262,662	273,168	284,095
Repairs and maintenance	6,147	37,071	43,908	51,141	58,501	65,060	70,265	74,481	77,460	80,558
Insurance	19,388	116,932	138,496	161,311	184,526	205,216	221,633	234,932	244,329	254,102
Office expenses	6,975	42,066	49,824	58,032	66,384	73,827	79,733	84,517	87,898	91,414
Utilities	19,264	116,184	137,610	160,279	183,345	203,903	220,215	233,428	242,765	252,476
Rent	22,500	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
Equipment lease	0	5,100	5,100	5,100	10,200	10,200	5,100	5,100	5,100	0
Total incremental expenses	\$396,499	\$2,435,055	\$2,869,856	\$3,277,003	\$3,742,188	\$4,152,232	\$4,472,494	\$4,736,038	\$ 4,922,276	\$ 5,110,863
Lost profits	\$129,568	\$ 730,283	\$ 878,677	\$1,144,607	\$1,306,351	\$1,472,845	\$1,599,425	\$1,703,550	\$ 1,774,896	\$ 1,840,897
Present value at 5%	\$153,695	\$ 825,020	\$ 945,395	\$1,172,873	\$1,274,868	\$1,368,905	\$1,415,763	\$1,436,126	\$ 1,425,021	\$ 1,407,629
Cumulative		\$ 978,715	\$1,924,109	\$3,096,982	\$4,371,851	\$5,740,755	\$7,156,518	\$8,592,644	\$10,017,664	\$11,425,294

Damages resulting from lost profits under this scenario amount to approximately \$11.4 million.

(Continued)

**EXHIBIT 21.2** *(Continued)*

In order to determine the reasonableness of the projections used in this analysis, we reviewed additional documentation. First, we reviewed Form 10-K filed by the parent company of The Big Retailer with the Securities and Exchange Commission for the period ended January 28, 2006. According to this filing, The Big Retailer stated

We opened 13 The Big Retailer stores in 2005 and, as part of our long-range growth plan, we plan to open approximately 65 new The Big Retailer stores over the next three years, including approximately 22 stores in 2006.

The number of stores has grown as follows:

FISCAL YEAR ENDED				
February 2, 2002	February 1, 2003	January 31, 2004	January 29, 2005	January 28, 2006
165	183	198	217	230
	10.90%	8.20%	9.60%	6.00%

Opening up an additional 22 stores in the current fiscal year would add an additional 9.6 percent to the store count. Sales have also risen from \$1.595 million to \$2.078 million over the past four years for a compound annual growth rate of 9.22 percent.

Other select data includes the following:

- *Sales of high-end products for babies grew at an estimated 20 percent last year—five times faster than the total \$24 billion infant and preschool goods industry.* (NewsBank, Inc., March 2006)
- *The infant luxury market is predicted to grow in the next five years by another 10%, as parents continue to wait until later in life when they have more money to have children, according to Michael Silverstein, a senior vice president at the Boston Consulting Group.* (RDS Business & Industry, August 21, 2006)

This is a growing industry, and with a leader such as The Big Retailer expanding its retail facilities, the growth potential is realistic. This national retailer generates enough traffic in its stores that it seems that the concept that was alleged to have been stolen from Designs By Our Client, Inc., would have had great potential.

Therefore, in my opinion, the damages that are calculated herein have been calculated with a reasonable degree of economic certainty.

### EXHIBIT 21.3

#### SAMPLE REPORT SECTION

This case involves a legal malpractice issue relating to our client's inability to purchase a piece of real estate needed to expand her business. The dates are a little old, but don't worry about that. Follow the concepts.

#### **DAMAGE CALCULATIONS**

Damages have been estimated based on the underlying documentation that was reviewed in this matter. We have assumed that liability will be proven, and are not offering any opinion regarding the legal malpractice claim. It is possible that this report will have to be updated to include additional information that may be provided to us.

Pre-judgment interest has been calculated through September 30, 2001, at a 14.5 percent annual rate. This is the rate of return that the plaintiffs have earned on their investments during the period January 1, 1995, through July 13, 2001. The purpose of this calculation is to compensate the plaintiffs for the loss on the monies expended or what would have been earned but for the actions of the defendants.



**EXHIBIT 21.2**

Damages have been calculated relating to the following areas:

1. Real estate pre-acquisition costs
2. Telephone service expenses
3. Mail and postage expenses
4. Equipment related expenses
5. Employee hiring
6. Promotional expenses
7. Existing real estate fit-up expenses
8. General Electric Capital Corporation lease expense
9. Accounting fees
10. Outsourcing expenses
11. Executive hiring expenses
12. Fulfillment expenses
13. Legal fees and costs
14. Opportunity cost on Easton deposit
15. Lost business profits

An explanation of each of these sections follows.

**Real Estate Pre-acquisition Costs.** On or about the time of entering into an agreement to purchase the Easton property or closing the property transaction, or both, the plaintiffs incurred several real estate-related expenses in preparation of purchasing the Easton property. Also included in this expense category is the lease proposal fee to General Electric Capital Corporation. The balance of this lease is addressed separately in this report.

Therefore, the damages sustained by the plaintiffs were as follows:

**TABLE 1**  
**PRE-ACQUISITION EXPENSES**

<b>Date Paid</b>	<b>Check No.</b>	<b>Payee</b>	<b>Purpose</b>	<b>Amount</b>	<b># Days</b>	<b>Interest</b>	<b>Total Damages</b>
08/08/1995	5589	Marvin H. Smith Inspection Service	Fee for building inspection of Easton	\$ 742	2,245	\$ 964	\$ 1,706
08/28/1995	5700	Michael B. Silver Associates, Inc.	Fee for real estate appraisal of Easton	2,000	2,225	2,566	4,566
08/30/1995	5721	Leo Leonard	Land survey of Easton property	750	2,223	961	1,711
09/22/1995	5814	G.E. Capital	Fee for lease proposal	1,500	2,200	1,893	3,393
11/30/1995	6197	First Bank	First Bank appraisal	3,500	2,131	4,216	7,716
11/30/1995	6198	First Bank	Environmental appraisal	800	2,131	964	1,764
12/26/1995	6297	Adams Environmental Inc.	Fee for independent environmental appraisal	5,050	2,105	5,976	11,026
01/29/1996	6441	Shanty Consulting	Review of earlier environmental studies	510	2,071	590	1,100
02/12/1996	6506	First Bank	Fees for First attorney expenses	1,800	2,057	2,061	3,861
02/14/1996	6515	Parsons & Connolly	Fees for processing title insurance	261	2,055	298	559
<b>Total Pre-Acquisition Expenses</b>				<b>\$16,913</b>		<b>\$20,489</b>	<b>\$37,402</b>

(Continued)

## EXHIBIT 21.3 (Continued)

**Telephone Service Expenses.** The plaintiffs incurred several expenses relating to the installation of telephone equipment at the Easton property, as well as monthly service charges for several months. Those costs and resulting damages are as follows:

<b>Date Paid</b>	<b>Check No.</b>	<b>Payee</b>	<b>Purpose</b>	<b>Amount</b>	<b># Days</b>	<b>Interest</b>	<b>Total Damages</b>
10/16/1995	5936	Telephone Company	Installation	\$434	2,176	\$ 539	\$ 974
11/13/1995	6096	Telephone Company	Monthly bill	127	2,148	154	281
12/18/1995	6285	Telephone Company	Monthly bill	127	2,113	151	277
01/22/1996	6416	Telephone Company	Monthly bill	132	2,078	153	285
02/12/1996	6508	Telephone Company	Monthly bill	127	2,057	145	272
<b>Total Telephone Services Fees</b>				<b>\$946</b>		<b>\$1,143</b>	<b>\$2,089</b>

**Mail and Postage Expenses.** The plaintiffs incurred expenses for post office boxes at the Easton post office. These expenses were for both permits and the actual use of the post office boxes. In addition, once the Easton property transaction failed to close, DEF Associates had to send an employee to retrieve mail sent to the Easton Post Office. The costs and related damages are as follows:

<b>Date</b>	<b>Check Number</b>	<b>Payee</b>	<b>Purpose</b>	<b>DEF Cost</b>	<b>DEF Mitigation</b>	<b>Amount</b>	<b># Days</b>	<b>Interest</b>	<b>Total Damages</b>
08/14/95	5622	Easton Postmaster	Fees for permits	\$ —	\$ —	\$2,430	2,239	\$3,146	\$5,576
08/22/95	5685	Easton Postmaster	Fees for PO Boxes			450	2,231	580	1,030
11/15/95		Howard Howlander*	Employee expense for mail pickup	88	57	31	2,146	38	69
11/30/95		Howard Howlander	Employee expense for mail pickup	88	57	31	2,131	37	68
12/15/95		Howard Howlander	Employee expense for mail pickup	88	57	31	2,116	37	68
12/30/95		Howard Howlander	Employee expense for mail pickup	88	57	31	2,101	37	68
01/15/96		Howard Howlander	Employee expense for mail pickup	88	57	31	2,085	36	67

EXHIBIT 21.3

Date	Check Number	Payee	Purpose	DEF			# Days	Interest	Total Damages
				Cost	Mitigation	Amount			
01/30/96		Howard Howlander	Employee expense for mail pickup	88	57	31	2,070	36	67
02/14/96		Howard Howlander	Employee expense for mail pickup	88	57	31	2,055	35	66
02/28/96		Howard Howlander	Employee expense for mail pickup	88	57	31	2,041	35	66
03/15/96		Howard Howlander	Employee expense for mail pickup	88	57	31	2,025	35	66
<b>Totals—Postal-related Fees</b>				<b>\$792</b>	<b>\$513</b>	<b>\$3,159</b>		<b>\$4,052</b>	<b>\$7,211</b>

\*Howard Howlander was the employee responsible for picking up mail in Easton. Had he not been completing that task, he would have been working as a packer for DEF Associates. Therefore, this damage is the excess cost incurred by DEF Associates when the company replaced Mr. Howlander during those trips.

Cost was determined as 2 trips × 2 hours × 2 weeks per pay period × \$11 per hour = \$88. The \$11 per hour is the rate paid to Olsten Temporary Services for individuals needed due to Mr. Howlander's unavailability. Mitigation was determined based on Mr. Howlander's actual cost of \$7.15 per hour using the same formula.

**Equipment and Related Expenses.** Equipment was ordered for use by additional employees expected to work at the Easton property. This equipment included computer hardware, as well as telephone equipment. When the property transaction did not take place, DEF Associates had incurred additional expenses. The expenses and damages associated with these items are as follows:

TABLE 4  
EQUIPMENT RELATED EXPENSES

Date Paid	Check No.	Payee	Purpose	Amount	# Days	Interest	Total Damages
09/07/95	5753	Toe Communications	Down payment for equipment installation in Easton	\$ 926	2,215	\$ 1,180	\$ 2,105
09/18/95	5798	Toe Communications	Maintenance fee	1,247	2,204	1,577	2,824
09/13/95	5782	AT&T	Down payment on phone equipment	7,200	2,209	9,139	16,339
11/30/95	6195	Maple Software	Fee for reconfiguring Bolton computers	450	2,131	542	992
<b>Total Equipment-Related Expenses</b>				<b>\$ 9,822</b>		<b>\$ 12,438</b>	<b>\$ 22,260</b>

**Employee Hiring.** When the plaintiffs were planning to open operations at the Easton site, employees were to be hired. To locate potential employees, DEF Associates held an open interview, or casting call, at a local hotel. Several individuals were hired, but once the Easton transaction failed, all of the new hires refused to work in Bolton. The expenses incurred as a result of this casting call are as follows:

(Continued)

## EXHIBIT 21.3 (Continued)

**TABLE 5**  
**EMPLOYEE HIRING**

Date Paid	Check Number	Payee	Purpose	Amount	# Days	Interest	Total Damages
08/31/95	5695	The Honor Publishing (Visa)	Newspaper advertisement	\$ 229	2,222	\$ 293	\$ 521
09/26/95	5823	The Honor Publishing (Visa)	Newspaper advertisement	280	2,196	352	631
09/15/95		Barbara Luciano*	Employee working casting call	150	2,207	190	339
09/15/95		Jonathan Poll*	Employee working casting call	141	2,207	178	319
09/15/95		Lawson Brown*	Employee working casting call	150	2,207	190	339
09/27/95	5834	The News	Newspaper advertisement	384	2,195	480	864
10/09/95	5912	The News	Newspaper advertisement	167	2,183	208	375
10/16/95	5930	Maple Software	Fee for computer rental	159	2,176	197	356
10/16/95	5934	South Newspapers, Inc.	Newspaper advertisement	451	2,176	560	1,011
10/31/95	6033	South Newspapers, Inc.	Newspaper advertisement	119	2,161	146	265
11/01/95	6128	Marriot Courtyard (Visa)	Fee for room rented	428	2,160	526	954
<b>Total Employee Hiring Expenses</b>				<b>\$2,656</b>		<b>\$3,320</b>	<b>\$5,976</b>

\*DEF employees were used for the casting call. Expenses were based on two eight-hour days at payroll of \$8.50 per hour and \$8.00 per hour plus a 10 percent adjustment for payroll costs.

**Promotional Expenses.** As DEF Associates was preparing to move to the Easton property, the company needed to update its stationary, as well as send moving announcements to those it had business relations with. Once Easton fell through, these items had to be discarded. The expenses relating to these items are as follows:

**TABLE 6**  
**PROMOTIONAL EXPENSES**

Date Paid	Check No.	Payee	Purpose	Amount	# Days	Interest	Total Damages
06/26/1995	5409	Lisa Warner	Production support	\$ 600	2,288	\$ 802	\$ 1,402
10/09/1995	5899	Lisa Warner	Production support	1,200	2,183	1,497	2,697
07/26/1995	5561	Alphagraphics	Discarded color copies	734	2,258	962	1,696
10/09/1995	5871	Vechon Design	Art designs for mailings	2,350	2,183	2,932	5,282
10/13/1995	5920	Graphics Inc.	Discarded envelopes	90	2,179	112	202
10/31/1995	6031	The Colon Group	Presentation folders	2,917	2,161	3,585	6,502
09/27/1995	5821	City Printers	Imprinting preparations	48	2,195	60	108
10/09/1995	5878	City Printers	Announcement card imprinting	1,044	2,183	1,303	2,347
10/31/1995	6071	City Printers	Business cards	270	2,161	332	602
11/20/1995	6127	City Printers	Memo sheets, letterhead printing	742	2,141	900	1,642
11/30/1995	6189	City Printers	Imprinting of logo sheets	292	2,131	351	643
12/26/1995	6295	City Printers	Business cards and mailing labels	325	2,105	385	710
12/27/1995	6302	City Printers	Sales tax on check 6295	20	2,104	23	43
<b>Total Promotional Expenses</b>				<b>\$10,630</b>		<b>\$13,243</b>	<b>\$23,873</b>

**EXHIBIT 21.3**

**Existing Property Expenses.** At the time that the Easton property transaction failed to close, DEF Associates had several ongoing and anticipated promotions to run for several clients. As a result, DEF Associates needed to implement changes and upgrades to its current facilities in Bolton. The expenses related to these improvements would not have been incurred had DEF Associates been able to transfer operations to Easton. Because the Bolton site was eventually closed, these expenses were temporary. The damages within this category are as follows:

<b>TABLE 7 EXISTING PROPERTY</b>							
<b>Date Paid</b>	<b>Check No.</b>	<b>Payee</b>	<b>Purpose</b>	<b>Amount</b>	<b># Days</b>	<b>Interest</b>	<b>Total Damage</b>
09/13/95	5783	Schein Electric	Lost deposit on lighting fixtures for Easton	\$2,700	2,209	\$3,427	\$ 6,127
12/29/95	6345	Schein Electric	Install wiring in Bolton that was existing at Easton	2,150	2,102	2,539	4,689
10/09/95	5873	Richard Allen	Additional security deposit for Bolton upstairs	438	2,183	546	984
10/31/95	6030	James R. Green	Carpet in upstairs Bolton	501	2,161	616	1,117
10/31/95	6032	Melvin Sign	New sign for Bolton	80	2,161	98	178
11/13/95	6088	Matthew Glass	CD player for telephone system at Bolton	148	2,148	180	328
11/13/95	6092	Electrical Contractors, Inc.	Overload of computer circuits due to additional computers	159	2,148	194	353
<b>Total Existing Property Expenses</b>				<b>\$6,176</b>		<b>\$7,600</b>	<b>\$13,776</b>

**General Electric Capital Corporation Lease Expense.** As part of the purchase of the Easton facility, DEF Associates committed to purchasing equipment through General Electric Capital Corporation. The type and value of this equipment is as follows:

AT&T phone system	\$21,600
Maple software (Computers)	34,050
A-Copy (Copiers, Fax Machines)	7,808
Alarm King (Alarm System)	3,805
New mailing systems (Scale, Mail Processor)	3,725
Low Black Appliances (Microwave, Refrigerator)	593
<b>Total</b>	<b>\$71,581</b>

According to the signed contract, an advance payment of \$1,523 was made at the time of the contract was signed on October 31, 1995. This is removed from the capitalized cost as follows:

Total equipment cost	\$71,581
Advance payment	1,523
<b>Total</b>	<b>\$70,058</b>

(Continued)

**EXHIBIT 21.3** (Continued)

The expense of \$70,058 was then paid over a 60 month period, at a lease rate of 2.12766 percent. This resulted in a \$2,078 monthly payment. These payments began on or about November 1, 1995, and continued on or about the first of each month thereafter. These payments, both the advance and monthly, plus their associated interest amounts are as follows:

**TABLE 8**  
**GE CAPITAL LEASE COSTS**

<b>Payment Number</b>	<b>Date Paid</b>	<b>Payee</b>	<b>Purpose</b>	<b>Amount</b>	<b># Days</b>	<b>Interest</b>	<b>Total Damages</b>
	10/31/1995	GE Lease— adv. pay.	1st payment on equipment lease	\$1,523	2,161	\$1,872	\$3,395
1	11/01/1995	GE Lease	Equipment lease	2,078	2,160	2,553	4,631
2	12/01/1995	GE Lease	Equipment lease	2,078	2,130	2,501	4,579
3	01/01/1996	GE Lease	Equipment lease	2,078	2,099	2,449	4,527
4	02/01/1996	GE Lease	Equipment lease	2,078	2,068	2,397	4,475
5	03/01/1996	GE Lease	Equipment lease	2,078	2,040	2,351	4,429
6	04/01/1996	GE Lease	Equipment lease	2,078	2,009	2,300	4,378
7	05/01/1996	GE Lease	Equipment lease	2,078	1,978	2,250	4,328
8	06/01/1996	GE Lease	Equipment lease	2,078	1,947	2,201	4,279
9	07/01/1996	GE Lease	Equipment lease	2,078	1,917	2,154	4,232
10	08/01/1996	GE Lease	Equipment lease	2,078	1,886	2,105	4,183
11	09/01/1996	GE Lease	Equipment lease	2,078	1,855	2,057	4,135
12	10/01/1996	GE Lease	Equipment lease	2,078	1,825	2,012	4,090
13	11/01/1996	GE Lease	Equipment lease	2,078	1,794	1,965	4,043
14	12/01/1996	GE Lease	Equipment lease	2,078	1,764	1,920	3,998
15	01/01/1997	GE Lease	Equipment lease	2,078	1,733	1,874	3,952
16	02/01/1997	GE Lease	Equipment lease	2,078	1,702	1,829	3,907
17	03/01/1997	GE Lease	Equipment lease	2,078	1,674	1,789	3,867
18	04/01/1997	GE Lease	Equipment lease	2,078	1,643	1,745	3,823
19	05/01/1997	GE Lease	Equipment lease	2,078	1,613	1,702	3,780
20	06/01/1997	GE Lease	Equipment lease	2,078	1,582	1,659	3,737
21	07/01/1997	GE Lease	Equipment lease	2,078	1,552	1,618	3,696
22	08/01/1997	GE Lease	Equipment lease	2,078	1,521	1,575	3,653
23	09/01/1997	GE Lease	Equipment lease	2,078	1,490	1,534	3,612
24	10/01/1997	GE Lease	Equipment lease	2,078	1,460	1,494	3,572
25	11/01/1997	GE Lease	Equipment lease	2,078	1,429	1,453	3,531
26	12/01/1997	GE Lease	Equipment lease	2,078	1,399	1,414	3,492
27	01/01/1998	GE Lease	Equipment lease	2,078	1,368	1,374	3,452
28	02/01/1998	GE Lease	Equipment lease	2,078	1,337	1,334	3,412

## EXHIBIT 21.3

<b>Payment Number</b>	<b>Date Paid</b>	<b>Payee</b>	<b>Purpose</b>	<b>Amount</b>	<b># Days</b>	<b>Interest</b>	<b>Total Damages</b>
29	03/01/1998	GE Lease	Equipment lease	2,078	1,309	1,299	3,377
30	04/01/1998	GE Lease	Equipment lease	2,078	1,278	1,260	3,338
31	05/01/1998	GE Lease	Equipment lease	2,078	1,248	1,224	3,302
32	06/01/1998	GE Lease	Equipment lease	2,078	1,217	1,186	3,264
33	07/01/1998	GE Lease	Equipment lease	2,078	1,187	1,150	3,228
34	08/01/1998	GE Lease	Equipment lease	2,078	1,156	1,113	3,191
35	09/01/1998	GE Lease	Equipment lease	2,078	1,125	1,076	3,154
36	10/01/1998	GE Lease	Equipment lease	2,078	1,095	1,041	3,119
37	11/01/1998	GE Lease	Equipment lease	2,078	1,064	1,006	3,084
38	12/01/1998	GE Lease	Equipment lease	2,078	1,034	972	3,050
39	01/01/1999	GE Lease	Equipment lease	2,078	1,003	937	3,015
40	02/01/1999	GE Lease	Equipment lease	2,078	972	902	2,980
41	03/01/1999	GE Lease	Equipment lease	2,078	944	871	2,949
42	04/01/1999	GE Lease	Equipment lease	2,078	913	838	2,916
43	05/01/1999	GE Lease	Equipment lease	2,078	883	805	2,883
44	06/01/1999	GE Lease	Equipment lease	2,078	852	772	2,850
45	07/01/1999	GE Lease	Equipment lease	2,078	822	741	2,819
46	08/01/1999	GE Lease	Equipment lease	2,078	791	709	2,787
47	09/01/1999	GE Lease	Equipment lease	2,078	760	677	2,755
48	10/01/1999	GE Lease	Equipment lease	2,078	730	646	2,724
49	11/01/1999	GE Lease	Equipment lease	2,078	699	615	2,693
50	12/01/1999	GE Lease	Equipment lease	2,078	669	585	2,663
51	01/01/2000	GE Lease	Equipment lease	2,078	638	555	2,633
52	02/01/2000	GE Lease	Equipment lease	2,078	607	525	2,603
53	03/01/2000	GE Lease	Equipment lease	2,078	578	497	2,575
54	04/01/2000	GE Lease	Equipment lease	2,078	547	468	2,546
55	05/01/2000	GE Lease	Equipment lease	2,078	517	439	2,517
56	06/01/2000	GE Lease	Equipment lease	2,078	486	411	2,489
57	07/01/2000	GE Lease	Equipment lease	2,078	456	383	2,461
58	08/01/2000	GE Lease	Equipment lease	2,078	425	355	2,433
59	09/01/2000	GE Lease	Equipment lease	2,078	394	327	2,405
60	10/01/2000	GE Lease	Equipment lease	2,078	364	300	2,378
<b>Total GE Lease Costs</b>				<b>\$126,203</b>		<b>\$80,165</b>	<b>\$206,368</b>

(Continued)



**EXHIBIT 21.3** (Continued)

**Accounting Fees.** As a result of the difficulties in purchasing the Easton property, DEF Associates had its accounting firm perform services relating to the transaction that would not otherwise have been incurred. A breakdown of the specific amounts was provided by Thomas and Company.

Because payments to the accounting firm covered many items that are not considered damages, we made the assumption that the specific damage amounts were paid, on average, 45 days from the invoice date. Therefore damages have been estimated as follows:

**TABLE 9**  
**ACCOUNTING FEES**

Date of Invoice	Payment Date	Invoice No.	Payee	Purpose	Amount	# Days	Interest	Total Damages
09/30/1995	11/14/1995	1517	Joshua A. Thomas	Easton accounting issues	\$ 1,200	2,147	\$ 1,461	\$ 2,661
10/31/1995	12/15/1995	1615	Joshua A. Thomas	Easton accounting issues	1,150	2,116	1,371	2,521
12/22/1995	02/05/1996	1785	Joshua A. Thomas	Easton accounting issues	575	2,064	662	1,237
01/31/1996	03/17/1996	1873	Joshua A. Thomas	Easton accounting issues	1,650	2,023	1,845	3,495
05/31/1996	07/15/1996	2173	Joshua A. Thomas	Easton accounting issues	1,275	1,903	1,308	2,583
08/31/1996	10/15/1996	2416	Joshua A. Thomas	Easton accounting issues	600	1,811	575	1,175
09/30/1996	11/14/1997	2462	Joshua A. Thomas	Easton accounting issues	1,350	1,416	933	2,283
10/31/1996	12/15/1996	2550	Joshua A. Thomas	Easton accounting issues	1,000	1,750	914	1,914
11/30/1996	01/14/1997	2647	Joshua A. Thomas	Easton accounting issues	1,450	1,720	1,295	2,745
12/28/1996	02/11/1997	2724	Joshua A. Thomas	Easton accounting issues	275	1,692	240	515
02/28/1997	04/14/1997	2901	Joshua A. Thomas	Easton accounting issues	1,825	1,630	1,516	3,341
<b>Total Thomas Fees</b>					<b>\$12,350</b>		<b>\$12,119</b>	<b>\$24,469</b>

**Outsourcing Expenses.** Because of the failure to acquire the Easton property, DEF Associates was forced to use several outside contractors to maintain its ability to run contracted promotions. These included temporary employment agencies, transportation, and storage. The costs and related damages are as follows:

**TABLE 10**  
**OUTSOURCING EXPENSES**

Date Paid	Check No.	Payee	Purpose	Amount	DEF Mitigation*	Excess Cost	# Days	Interest	Total Damages
10/31/1995	6050	Corporate Staffing Solutions	Temps hired	\$ 997	\$ 687	\$ 310	2,161	\$ 381	\$ 691
11/13/1995	6077	Corporate Staffing Solutions	Temps hired	801	552	249	2,148	303	552
11/20/1995	6131	Corporate Staffing Solutions	Temps hired	895	617	278	2,141	338	616
11/30/1995	6191	Corporate Staffing Solutions	Temps hired	858	591	267	2,131	321	588
12/11/1995	6213	Corporate Staffing Solutions	Temps hired	282	194	88	2,120	105	192
12/18/1995	6277	Corporate Staffing Solutions	Temps hired	631	435	196	2,113	233	430
12/29/1995	6325	Corporate Staffing Solutions	Temps hired	85	58	26	2,102	31	57
08/30/1996	7294	Corporate Staffing Solutions	Temps hired	828	570	257	1,857	255	512
09/11/1996	7335	Corporate Staffing Solutions	Temps hired	265	182	82	1,845	81	163
09/17/1996	7376	Corporate Staffing Solutions	Temps hired	407	281	127	1,839	124	250
09/24/1996	7411	Corporate Staffing Solutions	Temps hired	760	524	236	1,832	230	466
09/30/1996	7446	Corporate Staffing Solutions	Temps hired	326	224	101	1,826	98	199
10/09/1996	7472	Corporate Staffing Solutions	Temps hired	336	231	104	1,817	100	205

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Date Paid	Check No.	Payee	Purpose	Amount	DEF Mitigation*	Excess Cost	# Days	Interest	Total Damages
10/14/1996	7509	Corporate Staffing Solutions	Temps hired	485	334	151	1,812	145	295
10/23/1996	7555	Corporate Staffing Solutions	Temps hired	733	505	228	1,803	217	445
10/28/1996	7578	Corporate Staffing Solutions	Temps hired	81	56	25	1,798	24	49
11/11/1996	7626	Corporate Staffing Solutions	Temps hired	79	56	23	1,784	21	44
11/29/1996	7743	Olsten Staffing Services, Inc.	Temps hired	548	414	134	1,766	124	259
12/16/1996	7792	Olsten Staffing Services, Inc.	Temps hired	641	484	157	1,749	144	301
12/31/1996	7878	Olsten Staffing Services, Inc.	Temps hired	1,178	889	289	1,734	261	550
10/09/1996	7475	Dunhill Temporary Systems	Temps hired	162	112	50	1,817	48	98
10/14/1996	7511	Dunhill Temporary Systems	Temps hired	162	112	50	1,812	48	98
10/28/1996	7579	Danbury Transportation Co.	Transport	—	—	1,785	1,798	1,693	3,478
05/20/1996	6880	New England Motor Freight	Return freight	—	—	350	1,959	374	723
05/31/1996	6927	CF Motor Freight	Freight	—	—	560	1,948	594	1,154
10/31/1995	6039	Shepard's	Storage fees	—	—	944	2,161	1,160	2,104
05/13/1996	6858	Shepard's	Storage fees	—	—	450	1,966	483	932
06/24/1996	7003	Shepard's	Storage fees	—	—	306	1,924	319	625
07/03/1996	7064	Shepard's	Storage fees	—	—	486	1,915	503	989
07/29/1996	7175	Shepard's	Storage fees	—	—	306	1,889	311	617
08/31/1996	7319	Shepard's	Storage fees	—	—	306	1,856	303	609
09/30/1996	7455	Shepard's	Storage fees	—	—	194	1,826	188	382
10/28/1996	7584	Shepard's	Storage fees	—	—	114	1,798	108	222
11/25/1996	7713	Shepard's	Storage fees	—	—	114	1,770	106	220
12/31/1996	7891	Shepard's	Storage fees	—	—	114	1,734	103	217
<b>Total Outsourcing Expenses</b>				<b>\$11,538</b>	<b>\$8,109</b>	<b>\$9,457</b>		<b>\$9,875</b>	<b>\$19,332</b>

\*Mitigation has been calculated based on the anticipated cost that DEF Associates would have incurred had it not been damaged. Payroll records indicate that the company pays its employees \$8 to \$9 per hour for these services. We used \$8.50 per hour plus a 10 percent premium for payroll costs, resulting in \$9.35 per hour.

**Executive Hiring Expenses.** In anticipation of its expansion, DEF Associates used an executive search firm to find Frank Smith, a marketing executive. As a result of the Easton deal falling through, DEF Associates could not provide Mr. Smith with adequate working conditions. This caused various problems that contributed to him leaving DEF Associates. The expenses relating to his employment and departure were as follows:

**TABLE 11**  
**EXECUTIVE HIRING EXPENSES**

Date Paid	Check No.	Payee	Purpose	Amount	# Days	Interest	Total Damages
09/29/1995	5848	Frank Smith	Salary	\$ 1,710	2,193	\$2,148	\$3,858
10/16/1995	5925	Frank Smith	Reimbursement	453	2,176	562	1,015
10/16/1995	5946	Frank Smith	Salary	3,071	2,176	3,813	6,884
10/30/1995	5998	Frank Smith	Salary	2,533	2,162	3,116	5,649

(Continued)

## EXHIBIT 21.3 (Continued)

Date Paid	Check No.	Payee	Purpose	Amount	# Days	Interest	Total Damages
11/15/1995	6108	Frank Smith	Salary	3,071	2,146	3,737	6,808
11/21/1995	6151	Frank Smith	Reimbursement	13,798	2,140	16,723	30,521
11/30/1995	6172	Frank Smith	Buyout	3,257	2,131	3,923	7,180
12/15/1995	6253	Frank Smith	Buyout	3,257	2,116	3,883	7,140
12/29/1995	6308	Frank Smith	Buyout	3,257	2,102	3,847	7,104
06/20/1995	5396	Rene Assoc.	Executive search	12,222	2,294	16,402	28,624
08/09/1995	5608	Rene Assoc.	Executive search	12,222	2,244	15,876	28,098
08/21/1995	5679	Rene Assoc.	Executive search	235	2,232	303	538
09/07/1995	5744	Rene Assoc.	Executive search	19,999	2,215	25,486	45,485
10/09/1995	5906	Rene Assoc.	Executive search	206	2,183	257	463
10/23/1995	5985	Rene Assoc.	Executive search	529	2,169	654	1,183
<b>Total Executive Hiring Expenses</b>				<b>\$79,820</b>		<b>\$100,730</b>	<b>\$180,550</b>

**Fulfillment Expenses.** At the time that the Easton property transaction failed to close, DEF Associates had several promotional jobs in process. In addition, DEF Associates had entered into an agreement to run a promotion entitled "Venus Fields." This promotion required more employees and duties than Bolton could handle. This project was the main driving force behind the purchase of the Easton property. However, when the deal fell through, DEF Associates needed to contract with two companies to complete the duties that it could not do. These two firms were Garden State Direct Mail and National Refund Service.

**Garden State Direct Mail (GSDM).** Various payments were made to GSDM that would not have been incurred but for the inability of DEF Associates to complete the Easton transaction and hire the necessary employees that were anticipated when the project was bid. These payments are shown in the following table.

However, DEF would have incurred expenses with its own people had the company completed its fulfillment obligation on its own. In order to calculate the mitigation, we reviewed the GSDM invoices to determine the quantity of pieces that were handled.

The cost to DEF for most of the employees, as payroll, is \$4.29 per hour plus \$0.08 per unit, plus an estimated 10 percent payroll cost. In some cases, different hourly or piece good rates were paid. However, these differences are minimal. We have been told by Karen Glass that approximately five orders are typically fulfilled per hour by DEF employees. Therefore, total mitigation has been estimated as follows:

Number of pieces handled by GSDM	<u>524,978</u>
Number of Jiffy Bags fulfilled by GSDM	9,940
Average number of units per order	<u>2.78</u>
Total number of orders	3,580
DEF fulfillment per hour	<u>5</u>
Number of DEF hours	716
DEF hourly expense	<u>x 4.29</u>

## EXHIBIT 21.3

DEF costs	\$3,071
DEF piece good cost	41,998
DEF payroll expense	\$45,070
Payroll costs	4,507
<b>Total mitigation</b>	<b>\$49,577</b>

*Note:* Some figures may not add due to rounding.

The total mitigation has been allocated against the GSDM payments for fulfillment based on the size of the payment. At times, a GSDM invoice was paid in pieces, not allowing a complete matching by number of units paid for. This alternative allocation is a reasonable proxy for the timing, because most of the payments were in two early invoices.

Damages have been calculated as follows:

**TABLE 12**  
**FULFILLMENT EXPENSES**  
**GARDEN STATE DIRECT MAIL**

Date Paid	Check No.	Payee	Purpose	Amount	DEF		# Days	Interest	Total Damages
					Mitigation	Damage			
12/15/1995	6265	GSDM	Fulfillment	\$ 50,000	\$17,015	\$32,985	2,116	\$ 39,330	\$ 72,315
12/29/1995	6330	GSDM	Fulfillment	67,566	22,999	44,567	2,102	52,634	97,201
01/31/1996	6461	GSDM	Fulfillment	3,849	1,309	2,540	2,069	2,933	5,473
02/13/1996	6486	GSDM	Fulfillment	2,000	679	1,321	2,056	1,511	2,832
02/27/1996	6572	GSDM	Fulfillment	2,589	882	1,707	2,042	1,933	3,640
03/26/1996	6671	GSDM	Fulfillment	1,588	540	1,047	2,014	1,164	2,211
04/15/1996	6753	GSDM	Fulfillment	1,134	387	747	1,994	818	1,566
04/29/1996	6796	GSDM	Fulfillment	4,280	1,458	2,822	1,980	3,061	5,883
06/10/1996	6945	GSDM	Fulfillment	3,109	1,056	2,053	1,938	2,160	4,213
06/27/1996	7015	GSDM	Fulfillment	1,410	481	929	1,921	966	1,895
07/03/1996	7054	GSDM	Fulfillment	1,847	630	1,217	1,915	1,260	2,477
07/31/1996	7188	GSDM	Fulfillment	1,303	441	862	1,887	874	1,736
08/09/1996	7198	GSDM	Fulfillment	5,001	1,700	3,300	1,878	3,324	6,624
<b>Total Garden State Direct Mail Expenses</b>				<b>\$145,676</b>	<b>\$49,577</b>	<b>\$96,099</b>		<b>\$111,967</b>	<b>\$208,066</b>

**National Refund Service (NRS).** Because DEF Associates could not physically house its telemarketers in the smaller, Bolton facility, the company had to use subcontractors for what it would have done itself. This includes handling telephone calls, faxes, and mail.

NRS charged \$1.10 per call, \$1.10 per fax, and \$0.40 per piece of mail. DEF Associates pays most of its employees \$4.29 per hour plus \$0.08 per unit.

(Continued)

**EXHIBIT 21.3** (Continued)

We reviewed call logs and payroll sheets for August 1995 to approximate DEF's per piece cost. Payroll and related payroll costs amount to \$0.1331 per unit. This is calculated based on the number of units charged for by NRS.

In addition, all start-up expenses have been considered damages because these would not have been incurred by DEF Associates.

Damages are calculated as follows:

**TABLE 13**  
**FULFILLMENT EXPENSES**  
**NATIONAL REFUND SERVICE**

Date Paid	Check No.	Payee	Purpose	DEF			# Days	Interest	Total Damages
				Amount	Mitigation	Damage			
12/29/1995	6337	NRS	Fulfillment	\$ 1,029	\$ 23	\$ 1,006	2,102	\$ 1,188	\$ 2,193
01/22/1996	6410	NRS	Fulfillment	4,615	541	4,074	2,078	4,732	8,806
01/29/1996	6440	NRS	Fulfillment	427	51	376	2,071	435	811
02/12/1996	6504	NRS	Fulfillment	1,552	185	1,367	2,057	1,565	2,932
02/18/1996	6542	NRS	Fulfillment	938	116	823	2,051	938	1,761
02/26/1996	6562	NRS	Fulfillment	4,261	508	3,753	2,043	4,255	8,009
03/05/1996	6601	NRS	Fulfillment	48	16	32	2,035	36	69
03/19/1996	6642	NRS	Fulfillment	1,649	196	1,452	2,021	1,622	3,074
04/22/1996	6780	NRS	Fulfillment	1,109	132	977	1,987	1,065	2,041
04/29/1996	6798	NRS	Fulfillment	1,040	142	898	1,980	974	1,872
05/13/1996	6856	NRS	Fulfillment	2,093	249	1,844	1,966	1,980	3,824
05/20/1996	6881	NRS	Fulfillment	500	65	435	1,959	465	899
06/10/1996	6954	NRS	Fulfillment	257	11	247	1,938	260	506
07/03/1996	7059	NRS	Fulfillment	3,372	402	2,970	1,915	3,073	6,043
07/16/1996	7090	NRS	Fulfillment	1,545	186	1,358	1,902	1,392	2,751
07/22/1996	7140	NRS	Fulfillment	307	37	270	1,896	276	546
07/29/1996	7170	NRS	Fulfillment	2,751	328	2,423	1,889	2,460	4,884
<b>Total NRS damages</b>				<b><u>\$27,492</u></b>	<b><u>\$3,186</u></b>	<b><u>\$24,305</u></b>		<b><u>\$26,716</u></b>	<b><u>\$51,021</u></b>

The total amount of DEF Associates' fulfillment damages are as follows:

Total Garden State Direct Mail	\$208,066
Total NRS fees and damages	<u>51,021</u>
Total fulfillment costs and damages	<u><u>\$259,087</u></u>

## EXHIBIT 21.3

**Legal Fees and Costs.** The plaintiffs incurred legal expenses as a result of the failed Easton property transaction. The legal fees and costs are as follows:

**TABLE 14**  
**LEGAL FEES AND COSTS**

Date Paid	Check No.	Payee	Purpose	Amount	# Days	Interest	Total Damages
10/22/1996	7548	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	\$ 5,000	1,804	\$ 4,764	\$ 9,764
11/07/1996	7611	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	2,500	1,788	2,353	4,853
11/25/1996	7702	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	241	1,770	223	464
12/31/1996	7866	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	6,315	1,734	5,701	12,016
02/17/1997	8049	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	6,061	1,686	5,268	11,330
03/14/1997	8190	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	6,205	1,661	5,285	11,490
04/09/1997	8308	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	8,058	1,635	6,721	14,779
05/29/1997	8522	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	5,000	1,585	4,002	9,002
06/25/1997	8642	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	3,590	1,558	2,809	6,399
07/10/1997	8685	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	5,000	1,543	3,863	8,863
08/04/1997	8776	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	5,775	1,518	4,367	10,142
09/15/1997	8950	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	1,650	1,476	1,203	2,852
10/10/1997	9026	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	2,300	1,451	1,640	3,940
12/29/1997	463	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	2,309	1,371	1,531	3,840
01/30/1998	1339	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	1,200	1,339	772	1,972
02/25/1998	1410	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	1,200	1,313	753	1,953
03/27/1998	1526	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	1,200	1,283	731	1,931
04/27/1998	1617	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	2,035	1,252	1,203	3,238
05/31/1998	1745	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	4,214	1,218	2,407	6,621
06/29/1998	1846	Finkelstein (Jack Mann)	Fees for J. Morris deposit litigation	2,974	1,189	1,649	4,622
12/15/1997	1197	Silverfarb and Ajello	Costs associated with J. Mann	397	1,385	266	663
12/29/1997	1222	Scribes	Costs associated with J. Mann	1,010	1,371	670	1,680
<b>Total Legal Fees and Costs</b>				<b>\$74,232</b>		<b>\$58,179</b>	<b>\$132,413</b>

**Opportunity Cost on Easton Deposit.** A total amount of \$105,000 was paid by DEF Associates as a deposit on the Easton property. As the result of the litigation, \$100,000 was ultimately returned, while \$5,000 was not. Following are the damage calculations relating to the \$100,000 portion of the deposit while it was not in the possession of DEF Associates, as well as the damage calculations relating to the \$5,000 portion of the deposit that was never returned.

**TABLE 15**  
**OPPORTUNITY COST ON EASTON DEPOSIT**

Date Paid	Date Returned	Payee	Purpose	Amount	# Days	Interest	Total Damages
06/30/1995		Joshua Morris	Deposit not returned	\$ 5,000	2,284	\$ 6,667	\$11,667
06/30/1995	12/05/97	Joshua Morris	Opportunity cost of deposit	4,000	889	1,563	1,563
08/11/1995	12/05/97	Joshua Morris	Opportunity cost of deposit	96,000	847	35,441	35,441
<b>Total Deposit Damages</b>				<b>\$105,000</b>		<b>\$43,671</b>	<b>\$48,671</b>

(Continued)

**EXHIBIT 21.3** (Continued)

**Lost Business Profits.** DEF Associates was interested in purchasing the Easton property so that it could expand the number of promotional jobs it could run at the same time. When the Easton property transaction failed to close, two planned jobs were turned down by DEF Associates. These two jobs were Emerald Roulette '95 and Tadar Direct.

**Emerald Roulette '95.** This project had to be canceled because of the Easton transaction falling through. DEF Associates did not have the space or the personnel to accommodate its client, Famous Name, which had budgeted \$600,000 for this project.

A similar, but smaller project was performed by DEF Associates in 1996, which has been used as a benchmark for the expected results of the 1995 project. The accounting records for DEF reflect the 1996 Emerald Roulette project as follows:

Revenue	\$310,182	
Cost of revenue	<u>188,314</u>	
Profit from project	<u>\$121,868</u>	39.3%

Therefore, the estimated profit on the 1995 project was \$235,800 ( $\$600,000 \times 39.3\%$ ). The timing of this project was estimated by Karen Glass as follows:

Mailing	3 <sup>rd</sup> week in October 1995
60% of budget	Billed at the end of October 1995
15% of budget	Billed at the end of December 1995
25% of budget	Billed at the end of March 1996

It was estimated that Famous Name would pay the invoices in 45 days.

**Tadar Direct.** This project began in 1994 with some work being billed for and some work that was not, in anticipation of getting a larger project. Additional work that was required included research that would have been performed for Tadar by Karen Glass.

As a result of the Easton transaction failing to close, this project could not be undertaken to completion. Services that were not billed for have been estimated by Karen Glass at \$75,000. It has been estimated that this amount would have been billed quarterly, beginning with the fourth quarter 1995 through the second quarter 1996. Payment was anticipated in 30 days.



**EXHIBIT 21.3**

Therefore, total damages in this area are estimated as follows:

<b>Promotion</b>	<b>Estimated Date Payment Would Have Been Received</b>	<b>Amount</b>	<b>Days</b>	<b>Interest</b>	<b>Total Damages</b>
Emerald Roulette '95	12/15/1995	\$141,480	2,116	\$168,694	\$310,174
	02/14/1996	35,370	2,055	40,439	75,809
	05/15/1996	58,950	1,964	63,203	122,153
Tadar Direct	01/30/1996	25,000	2,070	28,881	53,881
	04/30/1996	25,000	1,979	27,093	52,093
	07/30/1996	25,000	1,888	25,364	50,364
<b>Total lost business profits</b>		<b>\$310,800</b>		<b>\$353,674</b>	<b>\$664,474</b>

**Recap of Damages.** Several elements of damages were discussed in this report. These damages were summarized as follows:

Total out-of-pocket expenses	\$ 37,402
Total telephone service expenses	2,089
Total mail and postal expenses	7,211
Total equipment-related expenses	22,260
Total employee hiring expenses	5,976
Total promotional expenses	23,873
Total existing property expenses	13,776
Total GE lease expenses	206,368
Total accounting fees	24,469
Total outsourcing expenses	19,332
Total executive hiring expenses	180,550
Total fulfillment expenses	259,087
Total legal fees and costs	132,413
Total opportunity cost on Easton deposit	48,671
Total lost business profits	664,474
<b>Total Damages</b>	<b>\$1,647,951</b>

(Continued)

## EXHIBIT 21.4

### SAMPLE REPORT SECTION

The following is a critique of a plaintiff's expert report. Obviously, we were working with the defense in this assignment. Our client's business had a major explosion that caused damage to many of the surrounding businesses in the area. There was little question about liability in this case, but quantifying the damages was an interesting experience. Although you do not have the benefit of seeing the other side's report, this critique should give you a good flavor, once again, about using your business valuation skills in this type of assignment.

Pursuant to your request, Trugman Valuation Associates, Inc., has performed a critique of the economic damages report issued by Carl Lewis, Ph.D., and Robert Reed, CPA (hereafter referred to as "the authors"), on behalf of the Econ Group, LLP, entitled "An Appraisal of Economic Loss Suffered by Cups Plus, Inc." (hereafter referred to as "the Econ report"), dated July 25, 2005. This critique is not intended to be a personal attack on the authors, but rather a critique of the underlying work product and assumptions used in deriving their conclusion.

In order to make this critique easy to follow, we will be following the sequence of the Econ report. All page references are to that document.

**General Comments.** The Econ report contains numerous technical errors, unsupported assumptions, lacks independent verification of many critical components of the underlying data, and generally defies logic regarding the conclusion of damages. We find that the underlying assumptions are so full of unsupported speculation that the authors cannot meet their burden to opine about the damages in this matter with any reasonable degree of accounting or economic certainty. Furthermore, the technical errors made throughout the report render the results unusable.

Although the purpose of the Econ report is to estimate economic damages, the authors have attempted to rely on business valuation concepts and theory to reach their conclusion. While we agree with the use of business valuation concepts in a situation where an entire business is destroyed, the Econ report has misapplied these concepts and commingled them in an attempt to perform a lost profits analysis. We believe that this is not only inappropriate for this matter, but because of the many errors made throughout the analysis, an incorrect conclusion has been reached.

One of the most well-known business valuation references that provides guidance on the valuation of closely held businesses is Internal Revenue Ruling 59-60, promulgated by the United States Treasury Department. According to Section 3.01 of this frequently cited document:

A sound valuation will be based upon all relevant facts, but the elements of common sense, informed judgement, and reasonableness must enter into the process of weighing those facts and determining their aggregate significance.

This statement lays the foundation for much of the critique presented herein. One of the most critical aspects of business valuation, as well as economic damages analysis, is that the appraiser-economist approaches the assignment objectively and uses common sense and sound judgement. As the remainder of this critique will demonstrate, this does not appear to be the case in the Econ report.

An experienced damages expert must consider those methodologies and procedures that are normal and customary in the field of damages or valuation, or both. Part of the obligation of being an expert is to be familiar with issues that are regularly raised in the case law affecting the manner in which the expert will be guided. While we are not expected to practice law, certain legal concepts should be considered by the expert, and if the expert deviates from the norm, that position should be explained and well-justified.

An important concept that should have been considered within the context of the analysis presented, but was ignored by the authors, is *the new business rule*. This is especially pertinent considering that Cups Plus, Inc. (hereafter referred to as "Cups Plus" or "the company"), was a new company when the accident occurred. (The company was approximately four months old.)

According to the *Recovery of Damages For Lost Profits*, "a substantial body of older case law stated that lost profits of an unestablished business cannot be recovered."<sup>1</sup> Discussing more modern rulings, Robert Dunn states:

Most recent cases reject the once generally accepted rule that lost profits damages for a new business are not recoverable. The development of the law has been to find damages for lost profits of an unestablished business recoverable *when they can be adequately proved with reasonable certainty* (emphasis added).<sup>2</sup>

<sup>1</sup> Robert L. Dunn, *Recovery of Damages For Lost Profits*, fifth edition. (Alameda, CA: Lawpress Corporation, 1998): 342.

<sup>2</sup> *Ibid.*, 345-346.

### EXHIBIT 21.4

Dunn later adds that:

A number of cases have held that a business established for only a short period of time falls within the definition of an unestablished business, and that damages for lost profits of the business are not recoverable. The rationale appears to be that *the operating history of the business must be long enough to provide a basis to forecast future lost profits with confidence. A brief operating history, these cases say, does not establish that the results are typical* (emphasis added).<sup>3</sup>

At the time of the economic loss, Cups Plus was a four month old company. In accordance with the theory discussed in Dunn's treatise, a lost profits analysis for the company cannot be performed, due to Cups Plus' limited operating history. As will be explained shortly, such a lack of operating history for Cups Plus has resulted in unsupportable conclusions being reached in the Econ report.

In addition to the new business rule, the Econ report has also ignored other written treatises on this subject. Section 303.62 of the *Guide to Litigation Support Services*, in the discussion about the "Destruction of a Business," states:

However, if the business has been completely destroyed, most courts have ruled that *the proper measure of damages is the market value of the business on the day of the loss*. The theory behind this rule is that the plaintiff who recovers damages equal to the value of the business has, in effect, sold the business to the defendant. *The plaintiff should not also be able to recover future lost profits after the imputed sale* (emphasis added).<sup>4</sup>

Dunn provides similar analysis when he states:

If a business has not been just injured, but has been destroyed, almost all of the few cases in point hold that lost profits damages are not recoverable at all. *The measure of damages is said to be the market value of the business on the date of destruction* (emphasis added).<sup>5</sup>

The Econ report indicates that the business was destroyed. For example, on pages five and six, the authors write:

In order to fulfill existing in-house orders, Cups Plus attempted immediately to continue its business from other locations and even was in the process of negotiating leased space at another location (15,000 square feet in Township, State). However, the nature of the business and the type of specialized equipment needed to apply the decals and artwork to the cups and glassware (specifically the high temperature oven), made the continuation of the business at other locations not feasible. *The business of Cups Plus was thus lost as well* (emphasis added).

Also, on page 11, the Econ report states, "The loss of tangible assets, trained employees, sales reps, customers, and associated business opportunities for Cups Plus, Inc. *is deemed to be definite and permanent*" (emphasis added). Based on the authors' own statements, the Cups Plus business had been destroyed.

Therefore, the appropriate measure of damages would be the market value of the business at the time of the loss. While the Econ report attempts to determine the market value of the business using the anticipated future benefits that the owners of this company wished they would have achieved, the analysis is really nothing more than a lost profits calculation. In fact, the lost profits calculation was performed for a 25 year period based on four months of history.

As stated in more detail later, on pages 12–13, the market value of the business as of the date of the explosion is no more than \$317,500 at best. The available documentation, however, supports a valuation of only \$97,500. Because of both the new business rule and the destruction of the business, the market value of Cups Plus is the only legitimate way to calculate damages. Nonetheless, the Econ report erroneously uses other methods to attempt a calculation of Cups Plus' damages, and this report will provide additional criticism in the discussion that follows.

**Page 5.** Under the section, "Background Facts and Assumptions," the authors have stated that the source of their information was the "Cups Plus, Inc. business plan and request for mediation documents." In fact, it is obvious that the authors have relied on these documents throughout their report. These documents are loaded with unsupportable pie-in-the-sky innuendo that does not provide any reasonable basis for reliance on this information. The business plan contains a sales pitch made by the owners of Cups Plus that was created to induce investors into

<sup>3</sup> Ibid., 365.

<sup>4</sup> Brian P. Brinig, Douglas R. Carmichael, Raymond P. Ladouceur, Jay E. Fishman, J. Clifford Griffith, Meryl L. Reed, and Cherie W. Shipp, *Guide to Litigation Support Service*, fifth edition. (Fort Worth, TX: Practitioners Publishing Company, 2007), 3-21.

<sup>5</sup> *Recovery of Damages For Lost Profits*, 500.

(Continued)

**EXHIBIT 21.4** (Continued)

making an investment in the company. This document does not even attempt to quantify the rhetoric that was included in the business plan. We will point out many of these problems areas as we proceed with this critique.

Much of the analysis that was provided in the Econ report is based on the comparison of the expected performance and profitability of Cups Plus to other companies in the same industry as Cups Plus. According to the authors, Cups Plus, Inc., is categorized under several Standard Industrial Classification (SIC) codes. These SIC codes include 3231, 3999, 5190, and 5199. These codes are used in order to obtain comparative industry data, such as sales growth rates and profit margins, which are used later in the Econ report. Therefore, these figures are also being used as benchmark data to calculate damages.

Using this type of benchmark data is a common method to estimate the expected performance of a company *but for* an incident occurring that prevented the company from achieving certain results. However, the use of benchmark data is only effective if the benchmark data closely resembles the company whose performance is being estimated. In this instance, the use of these four SIC codes can result in a margin of error that cannot be quantified by the authors or anyone else. A description<sup>6</sup> of these four SIC codes follows:

- **3231 Glass Products, Made of Purchased Glass**

Establishments primarily engaged in manufacturing glass products from purchased glass.

- Aquariums and reflectors, made from purchased glass
- Art glass, made from purchased glass
- Christmas tree ornaments, made from purchased glass
- Cut and engraved glassware, made from purchased glass
- Decorated glassware (for example, chipped, engraved, or etched)
- Doors, made from purchased glass
- Enameled glass, made from purchased glass
- Encrusting silver, standard silver, or other metals on glass products
- Flowers, foliage, fruits, and vines: made from artificial glass
- Fruit, artificial: made from purchased glass
- Furniture tops, glass: cut, beveled, and polished
- Glass, scientific apparatus: made for druggists', hospitals, laboratories-made
- Glass, sheet: made from purchased bent glass
- Grasses, artificial: made from purchased glass
- Ground glass, made from purchased glass
- Industrial glassware, made from purchased glass
- Laboratory glassware, made from purchased glass
- Laminated glass, made from purchased glass
- Leaded glass, made from purchased glass
- Medicine droppers, made from purchased glass
- Mirrors, framed or unframed: made from purchased glass
- Mirrors, transportation equipment: made from purchased glass
- Multiple-glazed insulating units, made from purchased glass
- Novelties, glass: (for example, fruit, foliage, flowers, animals, made from purchased glass)
- Ornamented glass, made from purchased glass
- Plants and foliage, artificial: made from purchased glass
- Reflector glass beads, for highway signs and other reflectors: made from purchased glass
- Safety glass, made from purchased glass
- Slivered glass, made from purchased glass
- Stained glass, made from purchased glass

<sup>6</sup> All descriptions have been obtained from Occupational Safety & Health Administration, U.S. Department of Labor from the Web site <http://www.osha.gov/cgi-bin/sic/sicser2>.

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- Table tops made from purchased glass
- Technical glassware, made from purchased glass
- Tempered glass, made from purchased glass
- Test tubes, made from purchased glass
- Vials, made from purchased glass
- Watch crystals, made from purchased glass
- Windows, stained glass: made from purchased glass
- Windshields, made from purchased glass

- **3999 Manufacturing Industries, Not Elsewhere Classified**

Establishments primarily engaged in manufacturing miscellaneous fabricated products, including beauty shop and barber shop equipment; hair work; tobacco pipes and cigarette holders; coin-operated amusement machines; matches; candles; lamp shades; feathers; artificial trees and flowers made from all materials, except glass; dressed and dyed furs; umbrellas, parasols, and canes; and other articles, not elsewhere classified.

- Advertising curtains
- Amusement machines, coin-operated
- Artificial and preserved flowers (except foliage, fruits and vines)
- Artificial flower arrangements
- Atomizers, other than medical
- Badges for policemen and firemen-metal
- Barber shop equipment
- Barbers' clippers, hand, and electric
- Beach umbrellas
- Beaded novelties
- Beads, unassembled
- Beauty shop equipment
- Beekeeping supplies, except wood
- Bone novelties
- Book matches
- Boutiquing, for the trade (decorating gift items)
- Bric-a-brac

- **3231 Glass Products, Made of Purchased Glass**

- Bristles, dressing of
- Burnt wood articles
- Buttons: Red Cross, union, and identification
- Calendars, framed
- Candles
- Canes and cane trimmings, except precious metal
- Chairs, hydraulic: barber and beauty shop
- Christmas tree ornaments, except electrical and glass
- Christmas trees, artificial
- Cigar and cigarette holders
- Cigarette filters, not made in chemical plants
- Cigarette lighter flints
- Cleaners, pipe and cigarette holder
- Combs, except hard rubber
- Curlers, hair: designed for beauty parlors
- Curls, artificial hair

(Continued)

**EXHIBIT 21.4** *(Continued)*

- Decalcomania work, except on china or glass (for the trade)
- Desk pads, except paper
- Doll wigs
- Down, feathers
- Dressing of furs: bleaching, blending, currying, scraping, and tanning
- Driers, hair: designed for beauty parlors
- Dusters, feather
- Embroidery kits
- Feathers: curling, dyeing, and renovating for the trade
- Figures, wax: mannequins
- Fingerprint equipment, except cameras and optical equipment
- Fire extinguishers, portable
- Flocking metal products for the trade
- Fly swatters
- Forms: display, dress, and show except shore display forms
- Frames and handles, handbag and luggage (except precious metal)
- Fruits, artificial, except glass
- Fur stripping
- Furniture, beauty shop and barber shop
- Furs, dressed: bleached, curried, scraped, tanned, and dyed
- Games, coin-operated: pinball and other
- Globes, geographical
- Gold stamping for the trade, except books
- Glass
- Grenades, hand (fire extinguishers)
- Grinding purchased nut shells
- Hair clippers for human use, hand and electric
- Hair goods: braids, nets, switches, toupees, and wigs
- Hair, dressing of (for the trade)
- Hairpin mountings
- Hat blocks and display forms
- Honeycomb foundations (beekeepers' supplies)
- Hosiery kits, sewing and mending
- Identification plates
- Identification tags, except paper
- Lamp shade frames
- Lamp shades (except metal and glass)
- Lighters, cigar and cigarette (except precious metal and electric)
- Mannequins and display forms
- Marionettes (puppets)
- Massage machines, electric: designed for beauty and barber shops
- Matches and match books
- Military insignia, except textile
- Models, except toy and hobby
- Mosaics: ivory, shell, horn, and bone
- Mountings, comb and hairpin: except precious metal
- Music boxes

**EXHIBIT 21.4**

- Musical chests
- Novelties: bone, beaded, and shell
- Pads, permanent waving
- Painting instrument dials, for the trade
- Parasols and frames, handles, parts, and trimmings (except precious)
- Pelts: scraping, currying, tanning, bleaching, and dyeing
- Permanent wave equipment and machines
- Picture plaques, laminated
- Plaques, picture: laminated
- Plumes, feather
- Preparation of slides and exhibits, for classroom use
- Printing eyeglass frames for the trade
- Puppets
- Scenery for theaters, opera houses, halls, and schools
- Sewing kits, novelty: other than sewing cases and cabinets
- Shades, lamp and candle: except glass and metal
- Shell novelties
- Shoe patterns
- Slot machines
- Smokers, bee (beekeepers' supplies)
- Soap dispensers
- Sponges, bleaching and dyeing of
- Stage hardware and equipment, except lighting equipment
- Stereographs, photographic
- Sterilizers, beauty and barber shop
- Straw goods
- Stringing beads for the trade
- Tape measures
- Tear gas devices and equipment
- Tinsel
- Tobacco: pipes, pipe stems, and bib (except hard rubber)
- Transformations, hair
- Treating clock and watch dials with luminous material
- Trees, Christmas (artificial)
- Trimmings, feather
- Umbrellas and parts, except precious metal
- Umbrellas: beach, garden, and wagon
- Veils made of hair
- Vibrators, electric: designed for beauty and barber shops
- Walnut shell flour
- Wigs, including doll wigs, toupees, or wiglets (except custom made)
- Wind chimes
- Wool pulling
- Wreaths, artificial

*(Continued)*



**EXHIBIT 21.4** *(Continued)***• 5199 Nondurable Goods, Not Elsewhere Classified**

Establishments primarily engaged in the wholesale distribution of non-durable goods, not elsewhere classified, such as art goods, industrial yarns, textile bags, and bagging and burlap.

- Advertising specialties, wholesale
- Art goods, wholesale
- Artists' materials, wholesale
- Bags, textile, wholesale
- Baskets: reed, rattan, willow, and wood, wholesale
- Burlap, wholesale
- Candles, wholesale
- Canvas products, wholesale
- Cats, wholesale
- Chamois leather, wholesale
- Charcoal, wholesale
- Christmas trees, including artificial, wholesale
- Clothes hampers, wholesale
- Cotton yarns, wholesale
- Curios, wholesale
- Dogs, wholesale
- Felt, wholesale
- Fish, tropical, wholesale
- Foam rubber, wholesale
- Furs, dressed, wholesale
- Gifts and novelties, wholesale
- Glassware, novelty, wholesale
- Greases, animal and vegetable, wholesale
- Hairbrushes, Wholesale
- Handles: broom, mop, and paint, wholesale
- Ice, manufactured or natural, wholesale
- Industrial yarn, wholesale
- Jewelry boxes, wholesale
- Leather and cut stock, wholesale
- Leather goods (except footwear, gloves, and luggage)
- Lighters, cigar and cigarette, wholesale
- Linseed oil, wholesale
- Matches, wholesale
- Novelties, paper, wholesale
- Oils, except cooking: animal and vegetable, wholesale
- Oilseed cake and meal, wholesale
- Pet supplies, except pet food, wholesale
- Pipes, smokers', wholesale
- Plant food, wholesale
- Plastics foam, wholesale
- Rayon yarns, wholesale
- Rennet, wholesale
- Rubber, crude, wholesale
- Sawdust, wholesale
- Sheet music, wholesale

**EXHIBIT 21.4**

- Silk yarns, wholesale
- Smokers' supplies, wholesale
- Sponges, wholesale
- Statuary, wholesale
- Vegetable cake and meal, wholesale
- Wigs, Wholesale
- Wood carvings, wholesale
- Woolen and worsted yarns, wholesale
- Worms, wholesale
- Yarns, wholesale

As illustrated above, these industry categories are very general and are used to classify a long list of miscellaneous manufacturing and wholesaling businesses. For example, SIC code 3231 contains businesses that manufacture glass products such as doors, flowers, fruit, furniture tops, mirrors, and watch crystals. These businesses can have very different cost structures and profit margins than a company that makes or decorates cups, or both. SIC code 3999 is a miscellaneous catchall of all manufacturing entities that do not fit into another category. The companies manufacture amusement machines, book matches, candles, cigarette lighter flints, down feathers pelts, and puppets. These, too, are very different from a company that makes and decorates cups.

There is no SIC code 5190, the three digit code 519 is a major grouping. SIC codes do not end in a zero. The SIC code grouping 519 represents the wholesale trade-nondurable goods category. We even reviewed the *Standard Industrial Classification Manual*, published by the United States Government, but could not find this classification (5190) as a stand-alone category. SIC code 5199 includes the distribution of cats, fish, plant food, and wigs. This is also not similar to a maker and decorator of cups.

Based on the types of companies included in these SIC codes, it would be impossible to know what the mix of companies is that is included in the benchmark data used by the authors. We do not understand how the authors can put any reliance on the data included in these categories. Clearly, there are times when the use of this type of benchmark data can be deemed appropriate. However, this data is being used in this instance to assist in creating benchmarks for a four month old company, with primarily one product line of business, no track record, and it is being used to estimate lost profits for the next 25 years.

The authors state that Cups Plus, Inc., purchased the business of Delphi for \$237,500 and that this price "represented a deep discount below the fair market value of the firm because the seller was not looking to continue manufacturing, but rather found an opportunity to sell to an entity (Cups Plus) that would serve the seller's own business of wholesale distribution on an ongoing basis at a discounted price."

According to the Econ report, the \$237,500 was comprised of "\$52,500 for equipment, + \$45,000 for inventory + \$70,000 for artwork + \$70,000 for decals." There does not appear to be any support for some of these figures. The documentation provided reflects the purchase of equipment for \$52,500 from Best Corporation (Delphi) in December 1999. We also saw documentation for the \$45,000 of inventory. However, our review of the documentation does not reflect substantiation of the payment for artwork or decals.

A letter dated July 11, 2000, approximately three months after the accident, from Best Corp. to Cups Plus discusses the supposed purchase of \$70,000 worth of transparencies and artwork. It seems ironic that these items were not part of the original purchase. However, this letter also seems to indicate that because Best Corp. sold these transparencies at a "discount," Cups Plus would provide a 15 cent rebate *on all items* decorated by you (Cups) for me (Best) after August 1, 2000. We have not seen documentation to show that the \$70,000 was ever paid to Best Corp.

Also, Cups Plus filed a tax return for the year 2000 that does not reflect any depreciable assets being acquired other than \$52,000, the original acquisition. Furthermore, the underlying contention in the Econ report is that the \$237,500 was a "bargain purchase" because of the deal with Best Corp. to decorate their cups with a rebate. The original agreement of sale of the equipment is silent about any bargain purchase.

The July 11, 2000, letter provides that Best estimated the value of the transparencies to be \$100 each and discusses that 1,500 units were sold to Cups Plus. Even if one buys into the concept that this purchase was legitimate,

(Continued)

**EXHIBIT 21.4** *(Continued)*

the maximum consideration for these 1,500 units would be \$150,000 (1,500 units at \$100) assuming that \$100 per unit is the correct value. The bargain purchase theory used in the Econ report to argue why the purchase price of the business should not be used as a representative market value for the company is therefore flawed.

Even if we accept the Econ report's contention that a bargain purchase of \$237,500 does not represent fair market value of this business at the time of the acquisition because of the side deal with Best Corp., the maximum value based on the documentation seems to be \$317,500 (\$237,000 + \$150,000 for the transparencies - \$70,000 listed for the transparencies by the authors). If you accept all of the other components of the purchase price (and we still have not seen proof of payment for the transparencies or the decals), the fair market value of the negotiated transaction between the willing buyer and willing seller with both parties having knowledge of the relevant facts about the property and neither party being under duress was \$317,500. If you remove those items that have not been paid for, the purchase price would be \$97,500. This is not even remotely close to the \$6.6 million of damages opined by the authors.

In addition, even if it is considered that the Best Corp. assets were sold at a discount, the authors do not discuss any additional expense or the effect on the profit margins of the side deal with Best Corp. They seem to have forgotten about this in their profit projections.

According to the Econ report, at the time of the acquisition, the ownership interests were "Russell Jones - 45%, Larry Graham - 45%, Alice Carlson - 10%." According to a document entitled "Draft 2 Agreement", a shareholder agreement between all of the stockholders, Alice Carlson was to contribute \$100,000 for her interest in the company. In simple mathematical terms, the Econ report wants the Supreme Court to award damages that would equate to approximately \$660,000 for a 10 percent interest in the company. This would provide Ms. Carlson with a return of 660 percent for four months, or 1,980 percent annualized.

Furthermore, the same shareholders' agreement reflects life insurance to be purchased on the owners, for buyout purposes, at \$100,000 each. That would indicate that they thought the business was worth \$300,000 at that time.

**Page 6.** According to the Econ report, the Delphi business purchased by Cups Plus "had been in existence for a number of years at the same location. It was operating as an Ad Specialty firm decorating customer's glassware and ceramics with annual gross sales of four to five (4-5) million dollars." First of all, the purchase documents reflect the purchase of some equipment and not an ongoing business. Second, we were provided with Delphi financial statements that appear to be the basis for the statement that the company was doing four to five million dollars in sales. We have no idea what Delphi's sales were at the time of the acquisition, and we have no idea of how the company's product line differed from that of Cups Plus. The financial statements that were provided reflect the following information:

	1992	1991	1989	1988
Sales	\$4,036,362	\$4,211,626	\$3,612,640	\$4,034,598
Net Income	\$ (159,635)	\$ (206,622)	\$ 86,330	\$ 45,864

What is apparently left out of the discussion in the Econ report is that the financial information was at least eight years old. They also ignored that fact that the compound annual growth rate over the five years (1988–1992) was 0 percent and Delphi was showing large losses. This should have raised serious doubts as to the reliability of the financial information that their clients provided them with, because they had never owned this type of business before. Furthermore, it would seem that the Delphi data may have been better benchmark data than relying on SIC codes that included so many unrelated types of businesses to render the comparison meaningless.

Presenting the limited information to the reader suggests an attempt by the author to convince the reader that Cups Plus, Inc. would have instantly achieved four to five million dollars in sales in its first year of operations. The authors do not present to the reader the fact that Cups Plus, Inc., would have a different operating structure, management team, and financial condition than Delphi.

**Page 7.** The Econ report includes a list of companies that Mr. Jones has indicated are his contacts from his previous employment. However, there is no support to indicate any of the following:

- Would any of these customers follow Jones?
- What would be the size of the orders placed with Cups Plus?

**EXHIBIT 21.4**

- Could Cups Plus handle the volume of business without making a substantial investment to meet customer demands?
- How much would such an investment be?
- Could Cups Plus raise the necessary capital?
- Are there any written contracts that Cups Plus had with any of these contacts to indicate that they would be a continuing source of business in the future?

There are many more questions that need to be answered as well, but the Econ report does not address any of them. The authors merely accepted their clients' word for what they would achieve. This is highly speculative because there is no track record to support this type of success. While the authors discuss Mr. Jones's success at Star Giftware, bringing the company from \$9.0 million to \$28.0 million in sales in a span of five to seven years, no proof has been furnished that this was solely due to his efforts. Once again, the authors attribute the success of Star to the fact that Mr. Jones was sent to manage the company. While Mr. Jones may have done a good job for the company, there is no independent proof that the company's success was solely, or even more than a little bit, due to Mr. Jones's effort. What is omitted from the Econ report is the fact that Star, as a subsidiary of XYZ Company, was part of a publicly traded company with sales revenues of approximately \$348 million (in 2000 per Form 10K filed with the Securities and Exchange Commission) and a book value of about \$223 million. Having these resources behind a company like Star, and having a parent company like XYZ Company, may have impacted the growth a little bit more than merely bringing in Mr. Jones to manage the company. Actually, XYZ Company decided to sell Star in the early part of 2007 because it did not fit within the company's strategic plan. If the projections for this industry were so spectacular, XYZ Company may have wanted to keep its subsidiary.

**Page 8.** At the top of this page, the Econ report indicates that "These customers were bringing in over two million dollars a year in sales of Cups Plus and giftware for Star." Besides not being provided with documentation to support this amount, the authors are implying that this business would be transferred to Cups Plus. It is more than conceivable to think that many of these large customers are dealing with Star and have deals and relationships with Star due to XYZ Company. For example, if XYZ Company makes stuffed animals for the Disney Company, Disney may purchase other products from the company and its subsidiaries because of the ongoing relationship. There is more of an ongoing trend for large companies to consolidate its vendors. No proof has been furnished to support the dreams of a salesman that ended up in these projections.

According to the Econ report, "as a result of the explosion and the ensuing business interruption, plaintiff lost the opportunity at hand to sell Cups to millions of World Games visitors not only at the 2006 World Games but at all future World Games games as well." This is another highly speculative statement. There is no proof to suggest that Cups Plus, Inc. would have continuing revenue from future World Games. In fact, the apparent relationship was with the Visitors Bureau and not the World Games.

**Page 10.** According to the Econ report, "Cups Plus strategy to dominate the competition was by offering high quality 12 ounce ceramic cups and glassware, exceptional design, decorated by their designers, and pricing less than their competitors." The report continues, "Their estimated cost of a decorated ceramic mug was \$0.80. Their wholesale price was \$2.50 per mug. The result was a gross profit of \$1.70 per mug (68% gross profit). The plan was to maintain a minimum gross profit margin of 60% on all cups and glassware." The authors cite the business plan as their source for this information. The documentation supplied to us does not contain any cost sheets demonstrating where these figures came from.

Delphi's financial statements reflect gross margins of 30.7 percent and 21.9 percent, respectively, for 1992 and 1991. Furthermore, the authors have repeatedly indicated that the original purchase was at a bargain price because of future discounts being provided to Delphi (Best), but there is no discussion of how this fits into the figures cited above. How does anyone know whether the projected gross profits could be achieved? Are management's estimates calculated by an experienced cost accountant with knowledge about the production facilities that were purchased? It appears that it was older equipment worth \$52,500. How much money would have to be invested to make the production facility modern enough and efficient enough to allow this level of profitability to be achieved? Could the company find a labor force that would work at a low enough wage to keep these profit margins? One of the very substantial reasons why so much of the manufacturing in this country has left is due to the high cost of labor. Why would Cups Plus achieve what the rest of the country cannot?

*(Continued)*

**EXHIBIT 21.4** *(Continued)*

**Page 11.** According to the authors, their firm was retained in this matter “to evaluate, within a reasonable degree of economic certainty, the economic loss sustained by the ‘closely held’ business of Cups Plus, Inc., as a result of its permanent business interruption caused by the defendant.”

The only apparent measure of the economic loss suffered by the company, because its loss is permanent, was the fair market value of the business at the time of the accident. Without reiterating all of the reasons that we have previously raised about the speculation and unsupported information presented and used in the Econ report, we must once again raise the common sense issue of “Can a four month old closely held company that is in the glassware business, purchased for about \$300,000 (maybe), be sold to a willing buyer for \$6.6 million?” This defies logic. Cups Plus was not an internet company, nor was it going to go public in April 2000.

**Page 12.** In discussing the theory of calculating damages, the authors discuss the yardstick approach. We agree with the theory and especially agree with them when they say that “one of the key issues in applying the yardstick method is the issue of comparability.” It is obvious from the SIC codes that were previously discussed that the issue of comparability is highly questionable.

The authors then continue and discuss different valuation approaches. They state that “The cost approach is based on the business’ underlying value of net assets at the valuation date.” What they omitted was that this approach is frequently used for businesses that do not have a great deal of intangible value. A four month old company that bought equipment for \$52,500 probably has little, if any, intangible value. But then, they reject the cost approach and use other methods of valuation that result in a very large amount of intangible value.

The next problem, because there is not much intangible value after only four months, is that there is no proven track record of continued patronage to Cups Plus. Unfortunately, the accident put them out of business. If they had continued in business, without the accident, would a willing buyer have paid \$6.6 million for the business at that time? Clearly not. Therefore, the cost approach is probably the most applicable approach to use to value this new business.

Under the heading, “Earning-Based Models,” the authors state that “the discounted future earnings model, capitalization of earnings and the excess earnings method, also known as the formula approach are considered in this report.” The *PPC Guide To Business Valuations* notes conditions regarding the use of these methodologies. This publication states:

**Preconditions for Using the Capitalized Returns or the Discounted Future Returns Methods**

Before beginning this discussion, it should be noted that two important conditions should be present when any of these methods are used. First, *the valuation consultant must be able to estimate future returns* (either net cash flow or net earnings) *with a reasonable degree of probability*. Second, *there generally should be a reasonable likelihood that future operations will continue at a predictable rate*. *If the company is too volatile to predict future operations, the consultant should seriously question whether any of these methods are appropriate*. *If this latter situation exists, other methods, including the net asset value method or the liquidation value method may be appropriate*<sup>7</sup> (emphasis added).

Clearly, the Econ report did not follow the above concept in its analysis. It is unlikely that the authors could estimate the future returns of a four month old company for 25 years with a “reasonable degree of probability.” Also, there is no basis presented within the report for the authors to expect that there is “a reasonable likelihood that future operations will continue at a predictable rate.”

Because a new company’s results would be too volatile to predict, the Econ report should have used “other methods, including the net asset value method or the liquidation value method (as) may be appropriate.”

The Econ report also violated proper appraisal theory in its use of both the capitalization and discounted future earnings methods. Section 500.4 of the *PPC Guide* states:

<sup>7</sup> Jay E. Fishman, Shannon P. Pratt, J. Clifford Griffith, D. Keith Wilson. *Guide to Business Valuations*, 15th edition, vol. 1. (Fort Worth, TX: Practitioners Publishing Company, 1998), 5-1.

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A capitalized returns method tends to be more appropriate when it appears that a company's *current operations are indicative of its future operations* (assuming a normal growth rate). On the other hand, a discounted future returns method tends to be more appropriate when *future returns are expected to be "substantially different" from current operations*. (*Substantially different* means materially greater or less than a normal growth rate.) In some cases, it may be desirable to use both types of methods to estimate a company's value<sup>8</sup> (emphasis added).

Valuation theory dictates the proper use of each method with respect to expected volatility in future growth. The use of both methodologies to obtain the lost business value in the Econ report is not only improper through its implication that estimating future growth for Cups Plus can be performed with reasonable probability, but also that both stable and volatile growth is expected by the authors. Using both methods for the same earnings stream is contradictory. While capitalization methods are frequently used in the calculation of the residual value in a discounted cash flow model, the proper time to use this method is at the point of stabilization. The authors stabilize earnings, albeit wrong earnings, after the year 2005 and not 2025.

**Page 13.** The Econ report states:

The methods adopted in this appraisal report are that of applying accepted financial models to the financial characteristics of a firm in order to estimate a fair market value for the firm as though an active market for its shares existed.

However, the documentation provided to us is totally inadequate for a prospective purchaser to properly analyze Cups Plus. In addition, there is no basis to assume that an active market exists for this four month old company with inadequate records.

Similarly, there is no basis for the statement in the Econ report that "For many manufacturing and service firms, the intangible assets produce more value to a business than do tangible assets." Capital intensive manufacturing firms are very different than labor intensive service firms. Combining these two groups in the same statement is misleading. What is even worse is the footnote that the author uses to provide an example of what they mean. The authors give an example of Microsoft to support their claim. Although the statement holds true in the case of Microsoft, the use of one of the nation's largest technology companies as a comparison example to Cups Plus is wrong on many levels including company size, age, type of business, and financial history. This would be like saying that the local hardware store is worth a tremendous amount of money because it is in the same industry as The Home Depot.

The authors discuss the need to value the tangible and intangible assets of the business but they make no attempt to value any of the intangible assets that may exist. The cost approach could have been used to value the net assets that were on the balance sheet at the time of the accident and they could have added to that amount the value of any additional assets that may exist. This would have required more work on their part. Instead, they chose to use methods of valuation that normally capture the tangible and intangible value of the business enterprise. Unfortunately, the manner in which they applied these methodologies is fatally flawed.

**Page 14.** The authors discuss the three approaches to valuing intangible assets and the related models based on the Smith and Parr treatise. However, they never value these assets using these models. In fact, they have not provided a complete discussion about the valuation of intangible assets. Had they performed additional research, they would have also found out the following:

For an intangible asset to have a quantifiable value from an economic analysis or appraisal perspective, it must possess certain additional attributes. Some of these additional requisite attributes include the following:

- It must generate some measurable amount of economic benefit to its owner; this economic benefit could be in the form of an income increment or of a cost decrement.
- This economic benefit may be measured in any of several ways, including net income or net operating income or net cash flow, etc.
- It must enhance the value of other assets with which it is associated; the other assets may include tangible personal property and tangible real estate.

<sup>8</sup> Ibid. 5-2.

(Continued)

**EXHIBIT 21.4** (Continued)

Clearly there may be a substantial distinction between the legal existence of an intangible asset and the economic value of an intangible asset. An example of this situation would be the new registration of a legally binding and enforceable patent that, upon creation, is immediately and permanently locked in the corporate vault. If the patent is never used in the production of, or in the protection of, income, then it has no economic value—even though it has legal existence.<sup>9</sup>

Basically, the important distinction that Pratt makes is that you can have an intangible asset but it may not have value. All of these supposed contacts that Mr. Jones would have brought to the company are similar to the patent that has not had an opportunity to be tested in the market. Initially, it has no value. Value may have come in time, but certainly not after four months when there is no proven track record of what a willing buyer would be purchasing. If John Smith bought Cups Plus in April 2000, these possible intangible assets would not have been worth much, if anything, at all. In fact, there is no guarantee that they ever would have had value. Without history, this cannot be substantiated with any reasonable degree of certainty.

**Pages 15–16.** The Econ report identifies lost customers “who have bought products of Cups Plus, Inc., before the business interruption....” The table at the top of page 16 is intended to reflect the lost value of the sales. The sales in this table total \$5,700,000. According to the 1995 corporation tax return for Cups Plus (cups 001404–001414), sales were \$36,476. No documentation has been furnished to determine how these figures were derived. The note in the Econ report indicates that the \$5.7 million comes from purchase orders per Messrs. Graham and Jones. On page 10 of their report, the authors stated “After only a few months in operation, Cups Plus booked sales of over seven hundred fifty thousand dollars (\$750,000).” This is a vastly different figure than \$5.7 million. It also contradicts their previous statement.

Our review of the documentation provided reflects sales and purchase orders of \$992,338. A comparison was made to the table at the top of this page. The results are as follows:

<b>Customer Name</b>	<b>Per Econ</b>	<b>Documented</b>
Bob Anderson	\$1,000,000	\$259,200
Best	200,000	—
Raleys Drug	500,000	4,116
Uptons Department Stores	250,000	21,751
Canner & Hirsh	2,000,000	493,632
Target Stores	250,000	1,800
Bellcrest	250,000	13,141
Consumer Promotion	100,000	3,049
Atlanta Visitors Bureau (Atlanta Olympics)	1,000,000	10,000
Dandee Creations	50,000	—
Cardinal	100,000	1,144
<b>Total</b>	<b>\$5,700,000</b>	<b>\$807,833</b>

<sup>9</sup> Shannon P. Pratt, Robert F. Reilly, Robert P. Schweis, *Valuing A Business: The Analysis and Appraisal of Closely Held Companies*. (Burr Ridge, IL: Irwin Professional Publishing, 2000), 537.



**EXHIBIT 21.4**

In addition to these sales or orders, or both, we also found the following:

<b>Company</b>	<b>Sales</b>	<b>Bates #</b>
Ace Hardware	\$ 3,600	Cups 001316
Big Apple & Beer Co.	1,807	Cups 002126
Logo's & Promotions	2,143	Cups 002126
OH NUTS, Inc.	125	Cups 002126
QED Communications	538	Cups 002126
Riedys	59	Cups 002187
The Hass Company	226	Cups 002126
Touch of Georgia	345	Cups 002126
Westchester Restaurant Supply	270	Cups 002126
Food 4 Less Supermarkets	137,376	Cups 001672
Hughes Family Markets	38,016	Cups 001671
<b>Total</b>	<b>\$184,505</b>	

This further demonstrates that the authors have relied on incorrect and unsubstantiated figures.

Even if purchase orders had been received, more questions would have to be answered before any of this information is usable. For example, what are the delivery dates for the product? Can the orders be cancelled by the customer? These figures are as unsupported as many of the other statements that appear in the Econ report. It would appear prudent for the damage expert to have quantified these figures and not merely accept them from the client. There is no evidence in the Econ report that this was done.

Also on this page, the Econ report lists contacts of Mr. Jones as "potential customers" from which over \$2,500,000 in future sales are projected. These contacts are just that—contacts—and it is unsupported to assume that these "potential customers" would become customers in the first year because there is no basis for this assumption. Not only does this inflate the first year's sales estimate, but it inflates the next 24 years as well because the first year is used as the starting point to project results well into the new millennium.

**Page 17.** A list of lost sales representatives with projected first year sales figures attained from each is presented on this page. As mentioned about the previous page, at the time of loss, the sales to be made through these representatives are purely speculative. Projected sales from these representatives should not be considered in estimating future annual sales unless actual purchase orders were obtained, and even then, with serious reservation. There is no support for these figures.

Based on the speculative nature of the entire first year sales projection for Cups Plus, we find that the total first year sales volume of \$10,900,000 anticipated by the authors, used to estimate future earnings and damages in the Econ report, is totally unreasonable, unsupported, and arbitrary. There has not been any support using benchmark data to show that a new company in this business could grow to almost \$11 million in its first year. Delphi was doing about \$4 million based on the last known financial data that even the authors reviewed. The authors have accepted the statements of their clients as to all of the sales that would have been generated without performing any due diligence as to the reasonableness of the probability of occurrence. The basis of damage calculations should be based on supportable information. Not having a track record is the very reason that the Courts have not allowed damages in these cases.

It would have been reasonable to assume that if the authors had verified the \$750,000 of supposed purchase orders that were previously discussed, an annualized sales figure of about \$4 million might have occurred. However, not only did they not verify the information (at least there is no evidence in their report that they did), but accepting their clients' assertions without verification renders their opinion without any factual support.

*(Continued)*

**EXHIBIT 21.4** (Continued)

**Pages 18–19.** In their discussion of the length of the loss period, the authors are mixing concepts relating to lost profits and the complete loss of the business. Because the business was completely lost, calculating lost profits to the year 2025 is not the correct manner in which to calculate damages. First of all, there are very few businesses that can forecast next year's results with any degree of certainty, let alone go out 25 years. A discounted cash flow analysis will typically go out to the period at which time growth stabilizes and then a terminal value is calculated. More often than not, the financial community is very reluctant to go out much further than five years because the further out you go, the more speculative the projections become. Secondly, the methodology used by the authors makes no sense.

The authors have treated this case as if it was a personal injury case and the projections were being made of an individual's lost wages. This methodology is not correct for calculating the lost business value in April 1995 of Cups Plus. If the willing buyer placed him or herself at April 2000, how would they project the impact of the internet on this company? Could they have guessed at what the economy would be like in the year 2005 or 2015?

The concept of fair market value is supposed to be based on what information is known or knowable at the date of the valuation. In April 2000, all that was known is that there was a four month old acquisition of \$52,500 of equipment, \$45,000 of inventory, and a dream. A willing buyer would not attempt to project to the year 2025 with "any reasonable degree of economic certainty."

**Pages 19–22.** The authors go through an explanation of macroeconomics but fail to get down to the real issues surrounding Cups Plus. Though all of the items discussed in the Econ report are valid, they fail to specifically discuss how these economic issues pertain to the company. Using national economic figures makes sense, but it fails to recognize the tight labor market in the state. Their discussion also fails to discuss how inflation relating to materials and labor would have impacted the company. Could they have maintained management's expected gross profit margins?

**Pages 22–26.** The authors perform what they call an "Industry Analysis." First, they start off with an analysis of "all manufacturing industries." Their contention is that "the core of the plaintiff's business was manufacturing." Comparing all manufacturing industries with Cups Plus is a meaningless analysis. Companies that manufacture hand grenades, horseshoes, and computers are being compared to Cups Plus.

Next, they continue with an analysis of "miscellaneous manufacturing industries SIC 39." We previously discussed the poor choice of yardstick data because of the lack of comparability of the companies that are included in this SIC code. The same argument exists here as well.

The Econ report then gets a little more specific by looking at SIC code 32. How much of this data is from manufacturers of pots, dishes, and other types of glassware as opposed to cheap cups? The same problems also exist for the wholesale categories.

While there is no doubt that an economic analysis is important, we do not believe that the information that has been included in the Econ report is meaningful enough to provide the authors with the ability to opine within a reasonable degree of certainty. What would have been much more meaningful, but was not included in this report, would have been an extensive analysis of the "ceramic cups" industry. Industry data from 2000 should have been obtained to provide support for many of the unsupported figures that were used to make a 25 year forecast. Even with good industry data, a 25 year forecast is unreasonable and unsupported.

In order to obtain industry growth rates for use in their damages analysis, the authors perform two arbitrary tasks. First, they take the average of four SIC code growth rate averages to obtain another average growth rate. Averaging a series of averages is a meaningless mathematical exercise. Further, the decision to grow the hypothetical business of Cups Plus by 7.94 percent through 2005 and 5.67 percent through 2025 also has no basis. Besides using four SIC codes that may not truly have enough comparable data to be meaningful, the authors use data from 1993–2006, a period that for the most part had a booming economy, as a basis to justify using a 5.67 percent growth rate for the years 2006–2025. This means that the authors are forecasting a continuing booming economy.

**Pages 27–28.** The authors attempt to perform a "firm-specific analysis" by quoting information from one article that appeared in *Giftware News*. There is little information in this section that can assist in the quantification of the future for Cups Plus. We all have coffee cups with cute sayings on them but that does not provide enough data to allow a forecast to be relied upon. There really was no firm specific analysis performed here, despite what the authors called it.

**EXHIBIT 21.4**

At the bottom of page 28, the authors indicate “for purposes of this report, it is assumed, very conservatively, that the growth rate of the sales of Cups Plus, Inc., is 7.94%....” How do they know that the rate that they are using is conservative? They do not have any empirical data to compare this against that is in anyway reliable. They have taken averages of averages that have resulted in large standard deviations and then tried to justify their conclusions by running a correlation analysis showing good correlation among the variables. Other than attempting to use statistics for the sake of the presentation, the authors have yet to present good empirical data that supports their self-serving statement about how “conservative” they are being. For a new company without a proven track record, forecasting growth based on a group of mature businesses that are not necessarily similar, and very possibly considerably larger and better capitalized, is not conservative—it is foolish.

The reality is that even though the growth rate matters, the figures that they are being applied to are so unsupported that the results are meaningless. The fact is that the Econ report includes sales for 2000 of \$10,900,000 for a company that recorded actual sales from January 1, 2000 to April 21, 2000 of \$36,476. So the authors want us to accept that sales from April 21, 2000 to December 31, 2000 would have been \$10,863,524. This would have been achieved by a company that bought \$52,500 worth of used equipment. How would they have produced this level of sales?

**Page 29.** In the “Measurement of Economic Loss” section of their report, the authors once again cite documents from this litigation as support. The profit margins discussed, as if accurate, come from exhibit B of the Request for Mediation. Exhibit B is a self-serving letter “To whom it may concern” from Mr. Jones. He says that “*Based upon my experience in the industry, I know that an unboxed mug costs forty-five cents to purchase*” (emphasis added).

The authors then take this statement and turn it around as if factual that “*For Cups Plus, an unboxed mug costs forty-five cents to purchase*” (emphasis added). The authors have represented the cost of an unboxed mug as if it is factual, when it is anything but.

Mr. Jones has worked for many large companies that have tremendous buying power, and as a result, can obtain all types of discounts on the purchase of goods. Documentation supplied in this matter reflects a purchase price based on large quantities varying from 25 cents to 85 cents. The authors cannot state with certainty that cups cost 45 cents. We have not been provided with a written contract guaranteeing this price for Cups Plus.

The authors also refer to Arthur Bylin, a business owner who tells of his companies’ gross profit margins. Again, how comparable is Cups Plus to Mr. Bylin’s businesses? If this is good benchmark data, why didn’t the authors obtain financial data from Mr. Bylin to use as a yardstick? Then at least a true comparison can be done to determine similarities. Let’s see what Mr. Bylin’s balance sheet looks like, as well as his income statements and the type of equipment and number of personnel employed. Otherwise, this information does not tell us anything. We also cannot tell what the mix of product is between manufacturing (decorating) at a 15 percent to 20 percent margin versus general gift items at 50 percent to 70 percent. Without knowing the mix, the Econ report again states that “very conservatively” they will use 30 percent on total sales. Further justification is then used in the report that shows average gross margins for the poorly comparative SIC code information ranging from 20.18 percent to 36.35 percent. The average of the averages was 29.5 percent. Therefore, how come the authors say that they were conservative?

**Page 30.** At the top of the page, average profit margins before taxes are averaged again to derive a figure to apply to Cups Plus. The same problem exists here as before. Besides poor comparability, the profit percentages are being applied against a number that makes no sense. Applying the 2.99 percent profit against different sales levels would throw off the calculation of profits as follows:

Sales	\$ 10,900,000.00	\$ 4,000,000.00
Pre-tax Profit Percentage	× 2.99%	× 2.99%
Forecasted Pre-tax Profit	<u>\$ 325,910.00</u>	<u>\$ 119,600.00</u>

Using the sales forecast of \$10,900,000 results in an overstatement of pretax profits by \$206,310, or 272.5 percent in the very first year of the forecast, which gets compounded for 24 more years. Furthermore, if Cups Plus had this type of profit, the company would pay approximately 40 percent in taxes.

(Continued)

### EXHIBIT 21.4 (Continued)

In the middle of this page, the authors discuss the “lost tangible assets.” The values listed in the Econ report do not represent the fair market value of the assets that were destroyed. Our review of the documentation attached to the request for mediation leads us to believe that the figures used were “replacement costs” for these assets as if purchased new. Machinery and equipment is generally not appraised at replacement cost new. The concept that should be used for these assets is “depreciated replacement cost.” What is the value of the *used* equipment, not *new* equipment? Four months earlier, the company’s assets were bought for \$52,500. The artwork and the decals do not appear to have been on the books of the company because they apparently had not been paid for. The lost tangible asset value is not the \$827,228 claimed in the Econ report.

**Pages 31–32.** A discussion about the methodology used to derive the discount and capitalization rates used by the authors begins on page 31. On page 32, the authors illustrate how they derived a discount rate of 22 percent and a capitalization rate for earnings of 16.33 percent.

First, let’s address the most obvious technical error made by the authors. They point out that the source used for their equity risk premium data is *Stocks, Bonds, Bills, and Inflation*, published by Ibbotson Associates. This is a well regarded source. However, this source provides information for a discount rate to be used for net cash flow and not earnings. The 22 percent discount rate derived on page 32 should be applied to net cash flow. Subtracting growth from this figure provides a capitalization rate to be applied to net cash flow and not earnings.

Ibbotson data calculates the cash returns in the marketplace. Therefore, it is applicable to net cash flow. The model for the build up method presented in the *Guide to Business Valuations*<sup>10</sup> illustrates the steps as follows:

Step 1		Risk-free rate
Step 2	+	Equity Risk Premium
	=	Average Market Return At Valuation Date
Step 3		Increments for Risk Differentials of the Company Being Valued
Step 3a	+	a. Risk Premium for Size
Step 3b	±	b. Other Risk Factors
	=	<i>Net Cash Flow Discount Rate</i>
Step 4	+	The Additional Increment by Which the Net Earnings Discount Rate Exceeds the Net Cash Flow Discount Rate
	=	<i>Net Earnings Discount Rate</i>

An additional incremental adjustment should have been reflected in the build up of the discount rate if the authors intended to apply the discount rate to net income instead of net cash flow. Certainly even the authors would have to admit that in a growing company, such as they projected, cash flow would be considerably less than net income when factoring in such items as needed working capital and capital expenditures.

Also, despite stating in the Econ report that “additional risk may be due to specific risks associated with the industry or the company as compared to the entire market place,” the authors have not accounted for any company specific risk within their build-up model for a discount rate. That is represented in Step 3b previously. Understating the discount rate increases the value that they derive.

According to Pratt,

Broken down into its simplest components, the discount rate, or the rate of return that investors require, incorporates the following elements:

<sup>10</sup> *Guide to Business Valuations*, 5–14.

### EXHIBIT 21.4

- A “risk-free rate” (the amount that an investor feels certain of realizing over the holding period). This includes:
  - A “rental rate” for foregoing the use of funds over the holding period.
  - The expected rate of inflation over the holding period.
- A premium for risk. This includes:
  - Systematic risk (that risk that relates to movements in returns on the investment market in general).
  - Unsystematic risk (that risk that is specific to the subject investment).<sup>11</sup>

The Econ report has ignored part 2b of the above reference. Within the model, no effort is made to account for the risk of Cups Plus being a small private business with financial and economic risks that are specific to it alone. Specific risks pertaining to Cups Plus that have been ignored by the authors include, but are not limited to, the company is not a public company; it does not have the capital base of a public company; it has only been in business for four months; it lacks depth in management; it does not have the ability to raise capital and in this instance; and the forecast has significant risk of ever being achieved. Failure to add a premium has resulted, once again, in the understatement of the discount rate by the authors. This has also caused the value to be overstated.

Another error in the use of the discount rate derived by the authors is that the authors have applied these rates to the pretax income derived in their unsupported projections. We have previously demonstrated that this should have been applied to net cash flow. Net cash flow is also calculated after income taxes. Applying the discount rate to pretax income would have warranted an additional adjustment to the build up of the discount rate. This error, on behalf of the authors, also overstated the damages.

Discussing common errors made in business valuation, Pratt discusses the mismatching of the discount rate with the economic income measure. He states:

**Applying a Discount Rate to an Income Variable Defined Differently Than That to Which the Discount Rate Is Applicable.** This general error in itself has many variations. As discussed earlier, most of the methods and sources for developing discount rates used in the practical application of contemporary financial theory and discussed in this book produce a rate to discount net cash flow, as defined in the earlier section. The *SBBI: Valuation Edition 2004 Yearbook* makes the following point: It is implicit that the market return data represents returns after corporate taxes but before personal taxes (footnote omitted).<sup>12</sup>

**Page 32.** At the bottom of this page, the Econ report discusses the valuation going to the year 2025 because that is when the principals would sell the business. They discuss using three different approaches and methodologies and employing the incorrectly calculated discount and capitalization rates. None of these rates are appropriate for this brand new company. Not only did they calculate the discount rate improperly, they attempt to perform a sensitivity analysis by arbitrarily picking two other discount rates, one higher and one lower. Because the main discount rate is terribly understated, the other two rates follow as well.

**Page 33.** The first method used by the authors is the *price-earnings method*. What the authors have attempted to do is use multiples from actual transactions from the marketplace to determine the multiples that should be applied to Cups Plus in 2025 when the business will ultimately be sold. The authors used data from 2000–2004 (a very hot market) to apply to Cups Plus in 2025 (an unknown market).

The authors used *Mergerstat Review* to identify transactions in the marketplace. *Mergerstat Review* reports the purchase of fairly large companies by public companies. The authors calculate a weighted average price to earnings multiple for companies sold in the miscellaneous manufacturing and wholesale and distribution categories in 2000–2004. The authors indicate in their report that they are attempting to “find out the price to earnings ratios at which other companies in the same or similar industries are selling for” but the data in *Mergerstat* did not meet their purpose and should not have been used.

The authors demonstrate their lack of business valuation experience by blindly applying price to earnings multiples based on a SIC code rather than looking at the true comparability of the transactions. For example, a review of the wholesale and distribution category in the 2004 *Mergerstat* data would have revealed transactions involving companies in the voice, video, and data equipment business, a wholesale pharmaceutical distributor, a grocery wholesaler, and others that do not in any manner resemble Cups Plus.

<sup>11</sup> *Valuing A Business*, 160.

<sup>12</sup> *Ibid.*, 195.

(Continued)

**EXHIBIT 21.4** (Continued)

The concept behind the market approach is to use information for comparability in the valuation process. The authors have failed in this area. Furthermore, the use of the *Mergerstat* data without any consideration of the differences between large and small companies, or public and private companies, is also troublesome. The price to earnings ratios used in the Econ report are a mix of those from public and private companies.

There is a vast difference between the multiples for public and private companies. Our research shows that in eight out of the last 10 years, the price to earnings ratio for private companies has been significantly lower than that of public companies. In addition, the number of transactions of public companies as opposed to private companies in this data is also vastly different. The usage of the price to earnings ratios from *Mergerstat Review* is a meaningless exercise without an appropriate analysis to accompany the process.

According to the *2007 Business Reference Guide*, the suggested rule of thumb to value a small manufacturing business is 1.25 to 1.75 times the annual adjusted earnings. This ratio is well below the authors' suggested price to earnings ratio of 8.28 for Cups Plus. Furthermore, we contacted The Institute of Business Appraisers, a professional appraisal organization, for possible transaction data that this organization maintains in its market database of small private business transactions. This is what we received:

<b>Business Type</b>	<b>Annual Earnings \$000's</b>	<b>Sales Price \$000's</b>	<b>Price-Earnings</b>
<b>SIC code: 3231</b>			
Glass etcher	15	22	1.47
<b>SIC code: 5199</b>			
Distribution business	132	158	1.20
Housewares, import	147	150	1.02
Glassware, import	101	284	2.81
Artwork, wholesale	57	106	1.86
Ice delivery	42	175	4.17
Product distribution	48	65	1.35
Housewares, import	200	740	3.70
Gifts, wholesale	28	35	1.25
Tropical Fish, wholesale	102	225	2.21
Advert specialty, distribution	38	17	0.45
Graphic arts, export	100	218	2.18
Video tapes, wholesale	89	100	1.12
<b>SIC code: 3999</b>			
Silk flowers, manufacturing	50	105	2.10
Traffic control device, manufacturing	126	370	2.94
Giftware, manufacturing	336	1350	4.02
Flowers artificial, manufacturing	24	185	7.71
Windchime, manufacturing	34	61	1.79
Badge, manufacturing	12	23	1.92
Candles and lamps, manufacturing	21	40	1.90
Silk flowers, manufacturing	91	135	1.48
Hair color	85	130	1.53
Stained glass gifts, manufacturing	61	120	1.97
Windchime, manufacturing	55	61	1.11



**EXHIBIT 21.4**

Not only do these sample transactions show the varied type of industries within the SIC codes used by the authors to obtain their industry data, but they also show more reasonable price to earnings ratio figures for industry transactions. All of the transactions above have a price to earnings ratio below the authors suggested price to earnings ratio of 8.28.

Also, the 30 percent reduction in the weighted average price to earnings ratio in order to create the company-specific ratio is arbitrary and unsupported. The authors have made no effort to explain why the pretax price to earnings ratio of 11.83 is reduced by 30 percent to 8.28. The evidence above suggests that the business value of Cups Plus, Inc. obtained through the price to earnings method is greatly overstated, as is the damages estimate for loss of increased market value to Cups Plus, which is put forth by the authors.

**Page 35.** The calculation of economic losses in Scenario 1 is incorrect because the values are unsupported. The use of replacement costs is inappropriate because the damages should be based on the fair market value of the business and not what it would cost to replace it brand new.

The calculation of damages from prior lost sales is inappropriate because the sales forecast is unsupported, the profit is calculated on a pretax basis, and the determination of damages should be based on the lost value of the business and not lost profits.

**Page 36.** The calculation of lost future sales is also inappropriate due to unsupported forecasts, incorrectly calculated profits, and an incorrect method of determining damages.

**Pages 37–38.** The calculation of the value of the business in the year 2025 using incorrect price earnings multiples based on unsupported forecasts results in a meaningless number. The entire exercise on this page makes no sense, defies proper valuation practice, and is discounted improperly.

Another problem with the business values calculated by the authors is the failure to consider appropriate valuation discounts. For all calculations of value for the Cups Plus business on this page and after, the authors value the company as if it were a freely traded public company. Even if they performed their calculations correctly, which they did not, they should have applied an appropriate discount for lack of marketability. According to Pratt:

Since interests in closely held businesses do not, by definition, enjoy the ready market of a publicly traded stock, a share in a privately held company usually is worth less than an otherwise comparable share in a publicly traded one. Many factors affect the relative marketability of different business interests. Sometimes size of the interest is a factor; a smaller block may be easier to market than a larger block, and in other cases the reverse is true. In most cases, the lack of marketability factor harshly impacts minority interests. However, even controlling interests in closely held businesses obviously are not as readily marketable as shares of publicly traded stock.<sup>13</sup>

Failure to consider a lack of marketability discount in all business valuation calculations for Cups Plus, greatly overstates the value of the business in all scenarios. Based on studies involving restricted stock, lack of marketability discounts range from 25 percent to 45 percent. Failure to consider this discount has the impact of overvaluing the company.

For all scenarios, under the “Discounted Future Earnings Methodology Summary” the authors state that earnings at 2025 (they incorrectly referred to 2045) are being capitalized at 18.34 percent. There are mathematical calculation errors in these schedules.

**Page 39.** Besides the fact that the authors have incorrect figures in their report, they have also left out a digit from most of their final calculations for damages within this scenario. Furthermore, the authors have double counted the damages. When an income or market approach is used to calculate value, the value of the tangible assets is included in the result. It is inappropriate to add the value of the assets to the total value derived.

**Pages 40–43.** Scenario 2 contains all of the same errors as scenario 1.

**Page 44.** Once again, the authors have left out a digit from most of their final calculations for damages within this scenario.

**Page 45–49.** Scenario 3 is plagued with the same errors as scenarios 1 and 2.

<sup>13</sup> Ibid: 49–50.

(Continued)



### EXHIBIT 21.4 (Continued)

**Final Comments.** The conclusions reached in the Econ report have been demonstrated to lack support, violate proper theory, and represent anything but reality. The damages sustained by Cups Plus is no more than the purchase price of the assets plus any additional items that may have increased the value from December 1999 to April 2000. This value had certainly not grown to \$6.6 million.

Two items that were not discussed in the Econ report include the reliability of their clients' information and mitigation of damages. All one has to do is look at the business plan that was prepared by an apparently over optimistic salesman who thought he could set the world on fire. The business plan states "to implement our plans we require an investment of \$24,876,000 ..." Where did they think they were going to get that kind of capital from to grow the business?

Another concept ignored by the authors is that if they were correct in calculating damages to the year 2025, why didn't they consider the obligation of the damaged parties to mitigate their damages. While the authors started their report by claiming that they were calculating damages to the company, they end their report by calculating damages to the shareholders. Without mitigation, the shareholders get a windfall.

According to the *Guide To Litigation Support Services*:

**Mitigation of Damages.** The plaintiff has a duty to mitigate its damages. This means that the plaintiff has a responsibility to take whatever actions are appropriate to overcome the damage caused by the defendant's breach or tort. Generally, if a plaintiff loses an income-producing asset, for example, it cannot recover lost profits the asset would have produced beyond the reasonable period of time it should have taken the plaintiff to replace the asset. Lack of adequate resources to replace the asset would generally not be a sufficient legal excuse to justify the failure to mitigate one's damages. In determining the plaintiff's lost earnings, the amount of earnings lost as a result of the plaintiff's failure to mitigate its own damages are not recoverable.<sup>14</sup>

The authors of the report have made no attempt to offset the plaintiff's loss from the time of loss through the year 2025. The authors have written off the loss of business as permanent, citing various excuses including loss of resources and ability. As this treatise indicates "lack of adequate resources to replace the asset would generally not be a sufficient legal excuse to justify the failure to mitigate one's damages."

Clearly there is an obligation to mitigate on the part of the plaintiffs. The *Guide To Litigation Support Services* discusses how refusing to mitigate damages impacts the period of recovery for an economic loss. This treatise states:

303.36 **Period of Recovery.** Because the plaintiff has a duty to mitigate damages, the plaintiff cannot expect to be awarded lost profits from the date of the harmful event until the end of time. As one court ruled, a plaintiff cannot expect to retire for life from the taking of his business.

303.37 The plaintiff is entitled to recover earnings lost as a result of the defendant's actions for that period of time "proximately" related to those actions. The shorter the period, the easier it is to demonstrate a proximate link to the defendant's acts. As the period increases, other factors may be responsible for the plaintiff's losses. These may include general economic conditions, increased competition, poor business judgment, or the plaintiff's failure to mitigate its damages. Except for special circumstances, a proximate link is usually difficult to establish between current earnings and the actions of a defendant three or more years into the past. Likewise, as discussed beginning in Paragraph 303.46, lost earnings are equally difficult to project three or more years into the future without losing a proximate link to the cause of the future losses.<sup>15</sup>

Overall, the Econ report fails to support its value of damages to Cups Plus. Revenue and, therefore, profit projections for the business are highly speculative and include careless errors. In addition, the authors have ignored numerous business valuation and economic damages concepts and theory including the proper use of valuation methodology and the mitigation of damages.

Cups Plus, Inc., being a new business is a fact. According to the *Guide To Litigation Support Services*,

In a lost profits case, the plaintiff's damages must be proved to a reasonable certainty and may not be based merely on speculation or conjecture. Most new business ventures fail. Accordingly, the "new business" rule generally precludes a start-up business from recovering lost profits because there is usually no evidence that the business would have been able to generate a profit but for the defendant's actions.

The plaintiff's expert must be very creative to overcome the new business rule.<sup>16</sup>

<sup>14</sup> *Guide to Litigation Support Services*, 3-14 and 3-15.

<sup>15</sup> *Ibid.*, 3-15.

<sup>16</sup> *Ibid.*, 3-22.

**EXHIBIT 21.4**

We believe that we have sufficiently pointed out the many flaws in the Econ report. Clearly, their calculations are based on speculation and conjecture. Cups Plus was a new business and the new business rule should be considered. We do not believe that the plaintiff's experts were very creative, nor that they overcame the new business rule.

**CONCLUSION**

If I did my job, you should feel a little bit better informed about economic damages. Hopefully, you now realize that if you can perform business valuation assignments, you also can perform economic damage assignments. You certainly can do better than the individuals who I ripped apart in exhibit 21.4. While this chapter is not going to make you an expert, you can begin to think about performing these assignments by using the same skill set that you have gained in the first 20 chapters of this book. Good luck!!!



# APPENDIX 1

## *AICPA Statement on Consulting Services Standards I*

### CONSULTING SERVICES: DEFINITIONS AND STANDARDS

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#### INTRODUCTION

1. Consulting services that CPAs provide to their clients have evolved from advice on accounting-related matters to a wide range of services involving diverse technical disciplines, industry knowledge, and consulting skills. Most practitioners, including those who provide audit and tax services, also provide business and management consulting services to their clients.
2. Consulting services differ fundamentally from the CPA's function of attesting to the assertions of other parties. In an attest service, the practitioner expresses a conclusion about the reliability of a written assertion that is the responsibility of another party, the assertor. In a consulting service, the practitioner develops the findings, conclusions, and recommendations presented. The nature and scope of work is determined solely by the agreement between the practitioner and the client. Generally, the work is performed only for the use and benefit of the client.
3. Historically, CPA consulting services have been commonly referred to as management consulting services, management advisory services, business advisory services, or management services. A series of Statements on Standards for Management Advisory Services (SSMASs) previously issued by the AICPA contained guidance on certain types of consulting services provided by members. This Statement on Standards for Consulting Services (SSCS) supersedes the SSMASs and provides standards of practice for a broader range of professional services, as described in paragraph 5.
4. This SSCS and any subsequent SSCSs apply to any AICPA member holding out as a CPA while providing consulting services as defined herein.

#### DEFINITIONS

5. Terms established for the purpose of SSCS are as follows:

**Consulting Services Practitioner.** Any AICPA member holding out as a CPA while engaged in the performance of a consulting service for a client, or any other individual who is carrying out a Consulting Service for a client on behalf of any Institute member or member's firm holding out as a CPA.

**Consulting Process.** The analytical approach and process applied in a consulting service. It typically involves some combination of activities relating to determination of client objectives, fact-finding, definition of the problems or opportunities, evaluation of alternatives, formulation of proposed action, communication of results, implementation, and follow-up.

**Consulting Services.** Professional services that employ the practitioner's technical skills, education, observations, experiences, and knowledge of the consulting process.<sup>1</sup> Consulting services may include one or more of the following:

1. *Consultations*, in which the practitioner's function is to provide counsel in a short time-frame, based mostly, if not entirely, on existing personal knowledge about the client, the circumstances, the technical matters involved, client representations, and the mutual intent of the parties. Examples of consultations are reviewing and commenting on a client-prepared business plan and suggesting computer software for further client investigation.
2. *Advisory services*, in which the practitioner's function is to develop findings, conclusions, and recommendations for client consideration and decision-making. Examples of advisory services are an operational review and improvement study, analysis of an accounting system, assistance with strategic planning, and definition of requirements for an information system.
3. *Implementation services*, in which the practitioner's function is to put an action plan into effect. Client personnel and resources may be pooled with the practitioner's to accomplish the implementation objectives. The practitioner is responsible to the client for the conduct and management of engagement activities. Examples of implementation services are providing computer system installation and support, executing steps to improve productivity, and assisting with the merger of organizations.
4. *Transaction services*, in which the practitioner's function is to provide services related to a specific client transaction, generally with a third party. Examples of transaction services are insolvency services, valuation services, preparation of information for obtaining financing, analysis of a potential merger or acquisition, and litigation services.
5. *Staff and other support services*, in which the practitioner's function is to provide appropriate staff and possibly other support to perform tasks specified by the client. The staff provided will be directed by the client as circumstances require. Examples of staff and other support services are data processing facilities management, computer programming, bankruptcy trusteeship, and controllership activities.
6. *Product services*, in which the practitioner's function is to provide the client with a product and associated professional services in support of the installation, use, or maintenance of the product. Examples of product services are the sale and delivery of packaged training programs, the sale and implementation of computer software, and the sale and installation of systems development methodologies.

## STANDARDS FOR CONSULTING SERVICES

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6. The general standards of the profession are contained in Rule 201 of the AICPA Code of Professional Conduct [ET section 201.01] and apply to all services performed by members. They are as follows:

**Professional competence.** Undertake only those professional services that the member or the member's firm can reasonably expect to be completed with professional competence.

**Due professional care.** Exercise due professional care in the performance of professional services.

**Planning and supervision.** Adequately plan and supervise the performance of professional services.

**Sufficient relevant data.** Obtain sufficient relevant data to afford a reasonable basis for conclusions or recommendations in relation to any professional services performed.

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<sup>1</sup>The definition of consulting services excludes the following:

1. Services subject to other AICPA Technical Standards such as Statements on Auditing Standards (SASs), Statements on Standards for Attestation Engagements (SSAEs), or Statements on Standards for Accounting and Review Services (SSARs). (These excluded services may be performed in conjunction with consulting services, but only the consulting services are subject to the SSCS.)
2. Engagements specifically to perform tax return preparation, tax planning/advice, tax representation, personal financial planning, or book-keeping services, or situations involving the preparation of written reports or the provision of oral advice on the application of accounting principles to specified transactions or events, either completed or proposed, and the reporting thereof.
3. Recommendations and comments prepared during the same engagement as a direct result of observations made while performing the excluded services.

7. The following additional general standards for all consulting services are promulgated to address the distinctive nature of consulting services in which the understanding with the client may establish valid limitations on the practitioner's performance of services. These standards are established under Rule 202 of the AICPA Code of Professional Conduct [ET section 202.01].

**Client interest.** Serve the client interest by seeking to accomplish the objectives established by the understanding with the client while maintaining integrity and objectivity.<sup>2</sup>

**Understanding with client.** Establish with the client a written or oral understanding about the responsibilities of the parties and the nature, scope, and limitations of services to be performed, and modify the understanding if circumstances require a significant change during the engagement.

**Communication with client.** Inform the client of (a) conflicts of interest that may occur pursuant to interpretations of Rule 102 of the Code of Professional Conduct [ET section 102.03],<sup>3</sup> (b) significant reservations concerning the scope or benefits of the engagement, and (c) significant engagement findings or events.

8. Professional judgment must be used in applying Statements on Standards for Consulting Services in a specific instance since the oral or written understanding with the client may establish constraints within which services are to be provided. For example, the understanding with the client may limit the practitioner's effort with regard to gathering relevant data. The practitioner is not required to decline or withdraw from a consulting engagement when the agreed-upon scope of services includes such limitations.

## CONSULTING SERVICES FOR ATTEST CLIENTS

9. The performance of consulting services for an attest client does not, in and of itself, impair independence.<sup>4</sup> However, members and their firms performing attest services for a client should comply with applicable independence standards, rules and regulations issued by the AICPA, the state boards of accountancy, state CPA societies, and other regulatory agencies.

## EFFECTIVE DATE

10. This statement is effective for engagements accepted on or after January 1, 1992. Early application of the provisions of this statement is permissible.

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<sup>2</sup>Article III of the Code of Professional Conduct describes *integrity* as follows:

Integrity requires a member to be, among other things, honest and candid within the constraints of client confidentiality. Service and the public trust should not be subordinated to personal gain and advantage. Integrity can accommodate the inadvertent error and the honest difference of opinion; it cannot accommodate deceit or subordination of principle.

**Article IV of the Code of Professional Conduct differentiates between *objectivity* and *independence* as follows:**

Objectivity is a state of mind, a quality that lends value to a member's services. It is a distinguishing feature of the profession. The principle of objectivity imposes the obligation to be impartial, intellectually honest, and free of conflicts of interest. Independence precludes relationships that may appear to impair a member's objectivity in rendering attestation services.

<sup>3</sup>Rule 102-2 on Conflicts of Interest states, in part, the following:

A conflict of interest may occur if a member performs a professional service for a client or employer and the member or his or her firm has a significant relationship with another person, entity, product, or service that could be viewed as impairing the member's objectivity. If this significant relationship is disclosed to and consent is obtained from such client, employer, or other appropriate parties, the rule shall not operate or prohibit the performance of the professional service.

<sup>4</sup>AICPA independence standards relate only to the performance of attestation services; objectivity standards apply to all services. See footnote 2.





# APPENDIX 2

## *IBA Standards*

Business Appraisal Standards  
As Promulgated by  
The Institute of Business Appraisers, Inc.  
May 6, 1998  
Publication P-311b

### NOTICE

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This publication supersedes and replaces the following IBA publications:  
P-243 Standards of Business Appraisal Practice  
P-244 Standards for Business Appraisal Reports  
P-311a Business Appraisal Standards

### FOREWORD

Only a small percentage of individuals representing themselves as business appraisers have been tested and certified by a professional business appraisal institute or society.

Those considering employing a business appraiser are undoubtedly doing so in relation to a matter which can have far reaching financial or legal ramifications. Beyond the obvious caution that a proper valuation cannot be done without adequate preparation, competency, and documentation, we suggest verification that the individual is certified as a business appraiser and intends to prepare the appraisal in compliance with these standards.

The Institute of Business Appraisers would like to thank those associated with The Appraisal Foundation and the American Society of Appraisers whose efforts toward developing business appraisal standards and ethics have contributed greatly to the product of this Committee.

### FOUNDING STANDARDS COMMITTEE

David M. Bishop, CBA, Chairman

Larry R. Cook, CBA, CPA

James M. Hansen, CBA, CRA

Steven F. Schroeder, CBA, ASA

Raymond C. Miles, CBA, ASA Ex-Officio

### PREAMBLE

1. Certain professions, by their nature, and by the way they are perceived by the public, are capable of exerting substantial influence on the public welfare. It is our firm conviction that the practice of business appraisal falls in a similar category.

2. The performance of business appraisal/valuation requires a high degree of skill, imposes upon the appraiser a duty of non-advocacy to the client and an obligation to the general public as a third party beneficiary of the work. It is our purpose here to articulate standards by which those who aspire to participation, and those already established, in business appraisal practice may be guided in the ethical and skillful execution of their tasks, and report the results and conclusions of their work in the most effective manner.
3. It is also our purpose to state these standards in such a clear and unequivocal way that the world at large, and especially those who may engage the services of a business appraiser, will know the parameters by which professional competence is to be measured, and by which its professional practitioners wish to be judged.
4. Each standard is qualified as: (i) should, (ii) must, or (iii) shall. *Should* and *must* standards are guidelines. While an appraiser may depart from a should standard without a statement of departure, such departure should be made knowingly. In those instances where the appraiser feels a departure from a must standard is warranted, the report *shall* include a statement of departure. It is the position of the IBA that standards designated *shall* are those from which departure is not justified.
5. These standards have been developed to provide guidance to appraisers who are members of the Institute of Business Appraisers (IBA) and others performing appraisals of closely held businesses, business ownership interests, or securities. They have also been developed to assist in the evaluation and regulation of members of the IBA through creating uniform practices and procedures. Departures from the standards are not intended to provide a basis for civil liability, and should not be presumed to create evidence that any legal duty has been breached, or to imply the creation of any additional relationships or duties other than those specified herein.

## FORMAT

These standards are presented in a naturally progressive format beginning with overall professional conduct and ethics, followed by specific standards applicable to oral reports, expert testimony, letter reports, formal reports, and preliminary reports.

No attempt is made to anticipate every possible scenario or unique circumstance and create standards specific thereto. Conversely, these standards were developed under the premise that the professional business appraiser practicing within the proper standard of care can, on a case-by-case basis, adequately apply these standards in such a manner to result in a competent report while still permitting the flexibility necessary to meet the reasonable requests of the client and the vicissitudes of the assignment.

Within this publication, reference to all individuals has been in the masculine. This is done in the interest of simplicity, and is not intended as a gender bias. Terms should be assumed to be in the singular or plural as appropriate to the context in which they are used.

## STANDARD ONE: PROFESSIONAL CONDUCT & ETHICS

### 1.1 Competence

The achievement of certification as a business appraiser (CBA) is a result of specialized training, study, practice, the successful completion of a proctored examination, and a favorable review of the candidate's actual appraisal reports by The Institute of Business Appraisers' Qualifications Review Committee. To maintain certification, a CBA will adhere to continuing education requirements and periodic recertification as required by IBA.

Prior to accepting an engagement to perform a business appraisal, the appraiser *must* judge his competence to complete the assignment. Should the appraiser have a meaningful lack of knowledge and experience, the appraiser must immediately disclose that fact to the client. If the client desires the appraiser to continue with the assignment, the appraiser *shall* take those steps necessary to perform the appraisal in a competent manner, or take those steps necessary to complete the assignment under the supervision of an appraiser who has the requisite skill, or, with the permission of the client, refer the engagement to a qualified business appraiser.

It is essential that a business appraiser communicate the research and thought processes which led to his opinions and conclusions in a manner that is clear, meaningful, and not misleading. Said communication, whether oral or written, *shall* not be rendered in a careless or negligent manner.

The appraiser as an individual *must* be competent. Software valuation programs and/or excessive reliance on rules of thumb are not surrogates for individual competence.

The professional business appraiser recognizes and understands that compliance with these standards and ethics is an essential part of competence.

## 1.2 Confidentiality

The very fact an appraiser has been retained to value all or a portion of a business enterprise, or its securities, is in itself confidential. Consequently, it is considered unethical for a business appraiser to disclose either the assignment itself or any of the reasonably identifiable contents of an appraisal report without the client's express permission.

## 1.3 Disinterestedness

It is unethical for a business appraiser to accept any assignment when the appraiser has a present or contemplated interest in the property being appraised or a bias for or against any person associated therewith, either directly or indirectly. Such interests include, but are not limited to, present, contemplated, or prospective activity with the business enterprise, its officers, directors, or owners, including possible acquirers or investors.

However, if a prospective client, after full disclosure by the appraiser of said interest or bias, still elects to engage the appraiser, the appraiser may accept the assignment. When accepting such an assignment, the business appraiser *shall* include a Statement of Departure as required by Standard 1.21(b). The Statement of Departure *shall* include a complete disclosure of the interest or bias.

## 1.4 Nonadvocacy vs. Advocacy

Nonadvocacy is considered to be a mandatory standard of appraisal. The appraiser's obligation to serve the public interest assures that the integrity of valuations will be preserved. Hence, the appraiser may only be an advocate for his unbiased process and conclusions. The appraiser must be guided by nothing other than his informed judgment, the dictates of the client (as permitted under these standards), applicable administrative rulings, and the law.

In the event the appraiser is engaged to function not as an appraiser but as an advisor or consultant, he may serve as an advocate. In such instances the appraiser *shall* include a statement of departure which states that any positions taken were taken as an advocate for the client.

## 1.5 Engagement

Prior to performing an appraisal assignment, a business appraiser *should* obtain a written agreement signed by the client or his agent. At the very least, the engagement agreement *should* specify what the appraiser is being engaged to appraise, the function (use) of the appraisal, the purpose (standard of value) including the definition thereof, the effective date of the appraisal, the scope of the appraisal, that the appraisal will be performed on a nonadvocacy basis (see Standard 1.4), the amount of or method for calculating the appraiser's fee, together with the method for payment of same, and an indication of when the client may expect the report.

## 1.6 Coherence and Production

Appraisal reports must have logical organization. Readers' questions that can reasonably be anticipated should be answered. Data in one part of the report should not contradict other portions without reconciliation.

The appraiser should develop contributing conclusions from the various components of the appraisal process, drawing them together in a cross-supporting manner that logically brings the reader to the appraiser's conclusion.

The report should be produced in a manner and style which brings credit to the appraiser and the profession. Typographical errors and the like *shall* be eliminated. In formal reports, page and exhibit numbers *should* be used together with a table of contents or index to enhance readability.

## 1.7 Supportable Opinion

The essence of business appraisal is a supportable opinion. While it is intuitively logical that on a case-by-case basis certain opinions will be based on the informed, but subjective, judgment of the appraiser to a greater degree than others, the appraiser's goal is to have a supportable opinion. The reader should not be expected to accept critical elements such as adjustments to financial statements, the selected capitalization or discount rates, or weightings, without support—even in those instances where the vicissitudes of the assignment dictate that support be primarily based on the informed judgment of the appraiser.

## 1.8 Replicability

The appraiser's procedures and conclusions in the formal report must be presented in sufficient detail to permit the reader to replicate the appraisal process.

## 1.9 Appropriateness

The standard of value, the type of report, and the valuation approaches/methods utilized should be appropriate to the assignment. The material included in the report should be relevant, clear, and cogent.

## 1.10 Jurisdictional Exception

If any part of these standards is contrary to the law or public policy of any jurisdiction, only that part shall be void and of no force and effect in that jurisdiction.

## 1.11 Fiduciary Duty to Clients, and Other Duties

- *Client*: The one employing the business appraiser
- *Third Parties*: Others who could be expected to review the report, e.g., attorneys, accountants, lenders, buyers, investors, regulatory agencies, courts, etc.
- *Public*: Society at large
  - a. *Specialized Character of Business Appraisal*. Seldom are others intimately familiar with the process of business appraisal. Therefore, it is anticipated the business appraiser will use his professional abilities properly, as more fully described throughout these standards.
  - b. *Loyalty, Obedience, and Reasonable Skill and Care*. Agents have such duties to clients. While no fiduciary or other affirmative duty is owed to others, services provided in accordance with these standards should be clear as to meaning and not be misleading to others.

## 1.12 Duty to Profession

- a. *Professional Cooperation and Courtesy*. It is unethical to damage or attempt to damage the professional reputations or interfere with the performance of other business appraisers practicing within the scope of these standards through false or malicious statement or innuendo.
- b. *Conduct*. Every member is reminded that his demeanor and general conduct represents his profession and fellow practitioners, and unprofessional conduct damages more than his individual reputation.
- c. *Cooperation*. Each member *shall* cooperate fully with the efforts of the Institute and/or its Ethics and Discipline Committee when investigating possible activities which are contrary to these standards.

## 1.13 Substance vs. Form

The form of an appraisal report can be oral or written with variations of each. However, it is only the form of the report that varies. The appraiser's responsibilities to gather data, analyze the data, and draw supportable conclusions as applicable to the type of assignment undertaken does not change. Regardless of whether the final

valuation is reported orally, in a summarizing letter report, or a formal report, the appraiser *must* have first completed an appropriate valuation determination process.

A preliminary report is an exception to the above requirement for a thorough, complete work process. By its nature, a preliminary report results from a more cursory evaluation. (See Standard Six, Preliminary Reports.)

### 1.14 Professional Fees

The fees charged for the services of an appraiser are a product of the marketplace; however, a business appraiser is ethically denied the selection of a fee that could in itself call to question the objectivity of the appraiser.

- a. *Finder's Fees.* No appraiser will pay fees, or offer gain in any form, to others to promote the appraiser's work in such a way, or under any circumstances, that will diminish the dignity of, or reflect discredit or disrepute upon, the appraisal profession.
- b. *Referral Fees.* It is the right of an appraiser and, therefore, not unethical to pay a referral fee to another professional for the referral of appraisal assignments.
- c. *Percentage Fees.* To accept any engagement for which the compensation is based on a percentage of the valuation conclusion impairs independence and is thus unethical.

### 1.15 Access to Requisite Data

The business appraiser must decide what documents and/or information are requisite to a competent appraisal.

- a. *Reliability of Data.* An appraiser may rely upon documents and/or information provided by the client and/or his agents without further corroboration, provided the report clearly states he has done so. This right, however, does not abrogate the appraiser's duty to ask or otherwise inquire regarding information which on its surface clearly appears to be incomplete or otherwise inaccurate.
- b. *Pertinent Data.* In situations where access to "pertinent" data is denied to the appraiser, the appraiser may, at his option, withdraw from completing the assignment. However, should the appraiser elect to complete the assignment, the report *must* include a Statement of Departure as required under Standard 1.21Co). Such Statement of Departure *must* describe the limitation and/or restriction and its potential effect on the appraiser's conclusion.
- c. *Essential Data.* When the business appraiser is denied access to data considered essential to a proper appraisal, the business appraiser *should* not proceed with the assignment.

### 1.16 Valuation Approaches/Methods

The approaches/methods used within a given assignment are a matter that must be determined by the business appraiser's professional judgment. The task is generally decided through consideration of the approaches/methods that are conceptually most appropriate and those for which the most reliable data is available.

### 1.17 Definitions

- a. *Terms.* The appraiser should be careful in the use of ambiguous or esoteric terms. Such terms require definition to prevent the reader from applying a different definition.
- b. *Computations.* All computations, particularly those used to compute ratios and weightings, should be clearly defined.

### 1.18 Principal Sources and References

- a. *Formal Report.* A formal report must include a list of the principal sources of non-confidential information and references whenever their inclusion will materially contribute to the clarity and understanding of the report.
- b. *Oral and Informal Reports.* The appraiser's workpapers *must* include a general description of the principal sources of information and references.

### 1.19 Site Tours and Interviews

- a. *Tour.* Familiarity with an appraisal subject is a compelling necessity to a credible valuation. For this reason, it is desirable that a business appraiser make personal inspections or tours of appraisal subject sites whenever possible. When such activities are not performed, the appraiser's report *shall* disclose that the appraisal process did not include a site tour.
- b. *Interview.* An appraiser *should* not perform an appraisal without interviewing the management and other parties considered appropriate in the circumstances.

### 1.20 Eligibility of Data

An appraisal shall be based upon what a reasonably informed person would have knowledge of as of a certain date. This shall be known as the appraisal's "date of valuation" or "effective date" and accordingly reflect the appraiser's supportable conclusion as of that date. Information unavailable or unknown on the date of valuation must not influence the appraiser or contribute to the concluding opinion of value.

- a. *Imminent Change.* The appraiser is sometimes faced with the knowledge of a material imminent change in the business; a change not known of on the "date of valuation," but known as of the appraisal's "report" date. In such an event, the imminent change (positive or negative) *should* not affect the valuation conclusion unless a reasonably informed person could have anticipated the imminent change. However, it is not uncommon for an appraiser to disclose such a change within the narrative portion of the report.
- b. *Data on Guideline Companies.* When an appraiser selects guideline companies, the data on the companies judged sufficiently similar should be information knowable, although perhaps not yet compiled, on or before the appraisal's date of valuation. Additionally, the data on the guideline companies should be for the same accounting period; however, if it is as of a different period, said different period must be on or before the appraisal's date of valuation.

This restriction should apply whether the guideline companies are specific companies or aggregate industry statistics or ratios.

### 1.21 Departure.

A business appraiser may be engaged to perform an appraisal assignment that calls for something different from the work that would routinely result from the appraiser's compliance with all must standards, provided that prior to entering into an agreement to perform such an assignment:

- a. The appraiser is of the opinion that the assignment is not so limited in scope that the resulting report would tend to mislead or confuse the client or other anticipated readers; and
- b. The appraiser has advised the client that the assignment calls for something different than that which would normally result from compliance with applicable standards and, therefore, the report shall include a statement of departure.

### 1.22 Hypothetical Reports

An analysis or appraisal may be prepared under a hypothetical assumption, or series thereof, even though they may appear improbable. However, such a report must clearly state (i) the hypothetical assumption and (ii) the purpose of the analysis or appraisal, and any opinion of value *must* clearly be identified as resulting from a hypothetical assumption.

### 1.23 Dissenting Opinion

- a. *Dissenting Opinion With Other Appraisers.* Collaborating appraisers and review appraisers must sign the report. When a signing appraiser disagrees in whole or in part with any or all of the findings of other appraisers, said dissenting opinion must be included in the report, signed by the dissenting appraiser.

- b. *Dissenting Opinion With Case Law and/or Administrative Regulation.* As any other member of society, appraisers are required to comply with statutory law and statutory definitions as they may exist from time to time and from jurisdiction to jurisdiction. However, case law and/or administrative regulations do not have the same force as statutory law. Therefore, the business appraiser may, when he believes it is warranted, express within the appraisal report a dissenting opinion to case law and/or an administrative regulation.

## 1.24 Membership Designations

It is considered unethical conduct for any individual to explicitly or implicitly indicate he is a Certified Business Appraiser (CBA) when he has not been awarded the designation.

- a. *Certified Business Appraisal Reports.* An appraisal report may be considered a “Certified Report” when it is signed by a Certified Business Appraiser who is taking technical responsibilities for its content.
- b. *Certification of Firms.* The designation Certified Business Appraiser (CBA) is awarded to individuals, not business enterprises; therefore, it is unethical for an appraiser to explicitly or implicitly indicate that the firm is certified.
- c. *Misuse of Certification.* Each Certified Business Appraiser is honor-bound to refrain from any use of his professional designation in connection with any form of activity that may reflect discredit upon his designation, or the organization that conferred it, or deceive his client or the public. As with actual appraisal conclusions, this has been left as a matter of individual judgment and conscience; those who abuse this privilege could be subject to disciplinary action by IBA’s Ethics and Discipline Committee.

## 1.25 Certification

Each written report *must* contain a certification signed by the appraiser. Additional appraisers signing the report *must* accept responsibility for the full contents of the report. [In the event of a dissenting opinion, see Standard 1.23(a).] The certificate must be similar in content to the following:

- a. That to the best of the appraiser’s knowledge, the statements of fact contained in the report are true and correct.
- b. That the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are the appraiser’s personal, unbiased professional analyses, opinions, and conclusions.
- c. That the appraisal was performed on a basis of nonadvocacy, including a statement that the appraiser has no present or contemplated interest in the property appraised and has no personal bias with respect to the parties involved, or a complete disclosure of any such interest or bias.
- d. That the appraiser’s compensation is not contingent on an action or event resulting from the analyses, opinions, or conclusions in, or the use of, the report.
- e. That the appraiser’s analyses, opinions, and conclusions were developed and that the report has been prepared in conformity with the Business Appraisal Standards of The Institute of Business Appraisers.
- f. That no one provided significant professional assistance to the person signing the report. However, if there are exceptions to this, then the name of each individual providing significant professional assistance must be disclosed.

## 1.26 Qualifications of the Appraiser

The reader cannot fully judge the quality of the appraisal report without being given the opportunity to judge the appraiser’s qualifications. Therefore, each appraisal report must include the appraiser’s qualifications in a manner the appraiser believes accurately presents his appraisal experience, certification, professional activities, and other qualifications.

## 1.27 Force and Effect

These standards shall be in full force and effect on the date of their issuance. (Earlier compliance is encouraged.) Any and all prior standards regarding business appraisal practices, reports, conduct, or ethics are superseded. Future amendments, to be effective, *shall* be initiated and passed in accordance with Standard 1.29.



## 1.28 Enforcement

The enforcement of these standards, including amendments or modifications as may occur in accordance with Standard 1.29, *shall* be the responsibility and duty of all members as to their own performance, and otherwise by the standing Ethics and Discipline Committee of The Institute of Business Appraisers and/or such other individuals or committees as are designated from time to time by the governing body of The Institute of Business Appraisers.

## 1.29 Amendments to Standards

The Standards Committee of The Institute of Business Appraisers is a standing committee. Certified members desiring to propose amendments, additions, or deletions to these standards should submit a clear expression of the proposed change to The Institute of Business Appraisers, Attention: Chairperson, Standards Committee. The chairperson reserves the right to return any submitted change for further clarification as to the precise change proposed. The chairperson shall distribute copies of the proposed change to the members of the Standards Committee for their opinions on the proposed change. Should two-thirds or more of the Committee support the change, it shall be endorsed by the Committee and an exposure draft be provided to all CBAs. The exposure draft shall provide for a thirty-day period for the vote of all CBAs. In the event that those certified members who vote “No” exceeds 50% of all CBAs (those voting plus those not voting), the Committee’s vote will be overruled and the proposed change will die for lack of support. Otherwise, the change will be adopted as of the first day of the month following the date copies of the amendments are provided to all members.

## 1.30 Signing Reports

Each written report *must* be signed by the appraiser and any other appraisers, including those signing as a “Review Appraiser” or “Collaborating Appraiser,” shall accept responsibility for the full content of the report. [In the event of a dissenting opinion, see Standard 1.23(a).]

- a. *Exception.* Should the policy of a given firm be that all reports are to be signed by a person authorized to sign reports on behalf of the firm, an exception to Standards 1.30 and 1.25 is permitted. However, in this event:
  - (i) The designated signer shall take technical responsibility for the full content of the report; and
  - (ii) The report may not be considered a “Certified Appraisal Report” unless a Certified Business Appraiser taking technical responsibility signs the report.
  - (iii) The fact that a given appraisal report is signed under 1.30(a) is not intended in any way to justify or excuse deviation from any standard that would otherwise apply.

# STANDARD TWO: ORAL APPRAISAL REPORTS

## 2.1 Usage

In general, written reports are preferred; however, oral appraisal reports are permitted when ordered by the client.

## 2.2 Mandatory Content

When presenting an oral report, the business appraiser *shall* in a manner that is clear and not misleading communicate the following:

- a. *Introduction.* Identify the client, and set forth the property being appraised, the purpose and function of the appraisal, the definition of the standard of value, and the effective date of the appraisal.
- b. *Assumptions and Limiting Conditions.* Disclose any extraordinary assumptions or limiting conditions that in the appraiser’s judgment affected the value.
- c. *Disinterestedness.* That the appraisal was performed on a basis of nonadvocacy, including a statement that the appraiser has no present or contemplated interest in the property appraised and has no personal bias with respect to the parties involved, or a complete disclosure of any such interest or bias. [See Standard 1.3.]

- d. *Valuation Conclusion*. Represents a concluding opinion of value expressed as:
- (i) statement of a specific opinion of value; or
  - (ii) range of values; or
  - (iii) a preliminary estimate which *must* include a statement that an opinion of value resulting from a formal report might be different and that difference might be material. (See also Standard Six, Preliminary Reports.)

## 2.3 Conformity

Oral appraisal reports should comply with all applicable sections of Standard One, Professional Conduct and Ethics.

## 2.4 Written Follow-up

By its nature, the oral report is less detailed than the written report. Therefore, whenever feasible, it is suggested that oral reports be followed by a written presentation of the salient features of the oral report. In general, the written follow-up *should* include:

- a. *Assumptions and Limiting Conditions*. All applicable assumptions and limiting conditions.
- b. *Support*. In general, a brief presentation of the information considered, the appraisal approaches used, and the research and thought processes that support the appraiser's analyses, opinions, and conclusions.
- c. *Appraiser's Certification* as specified in section 1.25.

## 2.5 Recordkeeping.

An appraiser *should* retain written records of appraisal reports for a period of at least five (5) years after preparation or at least two (2) years after final disposition of any judicial proceeding in which the appraiser gave testimony, whichever period expires last.

# STANDARD THREE: EXPERT TESTIMONY

## 3.1 Definition

Expert testimony is an oral report given in the form of testimony in a deposition and/or on the witness stand before a court of proper jurisdiction or other trier of fact.

## 3.2 Mandatory Content

The appraiser shall answer all questions put to him in a manner that is clear and not misleading. When giving testimony, the appraiser shall not advocate any position that is incompatible with the appraiser's obligation of nonadvocacy; i.e., it is unethical for the appraiser to suppress any facts, data, or opinions which are adverse to the case his client is trying to establish, or to overemphasize any facts, data, or opinions which are favorable to his client's case, or in any other particulars become an advocate. The expert witness must at least comply in a manner that is clear and not misleading with the following:

- a. *Introduction*. Identify the client, and set forth the property being appraised, the purpose and function of the appraisal, the definition of the standard of value, and the effective date of the appraisal.
- b. *Assumptions and Limiting Conditions*. Disclose any extraordinary assumptions or limiting conditions that in the appraiser's judgment affected the value.
- c. *Disinterestedness*. That the appraisal was performed on a basis of nonadvocacy, including a statement that the appraiser has no present or contemplated interest in the property appraised and has no personal bias with respect to the parties involved, or a complete disclosure of any such interest or bias. (See Standard 1.3.)

- d. *Valuation Conclusion.* Any concluding opinion of value may be expressed as:
- (i) a statement of a specific opinion of value; or
  - (ii) a range of values; or
  - (iii) a preliminary estimate which must include a statement that an opinion of value resulting from a formal report may be different and that difference may be material. (See also Standard Six, Preliminary Reports.)

### 3.3 Conformity

Expert testimony reports *should* comply with all applicable sections of Standard One, Professional Conduct and Ethics.

### 3.4 Recordkeeping

An appraiser *should* retain written records of appraisal reports for a period of at least five (5) years after preparation or at least two (2) years after final disposition of any judicial proceeding in which the appraiser gave testimony, whichever period expires last.

## STANDARD FOUR: LETTER FORM WRITTEN APPRAISAL REPORTS

### 4.1 Definition

An appraiser's written report can be in the form of a letter report or a formal report. The letter report, which is shorter than the formal report, presents conclusions together with brief generalized comments. This type of report is often referred to as a short-form report, letter opinion, or an informal report.

By its nature, the letter form report is an instrument of brevity. It should contain at least a summary of the material factors that led to its conclusions, but it is usually intended by the parties to reduce the normal appraisal burden of writing a comprehensive report and thereby allow the client to realize some economic benefit. However, the appraiser is still required to perform materially the same investigation and analysis as would be required for a comprehensive formal report and maintain in his file the workpapers necessary to support the conclusions stated in the letter report.

### 4.2 Conformity

The letter form written report *must* comply with all applicable provisions of Business Appraisal Standards, Standard One, Professional Conduct and Ethics.

### 4.3 Mandatory Content

All letter form written appraisal reports *shall* minimally set forth in a manner that is clear and not misleading:

- a. Identify the client, and set forth a description of the business enterprise, security, or other tangible and/or intangible property being appraised.
- b. Form of the organization and, if incorporated, the state of incorporation, together with a description, adequate to the assignment, of all classes of securities outstanding and a list of shareholders whose interest should, in the appraiser's judgment, be specified. If a partnership, the type and the state of filing, together with a list of those partners, whether general or limited, whose interest should, in the appraiser's judgment, be specified.
- c. The purpose (standard of value) of the appraisal.
- d. The function (use) of the appraisal.
- e. The definition of the standard of value that is the purpose of the appraisal.
- f. The effective ("as of") date of the appraisal.
- g. The date the appraisal report was prepared.

- h. The report's assumptions and limiting conditions.
- i. Any special factors that affected the opinion of value. Such factors include, but are not limited to, buy-sell agreements, restrictive stock agreements, corporate articles, bylaws and resolutions, partnership agreements, litigation, regulatory compliance, or environmental hazards.
- j. Applicable discounts and premiums such as minority interest, control, marketability, or lack thereof.
- k. A certification consistent with the intent of section 1.25.

#### 4.4 Distribution of Report

The letter report *should* include a clear statement of the expected distribution of the report.

#### 4.5 Valuation Conclusion

The letter report *must* include a clear statement of the appraiser's concluding opinion of value expressed as appropriate to the assignment:

- a. a statement of a specific opinion of value; or
- b. a range of values; or
- c. a preliminary estimate which must include a statement that an opinion of value resulting from a formal report might be different and that difference might be material. (See also Standard Six, Preliminary Reports.)

#### 4.6 Transmittal Letter

If a transmittal letter is used, it *should* include a summary of the engagement. It may be structured in the form of a letter, an executive summary, or a similar rendering. However, regardless of the structure used, if a transmittal is used, it *shall* refer to the report in a manner sufficient to discourage any attempt to remove and use the transmittal without the report.

#### 4.7 Recordkeeping

An appraiser should retain written records of appraisal reports for a period of at least five (5) years after preparation or at least two (2) years after final disposition of any judicial proceeding in which the appraiser gave testimony, whichever period expires last.

### STANDARD FIVE: FORMAL WRITTEN APPRAISAL REPORTS

#### 5.1 Definition

The formal appraisal report is a comprehensive business appraisal report prepared to contain, at a minimum, the requirements described within this standard. It is sometimes called the long form, narrative, or comprehensive report.

#### 5.2 Conformity

The formal written report must comply with all applicable provisions of Business Appraisal Standards, Standard One, Professional Conduct and Ethics.

#### 5.3 Mandatory Content

All formal appraisal reports shall minimally set forth the following items in a manner that is clear and not misleading, including detail sufficient to permit the reader to reasonably replicate the appraiser's procedures:

- a. Identify the client, and set forth a description of the business enterprise, security, or other tangible and/or intangible property being appraised.
- b. Form of the organization and, if incorporated, the state of incorporation, together with a description, adequate to the assignment, of all classes of securities outstanding and a list of shareholders whose interest

should, in the appraiser's judgment, be specified. If a partnership, the type and the state of filing, together with a list of those partners, whether general or limited, whose interest should, in the appraiser's judgment, be specified.

- c. The purpose (standard of value) of the appraisal.
- d. The function (use) of the appraisal.
- e. The definition of the standard of value that is the purpose of the appraisal.
- f. The effective ("as of") date of the appraisal.
- g. The date the appraisal report was prepared.
- h. The report's assumptions and limiting conditions.
- i. The principal sources and references used by the appraiser.
- j. The consideration of relevant data regarding:
  - (i) The nature and history of the business.
  - (ii) The present economic conditions and the outlook affecting the business, its industry, and the general economy.
  - (iii) Past results, current operations, and future prospects of the business.
  - (iv) Past sales of interests in the business enterprise being appraised.
  - (v) Sales of similar businesses or interests therein, whether closely held or publicly held.
  - (vi) The valuation approaches/methods considered and rejected, the approaches/methods utilized, and the research, sources, computations, and reasoning that supports the appraiser's analyses, opinions, and conclusions.
  - (vii) Any special factors that affected the opinion of value. Such factors include, but are not limited to, buy-sell agreements, restrictive stock agreements, corporate articles, bylaws and resolutions, partnership agreements, litigation, regulatory compliance, or environmental hazards.
  - (viii) Applicable discounts and premiums, such as minority interest, control, marketability or lack thereof.
  - (ix) When valuing a majority interest in a business on a "going concern" basis, consider whether the business' highest value may be achieved on a liquidation basis.
  - (x) A Certification consistent with the intent of section 1.25.

## 5.4 Distribution of Report

The formal report *should* include a clear statement of the expected distribution of the report.

## 5.5 Valuation Conclusion

The formal report *must* include a clear statement of the appraiser's concluding opinion of value expressed as appropriate to the assignment:

- a. a statement of a specific opinion of value; or
- b. a range of values.

## 5.6 Transmittal Letter

If a transmittal letter is used, it *should* include a summary of the engagement. It may be structured in the form of a letter, an executive summary, or a similar rendering. However, regardless of the structure, if used, the transmittal *shall* refer to the report in a manner sufficient to discourage any attempt to remove and use the transmittal without the report.

## 5.7 Recordkeeping

An appraiser *should* retain written records of appraisal reports for a period of at least five (5) years after preparation or at least two (2) years after final disposition of any judicial proceeding in which the appraiser gave testimony, whichever period expires last.

## STANDARD SIX: PRELIMINARY REPORTS

### 6.1 Definition

A brief oral or written report reflecting the appraiser's limited opinion.

A preliminary report must clearly identify any valuation as a "limited" opinion of value as the appraiser has not performed the detailed investigation and analysis essential to a cogent appraisal. [See Standard 6.5.]

### 6.2 Conformity

The preliminary report must comply with all applicable provisions of Business Appraisal Standards, Standard One, Professional Conduct and Ethics.

### 6.3 Usage

The preliminary report has use when a client desires the appraiser's limited opinion.

### 6.4 Disclosure

The presentation of a preliminary opinion without disclosing its limitations is unethical.

### 6.5 Departure

If an appraiser makes a preliminary report without including a clear statement that it is preliminary, there is the possibility a user of the report could accord the report and its limited opinion of value a greater degree of accuracy and reliability than is inherent in the preliminary report process. Therefore, all preliminary reports *shall* include a Statement of Departure in accordance with Standard 1.21(b). The Statement of Departure *shall* include a statement that the report is preliminary and the conclusion subject to change following a proper appraisal and that said change could be material.

### 6.6 Oral vs. Written

All preliminary reports, whether oral or written, are subject to Standard Six.

### 6.7 Recordkeeping

An appraiser *should* retain written records of appraisal reports for a period of at least five (5) years after preparation or at least two (2) years after final disposition of any judicial proceeding in which the appraiser gave testimony, whichever period expires last.





# APPENDIX 3

## *ASA Standards*

### AMERICAN SOCIETY OF APPRAISERS BUSINESS VALUATION STANDARDS PREAMBLE APPROVED BY THE ASA BOARD OF GOVERNORS, SEPTEMBER 1992

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- I. To enhance and maintain the quality of business valuations for the benefit of the business valuation profession and users of business valuations, the American Society of Appraisers, through its Business Valuation Committee, has adopted these standards.
- II. The American Society of Appraisers (in its Principles of Appraisal Practice and Code of Ethics) and the Appraisal Foundation (in its Uniform Standards of Professional Appraisal Practice) have established authoritative principles and a code of professional ethics. These standards include these requirements, either explicitly or by reference, and are designed to clarify and provide additional requirements specifically applicable to the valuation of businesses, business ownership interests, or securities.
- III. These standards incorporate, where appropriate, all relevant business valuation standards adopted by the American Society of Appraisers through its Business Valuation Committee.
- IV. These standards provide minimum criteria to be followed by business appraisers in the valuation of businesses, business ownership interests, or securities.
- V. If, in the opinion of the appraiser, circumstances of a specific business valuation assignment dictate a departure from any provisions of any Standard, such departure must be disclosed and will apply only to the specific departure.
- VI. These Standards are designed to provide guidance to ASA Appraisers conducting business valuations and to provide a structure for regulating conduct of members of the ASA through Uniform Practices and Procedures. Deviations from the Standards are not designed or intended to be the basis of any civil liability and should not create any presumption or evidence that a legal duty has been breached or create any special relationship between the appraiser and any other person.

### BVS-I. GENERAL REQUIREMENTS FOR DEVELOPING A BUSINESS VALUATION

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#### I. PREAMBLE

- A. This standard is required to be followed in all valuations of businesses, business ownership interests, and securities by all members of the American Society of Appraisers, be they Candidates, Accredited Members (AM), Accredited Senior Appraisers (ASA), or Fellows (FASA).
- B. The purpose of this standard is to define and describe the general requirements for developing the valuation of businesses, business ownership interests, or securities.
- C. This standard incorporates the general preamble to the Business Valuation Standards of the American Society of Appraisers.

## II. THE VALUATION ASSIGNMENT SHALL BE APPROPRIATELY DEFINED

- A. In developing a business valuation, an appraiser must identify and define the following:
  - 1. The business, business ownership interest, or security to be valued
  - 2. The effective date of the appraisal
  - 3. The standard of value
  - 4. The purpose and use of the valuation
- B. The nature and scope of the assignment must be defined. Acceptable scopes of work would generally be of three types as delineated below. Other scopes of work should be explained and described.
  - 1. Appraisal
    - a. The objective of an appraisal is to express an unambiguous opinion as to the value of the business, business ownership interest, or security, which is supported by all procedures that the appraiser deemed to be relevant to the valuation.
    - b. An appraisal has the following qualities:
      - (1) It is expressed as a single dollar amount or as a range.
      - (2) It considers all relevant information as of the appraisal date available to the appraiser at the time of performance of the valuation.
      - (3) The appraiser conducts appropriate procedures to collect and analyze all information expected to be relevant to the valuation.
      - (4) The valuation is based upon consideration of all conceptual approaches deemed to be relevant by the appraiser.
  - 2. Limited Appraisal
    - a. The objective of a limited appraisal is to express an estimate as to the value of a business, business ownership interest, or security, which lacks the performance of additional procedures that are required in an appraisal.
    - b. A limited appraisal has the following qualities:
      - (1) It is expressed as a single dollar amount or as a range.
      - (2) It is based upon consideration of limited relevant information.
      - (3) The appraiser conducts only limited procedures to collect and analyze the information which such appraiser considers necessary to support the conclusion presented.
      - (4) The valuation is based upon the conceptual approach(es) deemed by the appraiser to be most appropriate.
  - 3. Calculations
    - a. The objective of calculations is to provide an approximate indication of value based upon the performance of limited procedures agreed upon by the appraiser and the client.
    - b. Calculations have the following qualities:
      - (1) They may be expressed as a single dollar amount or as a range.
      - (2) They may be based upon consideration of only limited relevant information.
      - (3) The appraiser performs limited information collection and analysis procedures.
      - (4) The calculations may be based upon conceptual approaches as agreed upon with the client.

## III. INFORMATION COLLECTION AND ANALYSIS

The appraiser shall gather, analyze, and adjust relevant information to perform the valuation as appropriate to the scope of work. Such information shall include the following:

- A. Characteristics of the business, business ownership interest, or security to be valued including rights, privileges and conditions, quantity, factors affecting control, and agreements restricting sale or transfer.
- B. Nature, history, and outlook of the business.
- C. Historical financial information for the business.
- D. Assets and liabilities of the business.

- E. Nature and conditions of the relevant industries which have an impact on the business.
- F. Economic factors affecting the business.
- G. Capital markets providing relevant information, e.g., available rates of return on alternative investments, relevant public stock transactions, and relevant mergers and acquisitions.
- H. Prior transactions involving the subject business, interest in the subject business, or its securities.
- I. Other information deemed by the appraiser to be relevant.

## IV. APPROACHES, METHODS, AND PROCEDURES

- A. The appraiser shall select and apply appropriate valuation approaches, methods, and procedures.
- B. The appraiser shall develop a conclusion of value pursuant to the valuation assignment as defined, considering the relevant valuation approaches, methods, and procedures, and appropriate premiums and discounts, if any.

## V. DOCUMENTATION AND RETENTION

The appraiser shall appropriately document and retain all information and work product that were relied on in reaching the conclusion.

## VI. REPORTING

The appraiser shall report to the client the conclusion of value in an appropriate written or oral format. The report must meet the requirements of Standard 10 of The Uniform Standards of Professional Appraisal Practice. In the event the assignment results in a comprehensive written report, the report shall meet the requirements of BVS-VII.

# BVS-II. FINANCIAL STATEMENT ADJUSTMENTS

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## I. PREAMBLE

- A. This standard is required to be followed in all valuations of businesses, business ownership interests, and securities by all members of the American Society of Appraisers, be they Candidates, Accredited Members (AM), Accredited Senior Appraisers (ASA), or Fellows (FASA).
- B. The purpose of this standard is to define and describe the requirements for making financial statement adjustments in valuation of businesses, business ownership interests, and securities.
- C. This present standard is applicable to appraisals and may not necessarily be applicable to limited appraisals and calculations as defined in BVS-I, Section II.B.
- D. This standard incorporates the general preamble to the Business Valuation Standards of the American Society of Appraisers.

## II. CONCEPTUAL FRAMEWORK

- A. Financial statements should be analyzed and, if appropriate, adjusted as a procedure in the valuation process. Financial statements to be analyzed include those of the subject entity and any entities used as guideline companies.
- B. Financial statement adjustments are modifications to reported financial information that are relevant and significant to the appraisal process. Adjustments may be necessary in order to make the financial statements more meaningful for the appraisal process. Adjustments may be *appropriate* for the following reasons, among others: (1) To present financial data of the subject and guideline companies on a consistent basis; (2) To adjust from reported values to current values; (3) To adjust revenues and expenses to levels which are reasonably representative of continuing results; and (4) To adjust for non-operating assets and liabilities and the related revenue and expenses.
- C. Financial statement adjustments are made for the purpose of assisting the appraiser in reaching a valuation conclusion and for no other purpose.

### III. DOCUMENTATION OF ADJUSTMENTS

Adjustments made should be fully described and supported.

## BVS-III. ASSET-BASED APPROACH TO BUSINESS VALUATION

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### I. PREAMBLE

- A. This standard is required to be followed in all valuations of businesses, business ownership interests, and securities by all members of the American Society of Appraisers, be they Candidates, Accredited Members (AM), Accredited Senior Appraisers (ASA), or Fellows (FASA).
- B. The purpose of this standard is to define and describe the requirements for the use of the Asset-Based Approach to business valuation and the circumstances in which it is appropriate.
- C. This present standard is applicable to appraisals and may not necessarily be applicable to limited appraisals and calculations as defined in BVS-1, Section II.B.
- D. This standard incorporates the general preamble to the Business Valuation Standards of the American Society of Appraisers.

### II. THE ASSET-BASED APPROACH

- A. In business valuation the Asset-Based Approach may be analogous to the Cost Approach of other disciplines.
- B. Assets, liabilities, and equity relate to a business that is an operating company, a holding company, or a combination thereof (mixed business).
  1. An operating company is a business which conducts an economic activity by generating and selling, or trading, in a product or service.
  2. A holding company is a business which derives its revenues by receiving returns on its assets, which may include operating companies and/or other businesses.
- C. The Asset-Based Approach should be considered in valuations conducted at the total entity level and involving the following:
  1. An investment or real estate holding company.
  2. A business appraised on a basis other than as a going concern. Valuations of particular *ownership interests* in an entity may or may not require the use of the Asset-Based Approach.
- D. The Asset-Based Approach should not be the sole appraisal approach used in assignments relating to operating companies appraised as going concerns unless it is customarily used by sellers and buyers. In such cases, the appraiser must support the selection of this approach.

## BVS-IV. INCOME APPROACH TO BUSINESS VALUATION

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### I. PREAMBLE

- A. This standard is required to be followed in all valuations of businesses, business ownership interests, and securities by all members of the American Society of Appraisers, be they Candidates, Accredited Members (AM), Accredited Senior Appraisers (ASA), or Fellows (FASA).
- B. The purpose of this standard is to define and describe the requirements for use of the income approach in valuation of businesses, business ownership interests, and securities, but not the reporting thereof.
- C. This present standard is applicable to appraisals and may not necessarily be applicable to limited appraisals and calculations as defined in BVS-I, Section II.B.
- D. This standard incorporates the general preamble to the Business Valuation Standards of the American Society of Appraisers.

## II. THE INCOME APPROACH

- A. The income approach is a general way of determining a value indication of a business, business ownership interest, or security using one or more methods wherein a value is determined by convening anticipated benefits.
- B. Both capitalization of benefits methods and discounted future benefits methods are acceptable. In capitalization of benefits methods, a representative benefit level is divided or multiplied by a capitalization factor to convert the benefit to value. In discounted future benefits methods, benefits are estimated for each of several future periods. These benefits are converted to value by the application of a discount rate using present value techniques.

## III. ANTICIPATED BENEFITS

- A. Anticipated benefits, as used in the income approach, are expressed in monetary terms. Depending on the nature of the business, business ownership interest, or security being appraised and other relevant factors, anticipated benefits may be reasonably represented by such items as net cash flow, dividends, and various forms of earnings.
- B. Anticipated benefits should be estimated considering such items as the nature, capital structure, and historical performance of the related business entity, expected future outlook for the business entity and relevant industries, and relevant economic factors.

## IV. CONVERSION OF ANTICIPATED BENEFIT

- A. Anticipated benefits are converted to value using procedures which consider the expected growth and timing of the benefits, the risk profile of the benefits stream, and the time value of money.
- B. The conversion of anticipated benefits to value normally requires the determination of a capitalization rate or discount rate. In determining the appropriate rate, the appraiser should consider such factors as the level of interest rates, rates of return expected by investors on relevant investments, and the risk characteristics of the anticipated benefits.
- C. In discounted future benefits methods, expected growth is considered in estimating the future stream of benefits. In capitalization of benefits methods, expected growth is incorporated in the capitalization rate.
- D. The rate of return used (capitalization rate or discount rate) should be consistent with the type of anticipated benefits used. For example, pre-tax rates of return should be used with pre-tax benefits, common equity rates of return should be used with common equity benefits, and net cash flow rates should be used with net cash flow benefits.

# BVS-V. MARKET APPROACH TO BUSINESS VALUATION

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## I. PREAMBLE

- A. This standard is required to be followed in all valuations of businesses, business ownership interests, and securities by all members of the American Society of Appraisers, be they Candidates, Accredited Members (AM), Accredited Senior Appraisers (ASA), or Fellows (FASA).
- B. The purpose of this standard is to define and describe the requirements for use of the market approach in valuation of businesses, business ownership interests, and securities, but not the reporting therefor.
- C. This present standard is applicable to appraisals and may not necessarily be applicable to limited appraisals and calculations as defined in BVS-I, Section II.B.
- D. This standard incorporates the general preamble to the Business Valuation Standards of the American Society of Appraisers.

## II. THE MARKET APPROACH

- A. The market approach is a general way of determining a value indication of a business, business ownership interest, or security using one or more methods that compare the subject to similar businesses, business ownership interests, and securities that have been sold.
- B. Examples of market approach methods include the Guideline Company Method and analysis of prior transactions in the ownership of the subject company.

## III. REASONABLE BASIS FOR COMPARISON

- A. The investment used for comparison must provide a reasonable basis for the comparison.
- B. Factors to be considered in judging whether a reasonable basis for comparison exists include:
  - 1. Sufficient similarity of qualitative and quantitative investment characteristics.
  - 2. Amount and verifiability of data known about the similar investment.
  - 3. Whether or not the price of the similar investment was obtained in an arm's length transaction, or a forced or distress sale.

## IV. MANNER OF COMPARISON

- A. The comparison must be made in a meaningful manner and must not be misleading. Such comparisons are normally made through the use of valuation ratios. The computation and use of such ratios should provide meaningful insight about the pricing of the subject considering all relevant factors. Accordingly, care should be exercised in the following:
  - 1. Selection of underlying data used for the ratio.
  - 2. Selection of the time period and/or averaging method used for the underlying data.
  - 3. Manner of computing and comparing the subject's underlying data.
  - 4. The timing of the price data used in the ratio.
- B. In general, comparisons should be made using comparable definitions of the components of the valuation ratios. However, where appropriate, valuation ratios based on components which are reasonably representative of continuing results may be used.

## V. RULES OF THUMB

- A. Rules of thumb may provide insight on the value of a business, business ownership interest, or security. However, value indications derived from the use of rules of thumb should not be given substantial weight unless supported by other valuation methods and it can be established that knowledgeable buyers and sellers place substantial reliance on them.

# BVS-VI. REACHING A CONCLUSION OF VALUE

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## I. PREAMBLE

- A. This standard is required to be followed in all valuations of businesses, business ownership interests, and securities by all members of the American Society of Appraisers, be they Candidates, Accredited Members (AM), Accredited Senior Appraisers (ASA), or Fellows (FASA).
- B. The purpose of this standard is to define and describe the requirements for reaching a final conclusion of value in valuation of businesses, business ownership interests, or securities.
- C. This present standard is applicable to appraisals and may not necessarily be applicable to limited appraisals and calculations as defined in BVS-I, Section II.B.
- D. This standard incorporates the general preamble to the Business Valuation Standards of the American Society of Appraisers.

## II. GENERAL

- A. The conclusion of value reached by the appraiser shall be based upon the applicable standard of value, the purpose and intended use of the valuation, and all relevant information obtained as of the appraisal date in carrying out the scope of the assignment.
- B. The conclusion of value reached by the appraiser will be based on value indications resulting from one or more methods performed under one or more appraisal approaches.

## III. SELECTION AND WEIGHING OF METHODS

- A. The selection of and reliance on the appropriate method and procedures depends on the judgment of the appraiser and not on the basis of any prescribed formula. One or more approaches may not be relevant to the particular situation. More than one method under an approach may be relevant to a particular situation.
- B. The appraiser must use informed judgment when determining the relative weight to be accorded to indications of value reached on the basis of various methods or whether an indication of value from a single method should dominate. The appraiser's judgment may be presented either in general terms or in terms of mathematical weighting of the indicated values reflected in the conclusion. In any case, the appraiser should provide the rationale for the selection or weighing of the method or methods relied on in reaching the conclusion.
- C. In formulating a judgment about the relative weights to be accorded to indications of value determined under each method or whether an indication of value from a single method should dominate, the appraiser should consider factors such as:
  1. The applicable standard of value;
  2. The purpose and intended use of the valuation;
  3. Whether the subject is an operating company, a real estate or investment holding company, or a company with substantial non-operating or excess assets;
  4. Quality and reliability of data underlying the indication of value;
  5. Such other factors which, in the opinion of the appraiser, are appropriate for consideration.

## IV. ADDITIONAL FACTORS TO CONSIDER

As appropriate for the valuation assignment as defined, and if not considered in the process of determining and weighting the indications of value provided by various procedures, the appraiser should separately consider the following factors in reaching a final conclusion of value:

- A. Marketability, or lack thereof, considering the nature of the business, business ownership interest or security, the effect of relevant contractual and legal restrictions, and the condition of the markets.
- B. Ability of the appraised interest to control the operation, sale, or liquidation of the relevant business.
- C. Such other factors which, in the opinion of the appraiser, are appropriate for consideration.

# BVS-VII. COMPREHENSIVE WRITTEN BUSINESS VALUATION REPORT

## I. PREAMBLE

- A. This standard is required to be followed in the preparation of comprehensive, written business valuation reports by all members of the American Society of Appraisers, be they Candidates, Accredited Members (AM), Accredited Senior Appraisers (ASA), or Fellows (FASA).
- B. The purpose of this standard is to define and describe the requirements for the written communication of the results of a business valuation, analysis, or opinion, but not the conduct thereof.
- C. This standard incorporates the general preamble to the Business Valuation Standards of the American Society of Appraisers.



## II. SIGNATURE AND CERTIFICATION

- A. An appraiser assumes responsibility for the statements made in the comprehensive, written report and indicates the acceptance of that responsibility by signing the report. To comply with this standard, a comprehensive, written report must be signed by the appraiser. For the purpose of this standard, the appraiser is the individual or entity undertaking the appraisal assignment under a contract with the client.
- B. Clearly, at least one individual is responsible for the valuation conclusion(s) expressed in the report. A report must contain a certification, as required by Standard 10 of the *Uniform Standards of Professional Appraisal Practice* of The Appraisal Foundation, in which the individuals responsible for the valuation conclusion(s) must be identified.

## III. ASSUMPTIONS AND LIMITING CONDITIONS

The following assumptions and/or limiting conditions must be stated:

- A. Pertaining to bias—a report must contain a statement that the appraiser has no interest in the asset appraised, or other conflict, which could cause a question as to the appraiser's independence or objectivity, or if such an interest or conflict exists, it must be disclosed.
- B. Pertaining to data used—where appropriate, a report must indicate that an appraiser relied on data supplied by others, without further verification by the appraiser, as well as the sources which were relied on.
- C. Pertaining to validity of the valuation—a report must contain a statement that a valuation is valid only for the valuation date indicated and for the purpose stated.

## IV. DEFINITION OF THE VALUATION ASSIGNMENT

The precise definition of the valuation assignment is a key aspect of communication with users of the report. The following are key components of such a definition and must be included in the report:

- A. The business interest valued must be clearly defined, such as “100 shares of the Class A common stock of the XYZ Corporation” or “a 20% limited partnership interest in the ABC Limited Partnership.” The existence, rights, and/or restrictions of other classes of ownership in the business appraised must also be adequately described if they are relevant to the conclusion of value.
- B. The purpose and use of the valuation must be clearly stated, such as “a determination of fair market value for ESOP purposes” or “a determination of fair value for dissenter's fight purposes.” If a valuation is being done pursuant to a particular statute, the particular statute must be referenced.
  - 1. The standard of value used in the valuation must be stated and defined. The premise of value, such as a valuation on a minority interest or a control basis, must be stated.
  - 2. The appraisal date must be clearly defined. The date of the preparation of the report must be indicated.

## V. BUSINESS DESCRIPTION

A comprehensive, written business valuation report must include a business description which covers all relevant factual areas, such as:

- 1. Form of organization (corporation, partnership, etc.)
- 2. History
- 3. Products and/or services and markets and customers
- 4. Management
- 5. Major assets, both tangible and intangible
- 6. Outlook for the economy, industry, and company
- 7. Past transactional evidence of value
- 8. Sensitivity to seasonal or cyclical factors
- 9. Competition
- 10. Sources of information used

## VI. FINANCIAL ANALYSIS

- A. An analysis and discussion of a firm's financial statements is an integral part of a business valuation and must be included. Exhibits summarizing balance sheets and income statements for a period of years sufficient to the purpose of the valuation and the nature of the subject company must be included in the valuation report.
- B. Any adjustments made to the reported financial data must be fully explained.
- C. If projections of balance sheets or income statements were utilized in the valuation, key assumptions underlying the projections must be included and discussed.
- D. If appropriate, the company's financial results relative to those of its industry must be discussed.

## VII. VALUATION METHODOLOGY

- A. The valuation method or methods selected, and the reasons for their selection, must be discussed. The steps followed in the application of the method or methods selected must be described and must lead to the valuation conclusion.
- B. The report must include an explanation of how any variables, such as discount rates, capitalization rates, or valuation multiples, were determined and used. The rationale and/or supporting data for any premiums or discounts must be clearly presented.

## VIII. COMPREHENSIVE, WRITTEN REPORT FORMAT

The comprehensive, written report format must provide a logical progression for clear communication of pertinent information, valuation methods, and conclusions and must incorporate the other specific requirements of this standard, including the signature and certification provisions.

## IX. CONFIDENTIALITY OF REPORT

No copies of the report will be furnished to persons other than the client without the client's specific permission or direction unless ordered by a court of competent jurisdiction.

## DEFINITIONS

ADJUSTED BOOK VALUE	The book value which results after one or more asset or liability amounts are added, deleted, or changed from the respective book amounts.
APPRAISAL	The act or process of determining value. It is synonymous with valuation.
APPRAISAL APPROACH	A general way of determining value using one or more specific appraisal methods. (See ASSET-BASED APPROACH, MARKET APPROACH, and INCOME APPROACH definitions.)
APPRAISAL METHOD	Within approaches, a specific way to determine value.
APPRAISAL PROCEDURE	The act, manner, and technique of performing the steps of an appraisal method.
APPRAISED VALUE	The appraiser's opinion or determination of value.
ASSET-BASED APPROACH	A general way of determining a value indication of a business's assets and/or equity interest using one or more methods based directly on the value of the assets of the business less liabilities.
BOOK VALUE	<ol style="list-style-type: none"> <li>1. With respect to assets, the capitalized cost of an asset less accumulated depreciation, depletion, or amortization as it appears on the books of account of the enterprise.</li> <li>2. With respect to a business enterprise, the difference between total assets (net of depreciation, depletion, and amortization) and total liabilities of an enterprise as they appear on the balance sheet. It is synonymous with net book value, net worth, and shareholder's equity.</li> </ol>

BUSINESS APPRAISER	A person, who by education, training, and experience is qualified to make an appraisal of a business enterprise and/or its intangible assets.
BUSINESS ENTERPRISE	A commercial, industrial, or service organization pursuing an economic activity.
BUSINESS VALUATION	The act or process of arriving at an opinion or determination of the value of a business or enterprise or an interest therein.
CAPITALIZATION	<ol style="list-style-type: none"> <li>1. The conversion of income into value.</li> <li>2. The capital structure of a business enterprise.</li> <li>3. The recognition of an expenditure as a capital asset rather than a period expense.</li> </ol>
CAPITALIZATION FACTOR	Any multiple or divisor used to convert income into value.
CAPITALIZATION RATE	Any divisor (usually expressed as a percentage) that is used to convert income into value.
CAPITAL STRUCTURE	The composition of the invested capital.
CASH FLOW	Net income plus depreciation and other non-cash charges.
CONTROL	The power to direct the management and policies of an enterprise.
CONTROL PREMIUM	The additional value inherent in the control interest, as contrasted to a minority interest, that reflects its power of control.
DISCOUNT FOR LACK OF CONTROL	An amount or percentage deducted from a pro rata share of the value of 100 percent of an equity interest in a business to reflect the absence of some or all of the powers of control.
DISCOUNT RATE	A rate of return used to convert a monetary sum, payable or receivable in the future, into present value.
ECONOMIC LIFE	The period over which property may be profitably used.
EFFECTIVE DATE	The date as of which the appraiser's opinion of value applies (also referred to as Appraisal Date, Valuation Date, or "As of" Date).
ENTERPRISE	See BUSINESS ENTERPRISE.
EQUITY	The owner's interest in property after deduction of all liabilities.
FAIR MARKET VALUE	The amount at which property would change hands between a willing seller and a willing buyer when neither is under compulsion and when both have reasonable knowledge of the relevant facts.
GOING CONCERN	An operating business enterprise.
GOING-CONCERN VALUE	<ol style="list-style-type: none"> <li>1. The value of an enterprise, or an interest therein, as a going concern.</li> <li>2. Intangible elements of value in a business enterprise resulting from factors such as having a trained work force; an operational plant; and the necessary licenses, systems, and procedures in place.</li> </ol>
GOODWILL	That intangible asset which arises as a result of name, reputation, customer patronage, location, products, and similar factors that have not been separately identified and/or valued but which generate economic benefits.
INCOME APPROACH	A general way of determining a value indication of a business, business ownership interest, or security using one or more methods wherein a value is determined by converting anticipated benefits.
INVESTED CAPITAL	The sum of the debt and equity in an enterprise on a long-term basis.
MAJORITY CONTROL	<ol style="list-style-type: none"> <li>1. Ownership position greater than 50% of the voting interest in an enterprise.</li> <li>2. The degree of control provided by a majority position.</li> </ol>
MARKET APPROACH	A general way of determining a value indication of a business, business ownership interest, or security using one or more methods that compare the subject to similar businesses, business ownership interests, or securities that have been sold.

MARKETABILITY DISCOUNT	An amount or percentage deducted from an equity interest to reflect lack of marketability.
MINORITY INTEREST	Ownership position less than 50% of the voting interest in an enterprise.
MINORITY DISCOUNT	A DISCOUNT FOR LACK OF CONTROL applicable to a minority interest.
NET ASSETS	Total assets less total liabilities.
NET INCOME	Revenue less expenses, including taxes.
RATE OF RETURN	An amount of income (loss) and/or change in value realized or anticipated on an investment, expressed as a percentage of that investment.
REPLACEMENT COST NEW	The current cost of a similar new item having the nearest equivalent utility as item being appraised.
REPORT DATE	The date of the report. May be the same as or different from the APPRAISAL DATE.
REPRODUCTION COST NEW	The current cost of an identical new item.
RULE OF THUMB	A mathematical relationship between or among a number of variables based on experience, observation, hearsay, or a combination of these, usually applicable to a specific industry.
VALUATION	See APPRAISAL.
VALUATION RATIO	A factor wherein a value or price serves as the numerator and financial, operating, or physical data serve as the denominator.
WORKING CAPITAL	The amount by which current assets exceed current liabilities.

## **SBVS-1. THE GUIDELINE COMPANY VALUATION METHOD**

### **I. PREAMBLE**

- A. This statement is required to be followed in all valuations of businesses, business ownership interests, and securities by all members of the American Society of Appraisers, be they Candidates, Accredited Members (AM), Accredited Senior Appraisers (ASA), or Fellows (FASA).
- B. The purpose of this statement is to define and describe the requirements for the use of guideline companies in the valuation of businesses, business ownership interests, or securities.
- C. This statement incorporates the general preamble to the Business Valuation Standards of the American Society of Appraisers.

### **II. CONCEPTUAL FRAMEWORK**

- A. Market transactions in businesses, business ownership interests, or securities can provide objective, empirical data for developing valuation ratios to apply in business valuation.
- B. The development of valuation ratios from guideline companies should be considered for use in the valuation of businesses, business ownership interests, or securities, to the extent that adequate information is available.
- C. Guideline companies are companies that provide a reasonable basis for comparison to the investment characteristics of the company being valued. Ideal guideline companies are in the same industry as the company being valued; but if there is insufficient transaction evidence available in the same industry it may be necessary to select companies with an underlying similarity of relevant investment characteristics, such as markets, products, growth, cyclical variability, and other salient factors.

### **III. SEARCH FOR AND SELECTION OF GUIDELINE COMPANIES**

- A. A thorough, objective search for guideline companies is required to establish the credibility of the valuation analysis. The procedure must include criteria for screening and selecting guideline companies.
- B. Empirical data from guideline companies can be found in transactions involving either minority or controlling interests in either publicly traded or closely held companies.

#### **IV. FINANCIAL DATA OF THE GUIDELINE COMPANIES**

- A. It is necessary to obtain and analyze financial and operating data on the guideline companies, as available.
- B. Consideration should be given to adjustments to the financial data of the subject company and the guideline companies to minimize the difference in accounting treatments when such differences are significant. Unusual or nonrecurring items should be analyzed and adjusted as appropriate.

#### **V. COMPARATIVE ANALYSIS OF QUALITATIVE AND QUANTITATIVE FACTORS**

A comparative analysis of qualitative and quantitative similarities and differences between guideline companies and the subject company must be made to assess the investment attributes of the guideline companies relative to the subject company.

#### **VI. VALUATION RATIOS DERIVED FROM GUIDELINE COMPANIES**

- A. Price information of the guideline companies must be related to the appropriate underlying financial data of each guideline company in order to compute appropriate valuation ratios.
- B. The valuation ratios for the guideline companies and comparative analysis of qualitative and quantitative factors should be used together to determine appropriate valuation ratios for application to the subject company.
- C. Several valuation ratios may be selected for application to the subject company and several value indications may be obtained. The appraiser should consider the relative importance accorded to each of the value indications utilized in arriving at the valuation conclusion.
- D. To the extent that adjustments for dissimilarities with respect to minority and control, or marketability, have not been made earlier, appropriate adjustments for these factors must be made, if applicable.

## APPENDIX 4

# NACVA Professional Standards

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## PREAMBLE

### GENERAL AND ETHICAL STANDARDS

**1.1 Preamble.** All members of the National Association of Certified Valuation Analysts (NACVA), an association of Certified Public Accountants and other valuation professionals who perform valuation services, shall comply with the standards and definitions herein. NACVA will adopt changes to and interpretations of the standards when necessary.

**1.2 General and Ethical Standards.** A member shall perform valuation and other services in compliance with a code of professional conduct consisting of the following principles and rules.

**a. Integrity and Objectivity.** A member shall remain objective, apply professional integrity, shall not knowingly misrepresent facts, or subrogate judgment to others. The member must not act in a manner that is misleading or fraudulent.

**b. Professional Competence.** A member shall only accept engagements the member can reasonably expect to complete with a high degree of professional competence. If a member lacks the knowledge and/or experience to complete such engagements with a high degree of professional competence, the member is not precluded from performing such engagements. In such instance, the member must take steps necessary to gain such expertise through additional research and/or consultation with other professionals believed to have such knowledge and/or experience prior to completion of such engagements.

**c. Due Professional Care.** A member must exercise due professional care in the performance of services, including completing sufficient research and obtaining adequate documentation.

**d. Understandings and Communications with Clients.** A member shall establish, with the client, a written or oral understanding of the nature, scope and limitations of services to be performed and the responsibilities of the parties. If circumstances encountered during the engagement require a significant change in these understandings, the member shall notify the client. A member shall inform the client of conflicts of interest, significant reservations concerning the scope or benefits of the engagement, and significant engagement findings or events.

**e. Planning and Supervision.** A member shall adequately plan and supervise the performance of any service provided.

**f. Sufficient Relevant Data.** A member shall obtain sufficient relevant data to afford a reasonable basis for conclusions, recommendations or positions relating to any service rendered.

**g. Confidentiality.** Unless required to do so by competent legal authority, a member shall not disclose any confidential client information to a third party without first obtaining the express consent of the client.

**h. Acts Discreditable.** A member shall not commit any act discreditable to the profession.

**i. Client Interest.** A member shall serve the client interest by seeking to accomplish the objectives established with the client, while maintaining integrity and objectivity.

**j. Financial Interest.** A member shall not express a Conclusion of Value or a Calculated Value unless the member and the member's firm state either of the following:

- 1) "I (We) have no financial interest or contemplated financial interest in the property that is the subject of this report."; or
- 2) "I (We) have a (specify) financial interest or contemplated financial interest in the property that is the subject of this report."

### MEMBER SERVICES

**2.1 Valuation Services.** When valuing a business, business ownership interest, security or intangible asset, a member may express either a Conclusion of Value or Calculated Value. When performing such valuation services, members shall comply with the Development Standards and the Reporting Standards, in addition to all other standards promulgated by NACVA. Valuation services are:

**a. Valuation Engagement.** A Valuation Engagement requires that a member apply valuation approaches or methods deemed in the member's professional judgment to be appropriate under the circumstances and results in a Conclusion of Value; or

**b. Calculation Engagement.** A Calculation Engagement occurs when the client and member agree to specific valuation approaches, methods and the extent of selected procedures and results in a Calculated Value.

**2.2 Other Services.** A member may perform other services, such as consulting, fraud and damage determinations, and other non-valuation services. When performing such services all standards promulgated by NACVA shall apply to the member's work except for the Development and Reporting Standards.

## DEVELOPMENT STANDARDS

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**3.1 General.** A member shall comply with these Development Standards when expressing a Conclusion of Value or Calculated Value.

**3.2 Expression of Value.** Value can be expressed as a single number or a range of values.

**3.3 Identification.** A member must define the assignment and determine the scope of work necessary by identifying the following:

- a. Subject to be valued;
- b. Interest to be valued;
- c. Valuation date;
- d. Purpose and use of the valuation;
- e. Standard of value;
- f. Premise of value;
- g. Intended users;
- h. Valuation approaches or methods;
- i. Assumptions, limiting conditions and scope limitations;
- j. Ownership size, nature, restrictions and agreements;
- k. Other factors that may influence value when appropriate in the opinion of the member; and
- l. The sources of information.

**3.4 Fundamental Analysis.** For a Conclusion of Value, the member must obtain and analyze information, as available and applicable, necessary to accomplish the assignment, including:

- a. The nature of the business and the history of the enterprise;
- b. The economic outlook in general and the condition and outlook of the specific industry in particular;
- c. The book value of the interest to be valued and the financial condition of the business;
- d. The earning capacity of the enterprise;
- e. The dividend paying capacity of the enterprise;
- f. Whether or not the enterprise has goodwill or other intangible value;
- g. Sales of interests and the size of the block of interest to be valued;
- h. The market price of interests of enterprises engaged in the same or a similar line of business having interests actively traded in a free and open market; and
- i. All other information deemed by the member to be relevant.

**3.5 Scope Limitations.** The member must identify and evaluate limitations on the scope of work, which affect the research, analysis and/or level of reliance the member places on the valuation results.

**3.6 Use of Specialist.** If the work of a third party specialist, such as a real estate or equipment appraiser, was relied upon in the engagement, a description of the reliance and level of member's responsibility should be documented.

**3.7 Valuation Approaches and Methods.** Valuation methods are commonly categorized into the asset-based approach, market approach, and income approach or a combination of these approaches. Professional judgment must be used to select the approach(es) and the method(s) that best indicate the value, including whether a combination of the results from more than one approach and/or method is necessary to arrive at an appropriate indication of value.

**3.8 Rule of Thumb.** Typically, a rule of thumb or benchmark indicator is used as a reasonableness check against the values determined by the use of other valuation approaches. For Valuation Engagements, it should not be used as the only method to determine the value of the subject interest. The source of rule of thumb data should be documented.

**3.9 Financial Statement Adjustments.** The historical financial statements should be analyzed and, if appropriate, adjusted to reflect the appropriate asset value, income, cash flows and/or benefit stream, as applicable, to be consistent with the valuation method(s) selected by the member.

**3.10 Earnings Determination.** The member should select the appropriate benefit stream, such as pre-tax or after-tax income and/or cash flows, and select appropriate capitalization/discount rate(s) to be consistent with the valuation method(s) selected.

**3.11 Capitalization/Discount Rate.** The member must consider appropriate capitalization and/or discount rates, consistent with the valuation method(s) selected, taking into consideration the following risk factors:

- a. The nature of the business;
- b. The stability or regularity of earnings;
- c. The stability, depth and experience of management; and
- d. Other risk factors when appropriate in the opinion of the member.

**3.12 Marketability, Control, and Other Premiums and Discounts.** If applicable, the member must consider the following:

- a. **Marketability and Liquidity**, or the lack thereof, considering the nature of the business, business ownership interest or security, the effect of relevant contractual and legal restrictions on transferability of the interest being valued and the condition of the market for the interest being valued;
- b. **Ability of the interest to control the operation**, sale and liquidation of the related business enterprise; and
- c. **Such other similar factors** when appropriate in the opinion of the member.

**3.13 Documentation.** Sufficient documentation should be retained for information relied upon in the valuation process. Inclusion of such information in the report satisfies this standard.

## REPORTING STANDARDS

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**4.1 General.** A member shall comply with these Reporting Standards when expressing a Conclusion of Value or a Calculated Value.

**4.2 Form of Report.** One of the final stages in the valuation process is the communication of the results of the valuation to the client or other user of the report. The form of any particular report will depend on the nature of the engagement, its purpose, its findings and the needs of the decision-makers who receive and rely upon it. The purpose of these standards is to establish minimum reporting criteria. The report may be written or oral. The objective of these standards is to ensure consistency and quality of valuation reports issued by members of NACVA.

**4.3 Contents of Report.** A report expressing a Conclusion of Value may be presented in either a Summary or Detailed Report. A Calculated Value must be presented in a Calculation Report. The member should disclose the report type (Summary, Detailed, or Calculation). Reports should be carefully prepared, communicate the results and identify the information relied upon in the valuation process. The wording used in the report should effectively communicate important thoughts, methods and reasoning, as well as identify the supporting documentation in a simple and concise manner, so that the user of the report can replicate the process followed by the member.

- a. **Summary Reports.** Summary Reports should set forth the Conclusion of Value and the following minimum information concerning the Valuation Engagement and its results:
  - 1) Identification of the subject being valued;
  - 2) Description of the interest being valued;
  - 3) Ownership size, nature, restrictions and agreements;
  - 4) Valuation date;
  - 5) Report date;
  - 6) Purpose and use of the valuation;
  - 7) Definition of the standard of value;
  - 8) Identification of the premise of value;
  - 9) Valuation approaches and method(s) utilized by the member;
  - 10) Historical financial statement summaries, when applicable;

- 11) Identification of the assumptions, limiting conditions and scope limitations;
  - 12) Reliance on a specialist;
  - 13) Jurisdictional exceptions and requirements;
  - 14) Limitations on use of the report—all valuation services vary as to specific assumptions, limiting conditions and scope, therefore, the member must identify material matters considered;
  - 15) Sources of information;
  - 16) A statement of Financial Interest;
  - 17) Whether or not member is obligated to update the report;
  - 18) Disclosure of any contingency fee;
  - 19) Qualifications of member; and
  - 20) Responsible member signature—the member who has primary responsibility for the determination of value must sign or be identified in the report;
- b. Detailed Reports.** Detailed Reports may include the following additional information in addition to that identified in paragraph 4.3 a:
- 1) Non-operating assets and liabilities;
  - 2) Adjustments to historical financial statements, when applicable;
  - 3) Adjusted financial statement summaries, when applicable;
  - 4) Projected/forecasted financial statements including the underlying assumptions, when applicable;
  - 5) Valuation approaches and method(s) considered by the member;
  - 6) A description of the fundamental analysis; and
  - 7) Other items that influence the valuation.
- c. Calculation Reports.** A Calculation Report should set forth the Calculated Value and should include the following information in addition to that identified in paragraphs 4.3 a 1 through 4.3 a 20:
- 1) Purpose of the calculation procedures;
  - 2) State that the expression of value is a Calculated Value; and
  - 3) A general description of the calculation, including a statement similar to the following:
 

*“This Calculation Engagement did not include all the procedures required for a Conclusion of Value. Had a Conclusion of Value been determined, the results may have been different.”*
- d. Statement that the Report is in Accordance with NACVA Standards.** A statement similar to the following should be included in the member’s report:
- “This analysis and report were completed in accordance with the National Association of Certified Valuation Analysts Professional Standards.”*

**4.4 Litigation Engagements Reporting Standards.** A valuation performed for a matter before a court, an arbitrator, a mediator or other facilitator, or a matter in a governmental or administrative proceeding, is exempt from the reporting provisions of these standards. The reporting exemption applies whether the matter proceeds to trial or settles. This litigation waiver does not, however, relieve the member from complying with the Development Standards and all other standards promulgated by NACVA.

## OTHER GUIDELINES AND REQUIREMENTS

**5.1 Other Requirements.** Besides NACVA’s Professional Standards, members may also find it necessary to consider guidelines and/or other requirements established by other organizations or authorities, such as:

- a. Department of Labor (DOL);
- b. Internal Revenue Service (IRS);
- c. Rules of the applicable courts;
- d. Federal and State laws;
- e. The Appraisal Foundation (USPAP); and
- f. Financial Accounting Standards Board (FASB).

**5.2 International Glossary of Business Valuation Terms.** Developed jointly by the AICPA, ASA, CICBV, IBA and NACVA, the glossary of definitions should be used by the member (see Appendix).

## EFFECTIVE DATE

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**6.1 Effective Date.** These Professional Standards are effective for engagements accepted on or after January 1, 2008.

## APPENDIX

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This appendix includes and list of International Business Valuation Terms and is printed in its entirety in appendix 5 of this text.



## APPENDIX 5

# *International Glossary of Business Valuation Terms*

To enhance and sustain the quality of business valuations for the benefit of the profession and its clientele, the below identified societies and organizations have adopted the definitions for the terms included in this glossary.

The performance of business valuation services requires a high degree of skill and imposes upon the valuation professional a duty to communicate the valuation process and conclusion in a manner that is clear and not misleading. This duty is advanced through the use of terms whose meanings are clearly established and consistently applied throughout the profession.

If, in the opinion of the business valuation professional, one or more of these terms needs to be used in a manner that materially departs from the enclosed definitions, it is recommended that the term be defined as used within that valuation engagement.

This glossary has been developed to provide guidance to business valuation practitioners by further memorializing the body of knowledge that constitutes the competent and careful determination of value and, more particularly, the communication of how that value was determined.

Departure from this glossary is not intended to provide a basis for civil liability and should not be presumed to create evidence that any duty has been breached.

*American Institute of Certified Public Accountants*  
*American Society of Appraisers*  
*Canadian Institute of Chartered Business Valuators*  
*National Association of Certified Valuation Analysts*  
*The Institute of Business Appraisers*

**Adjusted Book Value Method**—a method within the asset approach whereby all assets and liabilities (including off-balance sheet, intangible, and contingent) are adjusted to their fair market values. (NOTE: In Canada on a going concern basis.)

**Adjusted Net Asset Method**—see **Adjusted Book Value Method**.

**Appraisal**—see **Valuation**.

**Appraisal Approach**—see **Valuation Approach**.

**Appraisal Date**—see **Valuation Date**.

**Appraisal Method**—see **Valuation Method**.

**Appraisal Procedure**—see **Valuation Procedure**.

**Arbitrage Pricing Theory**—a multivariate model for estimating the cost of equity capital, which incorporates several systematic risk factors.

**Asset (Asset-Based) Approach**—a general way of determining a value indication of a business, business ownership interest, or security using one or more methods based on the value of the assets net of liabilities.



**Beta**—a measure of systematic risk of a stock; the tendency of a stock's price to correlate with changes in a specific index.

**Blockage Discount**—an amount or percentage deducted from the current market price of a publicly traded stock to reflect the decrease in the per share value of a block of stock that is of a size that could not be sold in a reasonable period of time given normal trading volume.

**Book Value**—see **Net Book Value**.

**Business**—see **Business Enterprise**.

**Business Enterprise**—a commercial, industrial, service, or investment entity (or a combination thereof) pursuing an economic activity.

**Business Risk**—the degree of uncertainty of realizing expected future returns of the business resulting from factors other than financial leverage. See **Financial Risk**.

**Business Valuation**—the act or process of determining the value of a business enterprise or ownership interest therein.

**Capital Asset Pricing Model (CAPM)**—a model in which the cost of capital for any stock or portfolio of stocks equals a risk-free rate plus a risk premium that is proportionate to the systematic risk of the stock or portfolio.

**Capitalization**—a conversion of a single period of economic benefits into value.

**Capitalization Factor**—any multiple or divisor used to convert anticipated economic benefits of a single period into value.

**Capitalization of Earnings Method**—a method within the income approach whereby economic benefits for a representative single period are converted to value through division by a capitalization rate.

**Capitalization Rate**—any divisor (usually expressed as a percentage) used to convert anticipated economic benefits of a single period into value.

**Capital Structure**—the composition of the invested capital of a business enterprise, the mix of debt and equity financing.

**Cash Flow**—cash that is generated over a period of time by an asset, group of assets, or business enterprise. It may be used in a general sense to encompass various levels of specifically defined cash flows. When the term is used, it should be supplemented by a qualifier (for example, “discretionary” or “operating”) and a specific definition in the given valuation context.

**Common Size Statements**—financial statements in which each line is expressed as a percentage of the total. On the balance sheet, each line item is shown as a percentage of total assets, and on the income statement, each item is expressed as a percentage of sales.

**Control**—the power to direct the management and policies of a business enterprise.

**Control Premium**—an amount or a percentage by which the pro rata value of a controlling interest exceeds the pro rata value of a non-controlling interest in a business enterprise to reflect the power of control.

**Cost Approach**—a general way of determining a value indication of an individual asset by quantifying the amount of money required to replace the future service capability of that asset.

**Cost of Capital**—the expected rate of return that the market requires in order to attract funds to a particular investment.

**Debt-Free**—*we discourage the use of this term*. See **Invested Capital**.

**Discount for Lack of Control**—an amount or percentage deducted from the pro rata share of value of 100% of an equity interest in a business to reflect the absence of some or all of the powers of control.

**Discount for Lack of Marketability**—an amount or percentage deducted from the value of an ownership interest to reflect the relative absence of marketability.

**Discount for Lack of Voting Rights**—an amount or percentage deducted from the per share value of a minority interest voting share to reflect the absence of voting rights.

**Discount Rate**—a rate of return used to convert a future monetary sum into present value.

**Discounted Cash Flow Method**—a method within the income approach whereby the present value of future expected net cash flows is calculated using a discount rate.

**Discounted Future Earnings Method**—a method within the income approach whereby the present value of future expected economic benefits is calculated using a discount rate.

**Economic Benefits**—inflows such as revenues, net income, net cash flows, etc.

**Economic Life**—the period of time over which property may generate economic benefits.

**Effective Date**—see **Valuation Date**.

**Enterprise**—see **Business Enterprise**.

**Equity**—the owner's interest in property after deduction of all liabilities.

**Equity Net Cash Flows**—those cash flows available to pay out to equity holders (in the form of dividends) after funding operations of the business enterprise, making necessary capital investments, and increasing or decreasing debt financing.

**Equity Risk Premium**—a rate of return added to a risk-free rate to reflect the additional risk of equity instruments over risk free instruments (a component of the cost of equity capital or equity discount rate).

**Excess Earnings**—that amount of anticipated economic benefits that exceeds an appropriate rate of return on the value of a selected asset base (often net tangible assets) used to generate those anticipated economic benefits.

**Excess Earnings Method**—a specific way of determining a value indication of a business, business ownership interest, or security determined as the sum of a) the value of the assets derived by capitalizing excess earnings, and b) the value of the selected asset base. Also frequently used to value intangible assets. See also **Excess Earnings**.

**Fair Market Value**—the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arms length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts. (NOTE: in Canada, the term “price” should be replaced with the term “highest price.”)

**Fairness Opinion**—an opinion as to whether or not the consideration in a transaction is fair from a financial point of view.

**Financial Risk**—the degree of uncertainty of realizing expected future returns of the business resulting from financial leverage. See **Business Risk**.

**Forced Liquidation Value**—liquidation value, at which the asset or assets are sold as quickly as possible, such as at an auction.

**Free Cash Flow**— *we discourage the use of this term*. See **Net Cash Flow**.

**Going Concern**—an ongoing operating business enterprise.

**Going Concern Value**—the value of a business enterprise that is expected to continue to operate into the future. The intangible elements of Going Concern Value result from factors such as having a trained work force, an operational plant, and the necessary licenses, systems and procedures in place.

**Goodwill**—that intangible asset arising as a result of name, reputation, customer loyalty, location, products and similar factors not separately identified.

**Goodwill Value**—the value attributable to goodwill.

**Guideline Public Company Method**—a method within the market approach whereby market multiples are derived from market prices of stocks of companies that are engaged in the same or similar lines of business and that are actively traded on a free and open market.

**Income (Income-Based) Approach**—a general way of determining a value indication of a business, business ownership interest, security or intangible asset using one or more methods that convert anticipated economic benefits into a present single amount.

**Intangible Assets**—non-physical assets such as franchises, trademarks, patents, copyrights, goodwill, equities, mineral rights, securities and contracts (as distinguished from physical assets) that grant rights and privileges and have value for the owner.

**Internal Rate of Return**—a discount rate at which the present value of the future cash flows of the investment equals the cost of the investment.

**Intrinsic Value**—the value that an investor considers, on the basis of an evaluation or available facts, to be the “true” or “real” value that will become the market value when other investors reach the same conclusion. When the term applies to options, it is the difference between the exercise price or strike price of an option and the market value of the underlying security.

**Invested Capital**—the sum of equity and debt in a business enterprise. Debt is typically a) all interest-bearing debt, or b) long-term interest-bearing debt. When the term is used, it should be supplemented by a specific definition in the given valuation context.

**Invested Capital Net Cash Flows**—those cash flows available to pay out to equity holders (in the form of dividends) and debt investors (in the form of principal and interest) after funding operations of the business enterprise and making necessary capital investments.

**Investment Risk**—the degree of uncertainty as to the realization of expected returns.

**Investment Value**—the value to a particular investor based on individual investment requirements and expectations. (NOTE: in Canada, the term used is “Value to the Owner.”)

**Key Person Discount**—an amount or percentage deducted from the value of an ownership interest to reflect the reduction in value resulting from the actual or potential loss of a key person in a business enterprise.

**Levered Beta**—the beta reflecting a capital structure that includes debt.

**Limited Appraisal**—the act or process of determining the value of a business, business ownership interest, security or intangible asset with limitations in analyses, procedures or scope.

**Liquidity**—the ability to quickly convert property to cash or pay a liability.

**Liquidation Value**—the net amount that would be realized if the business is terminated and the assets are sold piecemeal. Liquidation can be either “orderly” or “forced.”

**Majority Control**—the degree of control provided by a majority position.

**Majority Interest**—an ownership interest greater than 50% of the voting interest in a business enterprise.

**Market (Market-Based) Approach**—a general way of determining a value indication of a business, business ownership interest, security or intangible asset by using one or more methods that compare the subject to similar businesses, business ownership interests, securities or intangible assets that have been sold.

**Market Capitalization of Equity**—the share price of a publicly traded stock multiplied by the number of shares outstanding.

**Market Capitalization of Invested Capital**—the market capitalization of equity plus the market value of the debt component of invested capital.

**Market Multiple**—the market value of a company’s stock or invested capital divided by a company measure (such as economic benefits, number of customers).

**Marketability**—the ability to quickly convert property to cash at minimal cost.

**Marketability Discount**—see **Discount for Lack of Marketability**.

**Merger and Acquisition Method**—a method within the market approach whereby pricing multiples are derived from transactions of significant interests in companies engaged in the same or similar lines of business.

**Mid-Year Discounting**—a convention used in the Discounted Future Earnings Method that reflects economic benefits being generated at midyear, approximating the effect of economic benefits being generated evenly throughout the year.

**Minority Discount**—a discount for lack of control applicable to a minority interest.

**Minority Interest**—an ownership interest less than 50 percent of the voting interest in a business enterprise.

**Multiple**—the inverse of the capitalization rate.

**Net Book Value**—with respect to a business enterprise, the difference between total assets (net of accumulated depreciation, depletion, and amortization) and total liabilities as they appear on the balance sheet (synonymous with Shareholder’s Equity). With respect to a specific asset, the capitalized cost less accumulated amortization or depreciation as it appears on the books of account of the business enterprise.

**Net Cash Flows**—when the term is used, it should be supplemented by a qualifier. See **Equity Net Cash Flows** and **Invested Capital Net Cash Flows**.

**Net Present Value**—the value, as of a specified date, of future cash inflows less all cash outflows (including the cost of investment) calculated using an appropriate discount rate.

**Net Tangible Asset Value**—the value of the business enterprise’s tangible assets (excluding excess assets and non-operating assets) minus the value of its liabilities.

**Non-Operating Assets**—assets not necessary to ongoing operations of the business enterprise. (NOTE: in Canada, the term used is “Redundant Assets.”)

**Normalized Earnings**—economic benefits adjusted for nonrecurring, non-economic or other unusual items to eliminate anomalies and/or facilitate comparisons.

**Normalized Financial Statements**—financial statements adjusted for non-operating assets and liabilities and/or for non-recurring, non-economic or other unusual items to eliminate anomalies and/or facilitate comparisons.

**Orderly Liquidation Value**—liquidation value at which the asset or assets are sold over a reasonable period of time to maximize proceeds received.

**Premise of Value**—an assumption regarding the most likely set of transactional circumstances that may be applicable to the subject valuation (e.g., going concern, liquidation).

**Present Value**—the value, as of a specified date, of future economic benefits and/or proceeds from sale, calculated using an appropriate discount rate.

**Portfolio Discount**—an amount or percentage deducted from the value of a business enterprise to reflect the fact that it owns dissimilar operations or assets that do not fit well together.

**Price/Earnings Multiple**—the price of a share of stock divided by its earnings per share.

**Rate of Return**—an amount of income (loss) and/or change in value realized or anticipated on an investment, expressed as a percentage of that investment.

**Redundant Assets**—see **Non-Operating Assets**.

**Report Date**—the date conclusions are transmitted to the client.

**Replacement Cost New**—the current cost of a similar new property having the nearest equivalent utility to the property being valued.

**Reproduction Cost New**—the current cost of an identical new property.

**Required Rate of Return**—the minimum rate of return acceptable by investors before they will commit money to an investment at a given level of risk.

**Residual Value**—the value as of the end of the discrete projection period in a discounted future earnings model.

**Return on Equity**—the amount, expressed as a percentage, earned on a company's common equity for a given period.

**Return on Investment**—see **Return on Invested Capital** and **Return on Equity**.

**Return on Invested Capital**—the amount, expressed as a percentage, earned on a company's total capital for a given period.

**Risk-Free Rate**—the rate of return available in the market on an investment free of default risk.

**Risk Premium**—a rate of return added to a risk-free rate to reflect risk.

**Rule of Thumb**—a mathematical formula developed from the relationship between price and certain variables based on experience, observation, hearsay or a combination of these; usually industry specific.

**Special Interest Purchasers**—acquirers who believe they can enjoy post-acquisition economies of scale, synergies or strategic advantages by combining the acquired business interest with their own.

**Standard of Value**—the identification of the type of value being used in a specific engagement (e.g., fair market value, fair value, investment value).

**Sustaining Capital Reinvestment**—the periodic capital outlay required to maintain operations at existing levels, net of the tax shield available from such outlays.

**Systematic Risk**—the risk that is common to all risky securities and cannot be eliminated through diversification. The measure of systematic risk in stocks is the beta coefficient.

**Tangible Assets**—physical assets (such as cash, accounts receivable, inventory, property, plant and equipment, etc.).

**Terminal Value**—see **Residual Value**.

**Transaction Method**—see **Merger and Acquisition Method**.

**Unlevered Beta**—the beta reflecting a capital structure without debt.

**Unsystematic Risk**—the risk specific to an individual security that can be avoided through diversification.

**Valuation**—the act or process of determining the value of a business, business ownership interest, security or intangible asset.

**Valuation Approach**—a general way of determining a value indication of a business, business ownership interest, security or intangible asset using one or more valuation methods.

**Valuation Date**—the specific point in time as of which the valuator's opinion of value applies (also referred to as "Effective Date" or "Appraisal Date").

**Valuation Method**—within approaches, a specific way to determine value.

**Valuation Procedure**—the act, manner, and technique of performing the steps of an appraisal method.

**Valuation Ratio**—a fraction in which a value or price serves as the numerator and financial, operating, or physical data serves as the denominator.

**Value to the Owner**—see **Investment Value**.

**Voting Control**— *de jure* control of a business enterprise.

**Weighted Average Cost of Capital (WACC)**—the cost of capital (discount rate) determined by the weighted average, at market value, of the cost of all financing sources in the business enterprise's capital structure.





# APPENDIX 6

## SSVS 1 Appendix C

### GLOSSARY OF ADDITIONAL TERMS

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**Assumptions and Limiting Conditions.** Parameters and boundaries under which a valuation is performed, as agreed upon by the valuation analyst and the client or as acknowledged or understood by the valuation analyst and the client as being due to existing circumstances. An example is the acceptance, without further verification, by the valuation analyst from the client of the client's financial statements and related information.

**Business Ownership Interest.** A designated share in the ownership of a business (business enterprise).

**Calculated Value.** An estimate as to the value of a business, business ownership interest, security, or intangible asset, arrived at by applying valuation procedures agreed upon with the client and using professional judgment as to the value or range of values based on those procedures.

**Calculation Engagement.** An engagement to estimate value wherein the valuation analyst and the client agree on the specific valuation approaches and valuation methods that the valuation analyst will use and the extent of valuation procedures the valuation analyst will perform to estimate the value of a subject interest. A calculation engagement generally does not include all of the valuation procedures required for a valuation engagement. If a valuation engagement had been performed, the results might have been different. The valuation analyst expresses the results of the calculation engagement as a calculated value, which may be either a single amount or a range.

**Capital or Contributory Asset Charge.** A fair return on an entity's *contributory assets*, which are tangible and intangible assets used in the production of income or cash flow associated with an intangible asset being valued. In this context, *income* or *cash flow* refers to an applicable measure of income or cash flow, such as net income, or operating cash flow before taxes and capital expenditures. A capital charge may be expressed as a percentage return on an economic rent associated with, or a profit split related to, the contributory assets.

**Capitalization of Benefits Method.** A method within the income approach whereby expected future benefits (for example, earnings or cash flow) for a representative single period are converted to value through division by a capitalization rate.

**Comparable Profits Method.** A method of determining the value of intangible assets by comparing the profits of the subject entity with those of similar uncontrolled companies that have the same or similar complement of intangible assets as the subject company.

**Comparable Uncontrolled Transaction Method.** A method of determining the value of intangible assets by comparing the subject transaction to similar transactions in the market place made between independent (uncontrolled) parties.

**Conclusion of Value.** An estimate of the value of a business, business ownership interest, security, or intangible asset, arrived at by applying the valuation procedures appropriate for a valuation engagement and using professional judgment as to the value or range of values based on those procedures.

**Control Adjustment.** A valuation adjustment to financial statements to reflect the effect of a controlling interest in a business. An example would be an adjustment to owners' compensation that is in excess of market compensation.

**Engagement to Estimate Value.** An engagement, or any part of an engagement (for example, a tax, litigation, or acquisition-related engagement), that involves determining the value of a business, business ownership interest, security, or intangible asset. Also known as *valuation service*.

**Excess Operating Assets.** Operating assets in excess of those needed for the normal operation of a business.

**Fair Value.** In valuation applications, there are two commonly used definitions for fair value:

- (1) For financial reporting purposes only, the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. *Source:* Financial Accounting Standards Board definition in Statement of Financial Accounting Standards (SFAS) No. 157, *Fair Value Measurements*, as used in the context of Generally Accepted Accounting Principles (GAAP) (Effective 2008).
- (2) For state legal matters only, some states have laws that use the term *fair value* in shareholder and partner matters. For state legal matters only, therefore, the term may be defined by statute or case law in the particular jurisdiction.

**Guideline Company Transactions Method.** A method within the market approach whereby market multiples are derived from the sales of entire companies engaged in the same or similar lines of business.

**Hypothetical Condition.** That which is or may be contrary to what exists, but is supposed for the purpose of analysis.

**Incremental Income.** Additional income or cash flow attributable to an entity's ownership or operation of an intangible asset being valued, as determined by a comparison of the entity's income or cash flow with the intangible asset to the entity's income or cash flow without the intangible asset. In this context, *income* or *cash flow* refers to an applicable measure of income or cash flow, such as license royalty income or operating cash flow before taxes and capital expenditures.

**Normalization.** See *Normalized Earnings* in Appendix B, "International Glossary of Business Valuation Terms." (See Appendix 5 in this book).

**Pre-adjustment Value.** The value arrived at prior to the application, if appropriate, of valuation discounts or premiums.

**Profit Split Income.** With respect to the valuation of an intangible asset of an entity, a percentage allocation of the entity's income or cash flow whereby (1) a split (or percentage) is allocated to the subject intangible and (2) the remainder is allocated to all of the entity's tangible and other intangible assets. In this context, *income* or *cash flow* refers to an applicable measure of income or cash flow, such as net income or operating cash flow before taxes and capital expenditures.

**Relief from Royalty Method.** A valuation method used to value certain intangible assets (for example, trademarks and trade names) based on the premise that the only value that a purchaser of the assets receives is the exemption from paying a royalty for its use. Application of this method usually involves estimating the fair market value of an intangible asset by quantifying the present value of the stream of market-derived royalty payments that the owner of the intangible asset is exempted from or "relieved" from paying.

**Residual Income.** For an entity that owns or operates an intangible asset being valued, the portion of the entity's income or cash flow remaining after subtracting a capital charge on all of the entity's tangible and other intangible assets. *Income* or *cash flows* can refer to any appropriate measure of income or cash flow, such as net income or operating cash flow before taxes and capital expenditures.

**Security.** A certificate evidencing ownership or the rights to ownership in a business enterprise that (1) is represented by an instrument or by a book record or contractual agreement, (2) is of a type commonly dealt in on securities exchanges or markets or, when represented by an instrument, is commonly recognized in any area in which it is issued or dealt in as a medium for investment, and (3) either one of a class or series or, by its terms, is divisible into a class or series of shares, participations, interests, rights, or interest-bearing obligations.

**Subject Interest.** A business, business ownership interest, security, or intangible asset that is the subject of a valuation engagement.

**Subsequent Event.** An event that occurs subsequent to the valuation date.

**Valuation Analyst.** For purposes of this Statement, an AICPA member who performs an engagement to estimate value that culminates in the expression of a conclusion of value or a calculated value.

**Valuation Assumptions.** Statements or inputs utilized in the performance of an engagement to estimate value that serve as a basis for the application of particular valuation methods.

**Valuation Engagement.** An engagement to estimate value in which a valuation analyst determines an estimate of the value of a subject interest by performing appropriate valuation procedures, as outlined in the AICPA Statement on Standards for Valuation Services, and is free to apply the valuation approaches and methods he or she deems appropriate in the circumstances. The valuation analyst expresses the results of the valuation engagement as a conclusion of value, which may be either a single amount or a range.

**Valuation Service.** See **Engagement to Estimate Value**.



# APPENDIX 7

## *Revenue Ruling 59-60*

### **REV. RUL. 59-60, 1959-1 C.B. 237 IRC SEC. 2031**

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Sec. 2031—DEFINITION OF GROSS ESTATE

26 CFR 20.2031-2: Valuation of stocks and bonds.

(Also Section 2512.)

(Also Part II, Sections 811(k), 1005, Regulations 105, Section 81.10.)

### **HEADNOTE**

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In valuing the stock of closely held corporations, or the stock of corporations where market quotations are not available, all other available financial data, as well as all relevant factors affecting the fair market value must be considered for estate tax and gift tax purposes. No general formula may be given that is applicable to the many different valuation situations arising in the valuation of such stock. However, the general approach, methods, and factors which must be considered in valuing such securities are outlined. Revenue Ruling 54-77, C.B. 1954-1, 187, superseded.

### **TEXT**

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#### **SEC. 1. PURPOSE**

The purpose of this Revenue Ruling is to outline and review in general the approach, methods, and factors to be considered in valuing shares of the capital stock of closely held corporations for estate tax and gift tax purposes. The methods discussed herein will apply likewise to the valuation of corporate stocks on which market quotations are either unavailable or are of such scarcity that they do not reflect the fair market value.

#### **SEC. 2. BACKGROUND AND DEFINITIONS**

**.01** All valuations must be made in accordance with the applicable provisions of the Internal Revenue Code of 1954 and the Federal Estate Tax and Gift Tax Regulations. Sections 2031(a), 2032, and 2512(a) of the 1954 Code (sections 811 and 1005 of the 1939 Code) require that the property to be included in the gross estate, or made the subject of a gift, shall be taxed on the basis of the value of the property at the time of death of the decedent, the alternate date if so elected, or the date of gift.

**.02** Section 20.2031-1(b) of the Estate Tax Regulations (section 81.10 of the Estate Tax Regulations 105) and section 25.2512-1 of the Gift Tax Regulations (section 86.19 of Gift Tax Regulations 108) define fair market value, in effect, as the price at which the property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having

reasonable knowledge of relevant facts. Court decisions frequently state in addition that the hypothetical buyer and seller are assumed to be able, as well as willing, to trade and to be well informed about the property and concerning the market for such property.

**.03** Closely held corporations are those corporations the shares of which are owned by a relatively limited number of stockholders. Often the entire stock issue is held by one family. The result of this situation is that little, if any, trading in the shares takes place. There is, therefore, no established market for the stock and such sales as occur at irregular intervals seldom reflect all of the elements of a representative transaction as defined by the term “fair market value.”

### SEC. 3. APPROACH TO VALUATION

**.01** A determination of fair market value, being a question of fact, will depend upon the circumstances in each case. No formula can be devised that will be generally applicable to the multitude of different valuation issues arising in estate and gift tax cases. Often, an appraiser will find wide differences of opinion as to the fair market value of a particular stock. In resolving such differences, he should maintain a reasonable attitude in recognition of the fact that valuation is not an exact science. A sound valuation will be based upon all the relevant facts, but the elements of common sense, informed judgment and reasonableness must enter into the process of weighing those facts and determining their aggregate significance.

**.02** The fair market value of specific shares of stock will vary as general economic conditions change from “normal” to “boom” or “depression,” that is, according to the degree of optimism or pessimism with which the investing public regards the future at the required date of appraisal. Uncertainty as to the stability or continuity of the future income from a property decreases its value by increasing the risk of loss of earnings and value in the future. The value of shares of stock of a company with very uncertain future prospects is highly speculative. The appraiser must exercise his judgment as to the degree of risk attaching to the business of the corporation which issued the stock, but that judgment must be related to all of the other factors affecting value.

**.03** Valuation of securities is, in essence, a prophecy as to the future and must be based on facts available at the required date of appraisal. As a generalization, the prices of stocks which are traded in volume in a free and active market by informed persons best reflect the consensus of the investing public as to what the future holds for the corporations and industries represented. When a stock is closely held, is traded infrequently, or is traded in an erratic market, some other measure of value must be used. In many instances, the next best measure may be found in the prices at which the stocks of companies engaged in the same or a similar line of business are selling in a free and open market.

### SEC. 4. FACTORS TO CONSIDER

**.01** It is advisable to emphasize that in the valuation of the stock of closely held corporations or the stock of corporations where market quotations are either lacking or too scarce to be recognized, all available financial data, as well as all relevant factors affecting the fair market value, should be considered. The following factors, although not all-inclusive, are fundamental and require careful analysis in each case:

- a. The nature of the business and the history of the enterprise from its inception
- b. The economic outlook in general and the condition and outlook of the specific industry in particular

- c. The book value of the stock and the financial condition of the business
- d. The earning capacity of the company
- e. The dividend-paying capacity
- f. Whether or not the enterprise has goodwill or other intangible value
- g. Sales of the stock and the size of the block of stock to be valued
- h. The market price of stocks of corporations engaged in the same or a similar line of business having their stocks actively traded in a free and open market, either on an exchange or over-the-counter

**.02** The following is a brief discussion of each of the foregoing factors:

- a. The history of a corporate enterprise will show its past stability or instability, its growth or lack of growth, the diversity or lack of diversity of its operations, and other facts needed to form an opinion of the degree of risk involved in the business. For an enterprise which changed its form of organization but carried on the same or closely similar operations of its predecessor, the history of the former enterprise should be considered. The detail to be considered should increase with approach to the required date of appraisal since recent events are of greatest help in predicting the future; but a study of gross and net income, and of dividends covering a long prior period, is highly desirable. The history to be studied should include, but need not be limited to, the nature of the business, its products or services, its operating and investment assets, capital structure, plant facilities, sales records, and management, all of which should be considered as of the date of the appraisal, with due regard for recent significant changes. Events of the past that are unlikely to recur in the future should be discounted, since value has a close relation to future expectancy.
- b. A sound appraisal of a closely held stock must consider current and prospective economic conditions as of the date of appraisal, both in the national economy and in the industry or industries with which the corporation is allied. It is important to know that the company is more or less successful than its competitors in the same industry, or that it is maintaining a stable position with respect to competitors. Equal or even greater significance may attach to the ability of the industry with which the company is allied to compete with other industries. Prospective competition which has not been a factor in prior years should be given careful attention. For example, high profits due to the novelty of its product and the lack of competition often lead to increasing competition. The public's appraisal of the future prospects of competitive industries or of competitors within an industry may be indicated by price trends in the markets for commodities and for securities. The loss of the manager of a so-called "one-man" business may have a depressing effect upon the value of the stock of such business, particularly if there is a lack of trained personnel capable of succeeding to the management of the enterprise. In valuing the stock of this type of business, therefore, the effect of the loss of the manager on the future expectancy of the business and the absence of management-succession potentialities are pertinent factors to be taken into consideration. On the other hand, there may be factors which offset, in whole or in part, the loss of the manager's services. For instance, the nature of the business and of its assets may be such that they will not be impaired by the loss of the manager. Furthermore, the loss may be adequately covered by life insurance, or competent management might be employed on the basis of the consideration paid for the former manager's services. These, or other offsetting factors, if found to exist, should be carefully weighed against the loss of the manager's services in valuing the stock of the enterprise.
- c. Balance sheets should be obtained, preferably in the form of comparative annual statements for two or more years immediately preceding the date of appraisal, together with a balance sheet at the end of the month preceding that date, if corporate accounting will permit. Any balance sheet descriptions that are not self-explanatory, and balance sheet items comprehending diverse assets or liabilities, should be clarified in essential detail by supporting supplemental schedules. These statements usually will disclose to the appraiser (1) liquid position (ratio of current assets to current liabilities); (2) gross and net book value of principal classes of fixed assets; (3) working capital; (4) long-term indebtedness; (5) capital structure; and (6) net worth. Consideration also should be given to any assets not essential to the operation of the business, such as investments in securities, real estate, etc. In general, such non-operating assets will



- command a lower rate of return than do the operating assets, although in exceptional cases the reverse may be true. In computing the book value per share of stock, assets of the investment type should be revalued on the basis of their market price and the book value adjusted accordingly. Comparison of the company's balance sheets over several years may reveal, among other facts, such developments as the acquisition of additional production facilities or subsidiary companies, improvement in financial position, and details as to recapitalizations and other changes in the capital structure of the corporation. If the corporation has more than one class of stock outstanding, the charter or certificate of incorporation should be examined to ascertain the explicit rights and privileges of the various stock issues including: (1) voting powers, (2) preference as to dividends, and (3) preference as to assets in the event of liquidation.
- d. Detailed profit-and-loss statements should be obtained and considered for a representative period immediately prior to the required date of appraisal, preferably five or more years. Such statements should show (1) gross income by principal items; (2) principal deductions from gross income including major prior items of operating expenses, interest and other expense on each item of long-term debt, depreciation and depletion if such deductions are made, officers' salaries, in total if they appear to be reasonable or in detail if they seem to be excessive, contributions (whether or not deductible for tax purposes) that the nature of its business and its community position require the corporation to make, and taxes by principal items, including income and excess profits taxes; (3) net income available for dividends; (4) rates and amounts of dividends paid on each class of stock; (5) remaining amount carried to surplus; and (6) adjustments to, and reconciliation with, surplus as stated on the balance sheet. With profit and loss statements of this character available, the appraiser should be able to separate recurrent from nonrecurrent items of income and expense, to distinguish between operating income and investment income, and to ascertain whether or not any line of business in which the company is engaged is operated consistently at a loss and might be abandoned with benefit to the company. The percentage of earnings retained for business expansion should be noted when dividend-paying capacity is considered. Potential future income is a major factor in many valuations of closely held stocks, and all information concerning past income which will be helpful in predicting the future should be secured. Prior earnings records usually are the most reliable guide as to the future expectancy, but resort to arbitrary five- or ten-year averages without regard to current trends or future prospects will not produce a realistic valuation. If, for instance, a record of progressively increasing or decreasing net income is found, then greater weight may be accorded the most recent years' profits in estimating earning power. It will be helpful, in judging risk and the extent to which a business is a marginal operator, to consider deductions from income and net income in terms of percentage of sales. Major categories of cost and expense to be so analyzed include the consumption of raw materials and supplies in the case of manufacturers, processors, and fabricators; the cost of purchased merchandise in the case of merchants; utility services; insurance; taxes; depletion or depreciation; and interest.
- e. Primary consideration should be given to the dividend-paying capacity of the company rather than to dividends actually paid in the past. Recognition must be given to the necessity of retaining a reasonable portion of profits in a company to meet competition. Dividend-paying capacity is a factor that must be considered in an appraisal, but dividends actually paid in the past may not have any relation to dividend-paying capacity. Specifically, the dividends paid by a closely held family company may be measured by the income needs of the stockholders or by their desire to avoid taxes on dividend receipts, instead of by the ability of the company to pay dividends. Where an actual or effective controlling interest in a corporation is to be valued, the dividend factor is not a material element, since the payment of such dividends is discretionary with the controlling stockholders. The individual or group in control can substitute salaries and bonuses for dividends, thus reducing net income and understating the dividend-paying capacity of the company. It follows, therefore, that dividends are less reliable criteria of fair market value than other applicable factors.
- f. In the final analysis, goodwill is based upon earning capacity. The presence of goodwill and its value, therefore, rests upon the excess of net earnings over and above a fair return on the net tangible assets. While the element of goodwill may be based primarily on earnings, such factors as the prestige and renown of the business, the ownership of a trade or brand name, and a record of successful operation over a prolonged

period in a particular locality also may furnish support for the inclusion of intangible value. In some instances it may not be possible to make a separate appraisal of the tangible and intangible assets of the business. The enterprise has a value as an entity. Whatever intangible value there is, which is supportable by the facts, may be measured by the amount by which the appraised value of the tangible assets exceeds the net book value of such assets.

- g. Sales of stock of a closely held corporation should be carefully investigated to determine whether they represent transactions at arm's length. Forced or distress sales do not ordinarily reflect fair market value nor do isolated sales in small amounts necessarily control as the measure of value. This is especially true in the valuation of a controlling interest in a corporation. Since, in the case of closely held stocks, no prevailing market prices are available, there is no basis for making an adjustment for blockage. It follows, therefore, that such stocks should be valued upon a consideration of all the evidence affecting the fair market value. The size of the block of stock itself is a relevant factor to be considered. Although it is true that a minority interest in an unlisted corporation's stock is more difficult to sell than a similar block of listed stock, it is equally true that control of a corporation, either actual or in effect, representing as it does an added element of value, may justify a higher value for a specific block of stock.
- h. Section 2031(b) of the Code states, in effect, that in valuing unlisted securities the value of stock or securities of corporations engaged in the same or a similar line of business which are listed on an exchange should be taken into consideration along with all other factors. An important consideration is that the corporations to be used for comparisons have capital stocks which are actively traded by the public. In accordance with section 2031(b) of the Code, stocks listed on an exchange are to be considered first. However, if sufficient comparable companies whose stocks are listed on an exchange cannot be found, other comparable companies which have stocks actively traded on the over-the-counter market also may be used. The essential factor is that whether the stocks are sold on an exchange or over-the-counter there is evidence of an active, free public market for the stock as of the valuation date. In selecting corporations for comparative purposes, care should be taken to use only comparable companies. Although the only restrictive requirement as to comparable corporations specified in the statute is that their lines of business be the same or similar, yet it is obvious that consideration must be given to other relevant factors in order that the most valid comparison possible will be obtained. For illustration, a corporation having one or more issues of preferred stock, bonds, or debentures in addition to its common stock should not be considered to be directly comparable to one having only common stock outstanding. In like manner, a company with a declining business and decreasing markets is not comparable to one with a record of current progress and market expansion.

## SEC. 5. WEIGHT TO BE ACCORDED VARIOUS FACTORS

The valuation of closely held corporate stock entails the consideration of all relevant factors as stated in Section 4. Depending upon the circumstances in each case, certain factors may carry more weight than others because of the nature of the company's business. To illustrate:

1. Earnings may be the most important criterion of value in some cases, whereas asset value will receive primary consideration in others. In general, the appraiser will accord primary consideration to earnings when valuing stocks of companies which sell products or services to the public; conversely, in the investment or holding type of company, the appraiser may accord the greatest weight to the assets underlying the security to be valued.
2. The value of the stock of a closely held investment or real estate holding company, whether or not family owned, is closely related to the value of the assets underlying the stock. For companies of this type the appraiser should determine the fair market values of the assets of the company. Operating expenses of such a company and the cost of liquidating it, if any, merit consideration when appraising the relative values of the stock and the underlying assets. The market values of the underlying assets give due weight to potential earnings and dividends of the particular items of property underlying the stock, capitalized at rates deemed proper by the investing public at the date of appraisal. A current appraisal by the investing public should be superior to the retrospective opinion of an individual. For these reasons, adjusted net worth should be

accorded greater weight in valuing the stock of a closely held investment or real estate holding company, whether or not family owned, than any of the other customary yardsticks of appraisal, such as earnings and dividend paying capacity.

## SEC. 6. CAPITALIZATION RATES

In the application of certain fundamental valuation factors, such as earnings and dividends, it is necessary to capitalize the average or current results at some appropriate rate. A determination of the proper capitalization rate presents one of the most difficult problems in valuation. That there is no ready or simple solution will become apparent by a cursory check of the rates of return and dividend yields in terms of the selling prices of corporate shares listed on the major exchanges of the country. Wide variations will be found even for companies in the same industry. Moreover, the ratio will fluctuate from year to year depending upon economic conditions. Thus, no standard tables of capitalization rates applicable to closely held corporations can be formulated. Among the more important factors to be taken into consideration in deciding upon a capitalization rate in a particular case are: (1) the nature of the business; (2) the risk involved; and (3) the stability or irregularity of earnings.

## SEC. 7. AVERAGE OF FACTORS

Because valuations cannot be made on the basis of a prescribed formula, there is no means whereby the various applicable factors in a particular case can be assigned mathematical weights in deriving the fair market value. For this reason, no useful purpose is served by taking an average of several factors (for example, book value, capitalized earnings, and capitalized dividends) and basing the valuation on the result. Such a process excludes active consideration of other pertinent factors, and the end result cannot be supported by a realistic application of the significant facts in the case except by mere chance.

## SEC. 8. RESTRICTIVE AGREEMENTS

Frequently, in the valuation of closely held stock for estate and gift tax purposes, it will be found that the stock is subject to an agreement restricting its sale or transfer. Where shares of stock were acquired by a decedent subject to an option reserved by the issuing corporation to repurchase at a certain price, the option price is usually accepted as the fair market value for estate tax purposes. See Rev. Rul. 54-76, C.B. 1954-1, 194. However, in such case the option price is not determinative of fair market value for gift tax purposes. Where the option, or buy and sell agreement, is the result of voluntary action by the stockholders and is binding during the life as well as at the death of the stockholders, such agreement may or may not, depending upon the circumstances of each case, fix the value for estate tax purposes. However, such agreement is a factor to be considered, with other relevant factors, in determining fair market value. Where the stockholder is free to dispose of his shares during life and the option is to become effective only upon his death, the fair market value is not limited to the option price. It is always necessary to consider the relationship of the parties, the relative number of shares held by the decedent, and other material facts to determine whether the agreement represents a bona fide business arrangement or is a device to pass the decedent's shares to the natural objects of his bounty for less than an adequate and full consideration in money or money's worth. In this connection see Rev. Rul. 157 C.B. 1953-2, 255, and Rev. Rul. 189, C.B. 1953-2, 294.

## SEC. 9. EFFECT ON OTHER DOCUMENTS

Revenue Ruling 54-77, C.B. 1954-1, 187, is hereby superseded.

## APPENDIX 8

# Revenue Ruling 65-192

### REV. RUL. 65-192

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The general approach, methods, and factors outlined in Revenue Ruling 59-60, C.B. 1959-1, 237, for use in valuing closely held corporate stocks for estate and gift tax purposes are equally applicable to valuations thereof for income and other tax purposes and also in determinations of the fair market values of business interests of any type and of intangible assets for all tax purposes.

The formula approach set forth in A.R.M. 34, C.B. 2, 31 (1920), and A.R.M. 68, C.B. 3, 43 (1920), has no valid application in determinations of the fair market values of corporate stocks or of business interests, unless it is necessary to value the intangible assets of the corporation or the intangible assets included in the business interest. The formula approach may be used in determining the fair market values of intangible assets only if there is no better basis therefor available. In applying the formula, the average earnings period and the capitalization rates are dependent upon the facts and circumstances pertinent thereto in such case.

### FULL TEXT

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#### SEC. 1. PURPOSE

The purpose of this Revenue Ruling is to furnish information and guidance as to the usage to be made of suggested methods for determining the value as of March 1, 1913, or of any other date, of intangible assets and to identify those areas where a valuation formula set forth in A.R.M. 34, C.B. 2, 31 (1920), as modified by A.R.M. 68, C.B. 3, 43 (1920), both quoted in full below should and should not be applied. Since it appears that such formula has been applied to many valuation issues for which it was never intended, the Internal Revenue Service reindicates its limited application.

#### SEC. 2. BACKGROUND

A.R.M. 34 was issued in 1920 for the purpose of providing suggested formulas for determining the amount of March 1, 1913, intangible asset value lost by breweries and other businesses connected with the distilling industry, as a result of the passage of the 18th Amendment to the Constitution of the United States. A.R.M. 68 was issued later in the same year and contained a minor revision of the original ruling so that its third formula would be applied in accordance with its purpose and intent.

#### SEC. 3. STATEMENT OF POSITION

**.01** Although the formulas and approach contained in A.R.M. 34 were specifically aimed at the valuation of intangible assets of distilling and related companies as of March 1, 1913, the last two paragraphs of the ruling seemingly broaden it to make its third formula applicable to almost any kind of enterprise. The final sentences, however, limit the purpose of such formula by stating that “In . . . all of the cases the effort should be to determine what net earnings a purchaser of a business on March 1, 1913, might reasonably have expected to receive from it” and by providing certain checks and alternatives. Also, both A.R.M. 34 and A.R.M. 68 expressly stated that such for-

mula was merely a rule for guidance and not controlling in the presence of “better evidence” in determining the value of intangible assets. Furthermore, T.B.R. 57, C.B. 1, 40 (1919), relating to the meaning of “fair market value” of property received in exchange for other property, which was published before A.R.M. 34 and A.R.M. 68 and has not been revoked, set forth general principles of valuation that are consistent with Revenue Ruling 59-60, C.B. 1959-1, 237. Moreover, in S.M. 1609, C.B. III-1, 48 (1924) it was stated that “the method suggested in A.R.M. 34 for determining the value of intangibles is . . . controlling only in the absence of better evidence.” As said in *North American Service Co., Inc. v. Commissioner*, 33 T.C. 677, 694 (1960), acq., C.B. 1960-2, 6, “an A.R.M. 34 computation would not be conclusive of the existence and value of good will if better evidence were available.”

**.02** Revenue Ruling 59-60 sets forth the proper approach to use in the valuation of closely held corporate stocks for estate and gift tax purposes. That ruling contains the statement that no formula can be devised that will be generally applicable to the multitude of different valuation issues. It also contains a discussion of intangible value in closely held corporations and some of the elements which may support such value in a given business.

## SEC. 4. DELINEATION OF AREAS IN WHICH SUGGESTED METHODS WILL BE EFFECTIVE

**.01** The general approach, methods, and factors outlined in Revenue Ruling 59-60 are equally applicable to valuations of corporate stocks for income and other tax purposes as well as for estate and gift tax purposes. They apply also to problems involving the determination of the fair market value of business interests of any type, including partnerships, proprietorships, etc., and of intangible assets for all tax purposes.

**.02** Valuation, especially where earning power is an important factor, is in essence a process requiring the exercise of informed judgment and common sense. Thus, the suggested formula approach set forth in A.R.M. 34 has no valid application in determinations of the fair market value of corporate stocks or of business interests unless it is necessary to value the intangible assets of the corporation or the intangible assets included in the business interest. The formula approach may be used in determining the fair market values of intangible assets only if there is no better basis therefor available. In applying the formula, the average earnings period and the capitalization rates are dependent upon the facts and circumstances pertinent thereto in each case. See *John Q. Shunk et al. v. Commissioner*, 10 T.C. 293, 304-5 (1948), acq., C.B. 1948-1, 3, aff'd 173 Fed. (2d) 747 (1949); *USHCO Manufacturing Co., Inc. v. Commissioner*, Tax Court Memorandum Opinion entered March 10, 1945, aff'd 175 Fed. (2d) 821 (1945); and *White & Wells Co. v. Commissioner*, 19 B.T.A. 416, nonacq., C.B. IX-2, 87 (1930), rev'd and remanded, 50 Fed. (2d) 120 (1931).

## SEC. 5. QUOTATION OF A.R.M. 34

For convenience, A.R.M. 34 reads as follows:

The Committee has considered the question of providing some practical formula for determining value as of March 1, 1913, or of any other date, which might be considered as applying to intangible assets, but finds itself unable to lay down any specific rule of guidance for determining the value of intangibles which would be applicable in all cases and under all circumstances. Where there is no established market to serve as a guide, the question of value, even of tangible assets, is one largely of judgment and opinion, and the same thing is even more true of intangible assets such as goodwill, trademarks, trade brands, etc. However, there are several methods of reaching a conclusion as to the value of intangibles which the Committee suggests may be utilized broadly in passing upon questions of valuation, not to be regarded as controlling, however, if better evidence is presented in any specific case.

Where deduction is claimed for obsolescence or loss of goodwill or trademarks, the burden of proof is primarily upon the taxpayer to show the value of such goodwill or trademarks on March 1, 1913. Of course, if goodwill or trademarks have been acquired for cash or other valuable considerations subsequent to March 1, 1913, the measure of loss will be determined by the amount of cash or value of other considerations paid therefor, and no deduction will be allowed for the value of goodwill or trademarks built up by the taxpayer since March 1, 1913. The following suggestions are made, therefore, merely as suggestions for checks upon the soundness and validity of the taxpayers' claims. No obsolescence or loss with respect to goodwill should be allowed except in cases of actual disposition of the asset or abandonment of the business.

In the first place, it is recognized that in numerous instances it has been the practice of distillers and wholesale liquor dealers to put out under well-known and popular brands only so much goods as could be marketed without affecting the established market price therefor and to sell other goods of the same identical manufacture, age, and character under other brands, or under no brand at all, at figures very much below those which the well-known brands commanded. In such cases the difference between the price at which whisky was sold under a given brand name and also under another brand name, or under no brand, multiplied by the number of units sold during a given year gives an accurate determination of the amount of profit attributable to that brand during that year, and where this practice is continued for a long enough period to show that this amount was fairly constant and regular and might be expected to yield annually that average profit, by capitalizing this earning at the rate, say, of 20 percent, the value of the brand is fairly well established.

Another method is to compare the volume of business done under the trademark or brand under consideration and profits made, or by the business whose goodwill is under consideration, with the similar volume of business and profit made in other cases where goodwill or trademarks have been actually sold for cash, recognizing as the value of the first the same proportion of the selling price of the second, as the profits of the first attributable to brands or goodwill, is of the similar profits of the second.

The third method and possibly the one which will most frequently have to be applied as a check in the absence of data necessary for the application of the preceding ones, is to allow out of average earnings over a period of years prior to March 1, 1913, preferably not less than five years, a return of 10 percent upon the average tangible assets for the period. The surplus earnings will then be the average amount available for return upon the value of the intangible assets, and it is the opinion of the Committee that this return should be capitalized upon the basis of not more than five years' purchase that is to say, five times the amount available as return from intangibles should be the value of the intangibles.

In view of the hazards of the business, the changes in popular tastes, and the difficulties in preventing limitation or counterfeiting of popular brands affecting the sales of the genuine goods, the Committee is of the opinion that the figure given of 20 percent return on intangibles is not unreasonable, and it recommends that no higher figure than that be attached in any case to intangibles without a very clear and adequate showing that the value of the intangibles was in fact greater than would be reached by applying this formula.

The foregoing is intended to apply particularly to businesses put out of existence by the prohibition law, but will be equally applicable so far as the third formula is concerned, to other businesses of a more or less hazardous nature. In the case, however, of valuation of goodwill of a business which consists of the manufacture or sale of standard articles of everyday necessity not subject to violent fluctuations and where the hazard is not so great, the Committee is of the opinion that the figure for determination of the return on tangible assets might be reduced from 10 to 8 or 9 percent, and that the percentage for capitalization of the return upon intangibles might be reduced from 20 to 15 percent.

In any or all of the cases the effort should be to determine what net earnings a purchaser of a business on March 1, 1913, might reasonably have expected to receive from it, and therefore a representative period should be used for averaging actual earnings, eliminating any year in which there were extraordinary factors affecting earnings either way. Also, in the case of the sale of goodwill of a going business the percentage rate of capitalization of earnings applicable to goodwill shown by the amount actually paid for the business should be used as a check against the determination of goodwill value as of March 1, 1913, and if the goodwill is sold upon the basis of capitalization of earnings less than the figures above indicated as the ones ordinarily to be adopted, the same percentage should be used in figuring value as of March 1, 1913.



## SEC. 6. QUOTATION OF A.R.M. 68

Also for convenience, A.R.M. 68 reads as follows:

The Committee is in receipt of a request for advice as to whether under A.R.M. 34 the 10 percent upon tangible assets is to be applied only to the net tangible assets or to all tangible assets on the books of the corporation, regardless of any outstanding obligations.

The Committee, in the memorandum in question, undertook to lay down a rule for guidance in the absence of better evidence in determining the value as of March 1, 1913, of goodwill, and held that in determining such value, income over an average period in excess of an amount sufficient to return 10 percent upon tangible assets should be capitalized at 20 percent. Manifestly, since the effort is to determine the value of the goodwill, and therefore the true net worth of the taxpayer as of March 1, 1913, the 10 percent should be applied only to the tangible assets entering into net worth, including accounts and bills receivable in excess of accounts and bills payable.

In other words, the purpose and intent are to provide for a return to the taxpayer of 10 percent upon so much of his investment as is represented by tangible assets and to capitalize the excess of earnings over the amount necessary to provide such return, at 20 percent.

## SEC. 7. EFFECT ON OTHER DOCUMENTS

Although the limited application of A.R.M. 34 and A.R.M. 68 is reindicated in this Revenue Ruling, the principles enunciated in those rulings are not thereby affected.



## APPENDIX 9

# *Revenue Ruling 65-193*

### **REV. RUL. 65-193, 1965-2 C.B. 370, IRC SEC. 2031**

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Sec. 2031—DEFINITION OF GROSS ESTATE

26 CFR 20.2031-2: Valuation of stocks and bonds.

(Also Sections 1001, 2512; 1.1001-1, 25.2512-2.)

### **TEXT**

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Revenue Ruling 59-60, C.B. 1959-1, 237, is hereby modified to delete the statements, contained therein at section 4.02(f), that “In some instances it may not be possible to make a separate appraisal of the tangible and intangible assets of the business. The enterprise has a value as an entity. Whatever intangible value there is, which is supportable by the facts, may be measured by the amount by which the appraised value of the tangible assets exceeds the net book value of such assets.”

The instances where it is not possible to make a separate appraisal of the tangible and intangible assets of a business are rare and each case varies from the other. No rule can be devised which will be generally applicable to such cases.

Other than this modification, Revenue Ruling 59-60 continues in full force and effect. See Rev. Rul. 65-192, page 259, this Bulletin.



# APPENDIX 10

## Revenue Procedure 66-49

### REV. PROC. 66-49

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Section 170

### HEADNOTE

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Rev. Proc. 66-49. A procedure to be used as a guideline by all persons making appraisals of donated property for Federal income tax purposes.

### FULL TEXT

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#### SEC. 1. PURPOSE

The purpose of this procedure is to provide information and guidelines for taxpayers, individual appraisers, and valuation groups relative to appraisals of contributed property for Federal income tax purposes. The procedures outlined are applicable to all types of non-cash property for which an appraisal is required, such as real property, tangible or intangible personal property, and securities. These procedures are also appropriate for unique properties, such as art objects, literary manuscripts, antiques, etc., with respect to which the determination of value often is more difficult.

#### SEC. 2. LAW AND REGULATIONS

**.01** Numerous sections of the Internal Revenue Code of 1954, as amended, give rise to a determination of value for Federal tax purposes; however, the significant section for purposes of this Revenue Procedure is section 170, Charitable, Etc., Contributions and Gifts.

**.02** Value is defined in section 1.170-1(c) of the Income Tax Regulations as follows:

The fair market value is the price at which the property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or sell and both having reasonable knowledge of relevant facts.

**.03** This section further provides that:

If the contribution is made in property of a type which the taxpayer sells in the course of his business, the fair market value is the price which the taxpayer would have received if he had sold the contributed property in the lowest usual market in which he customarily sells, at the time and place of contribution (and in the case of a contribution of goods in quantity, in the quantity contributed).

**.04** As to the measure of Proof in determining the fair market value, all factors bearing on value are relevant including, where pertinent, the cost, or selling price of the item, sales of comparable properties, cost of reproduction, opinion evidence, and appraisals. Fair market value depends upon value in the market and not on intrinsic worth.

**.05** The cost or actual selling price of an item within a reasonable time before or after the valuation date may be the best evidence of its fair market value. Before such information is taken into account, it must be ascertained that the transaction was at arm's length and that the parties were fully informed as to all relevant facts. Absent such evidence, even the sales price of the item in question will not be persuasive.

**.06** Sales of similar properties are often given probative weight by the courts in establishing fair market value. The weight to be given such evidence will be affected by the degree of similarity to the property under appraisal and the proximity of the date of sale to the valuation date.

**.07** With respect to reproductive cost as a measure of fair market value, it must be shown that there is a probative correlation between the cost of reproduction and fair market value. Frequently, reproductive cost will be in excess of the fair market value.

**.08** Generally, the weight to be given to opinion evidence depends on its origin and the thoroughness with which it is supported by experience and facts. It is only where expert opinion is supported by facts having strong probative value that the opinion testimony will in itself be given appropriate weight. The underlying facts must corroborate the opinion; otherwise such opinion will be discounted or disregarded.

**.09** The weight to be accorded any appraisal made either at or after the valuation date will depend largely upon the competence and knowledge of the appraiser with respect to the property and the market for such property.

### **SEC. 3. APPRAISAL FORMAT**

**.01** When it becomes necessary to secure an appraisal in order to determine the values of items for Federal income tax purposes, such appraisals should be obtained from qualified and reputable sources, and the appraisal report should accompany the return when it is filed. The more complete the information filed with a tax return the more unlikely it will be that the Internal Revenue Service will find it necessary to question items on it. Thus, when reporting deduction for charitable contributions on an income tax return, it will facilitate the review and the acceptance of the returned values if any appraisals which have been secured are furnished. The above-mentioned regulations prescribe that support of values claimed should be submitted and a properly prepared appraisal by a person qualified to make such an appraisal may well constitute the necessary substantiation. In this respect, it is not intended that all value determinations be supported by formal written appraisals as outlined in detail below. This is particularly applicable to minor items of property or where the value of the property is easily ascertainable by methods other than appraisal.

**.02** In general, an appraisal report should contain at least the following:

- a. A summary of the appraiser's qualifications
- b. A statement of the value and the appraiser's definition of the value he has obtained
- c. The bases upon which the appraisal was made, including any restrictions, understandings, or covenants limiting the use or disposition of the property

- d. The date as of which the property was valued
- e. The signature of the appraiser and the date the appraisal was made

**.03** An example of the kind of data which should be contained in a typical appraisal is included below. This relates to the valuation of art objects, but a similar detailed breakdown can be outlined for any type of property. Appraisals of art objects, paintings in particular, should include:

- a. A complete description of the object, indicating the size, the subject matter, the medium, the name of the artist, approximate date created, the interest transferred, etc.
- b. The cost, date, and manner of acquisition
- c. A history of the item including proof of authenticity such as a certificate of authentication if such exists
- d. A photograph of a size and quality fully identifying the subject matter, preferably a 10", 12", or larger print
- e. A statement of the factors upon which the appraisal was based, such as:
  1. Sales of other works by the same artist particularly on or around the valuation date
  2. Quoted prices in dealers' catalogs of the artist's works or of other artists of comparable stature
  3. The economic state of the art market at or around the time of valuation, particularly with respect to the specific property
  4. A record of any exhibitions at which the particular art object had been displayed
  5. A statement as to the standing of the artist in his profession and in the particular school or time period

**.04** Although an appraisal report meets these requirements, the Internal Revenue Service is not relieved of the responsibility of reviewing appraisals to the extent deemed necessary.

## SEC. 4. REVIEW OF VALUATION APPRAISALS

**.01** While the Service is responsible for reviewing appraisals, it is not responsible for making appraisals; the burden of supporting the fair market value listed on a return is the taxpayer's. The Internal Revenue Service cannot accord recognition to any appraiser or group of appraisers from the standpoint of unquestioned acceptance of their appraisals. Furthermore, the Service cannot approve valuations or appraisals prior to the actual filing of the tax return to which the appraisal pertains and cannot issue advance rulings approving or disapproving such appraisals.

**.02** In determining the acceptability of the claimed value of the donated property, the Service may either accept the value claimed based on information or appraisals submitted with the return or make its own determination as to the fair market value. In either instance, the Service may find it necessary to:

1. Contact the taxpayer and ask for additional information.
2. Refer the valuation problem to a Service appraiser or valuation specialist.
3. Recommend that an independent appraiser be employed by the Service to appraise the asset in question. (This latter course is frequently used by the Service when objects requiring appraisers of highly specialized experience and knowledge are involved.)



## APPENDIX 11

# Revenue Ruling 68-609

### REV. RUL. 68-609, 1968-2 C.B. 327 IRC SEC. 1001

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Sec. 1001—DETERMINATION OF AMOUNT OF AND RECOGNITION OF GAIN OR LOSS

26 CFR 1.1001-1: Computation of gain or loss

(Also Section 167; 1.167(a)-3.)

### HEADNOTE

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The “formula” approach may be used in determining the fair market value of intangible assets of a business only if there is no better basis available for making the determination; A.R.M. 34, A.R.M. 68, O.D. 937, and Revenue Ruling 65-192 superseded.

### TEXT

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The purpose of this Revenue Ruling is to update and restate, under the current statute and regulations, the currently outstanding portions of A.R.M. 34, C.B. 2, 31 (1920), A.R.M. 68, C.B. 3, 43 (1920), and O.D. 937, C.B. 4, 43 (1921).

Prepared pursuant to Rev. Proc. 67-6, C.B. 1967-1, 576.

The question presented is whether the “formula” approach, the capitalization of earnings in excess of a fair rate of return on net tangible assets, may be used to determine the fair market value of the intangible assets of a business.

The “formula” approach may be stated as follows:

A percentage return on the average annual value of the tangible assets used in a business is determined, using a period of years (preferably not less than five) immediately prior to the valuation date. The amount of the percentage return on tangible assets, thus determined, is deducted from the average earnings of the business for such period and the remainder, if any, is considered to be the amount of the average annual earnings from the intangible assets of the business for the period. This amount (considered as the average annual earnings from intangibles), capitalized at a percentage of, say, 15 to 20 percent, is the value of the intangible assets of the business determined under the “formula” approach.

The percentage of return on the average annual value of the tangible assets used should be the percentage prevailing in the industry involved at the date of valuation, or (when the industry percentage is not available) a percentage of 8 to 10 percent may be used.

The 8 percent rate of return and the 15 percent rate of capitalization are applied to tangibles and intangibles, respectively, of businesses with a small risk factor and stable and regular earnings; the 10 percent rate of return and 20 percent rate of capitalization are applied to businesses in which the hazards of business are relatively high.

The above rates are used as examples and are not appropriate in all cases. In applying the “formula” approach, the average earnings period and the capitalization rates are dependent upon the facts pertinent thereto in each case.

The past earnings to which the formula is applied should fairly reflect the probable future earnings. Ordinarily, the period should not be less than five years, and abnormal years, whether above or below the average, should be eliminated. If the business is a sole proprietorship or partnership, there should be deducted from the earnings of the business a reasonable amount for services performed by the owner or partners engaged in the business. See Lloyd B. Sanderson



Estate v. Commissioner, 42 F.2d 160 (1930). Further, only the tangible assets entering into net worth, including accounts and bills receivable in excess of accounts and bills payable, are used for determining earnings on the tangible assets. Factors that influence the capitalization rate include (1) the nature of the business, (2) the risk involved, and (3) the stability or irregularity of earnings.

The “formula” approach should not be used if there is better evidence available from which the value of intangibles can be determined. If the assets of a going business are sold upon the basis of a rate of capitalization that can be substantiated as being realistic, though it is not within the range of figures indicated here as the ones ordinarily to be adopted, the same rate of capitalization should be used in determining the value of intangibles.

Accordingly, the “formula” approach may be used for determining the fair market value of intangible assets of a business only if there is no better basis therefore available.

See also Revenue Ruling 59-60, C.B. 1959-1, 237, as modified by Revenue Ruling 65-193, C.B. 1965-2, 370, which sets forth the proper approach to use in the valuation of closely held corporate stocks for estate and gift tax purposes. The general approach, methods, and factors, outlined in Revenue Ruling 59-60, as modified, are equally applicable to valuations of corporate stocks for income and other tax purposes as well as for estate and gift tax purposes. They apply also to problems involving the determination of the fair market value of business interests of any type, including partnerships and proprietorships, and of intangible assets for all tax purposes.

A.R.M. 34, A.R.M. 68, and O.D. 937 are superseded, since the positions set forth therein are restated to the extent applicable under current law in this Revenue Ruling. Revenue Ruling 65-192, C.B. 1965-2, 259, which contained restatements of A.R.M. 34 and A.R.M. 68, is also superseded.

## APPENDIX 12

# Revenue Procedure 77-12

### REV. PROC. 77-12, 1977-1 C.B. 569

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Sec. 7805—RULES AND REGULATIONS

26 CFR 601.105: Examination of returns and claims for refund, credit, or abatement; determination of correct tax liability

(Also Part I, Section 334; 1.334-1.)

### TEXT

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#### SEC. 1. PURPOSE

The purpose of this Revenue Procedure is to set forth guidelines for use by taxpayers and Service personnel in making fair market value determinations in situations where a corporation purchases the assets of a business containing inventory items for a lump sum or where a corporation acquires assets including inventory items by the liquidation of a subsidiary pursuant to the provisions of section 332 of the Internal Revenue Code of 1954 and the basis of the inventory received in liquidation is determined under section 334(b)(2). These guidelines are designed to assist taxpayers and Service personnel in assigning a fair market value to such assets.

#### SEC. 2. BACKGROUND

If the assets of a business are purchased for a lump sum, or if the stock of a corporation is purchased and that corporation is liquidated under section 332 of the Code and the basis is determined under section 334(b)(2), the purchase price must be allocated among the assets acquired to determine the basis of each of such assets. In making such determinations, it is necessary to determine the fair market value of any inventory items involved. This Revenue Procedure describes methods that may be used to determine the fair market value of inventory items.

In determining the fair market value of inventory under the situations set forth in this Revenue Procedure, the amount of inventory generally would be different from the amounts usually purchased. In addition, the goods in process and finished goods on hand must be considered in light of what a willing purchaser would pay and a willing seller would accept for the inventory at the various stages of completion, when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts.

#### SEC. 3. PROCEDURES FOR DETERMINATION OF FAIR MARKET VALUE

Three basic methods an appraiser may use to determine the fair market value of inventory are the *cost of reproduction method*, the *comparative sales method*, and the *income method*. All methods of valuation are based on one or a combination of these three methods.

**.01** The cost of reproduction method generally provides a good indication of fair market value if inventory is readily replaceable in a wholesale or retail business but generally should not be used in establishing the fair market value of the finished goods of a manufacturing concern. In valuing a particular inventory under this method,

however, other factors may be relevant. For example, a well-balanced inventory available to fill customers' orders in the ordinary course of business may have a fair market value in excess of its cost of reproduction because it provides a continuity of business, whereas an inventory containing obsolete merchandise unsuitable for customers might have a fair market value of less than the cost of reproduction.

**.02** The comparative sales method utilizes the actual or expected selling prices of finished goods to customers as a basis of determining fair market values of those finished goods. When the expected selling price is used as a basis for valuing finished goods inventory, consideration should be given to the time that would be required to dispose of this inventory, the expenses that would be expected to be incurred in such disposition—for example, all costs of disposition, applicable discounts (including those for quantity), sales commissions, and freight and shipping charges—and a profit commensurate with the amount of investment and degree of risk. It should also be recognized that the inventory to be valued may represent a larger quantity than the normal trading volume and the expected selling price can be a valid starting point only if customers' orders are filled in the ordinary course of business.

**.03** The income method, when applied to fair market value determinations for finished goods, recognizes that finished goods must generally be valued in a profit-motivated business. Since the amount of inventory may be large in relation to normal trading volume, the highest and best use of the inventory will be to provide for a continuity of the marketing operation of the going business. Additionally, the finished goods inventory will usually provide the only source of revenue of an acquired business during the period it is being used to fill customers' orders. The historical financial data of an acquired company can be used to determine the amount that could be attributed to finished goods in order to pay all costs of disposition and provide a return on the investment during the period of disposition.

**.04** The fair market value of work in process should be based on the same factors used to determine the fair market value of finished goods reduced by the expected costs of completion, including a reasonable profit allowance for the completion and selling effort of the acquiring corporation. In determining the fair market value of raw materials, the current costs of replacing the inventory in the quantities to be valued generally provides the most reliable standard.

## **SEC. 4. CONCLUSION**

Because valuing inventory is an inherently factual determination, no rigid formulas can be applied. Consequently, the methods outlined above can only serve as guidelines for determining the fair market value of inventories.

# APPENDIX 13

## *Revenue Ruling 77-287*

### **REV. RUL. 77-287, 1977-2 C.B. 319 IRC SEC. 2031**

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Sec. 2031—DEFINITION OF GROSS ESTATE

26 CFR 20.2031-2: Valuation of stocks and bonds

(Also Sections 170, 2032, 2512; 1.170A-1, 20.2032-1, 25.2512-2.)

### **HEADNOTE**

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Valuation of securities restricted from immediate resale. Guidelines are set forth for the valuation, for Federal tax purposes, of securities that cannot be immediately resold because they are restricted from resale pursuant to Federal securities laws; Rev. Rul. 59-60 amplified.

### **TEXT**

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#### **SEC. 1. PURPOSE**

The purpose of this Revenue Ruling is to amplify Rev. Rul. 59-60, 1959-1 C.B. 237, as modified by Rev. Rul. 65-193, 1965-2 C.B. 370, and to provide information and guidance to taxpayers, Internal Revenue Service personnel, and others concerned with the valuation, for Federal tax purposes, of securities that cannot be immediately resold because they are restricted from resale pursuant to Federal securities laws. This guidance is applicable only in cases where it is not inconsistent with valuation requirements of the Internal Revenue Code of 1954 or the regulations thereunder. Further, this ruling does not establish the time at which property shall be valued.

#### **SEC. 2. NATURE OF THE PROBLEM**

It frequently becomes necessary to establish the fair market value of stock that has not been registered for public trading when the issuing company has stock of the same class that is actively traded in one or more securities markets. The problem is to determine the difference in fair market value between the registered shares that are actively traded and the unregistered shares. This problem is often encountered in estate and gift tax cases. However, it is sometimes encountered when unregistered shares are issued in exchange for assets or the stock of an acquired company.

#### **SEC. 3. BACKGROUND AND DEFINITIONS**

**.01** The Service outlined and reviewed in general the approach, methods, and factors to be considered in valuing shares of closely held corporate stock for estate and gift tax purposes in Rev. Rul. 59-60, as modified by Rev. Rul. 65-193. The provisions of Rev. Rul. 59-60, as modified, were extended to the valuation of corporate securities for income and other tax purposes by Rev. Rul. 68-609, 1968-2 C.B. 327.

**.02** There are several terms currently in use in the securities industry that denote restrictions imposed on the resale and transfer of certain securities. The term frequently used to describe these securities is “restricted securities,” but they are sometimes referred to as “unregistered securities,” “investment letter stock,” “control stock,” or “private placement stock.” Frequently these terms are used interchangeably. They all indicate that these particular securities cannot lawfully be distributed to the general public until a registration statement relating to the corporation underlying the securities has been filed, and has also become effective under the rules promulgated and enforced by the United States Securities & Exchange Commission (SEC) pursuant to the Federal securities laws. The following represents a more refined definition of each of the following terms along with two other terms—“exempted securities” and “exempted transactions.”

1. The term “restricted securities” is defined in Rule 144 adopted by the SEC as “securities acquired directly or indirectly from the issuer thereof, or from an affiliate of such issuer, in a transaction or chain of transactions not involving any public offering.”
2. The term “unregistered securities” refers to those securities with respect to which a registration statement, providing full disclosure by the issuing corporation, has not been filed with the SEC pursuant to the Securities Act of 1933. The registration statement is a condition precedent to a public distribution of securities in interstate commerce and is aimed at providing the prospective investor with a factual basis for sound judgment in making investment decisions.
3. The terms “investment letter stock” and “letter stock” denote shares of stock that have been issued by a corporation without the benefit of filing a registration statement with the SEC. Such stock is subject to resale and transfer restrictions set forth in a letter agreement requested by the issuer and signed by the buyer of the stock when the stock is delivered. Such stock may be found in the hands of either individual investors or institutional investors.
4. The term “control stock” indicates that the shares of stock have been held or are being held by an officer, director, or other person close to the management of the corporation. These persons are subject to certain requirements pursuant to SEC rules upon resale of shares they own in such corporations.
5. The term “private placement stock” indicates that the stock has been placed with an institution or other investor who will presumably hold it for a long period and ultimately arrange to have the stock registered if it is to be offered to the general public. Such stock may or may not be subject to a letter agreement. Private placements of stock are exempted from the registration and prospectus provisions of the Securities Act of 1933.
6. The term “exempted securities” refers to those classes of securities that are expressly excluded from the registration provisions of the Securities Act of 1933 and the distribution provisions of the Securities Exchange Act of 1934.
7. The term “exempted transactions” refers to certain sales or distributions of securities that do not involve a public offering and are excluded from the registration and prospectus provisions of the Securities Act of 1933 and distribution provisions of the Securities Exchange Act of 1934. The exempted status makes it unnecessary for issuers of securities to go through the registration process.

## SEC. 4. SECURITIES INDUSTRY PRACTICE IN VALUING RESTRICTED SECURITIES

**.01** **Investment Company Valuation Practices.** The Investment Company Act of 1940 requires open-end investment companies to publish the valuation of their portfolio securities daily. Some of these companies have portfolios containing restricted securities, but also have unrestricted securities of the same class traded on a securities exchange. In recent years the number of restricted securities in such portfolios has increased. The following methods have been used by investment companies in the valuation of such restricted securities:

- a. Current market price of the unrestricted stock less a constant percentage discount based on purchase discount;
- b. Current market price of unrestricted stock less a constant percentage discount different from purchase discount;
- c. Current market price of the unrestricted stock less a discount amortized over a fixed period;
- d. Current market price of the unrestricted stock; and
- e. Cost of the restricted stock until it is registered.

The SEC ruled in its Investment Company Act Release No. 5847, dated October 21, 1969, that there can be no automatic formula by which an investment company can value the restricted securities in its portfolios. Rather, the SEC has determined that it is the responsibility of the board of directors of the particular investment company to determine the “fair value” of each issue of restricted securities in good faith.

**.02 Institutional Investors Study.** Pursuant to Congressional direction, the SEC undertook an analysis of the purchases, sales, and holding of securities by financial institutions, in order to determine the effect of institutional activity upon the securities market. The study report was published in eight volumes in March 1971. The fifth volume provides an analysis of restricted securities and deals with such items as the characteristics of the restricted securities purchasers and issuers, the size of transactions (dollars and shares), the marketability discounts on different trading markets, and the resale provisions. This research project provides some guidance for measuring the discount in that it contains information, based on the actual experience of the marketplace, showing that, during the period surveyed (January 1, 1966, through June 30, 1969), the amount of discount allowed for restricted securities from the trading price of the unrestricted securities was generally related to the following four factors.

1. **Earnings.** Earnings and sales consistently have a significant influence on the size of restricted securities discounts according to the study. Earnings played the major part in establishing the ultimate discounts at which these stocks were sold from the current market price. Apparently earnings patterns, rather than sales patterns, determine the degree of risk of an investment.
2. **Sales.** The dollar amount of sales of issuers' securities also has a major influence on the amount of discount at which restricted securities sell from the current market price. The results of the study generally indicate that the companies with the lowest dollar amount of sales during the test period accounted for most of the transactions involving the highest discount rates, while they accounted for only a small portion of all transactions involving the lowest discount rates.
3. **Trading Market.** The market in which publicly held securities are traded also reflects variances in the amount of discount that is applied to restricted securities purchases. According to the study, discount rates were greatest on restricted stocks with unrestricted counterparts traded over-the-counter, followed by those with unrestricted counterparts listed on the American Stock Exchange, while the discount rates for those stocks with unrestricted counterparts listed on the New York Stock Exchange were the smallest.
4. **Resale Agreement Provisions.** Resale agreement provisions often affect the size of the discount. The discount from the market price provides the main incentive for a potential buyer to acquire restricted securities. In judging the opportunity cost of freezing funds, the purchaser is analyzing two separate factors. The first factor is the risk that underlying value of the stock will change in a way that, absent the restrictive provisions, would have prompted a decision to sell. The second factor is the risk that the contemplated means of legally disposing of the stock may not materialize. From the seller's point of view, a discount is justified where the seller is relieved of the expenses of registration and public distribution, as well as of the risk that the market will adversely change before the offering is completed. The ultimate agreement between buyer and seller is a reflection of these and other considerations. Relative bargaining strengths of the parties to the agreement are major considerations that influence the resale terms and consequently the size of discounts in restricted securities transactions. Certain provisions are often found in agreements between buyers and sellers that affect the size of discounts at which restricted stocks are sold. Several such provisions follow, all of which, other than number (3), would tend to reduce the size of the discount:
  - (1) A provision giving the buyer an option to “piggyback,” that is, to register restricted stock with the next registration statement, if any, filed by the issuer with the SEC;
  - (2) A provision giving the buyer an option to require registration at the seller's expense;
  - (3) A provision giving the buyer an option to require registration, but only at the buyer's own expense;
  - (4) A provision giving the buyer a right to receive continuous disclosure of information about the issuer from the seller;
  - (5) A provision giving the buyer a right to select one or more directors of the issuer,
  - (6) A provision giving the buyer an option to purchase additional shares of the issuer's stock; and
  - (7) A provision giving the buyer the right to have a greater voice in operations of the issuer, if the issuer does not meet previously agreed upon operating standards.

Institutional buyers can and often do obtain many of these rights and options from the sellers of restricted securities, and naturally, the more rights the buyer can acquire, the lower the buyer's risk is going to be, thereby reducing the buyer's discount as well. Smaller buyers may not be able to negotiate the large discounts or the rights and options that volume buyers are able to negotiate.

**.03** Summary. A variety of methods have been used by the securities industry to value restricted securities. The SEC rejects all automatic or mechanical solutions to the valuation of restricted securities, and prefers, in the case of the valuation of investment company portfolio stocks, to rely upon good faith valuations by the board of directors of each company. The study made by the SEC found that restricted securities generally are issued at a discount from the market value of freely tradable securities.

## SEC. 5. FACTS AND CIRCUMSTANCES MATERIAL TO VALUATION OF RESTRICTED SECURITIES

**.01** Frequently, a company has a class of stock that cannot be traded publicly. The reason such stock cannot be traded may arise from the securities statutes, as in the case of an "investment letter" restriction; it may arise from a corporate charter restriction, or perhaps from a trust agreement restriction. In such cases, certain documents and facts should be obtained for analysis.

**.02** The following documents and facts, when used in conjunction with those discussed in Section 4 of Rev. Rul. 59-60, will be useful in the valuation of restricted securities:

1. A copy of any declaration of trust, trust agreement, and any other agreements relating to the shares of restricted stock;
2. A copy of any document showing any offers to buy or sell or indications of interest in buying or selling the restricted shares;
3. The latest prospectus of the company;
4. Annual reports of the company for 3 to 5 years preceding the valuation date;
5. The trading prices and trading volume of the related class of traded securities 1 month preceding the valuation date, if they are traded on a stock exchange (if traded over-the-counter, prices may be obtained from the National Quotations Bureau, the National Association of Securities Dealers Automated Quotations (NASDAQ), or sometimes from broker-dealers making markets in the shares);
6. The relationship of the parties to the agreements concerning the restricted stock, such as whether they are members of the immediate family or perhaps whether they are officers or directors of the company; and
7. Whether the interest being valued represents a majority or minority ownership.

## SEC. 6. WEIGHING FACTS AND CIRCUMSTANCES MATERIAL TO RESTRICTED STOCK VALUATION

All relevant facts and circumstances that bear upon the worth of restricted stock, including those set forth above in the preceding Sections 4 and 5, and those set forth in Section 4 of Rev. Rul. 59-60, must be taken into account in arriving at the fair market value of such securities. Depending on the circumstances of each case, certain factors may carry more weight than others. To illustrate:

**.01** Earnings, net assets, and net sales must be given primary consideration in arriving at an appropriate discount for restricted securities from the freely traded shares. These are the elements of value that are always used by investors in making investment decisions. In some cases, one element may be more important than in other cases. In the case of manufacturing, producing, or distributing companies, primary weight must be accorded earnings and net sales; but in the case of investment or holding companies, primary weight must be given to the net assets of



the company underlying the stock. In the former type of company, value is more closely linked to past, present, and future earnings while in the latter type of company, value is more closely linked to the existing net assets of the company. See the discussion in Section 5 of Rev. Rul. 59-60.

**.02** Resale provisions found in the restriction agreements must be scrutinized and weighed to determine the amount of discount to apply to the preliminary fair market value of the company. The two elements of time and expense bear upon this discount; the longer the buyer of the shares must wait to liquidate the shares, the greater the discount. Moreover, if the provisions make it necessary for the buyer to bear the expense of registration, the greater the discount. However, if the provisions of the restricted stock agreement make it possible for the buyer to “piggy-back” shares at the next offering, the discount would be smaller.

**.03** The relative negotiation strengths of the buyer and seller of restricted stock may have a profound effect on the amount of discount. For example, a tight money situation may cause the buyer to have the greater balance of negotiation strength in a transaction. However, in some cases the relative strengths may tend to cancel each other out.

**.04** The market experience of freely tradable securities of the same class as the restricted securities is also significant in determining the amount of discount. Whether the shares are privately held or publicly traded affects the worth of the shares to the holder. Securities traded on a public market generally are worth more to investors than those that are not traded on a public market. Moreover, the type of public market in which the unrestricted securities are traded is to be given consideration.

## **SEC. 7. EFFECT ON OTHER DOCUMENTS**

Rev. Rul. 59-60, as modified by Rev. Rul. 65-193, is amplified.



# APPENDIX 14

## *Revenue Ruling 83-120*

### **REV. RUL. 83-120, 1983-2 C.B. 170 IRC SEC. 2512**

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Sec. 2512 VALUATION OF GIFTS

26 CFR 25.2512-2: Stocks and bonds

(Also Sections 305, 351, 354, 368, 2031; 1.305-5, 1.351-1, 1.354-1, 1.368-1, 20.2031-2.)

### **HEADNOTE**

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Valuation; stock; closely held business. The significant factors in deriving the fair market value of preferred and common stock received in certain corporate reorganizations are discussed. Rev. Rul. 59-60 amplified.

### **TEXT**

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#### **SEC. 1. PURPOSE**

The purpose of this Revenue Ruling is to amplify Rev. Rul. 59-60, 1959-1 C.B. 237, by specifying additional factors to be considered in valuing common and preferred stock of a closely held corporation for gift tax and other purposes in a recapitalization of closely held businesses. This type of valuation problem frequently arises with respect to estate planning transactions wherein an individual receives preferred stock with a stated par value equal to all or a large portion of the fair market value of the individual's former stock interest in a corporation. The individual also receives common stock, which is then transferred, usually as a gift, to a relative.

#### **SEC. 2. BACKGROUND**

**.01** One of the frequent objectives of the type of transaction mentioned above is the transfer of the potential appreciation of an individual's stock interest in a corporation to relatives at a nominal or small gift tax cost. Achievement of this objective requires preferred stock having a fair market value equal to a large part of the fair market value of the individual's former stock interest and common stock having a nominal or small fair market value. The approach and factors described in this Revenue Ruling are directed toward ascertaining the true fair market value of the common and preferred stock and will usually result in the determination of a substantial fair market value for the common stock and a fair market value for the preferred stock which is substantially less than its par value.

**.02** The type of transaction referred to above can arise in many different contexts. Some examples are:

- a. A owns 100% of the common stock (the only outstanding stock) of Z Corporation, which has a fair market value of 10,500  $\text{\$}$ . In a recapitalization described in section 368(a)(1)(E), A receives preferred stock with a par value of 10,000  $\text{\$}$  and new common stock, which A then transfers to A's son B.
- b. A owns some of the common stock of Z Corporation (or the stock of several corporations), the fair market value of which stock is 10,500  $\text{\$}$ . A transfers this stock to a new corporation X in exchange for preferred

stock of X Corporation with a par value of 10,000 <sup>3</sup> and common stock of corporation, which A then transfers to A's son B.

- c. A owns 80 shares and his son B owns 20 shares of the common stock (the only stock outstanding) of Z Corporation. In a recapitalization described in section 368(a)(1)(E), A exchanges his 80 shares of common stock for 80 shares of new preferred stock of Z Corporation with a par value of 10,000 <sup>3</sup>. A's common stock had a fair market value of 10,000 <sup>3</sup>.

### SEC. 3. GENERAL APPROACH TO VALUATION

Under section 25.2512-2(f)(2) of the Gift Tax Regulations, the fair market value of stock in a closely held corporation depends upon numerous factors, including the corporation's net worth, its prospective earning power, and its capacity to pay dividends. In addition, other relevant factors must be taken into account. See Rev. Rul. 59-60. The weight to be accorded any evidentiary factor depends on the circumstances of each case. See section 25.2512-2(f) of the Gift Tax Regulations.

### SEC. 4. APPROACH TO VALUATION PREFERRED STOCK

**.01** In general the most important factors to be considered in determining the value of preferred stock are its yield, dividend coverage, and protection of its liquidation preference.

**.02** Whether the yield of the preferred stock supports a valuation of the stock at par value depends in part on the adequacy of the dividend rate. The adequacy of the dividend rate should be determined by comparing its dividend rate with the dividend rate of high-grade publicly traded preferred stock. A lower yield than that of high-grade preferred stock indicates a preferred stock value of less than par. If the rate of interest charged by independent creditors to the corporation on loans is higher than the rate such independent creditors charge their most credit-worthy borrowers, then the yield on the preferred stock should be correspondingly higher than the yield on high-quality preferred stock. A yield which is not correspondingly higher reduces the value of the preferred stock. In addition, whether the preferred stock has a fixed dividend rate and is nonparticipating influences the value of the preferred stock. A publicly traded preferred stock for a company having a similar business and similar assets with similar liquidation preferences, voting rights, and other similar terms would be the ideal comparable for determining yield required in arm's-length transactions for closely held stock. Such ideal comparables will frequently not exist. In such circumstances, the most comparable publicly traded issues should be selected for comparison and appropriate adjustments made for differing factors.

**.03** The actual dividend rate on a preferred stock can be assumed to be its stated rate if the issuing corporation will be able to pay its stated dividends in a timely manner and will, in fact, pay such dividends. The risk that the corporation may be unable to timely pay the stated dividends on the preferred stock can be measured by the coverage of such stated dividends by the corporation's earnings. Coverage of the dividend is measured by the ratio of the sum of pretax and pre-interest earnings to the sum of the total interest to be paid and the pretax earnings needed to pay the after-tax dividends. Standard & Poor's Ratings Guide, 58 (1979). Inadequate coverage exists where a decline in corporate profits would be likely to jeopardize the corporation's ability to pay dividends on the preferred stock. The ratio for the preferred stock in question should be compared with the ratios for high quality preferred stock to determine whether the preferred stock has adequate coverage. Prior earnings history is important in this determination. Inadequate coverage indicates that the value of preferred stock is lower than its par value. Moreover, the absence of a provision that preferred dividends are cumulative raises substantial questions concerning whether the stated dividend rate will, in fact, be paid. Accordingly, preferred stock with noncumulative dividend features will normally have a value substantially lower than a cumulative preferred stock with the same yield, liquidation preference, and dividend coverage.

**.04** Whether the issuing corporation will be able to pay the full liquidation preference at liquidation must be taken into account in determining fair market value. This risk can be measured by the protection afforded by the corporation's net assets. Such protection can be measured by the ratio of the excess of the current market value of the corporation's assets over its liabilities to the aggregate liquidation preference. The protection ratio should be compared with the ratios for high quality preferred stock to determine adequacy of coverage. Inadequate asset protection exists where any unforeseen business reverses would be likely to jeopardize the corporation's ability to pay the full liquidation preference to the holders of the preferred stock.

**.05** Another factor to be considered in valuing the preferred stock is whether it has voting rights and, if so, whether the preferred stock has voting control. See, however, Section 5.02 below.

**.06** Peculiar covenants or provisions of the preferred stock of a type not ordinarily found in publicly traded preferred stock should be carefully evaluated to determine the effects of such covenants on the value of the preferred stock. In general, if covenants would inhibit the marketability of the stock or the power of the holder to enforce dividend or liquidation rights, such provisions will reduce the value of the preferred stock by comparison to the value of preferred stock not containing such covenants or provisions.

**.07** Whether the preferred stock contains a redemption privilege is another factor to be considered in determining the value of the preferred stock. The value of a redemption privilege triggered by death of the preferred shareholder will not exceed the present value of the redemption premium payable at the preferred shareholder's death (i.e., the present value of the excess of the redemption price over the fair market value of the preferred stock upon its issuance). The value of the redemption privilege should be reduced to reflect any risk that the corporation may not possess sufficient assets to redeem its preferred stock at the stated redemption price. See .03 above.

## SEC. 5. APPROACH TO VALUATION COMMON STOCK

**.01** If the preferred stock has a fixed rate of dividend and is nonparticipating, the common stock has the exclusive right to the benefits of future appreciation of the value of the corporation. This right is valuable and usually warrants a determination that the common stock has substantial value. The actual value of this right depends upon the corporation's past growth experience, the economic condition of the industry in which the corporation operates, and general economic conditions. The factor to be used in capitalizing the corporation's prospective earnings must be determined after an analysis of numerous factors concerning the corporation and the economy as a whole. See Rev. Rul. 59-60, page 243. In addition, after-tax earnings of the corporation at the time the preferred stock is issued in excess of the stated dividends on the preferred stock will increase the value of the common stock. Furthermore, a corporate policy of reinvesting earnings will also increase the value of the common stock.

**.02** A factor to be considered in determining the value of the common stock is whether the preferred stock also has voting rights. Voting rights of the preferred stock, especially if the preferred stock has voting control, could under certain circumstances increase the value of the preferred stock and reduce the value of the common stock. This factor may be reduced in significance where the rights of common stockholders as a class are protected under state law from actions by another class of shareholders, see *Singer v. Magnavox Co.*, 380 A.2d 969 (Del. 1977), particularly where the common shareholders, as a class, are given the power to disapprove a proposal to allow preferred stock to be converted into common stock. See ABA-ALI Model Bus. Corp. Act, Section 60 (1969).

## SEC. 6. EFFECT ON OTHER REVENUE RULINGS

Rev. Rul. 59-60, as modified by Rev. Rul. 65-193, 1965-2 C.B. 370, and as amplified by Rev. Rul. 77-287, 1977-2 C.B. 319, and Rev. Rul. 80-213, 1980-2 C.B. 101, is further amplified.



# APPENDIX 15

## *Revenue Ruling 85-75*

### **REV. RUL. 85-75, 1985-1 C.B. 376 IRC SEC. 6659**

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Sec. 6659 ADDITION TO TAX IN THE CASE OF VALUATION OVERSTATEMENTS FOR PURPOSES OF THE INCOME TAX

#### **HEADNOTE**

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Penalties; valuation overstatement; basis of property acquired from a decedent. The penalty for overvaluation under section 6659 of the Code may apply when a beneficiary of an estate adopts an overstated amount shown on an estate tax return as the beneficiary's adjusted basis under section 1014.

#### **TEXT**

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##### **ISSUE**

May the addition to tax under section 6659 of the Internal Revenue Code apply to an income tax return if a beneficiary of an estate adopts an overstated amount shown on an estate tax return as the beneficiary's adjusted basis under section 1014?

##### **FACTS**

H and W were married at the time of W's death on December 31, 1982. W's will left all property to H. Included in the property was a building with a fair market value of 2,000 3 dollars. The executor filed Form 706, United States Estate Tax Return, valuing the property at 3,500 3 dollars. Because the entire estate qualified for the marital deduction under section 2056 of the Code, no estate tax was due.

H filed an income tax return for 1983 claiming an Accelerated Cost Recovery System deduction under section 168 of the Code for the building in question, using a basis under section 1014 of 3,500 3 dollars. The Internal Revenue Service examined H's 1983 income tax return and determined that the value of the building at the time of W's death was 2,000 3 dollars. This resulted in an underpayment of \$1,000.

##### **LAW AND ANALYSIS**

Section 6659(a) of the Code imposes an addition to tax if an individual or closely held corporation or a personal service corporation has an underpayment of income tax attributable to a valuation overstatement.

Section 6659(c) of the Code provides that there is a valuation overstatement if the value of any property, or the adjusted basis of any property, claimed on any return is 150 percent or more of the amount determined to be the correct amount of such valuation or adjusted basis.

Under section 6659(d) of the Code, the addition to tax is limited to situations in which there is an underpayment attributable to valuation overstatements of at least \$1,000.

Section 6659(e) of the Code provides that the Service may waive all or part of the addition to tax on a showing by the taxpayer that there was a reasonable basis for the valuation or adjusted basis claimed on the return and that the claim was made in good faith.



Section 1014 of the Code generally provides that the basis of property in the hands of a person to whom the property passed from a decedent shall be its fair market value at the date of the decedent's death.

The underpayment of H's income tax for 1983 was attributable to a valuation overstatement of 150 percent or more and was at least \$1,000. Accordingly, the addition to tax applies, if not waived by the Service. The fact that the adjusted basis of the building on H's income tax return is the same as the value on W's estate tax return does not of itself show the H had a reasonable basis to claim the valuation.

## **HOLDING**

The addition to tax under section 6659 of the Code applies to an income tax return, absent a waiver by the Service, if a taxpayer adopts an overstated amount shown on an estate tax return as the taxpayer's adjusted basis under section 1014.

## APPENDIX 16

# Revenue Ruling 93-12

### REV. RUL. 93-12, 1993-7 I.R.B. 13, 1/26/93

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January 26, 1993

Section 2512 VALUATION OF GIFTS

Family's Degree of Control Not Considered in Valuing Stock Transferred to Family Members

### HEADNOTE

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In Revenue Ruling 93-12, the Service has addressed whether, for gift tax purposes, “corporate control” is a factor that should be considered in determining the value of stock transferred from one family member to another.

### FACTS

A parent, who owned all of the outstanding stock in a corporation with a single class of stock, transferred his entire interest to his five children, giving each child 20 percent of his shares.

### ISSUE

At issue is how the transferred shares should be valued for purposes of section 2512—in particular, whether the extent of the family’s control over the corporation should be considered in determining the value of the transferred interests.

### HOLDING

The Service has ruled that, for gift tax purposes, when a donor transfers to his children shares in a corporation having only a single class of stock, the extent of the family’s control over the corporation will not be considered in determining the value of the transferred interests.

### ANALYSIS

Basically, the Service decided to acquiesce in the Tax Court’s decision in *Estate of Lee v. Commissioner*, 69 T.C. 860 (1978). Consequently, it will no longer assume that all voting power held by family members must be aggregated for purposes of determining whether the transferred interests should be valued as part of a controlling interest. Likewise, a minority discount will not be disallowed simply because a transferred interest, when aggregated with the interests held by other family members, would be part of a controlling interest. Because this position conflicts with the position the Service took in Rev. Rul. 81-253, 1981-1 C.B. 187, that ruling has been revoked.

### FULL TEXT

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#### PART I

Section 2512.—Valuation of Gifts

26 CFR 25.2512-1: Valuation of property; in general.

## ISSUE

If a donor transfers shares in a corporation to each of the donor's children, is the factor of corporate control in the family to be considered in valuing each transferred interest, for purposes of section 2512 of the Internal Revenue Code?

## FACTS

P owned all of the single outstanding class of stock of X corporation. P transferred all of P's shares by making simultaneous gifts of 20 percent of the shares to each of P's five children, A, B, C, D, and E.

## LAW AND ANALYSIS

Section 2512(a) of the Code provides that the value of the property at the date of the gift shall be considered the amount of the gift.

Section 25.2512-1 of the Gift Tax Regulations provides that, if a gift is made in property, its value at the date of the gift shall be considered the amount of the gift. The value of the property is the price at which the property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or to sell, and both having reasonable knowledge of relevant facts.

Section 25.2512-2(a) of the regulations provides that the value of stocks and bonds is the fair market value per share or bond on the date of the gift. Section 25.2512-2(f) provides that the degree of control of the business represented by the block of stock to be valued is among the factors to be considered in valuing stock where there are no sales prices or bona fide bid or asked prices.

Rev. Rul. 81-253, 1981-1 C.B. 187, holds that, ordinarily, no minority shareholder discount is allowed with respect to transfers of shares of stock between family members if, based upon a composite of the family members' interests at the time of the transfer, control (either majority voting control or de facto control through family relationships) of the corporation exists in the family unit. The ruling also states that the Service will not follow the decision of the Fifth Circuit in *Estate of Bright v. United States*, 658 F.2d 999 (5th Cir. 1981).

In *Bright*, the decedent's undivided community property interest in shares of stock, together with the corresponding undivided community property interest of the decedent's surviving spouse, constituted a control block of 55 percent of the shares of a corporation. The court held that, because the community-held shares were subject to a right of partition, the decedent's own interest was equivalent to 27.5 percent of the outstanding shares and, therefore, should be valued as a minority interest, even though the shares were to be held by the decedent's surviving spouse as trustee of a testamentary trust. See also *Propstra v. United States*, 680 F.2d 1248 (9th Cir. 1982). In addition, *Estate of Andrews v. Commissioner*, 79 T.C. 938 (1982), and *Estate of Lee v. Commissioner*, 69 T.C. 860 (1978), nonacq., 1980-2 C.B. 2, held that the corporation shares owned by other family members cannot be attributed to an individual family member for determining whether the individual family member's shares should be valued as the controlling interest of the corporation.

After further consideration of the position taken in Rev. Rul. 81-253, and in light of the cases noted above, the Service has concluded that, in the case of a corporation with a single class of stock, notwithstanding the family relationship of the donor, the donee, and other shareholders, the shares of other family members will not be aggregated with the transferred shares to determine whether the transferred shares should be valued as part of a controlling interest.

In the present case, the minority interests transferred to A, B, C, D, and E should be valued for gift tax purposes without regard to the family relationship of the parties.

## HOLDING

If a donor transfers shares in a corporation to each of the donor's children, the factor of corporate control in the family is not considered in valuing each transferred interest for purposes of section 2512 of the Code. For estate and gift tax valuation purposes, the Service will follow *Bright*, *Propstra*, *Andrews*, and *Lee* in not assuming that all voting power held by family members may be aggregated for purposes of determining whether the transferred shares should be valued as part of a controlling interest. Consequently, a minority discount will not be disallowed.

solely because a transferred interest, when aggregated with interests held by family members, would be a part of a controlling interest. This would be the case whether the donor held 100 percent or some lesser percentage of the stock immediately before the gift.

## EFFECT ON OTHER DOCUMENTS

Rev. Rul. 81-253 is revoked. Acquiescence is substituted for the nonacquiescence in issue one of Lee, 1980-2 C.B. 2.

## DRAFTING INFORMATION

The principal author of this Revenue Ruling is Deborah Ryan of the Office of Assistant Chief Counsel (Passthroughs and Special Industries). For further information regarding this Revenue Ruling, contact Ms. Ryan at (202) 622-3090 (not a toll-free call).



## APPENDIX 17

# Technical Advice Memorandum 94-36005

### FULL TEXT

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Date: May 26, 1994

### ISSUE

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Should the fact that each of three 30 percent blocks of stock transferred has “swing vote” attributes be taken into account as a factor in determining the fair market value of the stock?

### FACTS

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The donor owned all of outstanding common stock of Corporation, totaling 28,975 shares. On December 18, 1989, the donor transferred 8,592 shares (approximately 30 percent of the outstanding common stock in Corporation) to each of three children. The donor also transferred 1,509 shares (approximately 5 percent of the stock) to his spouse. The donor retained 1,510 shares or approximately 5 percent of the stock. The transfers to the children were reported on a timely filed federal Gift Tax Return, Form 709. The donor’s spouse consented to the gift-splitting provisions of section 2513 of the Internal Revenue Code.

Corporation was authorized 100,000 shares of common stock, of which 36,955 were issued. Of the shares issued, 8,160 were held as Treasury stock and the balance was owned by the donor.

The ownership of the stock before and after the transfer may be summarized as follows:

#### *Summary of Stock Holdings*

	<i>Donor</i>	<i>Child 1</i>	<i>Child 2</i>	<i>Child 3</i>	<i>Spouse</i>
Before	100%	0%	0%	0%	0%
After	5%	30%	30%	30%	5%

With respect to each gift, the stock was valued at approximately \$50 per share, representing the net asset value of Corporation, less a 25 percent discount characterized as a discount for “minority interest and marketability.”

### APPLICABLE LAW AND ANALYSIS

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Section 2501 provides that a gift tax is imposed for each calendar year on the transfer of property by gift.

Section 2511 provides that the gift tax shall apply whether the transfer is in trust or otherwise, whether the gift is direct or indirect, and whether the property is real or personal, tangible or intangible.

Section 2512(a) provides that the value of the property at the date of the gift shall be considered the amount of the gift.

Section 25.2512-1 of the Gift Tax Regulations provides that, if a gift is made in property, its value at the date of the gift shall be considered the amount of the gift. The value of the property is the price at which the property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or sell, and both having reasonable knowledge of relevant facts.

Section 25.2512-2(a) provides that the value of stocks and bonds is the fair market value per share or bond on the date of the gift. Section 25.2512-2(f) provides that all relevant factors are to be taken into account in determining fair market value, including the degree of control of the business represented by the block of stock to be valued.

Rev. Rul. 59-60, 1959-1 C.B. 237, provides guidelines for valuing closely held stock. Rev. Rul. 59-60 specifically states that the size of a block of stock is a factor to be considered in determining fair market value. The Revenue Ruling also holds that all relevant factors must be considered and that no general formula may be used that is applicable to different valuation situations.

In general, in determining the value of shares of stock that represent a minority interest, a discount may be allowed in appropriate circumstances to reflect the fact that the holder of a minority interest lacks control over corporate policy and thus, for example, cannot compel the payment of dividends or the liquidation of the corporation. *Ward v. Commissioner*, 87 T.C. 78, 106 (1986). Where a donor makes simultaneous gifts of multiple shares of securities to different donees, each gift is valued separately in determining fair market value for gift tax purposes. See, e.g., *Whittemore v. Fitzpatrick*, 127 F. Supp. 710 [47 AFTR 77] (D.C. Conn. 1954); *Avery v. Commissioner*, 3 T.C. 963 (1944); section 25.2512-2(e).

In Rev. Rul. 93-12, 1993-1 C.B. 202, a donor transferred 20 percent of the outstanding shares of a closely held corporation to each of his five children. The ruling concludes that, if a donor transfers shares in a corporation to each of the donor's children, the factor of corporate control in the family is not considered in valuing each transferred interest for purposes of section 2512. Thus, in valuing the shares, a minority discount will not be disallowed solely because a transferred interest, when aggregated with interests held by other family members, would be a part of a controlling interest.

In *Estate of Winkler v. Commissioner*, T.C.M. 1989-232 [¶ 89,232 PH Memo T.C.], the decedent, Clara Winkler, owned 10 percent of the voting stock of a closely held corporation. Of the balance of the voting stock, 40 percent was owned by other members of the Winkler family and 50 percent was owned by members of the Simmons family. The court recognized that the decedent's block constituted a minority interest in the corporation. However, the court found that, in view of the fact that neither family possessed a controlling interest in the corporation, the decedent's minority block had special characteristics that enhanced its value. The court described these "swing vote" characteristics as follows:

This 10 percent voting stock could become pivotal in this closely held corporation where members of one family held 50 percent and members of another family held 40 percent. By joining with the Simmons family a minority shareholder could effect control over the corporation and by joining the Winkler family, such a minority shareholder could block action. . . . Looking at this even split between the two families, the 10 percent block of voting stock, in the hands of a third party unrelated to either family, could indeed become critical. While it is difficult to put a value on this factor, we think it increases the value of the Class A voting stock by at least the 10 percent that [respondent's appraiser] found.

The court went on to find that, under the facts presented, the increased value attributable to the swing vote characteristics of the stock offset any minority discount otherwise available. See also, Glenn Desmond and Richard Kelley, *Business Valuation Handbook*, section 11.01 (1991) ("Likewise, if a minority block would enable another minority holder to achieve a majority with control or if the minority were needed to reach the percentage ownership needed to merge or file consolidated statements, the stock would have added value."); Shannon P. Pratt, *Valuing Small Businesses and Professional Practices*, 527 (2d ed. 1994) ("[I]f two stockholders own 49 percent [of the stock] and a third owns 2 percent, the 49 percent stockholders may be on a par with each other. . . . The 2 percent stockholder may be able to command a considerable premium over the pro-rata value for that particular block because of the swing vote power."); *Estate of Bright v. United States*, 658 F.2d 999 [48 AFTR 2d 81-6292], 1007 and 1009 n.9 (5th Cir. 1981), where the court discussed swing vote analysis in detail.

In the instant case, immediately before the transfers, the donor owned 100 percent of the outstanding stock of Corporation. The donor simultaneously transferred 3 blocks of stock, each constituting 30 percent of the



outstanding stock, to each of his three children. As discussed above, the three transfers are valued separately for gift tax purposes. As is evident, each gift, viewed separately, possesses the same swing vote characteristics described by the court in Estate of Winkler. That is, as a result of the simultaneous transfer, three individuals each owned a 30 percent block of stock. The owner of any one of the transferred blocks could join with the owner of any of the other transferred blocks and control the corporation. Thus, any one of these 30 percent blocks, whether owned by an individual related or unrelated to the family, could be critical in controlling the corporation. As the court concluded in Estate of Winkler, this swing vote attribute of each of the transferred blocks enhances the value of each block and is properly taken into account in determining the fair market value of each block transferred.

For valuation purposes, the focus is on shares actually transferred by the donor, notwithstanding that the transfers were treated as made one-half by the donor's spouse under section 2513.

The donor argues that attributing a swing vote value to each transferred block in this case produces an arbitrary result.

That is, if the donor had not made a simultaneous transfer, but rather had transferred each 30 percent block at different times, the valuation of each block would be different. For example, the first 30 percent block transferred might have no swing vote attributes, since after the initial transfer, the donor would continue to possess control of the corporation through his ownership of the retained 70 percent block.

However, the objection raised by the donor is inapposite. First, donor's assumption that the value of none of the three seriatim gifts would reflect swing vote attributes is incorrect. We agree that the value of the first 30 percent transfer would not reflect any swing vote value. However, the second transfer of 30 percent of the stock would possess swing vote value. Further, as a result of this second transfer, the value of the 30 percent interest held by the first transferee would increase, because that block would acquire enhanced voting control in the form of swing vote value as a result of the second transfer. After that transfer, the value of each of the three blocks would have been equalized, because no one stockholder would possess control of the corporation. This enhancement of value with respect to the first transferee's block at the time of the second transfer would constitute an indirect gift to that transferee at the time of the second transfer. Finally, the third 30 percent block would also have swing vote value both before and after the third transfer. Thus, we believe that, even if the three transfers were made at different times, the total value of the gifts would ultimately be the same as if the three transfers were made simultaneously.

Further, under established case law, gift tax valuation results are often dependent on the nature and timing of the gift. For example, a single transfer of a large block of stock to an individual might be valued differently for gift tax purposes than several independent transfers of smaller blocks at different times. On the other hand, the result might not differ with respect to the swing value approach, or any other valuation principles, in the case of an integrated series of transfers. See, e.g., *Citizens Bank and Trust Co. v. Commissioner*, 839 F.2d 1249 [61 AFTR 2d 88-1335] (7th Cir. 1988); *Estate of Murphy v. Commissioner*, T.C.M. 1990-472 [¶ 90,472 PH Memo T.C.]. Accordingly, we do not believe the donor's objections in any way mitigate against applying swing vote analysis to the facts presented here.

As discussed above, all relevant factors are to be considered when valuing closely held stock. As the court concluded in Estate of Winkler, swing block potential is one such factor. In this case, each 30 percent block of stock has swing vote characteristics. The extent to which the swing vote potential enhances the value of each block transferred is a factual determination. However, all relevant factors, including the minority nature of each block, any marketability concerns, and swing vote potential, should be taken into account in valuing each block.

## CONCLUSION

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In determining the fair market value of three 30 percent blocks of stock transferred by the donor, the swing vote attributes of each block are factors to be taken into consideration in determining the value of each block.

A copy of this Technical Advice Memorandum is to be given to the taxpayer. Section 6110(j)(3) of the Code provides that it may not be used or cited as precedent.



## APPENDIX 18

# *Private Letter Ruling* *91-50001*

### FULL TEXT

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UIL Number(s) 2031.00-00

Date: August 20, 1991

Control No.: TR-32-41-91

### ISSUE

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In determining the estate tax value of the decedent's stock in a subchapter C corporation based on net asset value, should a discount be allowed for potential capital gains taxes that would be incurred if the corporation was liquidated if no liquidation is planned?

### FACTS

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At her death, Decedent owned 779 shares of stock in Company X, a closely held corporation, subject to taxation under subchapter C of the Internal Revenue Code. Decedent owned 69.4 percent of the stock, which gave Decedent voting control of the corporation. The remaining shares were owned by relatives.

Company X was a real estate holding company. Its real estate holdings consisted of residential and commercial rental properties. The properties were depreciated and have a low basis. As a result of amendments to sections 337 and 336 of the Internal Revenue Code enacted by the Tax Reform Act of 1986, if Company X is liquidated, the corporation would incur a capital gains tax upon the disposition of the assets. A transitional rule was available under which the estate could have liquidated Company X prior to 1989 at a phased-in tax rate.

Decedent's estate contends that in determining the net asset value of the decedent's stock under section 2031 of the Code, a discount should be permitted for the potential capital gains tax that would be payable if the estate beneficiaries or a purchaser of the stock liquidated the corporation. Decedent's estate contends that a willing buyer would not pay the full value of the underlying assets for the stock, but would consider the capital gains tax payable upon disposition of the assets and adjust the price he would be willing to pay for the company accordingly. Decedent's estate has represented that no liquidation is planned.

### LAW AND ANALYSIS

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Section 2031 of the Code provides that the value of the gross estate shall be determined by including the value at the time of death of all property, real or personal, tangible or intangible, wherever situated. Section 20.2031-1(b) of the Estate Tax Regulations provides that the value of property includible in the decedent's gross estate is its fair market value on the appropriate valuation date. The fair market value is the price at which the property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or sell and both having a reasonable knowledge of the relevant facts.

Prior to amendment by the Tax Reform Act of 1986, sections 336 and 337 of the Code provided rules allowing the liquidation of a subchapter C corporation without incurring capital gains tax at the corporate level (commonly known as the General Utilities doctrine). However, section 631 of the Act amended these Code sections to eliminate the nonrecognition provisions. Section 336 now provides that gain or loss shall be recognized to a liquidating corporation on the distribution of property in complete liquidation as if such property were sold to the distributee at its fair market value.

In analogous situations involving similar valuation issues, several cases considered the effect of potential corporate level capital gains taxes on the estate tax valuation of closely held stock in circumstances arising prior to the 1986 amendments to sections 336 and 337. In *Estate of Cruikshank v. Commissioner*, 9 T.C. 162 (1947), for example, the decedent held stock in a closely held corporation that was an investment holding company. The parties agreed that the corporation should be valued based on the value of its underlying assets. The issue presented was whether the value of the underlying assets should be reduced by amounts of commissions and stamp and capital gains taxes that would become payable if the assets were sold.

The court held that the nature of the corporate business (investment to produce income) was such that the continued retention of the assets in corporate form would be consistent with the corporate purpose and there was otherwise no indication that the corporation would be liquidated or the assets sold. Thus, the court declined to allow a discount or reduction for any possible brokerage commissions and taxes, describing these items as “a hypothetical and supposititious liability . . . on sales not made nor projected” that should not be taken into account.

In addition, the court found that the underlying assets should be valued in the same manner as if the assets were owned outright, that is, based on what a willing buyer would pay a willing seller. Such a methodology focuses on the price the buyer would pay and precludes any reduction for potential income taxes the seller might incur on the sale.<sup>1</sup>

More recent cases have adopted the court’s reasoning in *Estate of Cruikshank* that no discount should be allowed where the potential sales expenses and tax liability are speculative, either because there is no evidence that the corporation will be liquidated or because the tax could be avoided through the operation of sections 336 and 337. See, e.g., *Ward v. Commissioner*, 87 T.C. 78, 103-104 (1986); *Estate of Andrews v. Commissioner*, 79 T.C. 938, 942 (1982); *Estate of Piper v. Commissioner*, 72 T.C. 1062, 1086-1087 (1979); *Estate of McTighe v. Commissioner*, T.C. Memo 1977-410; *Gallun v. Commissioner*, T.C. Memo 1974-284.

In *Ward*, the court summarized its position as follows:

The petitioner’s contend that, in arriving at the corporation’s net asset value, adjustments should be made to reflect costs that would be incurred if its assets were liquidated. They seek adjustments for the expenses of selling the real estate (including sales commissions) and the income taxes that would be recognized by the corporation or its shareholders upon liquidation. We disagree with this argument. J-Seven is not in the business of selling its assets piecemeal, and as petitioners themselves have argued, there is no evidence that the liquidation of the entire corporation is imminent or even contemplated. Under such circumstances, “We need not assume that conversion into cash is the only use available to an owner, for property which we know would cost market to replace.” *Estate of Cruikshank v. Commissioner*, 9 T.C. 162, 165 (1947). A hypothetical willing buyer of the shares in an arm’s-length sale could expect no reduction in price for sales expenses and taxes that he might incur in a subsequent sale of either the shares or the corporations underlying assets. When liquidation is only speculative, such costs are not to be taken into account[citations omitted].

(*Ward v. Commissioner*, 87 T.C. at 103-104)

Taxpayer argues that in view of the amendments to sections 336 and 337, it is now a virtual certainty that if the corporation is liquidated, a capital gains tax will be imposed at the corporate level. Thus, they argue that this

<sup>1</sup> See *Estate of Robinson v. Commissioner*, 69 T.C. 199, 225 (1977), where the court held that in valuing installment notes owned outright by the decedent, no discount was allowable for potential income tax that the estate or beneficiary might incur if the notes were sold. The court held that the price a willing buyer would pay for the notes would be determined without regard to the seller’s potential income tax liability.

change in the law justifies the allowance of a discount for potential taxes. The cases discussed above were decided based on the law as it existed prior to the 1986 amendments to sections 336 and 337 and, therefore, are no longer pertinent.

We disagree. In the cases discussed above, the courts disallowed the discounts because the tax liability was speculative. That is, there was no assurance that the estate beneficiaries would liquidate the corporation or sell the underlying assets and incur the tax and other expenses. Further, there was no indication that the hypothetical willing buyer would desire to purchase the stock only with a view toward liquidating the corporation or selling the assets, such that the potential tax liability would be of any concern.

As the above quoted discussion in *Ward* as well as the decision in *Estate of Cruikshank* indicate, a discount for any potential costs of sale or liquidation, whether in the nature of selling expenses or income taxes that might be incurred, is not appropriate simply because the sale or liquidation is itself speculative. The court drew no distinction between potential sales expenses that have always been an unavoidable cost of sale or liquidation and potential income taxes. Both potential expenses are not taken into account because the event generating these expenses (a sale or liquidation) is speculative. See also *Estate of Andrews v. Commissioner*, 79 T.C. at 942. Thus, although in some cases the courts did note that the nonrecognition provisions of sections 336 and 337 added to the speculative nature of the tax liability, we believe the decisions were primarily grounded on the speculative nature of the liquidation itself.<sup>2</sup> Accordingly, we conclude that the amendments to section 336 and 337 should have no impact on the decisions discussed above disallowing a discount for potential income tax liability.

In this case, the estate does not anticipate that the corporation will be liquidated. Therefore, the liquidation in this case is speculative at best. In view of the case law cited above, no discount should be allowed for potential capital gains tax.

## CONCLUSION

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In determining the value of the decedent's stock in a subchapter C corporation based on net asset value, no discount should be allowed for potential capital gains taxes that would be incurred if the corporation was liquidated since there is no indication that a liquidation is contemplated.

A copy of this Technical Advice Memorandum is to be given to the taxpayers. Section 6110(j)(3) of the Code provides that it may not be used or cited as precedent.

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<sup>2</sup> See, e.g., *Estate of Piper*, supra, 72 T.C. at 1087, n.27. In this regard, we note that in appropriate circumstances, the corporation could liquidate and avoid a tax at the corporate level. A subchapter C corporation that converts to a corporation described in subchapter S (section 1361, et seq.) can avoid recognition of any gain if the corporation retains the assets for a period of ten years from the date of conversion to an S corporation. See section 1374(d)(7) of the Code. If the corporation is eligible for a subchapter S election, a technique would exist for avoiding recognition of gain.



# APPENDIX 19

## *Business Valuation Resources*

You are probably wondering where the bibliography is. No, I am not playing hide and seek with you. The bibliography in this edition is so large that the publishers decided to move it to the CD-ROM. Besides the normal stuff that you get in a bibliography, because I have made friends with the really nice people at Business Valuation Resources, they were kind enough to allow me to include a listing of all of the guest articles and court cases that were published as part of BV Update. We have so much stuff in this bibliography that the book would have cost you even more money than you paid for it if we printed so many more pages. Because we did not want to see you pay more, we included it on the CD-ROM. The contents of appendix 19 include:

- Books, Periodicals, and More
- Government and Accounting Regulatory Material
- Organizations
- Sources of Data
- Available from Business Valuation Resources, LLC (Guest Articles)
- Court Cases Referenced in Business Valuation Update
- Available from Business Valuation Resources, LLC (Practice Tools)

Technology is a wonderful thing (even though my royalties go down because you paid less!) Anyway, the best part is that you can search this bibliography by key word if you choose to do so. Have fun!





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## NOTATION SYSTEM USED IN THIS BOOK

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Following are the symbols used in this book:

- Value at a point in time:

$PV$  = Present value

$FV$  = Future value

- Cost-of-capital and rate-of-return variables:

$k$  = Discount rate (generalized)

$k_e$  = Discount rate for common equity capital (cost of common equity capital); unless otherwise stated, it generally is assumed that this discount rate is applicable to the net cash flow available to common equity

$k_d$  = Discount rate for debt (*Note:* for complex capital structures, there could be more than one class of capital in any of the above categories, in which case expanded subscripts would be required.)

$c$  = Capitalization rate

$C_{pt}$  = Capitalization rate for a pretax benefit stream

$C_{at}$  = Capitalization rate for an after-tax benefit stream

$CP$  = Control premium

$t$  = Tax rate (expressed as a percentage of pretax income)

$R_f$  = Rate of return on a risk-free security

$\beta$  = Beta ( a coefficient, usually used to modify a rate-of-return variable)

$(R_m - R_f)$  = Risk premium for the "market" (usually used in the context of a market for equity securities such as NYSE or S&P 500)

$SCA$  = Specific company adjustment

$SCP$  = Small company premium

$WAAC$  = Weighted average cost of capital

- Income variables:

$E$  = Expected economic income (in generalized sense [i.e., could be dividends], any of several possible definitions of cash flow, net income, and so on; also called a benefit stream)

$EBIT$  = Earnings before interest and taxes

$EBITDA$  = Earnings before depreciation, interest, and taxes ("depreciation" in this context usually includes amortization)

- Periods or variables in a series:

$i$  = The  $i$ th period, or the  $i$ th variable in a series (may be extended to the  $j$ th variable, the  $k$ th variable, and so on)

$n$  = The number of periods or variables in the series, or the last number in the series

$\infty$  = Infinity

$O$  = Period, the base period, usually the latest year immediately preceding the valuation date

- Weightings

$W$  = Weight

$W_e$  = Weight (percentage) of common equity in capital structure

$W_p$  = Weight of preferred equity in capital structure

$W_d$  = Weight (percentage) of debt in capital structure

*Note:* For purposes of computing a weighted average cost of capital (WAAC), it is assumed that the above weightings are at market value.

- Growth:

$g$  = Rate of growth

- Mathematical functions:

$\Sigma$  = Sum of (add up all the variables that follow)