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American Institute of Certified Public Accountants

UNDERSTANDING BUSINESS VALUATION

A Practical Guide to Valuing Small to Medium-Sized Businesses

GARY R. TRUGMAN

AICPA

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

UNDERSTANDING BUSINESS VALUATION

A Practical Guide to Valuing Small to Medium-Sized Businesses

GARY R. TRUGMAN

CPA, ABV, CBA, ASA, CFE, MVS

Notice to Readers

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Dedication

To my father, who unfortunately left this earth earlier than he should have.

Pop, this one's for you!

Preface

This is just what we need, another book on business valuation. Those of us in the business valuation profession already recognize the fact that years ago we could not find a good book on this topic. Today, we have some excellent books available. Some of my favorites include the following:

- *Valuing a Business*, by Shannon Pratt et al.
- *Basic Business Appraisal*, by Raymond Miles
- *Guide to Business Valuation*, by Jay Fishman, Shannon Pratt et al.
- *Valuing Small Businesses and Professional Practices*, by Shannon Pratt et al.

So why do we need another business valuation book? After spending many years reading, teaching, and practicing in the business valuation field, I have found that there is still quite a bit of confusion among my colleagues when it comes to understanding and applying appraisal theory to real-world practice. Please don't get me wrong! I may not know as much as many of my colleagues, but I finally understand that there are things in this world that we may never understand.

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 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 this book. Otherwise, you may not understand what you are capitalizing and why. It is also important for you to make sure that you read the exhibits and the appendixes at the time that 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. Therefore, if you really get off on mathematical equations, this book is not for you. Believe it or

not, I want the readers to understand this stuff! In certain sections of this book, you will see some mathematical formulas. The notation may be different from 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. It's 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. 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.

6. In some instances, I will be illustrating points from the negative. Several of the exhibits contain sections of actual valuation reports critiquing someone else's work. Learn from what they may have done wrong.

7. Please don't shoot the messenger! Throughout this book, many 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.

8. While reading this book, you are going to be exposed to my own form of humor. This is not intended to insult anyone but, instead, 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.

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 direct and indirect contributions to this book. These people are not listed in any special order, but they are all very important to me. First and foremost, I would like to thank my business partner and my wife (not necessarily in that order), Linda Trugman, C.P.A., A.B.V., C.B.A., A.S.A., for her countless hours in assisting me to make this book more readable, logical, and technically accurate. I should also mention her kindness, as administrative manager of our practice, for allowing my billable hours to fall during the period of authorship.

Another special thanks to Cindy Wallace, one of my professional staff members, who assisted not only in the writing of chapter 4 but also as a reviewer of the manuscript. As a new business valuation professional, Cindy made sure that I wrote this book so that a novice could understand it.

I would like to also thank Cathy Yonki, our firm's new administrator, for starting with our firm in time to add her outstanding editorial capabilities to the galleys of this book. If this job didn't make her quit, she will probably be with us forever!

Other technical reviewers to whom I owe a great deal of thanks include Ken MacKenzie, C.B.A., former co-executive director of the Institute of Business Appraisers, and Mary McCarter, A.S.A., C.F.A., former education chairperson of the American Society of Appraisers. Their comments were greatly appreciated.

Another reviewer of the manuscript and a mentor to all of us in this field was Dr. Shannon Pratt. Reading Dr. Pratt's first book in 1983 got me hooked in this field, and after many years of working hard at becoming good at what I do, I can proudly say that I have had the pleasure and privilege of teaching and speaking at conferences with Dr. Pratt, and that each time has been another learning experience. The entire business valuation community owes Dr. Pratt a special thanks.

One more special thanks is necessary to Steve Sacks, technical manager in the Management Consulting Services Division of the American Institute of Certified Public Accountants. No matter how frustrated I got during this process, Steve was always there as a friend to keep telling me that I may have been overreacting. Somehow, I feel that without Steve, this book may not have ended up in print.

Additional thanks go to the editors and the publications department within the AICPA. You made a kid from the Bronx sound like he was from Manhattan.

And finally, what can I say about so many people who have influenced my business valuation career? For those of you whom I did not specifically mention by name, thanks.

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Introduction

This book has been methodically organized to help you get the most out of it that you possibly can. 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 and their standards. Although you probably fit into one of the categories discussed, you should be aware of the other types of appraisers and their standards, since you will most likely run across them in your endeavors.
- Chapter 2 gets you started in the appraisal process. In this chapter, I discuss the things that you must know to start an assignment. Chapter 2 includes information about engagement letters and the initial document request.
- Chapter 3 will take 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 be discussing some of the more important meanings. Since 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 4 includes a discussion of internal and external sources of information that will be gathered by the appraiser. Numerous references are provided for where you can locate information.
- Chapter 5 walks you through the process of what to do with the data that were gathered during the appraisal process. This chapter includes a discussion of economic, industry, company, and financial analysis.
- Chapter 6 presents the market approach to valuation. Several methods of appraisal are discussed, as well as the advantages and disadvantages of each.
- Chapter 7 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 8 presents the income approach to valuation. For small and medium-sized businesses, this chapter may be one of the most important. Single-period and multi-period models are presented.
- Chapter 9 is the chapter that everyone will want to turn to! Discount rates and capitalization rates are discussed. Since I have been reading about this topic for years, waiting for someone to give me the correct answer, and nobody has, I wrote my own chapter.
- Chapter 10 includes a discussion on valuation premiums and discounts are discussed. Learn when to use different premiums and discounts, as well as how to support your opinion.
- Chapter 11 is something completely new. It 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.
- Chapter 12 addresses the appraisal report. Learn how to prepare and defend the report, and learn some tips regarding presentation techniques.
- Chapter 13 provides you with sample reports to demonstrate two presentation methods for a business valuation report.

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 various appraisal reports, to help emphasize the subject matter. Make sure you read them!

Steps of an Appraisal

This book is going to proceed in a sequence that resembles the steps of performing an appraisal. Future chapters will address these steps in detail. Since you are probably dying to know what these steps are, here they are:

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 aftertax 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
  - β = 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 the NYSE or S&P 5OO)
  - SCA = Specific company adjustment
  - SCP = Small company premium
  - WACC = Weighted average cost of capital
- Income variables:
  - E = Expected economic income (in a generalized sense [i.e., could be dividends], any of several possible definitions of cash flows, net income, and so on; also called a benefit stream)

EBIT = Earnings before interest and taxes

EBDIT = Earnings before depreciation, interest, and taxes ("Depreciation" in this context usually includes amortization. Some writers use EBDITA to indicate that amortization is included.)

Periods or variables in a series:

i = The ith period, or the ith variable in a series (may be extended to the jth variable, the kth variable, and so on)

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

∞ = Infinity

^{0} = 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 (WACC), it is assumed that the above weightings are at market value.

- Growth:

  g = Rate of growth

- Mathematical functions:

  Σ = Sum of (add up all the variables that follow)

1 *Overview of Business Valuation*

Chapter Goals

In this chapter, I will attempt—

1. To explain why businesses are appraised.

2. To provide some background about who values businesses.

3. To familiarize you with the professional appraisal organizations.

4. To provide you with an overview of professional standards relating to business valuations.

Introduction

Business valuations can be performed for all sizes of companies. Although the conceptual principles are the same for companies of different sizes, the application of these principles is different. The level of data available for the appraisal of smaller companies tends to be considerably lower. As a result, certain methodologies are either unavailable or less reliable for these small companies.

The appraiser should understand the business valuation process from the large-company, more theoretical basis, to adapt these concepts properly to the smaller business.

Why Are Businesses Appraised?

The purpose of the business appraisal has an impact on the valuation process. For example, certain types of business valuations are guided by specific sets of rules, such as state statutes, Internal Revenue regulations, or Department of Labor regulations. Also, 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 (e.g., separating professional goodwill from the goodwill of the practice). This will start to make more sense as we proceed.

Business valuation engagements are performed for a variety of reasons, including the following:

- Mergers and acquisitions
- Allocation of purchase price
- Estate and gift taxes
- Marital dissolution
- Employee stock ownership plans
- Liquidation or reorganization of a business
- 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

Mergers and Acquisitions

Business valuations are frequently performed when one company acquires another company or when a company is targeted for an acquisition. The transactions may include entire or partial acquisitions or divestitures. Mergers will generally require that both companies 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.

Allocation of Purchase Price

Internal Revenue Code (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. In prior years, both the purchaser and seller would determine their own values and treat the purchase and sale of the assets differently. However, the Tax Reform Act of 1986 requires a uniform allocation of the purchase price based on an appraisal of the underlying assets. The Internal Revenue Service (IRS) now reviews these transactions more closely than ever 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 fifteen years. This change reduced the necessity for appraisers to allocate the purchase price between different classes of intangible assets that had different amortization periods, or no amortization period (e.g., 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.

Estate and Gift Taxes

The valuation of a closely held business interest is important to estate planners as they consider the impact of the unified estate and gift tax credit on lifetime transfers of property. Although this is not a tax book, appraisers working in this area are urged to consult the appropriate IRC sections for specifics on the unified estate and gift tax credit.

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. These rules can be advantageous for the client, but the IRC and the Internal Revenue regulations include strict provisions for compliance. Appraisers therefore should familiarize themselves with chapter 14.

In addition, 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. Appraisers need to be aware of the alternatives under IRC section 303.

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 (e.g., a minority interest) would be 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. Since marital dissolution laws vary significantly from state to state, the appraiser must be aware of the rules of the state in which the divorce will take place. For example, in some states, goodwill associated with a professional is excludable from distribution, while in other states, it is includable.

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 appraiser 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. Appraisers are urged to become familiar with the rules promulgated by the Department of Labor before they begin an ESOP engagement.

Liquidation or Reorganization of a Business

Closely held companies with two or more definable divisions may be split up or spun off into separate corporations. The reasons for doing this include estate tax considerations, family conflicts, or the sale of only part of the total business. Valuations are usually necessary for tax purposes, financial reporting, and (if applicable) equitable distribution of the assets among family members. In the liquidation of a corporation, the appraiser's allocation of the assets distributed to the stockholders may be required to substantiate subsequent depreciation and other deductions claimed.

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 an appraiser 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.

In working with the client, the appraiser should caution the client 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 appraiser.

Stockholder Disputes

Stockholder disputes can range from breakups of companies resulting from disagreements between stockholders to stockholder dissension relating to mergers, dissolutions, and similar matters. Since 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 effect 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 an appraiser 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 appraiser cannot address such issues as control premiums and minority discounts without adequate legal information about the value definition to be used.

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 their book value as recorded under generally accepted accounting principles (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 appraiser 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 impact on its incentive stock option plan.

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 appraiser 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 busi-

ness opportunities, while others relate to lender liability, discrimination, and wrongful death actions. The appraiser 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 appraiser 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.

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 appraiser must be aware of the rules concerning 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 impact 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 appraiser 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 appraiser needs to remember that real estate appraisers 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.

Who Values Businesses?

There is a considerable amount of competition among business valuers. There are a growing number of full-time appraisers in the business, but they are outnumbered by the part-time appraisers, who spend much of their time in other areas. It is important to understand who the other players are in the field, because you will 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 appraisers
- Accountants (CPAs)
- Business brokers
- College professors
- Commercial real estate appraisers

Each group of professionals brings something unique to the practice of business valuation. Each group has its advantages and disadvantages, although the better business appraisers 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 Appraisers

Professional business appraisers 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 (e.g., 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 necessarily in their area of special-

ization. For example, an appraiser who is accustomed to using public stock market information to value large closely held companies may have a terrible time valuing the local hardware store (not Home Depot!).

Accountants (CPAs)

The number of accountants doing business valuations has been growing, since it is a "hot" area of practice. An accountant's background and training provide both advantages and disadvantages to being a business appraiser.

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 (i.e., ratio analysis) that he or she employs to perform other types of accounting services.

Working with numbers is another clear advantage for the accountant. It has been said that accountants are the "number crunchers" of the world. (Who said that anyway?) Accountants are also frequently exposed to revenue rulings and tax laws. This can be a significant advantage over other types of appraisers, especially when tax-related appraisals are being performed.

However, there are disadvantages as well. Accountants are used to working with financial statements and concepts that either are oriented to GAAP or are 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 an ever increasing number of malpractice lawsuits, particularly in the audit area. Recently, the lawsuits have gone beyond the audit arena into litigation support engagements.[1] As a result, accountants tend to be concerned with malpractice exposure because of the subjective nature of a 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 (e.g., preparing tax returns for the business and then adjusting the officer's compensation in the appraisal for being excessive).

Business Brokers

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

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[1] See *Mattco Forge, Inc. v. Arthur Young and Co.*, 5 Cal. App. 439-2, 6 Cal. Rptr. 2d DCA (1992) (ultimately reversed).

However, many business brokers do not complete appraisal training. They are generally salespeople as opposed to appraisers. They will tell you that a similar business sold for $100,000 and, therefore, the appraisal subject is also worth $100,000, but they may not understand the impact 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 ten years with no interest? The present value of this transaction would be quite a bit less than $100,000.

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 6. 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 appraiser. Frequently, the business broker also lacks training in financial statement analysis.

College Professors

Another group of appraisers that is now becoming more visible in the field are college professors. Many professors are entering this field, since they have time after school, or as a means to supplement their income (nothing wrong with that!—last time I looked, I was not a nonprofit organization). Professors with backgrounds (and sometimes with Ph.D.s) in economics and finance are the ones entering the field.

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 jurors 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

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

While 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, whereas many real estate appraisals involving a capitalization of income use capitalization rates between 9 percent and 12 percent, real estate appraisers have a difficult time understanding the substantially higher capitalization rates used to appraise small businesses.

Professional Appraisal Organizations

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

- The American Society of Appraisers
- The Institute of Business Appraisers, Inc.
- The National Association of Certified Valuation Analysts
- The American Institute of Certified Public Accountants
- The Association for Investment Management and Research
- The Appraisal Foundation

The American Society of Appraisers

The American Society of Appraisers (ASA) is a multidiscipline 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 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 entity. ASA has approximately 7,000 members, about 2,000 of whom are in the business valuation discipline.

ASA accredits its members by requiring candidates to pass an extensive series of written examinations usually given at the end of four three-day training courses. An alternative to this method of testing is a single, all-day examination that is administered at various times and places. 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 are given one year of appraisal experience for being a CPA 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.

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. Therefore, he started the Institute of Business

Appraisers, Inc. (IBA). Miles got people to join the organization by soliciting membership through a 700-piece mailing. Today, IBA has approximately 2,500 members, of whom approximately 250 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. There is no experience requirement, although it is almost impossible for someone without experience to submit reports that will meet the criteria of this organization. IBA's philosophy has been to place more emphasis on the work product than on the examination.

At the time that this book was in process, the IBA was working on a junior designation and another designation that pertains to litigation. By the time this book was published, both new designations were in place.

The National Association of Certified Valuation Analysts

Founded in 1991, the National Association of Certified Valuation Analysts (NACVA) is one of the newest organizations accrediting appraisers. This organization requires its members to be CPAs in good standing. The accreditation process consists of (1) attending a five-day training workshop and passing a sixty-hour, take-home examination, including a case study and report-writing requirement, or (2) passing the examinations given as part of the Certificate of Educational Achievement program of the American Institute of Certified Public Accountants (AICPA) and then taking a two-day workshop and passing the same sixty-hour take-home examination. The designation earned is "certified valuation analyst" (CVA).

NACVA also provides the certification of "government valuation analyst" to those individuals who are employed by a government agency, have a level GS-12 or higher, and have two years' experience in performing business valuations. At the time that this book was edited, NACVA had 2,670 members, of whom 2,053 were designated as certified valuation analysts.

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 the size of its membership. 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 Management Consulting Services (MCS). The AICPA recognizes business valuation services as an important component of CPA services.

An "accredited in business valuation" (ABV) designation was approved by the AICPA Council in the fall of 1996, and the first examination was given in November 1997.

To obtain this accreditation, an applicant will have to pass a written examination. Eligibility to sit for the written examination requires that the candidate be an AICPA member in good standing, hold an unrevoked CPA certificate or license issued by a recognized state authority, and provide evidence of ten business valuation engagements that demonstrate substantial experience and competence.

After receiving the accreditation, the holder will be required to demonstrate substantial involvement in five business valuation engagements during each subsequent three-year period, as well as complete sixty hours of related continuing education during the same three-year period.

The Association for Investment Management and Research

The Association for Investment Management and Research also is not 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 have. There is no report requirement, but the experience level needed for one to obtain this designation is three years.

The Appraisal Foundation

Established in 1987, the Appraisal Foundation is not really 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 that provided consistency in their work product. As such, 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* (*USPAP*). Although 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.

As a result of the economic problems suffered by banks and thrifts, the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) was enacted by Congress and signed into law. FIRREA required two things. First, it mandated the licensing or certification of real estate appraisers. Second, it required that the *USPAP* be adhered to whenever a real estate appraisal is performed for a federally related transaction. This topic, too, will be expanded upon later in this book.

Business Appraisal Standards

Different organizations have different standards, and since they do, 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 you 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 MCS Statement on Consulting Services Standards 1
- IBA Standards
- ASA Standards
- USPAP
- NACVA Standards

AICPA MCS Statement on Consulting Services Standards 1

The AICPA promulgated MCS Statement on Consulting Services Standards 1 to cover the broad range of consulting services that its members provide, not just business valuations. This standard is therefore extremely general and deals with such issues 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.

For the past several years, the AICPA MCS Division's Business Valuation and Appraisal Subcommittee has been working on standards pertaining strictly to business valuations. This author expects to see the AICPA promulgate a business valuation standard eventually. As this area of business continues to grow, the Business Valuation and Appraisal Subcommittee will probably play an important role in developing appropriate standards. In October 1995 the Florida Board of Accountancy passed a rule that now requires CPAs performing business valuations to consider the AICPA Practice Aid 93-3, entitled *Conducting a Valuation of a Closely Held Business* (authored by yours truly!) as a standard. In certain other engagements, however, AICPA members will be obligated to follow the *USPAP*.

IBA Standards

The IBA Standards, which are reproduced in appendix 2, are probably the most comprehensive set of standards that exist for business appraisals. These standards also offer guidance and have been written by a committee consisting of full-time appraisers, CPAs, and business brokers.

All members of IBA must adhere to the IBA Standards. It is also recommended in these standards that IBA members should follow the *USPAP*. The intent of these standards is that by following either the IBA standards or the *USPAP*, the appraiser will be complying with both.

ASA Standards

The ASA standards, which are reproduced in appendix 3, are also a well-thought-out set of standards and must be followed by members of ASA. These standards do not provide the same level of guidance that are included in the 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 IBA does not have. Since ASA is a sponsoring member of the Appraisal Foundation, all its members must comply with the *USPAP* in all appraisals. Fortunately, the *USPAP* and the ASA standards do not contradict each other.

ASA members must also take a comprehensive, fifteen-hour *USPAP* course and pass a *USPAP* examination every five years to remain in good standing in the organization. Neither the course nor the examination is fun! However, for those of us who believe in standards, it is really important.

Uniform Standards of Professional Appraisal Practice

The 1998 *USPAP* publication is approximately 150 pages long. The current price at the time this book was published was $25. If you wish to obtain a copy (and every appraiser should), this amount should be sent to:

The Appraisal Foundation
Attn.: Publications Dept.
1029 Vermont Avenue N.W., Suite 900
Washington, D.C. 20005-3517

Don't forget to tell them what you want!

In my opinion, if you are considering business valuation assignments, you not only should be familiar with the *USPAP* but also should attempt to follow these standards in all your assignments. The *USPAP* is made up of the following sections:

- Preamble
- Ethics Provision
- Competency Provision
- Departure Provision
- Jurisdictional Exception and Supplemental Standards Section

- Definitions
- Standards 1–6, "Real Estate"
- Standards 7–8, "Personal Property"
- Standards 9–10, "Business Valuation"
- Statements on Appraisal Standards
- Advisory Opinions

Although Standards 9 and 10 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.

According to the FIRREA legislation, the *USPAP* must be adhered to when an appraisal is performed in accordance with a "federally related transaction." The legislation, however, never clearly defined what a federally related transaction is. Although the language leans toward real estate, many new interpretations have come about.

In real estate, a federally related transaction has been interpreted to mean that there is federal backing in the financing. Many government agencies have adopted provisions requiring the *USPAP* to be followed for all appraisals performed for their agencies.

What does this have to do with business appraisers? Plenty! At the January 1995 IBA National Conference, an individual employed by the Internal Revenue Service (IRS), speaking for himself and not as an official spokesperson of the IRS, reminded the participants that tax transactions could be considered a federally related transaction. Therefore, any appraisal performed that will be used for tax purposes should probably be in compliance with the *USPAP*.

All appraisals that are performed for tax purposes have the possibility of ending up in the courts as part of a tax litigation. The worst thing that could happen to any of us would be to perform an appraisal, charge a client thousands of dollars, and have the court disregard our work because we did not follow the *USPAP*. Besides not having a happy client, good luck getting paid! This could even lead to that bad m-word (malpractice). Therefore, don't take a chance—follow the *USPAP*!

NACVA Standards

NACVA has its own set of standards, which resemble accounting standards. These standards are mostly report-writing standards. In appendix 4, the NACVA standards are reproduced. As of the time of this book's publication, a new set of standards was in draft form and was expected to be approved by the organization.

Conclusion

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

2 *Getting Started*

Chapter Goals

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

1. Learning about the engagement
2. Deciding whether to accept the engagement
3. Defining the engagement
4. Engagement letters
5. 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 this stage of the process, the beginning.

Learning About the Engagement

After the telephone rings and the caller tells you that he or she needs the services of a good appraiser, what should you do? Should you find out more about the assignment, automatically accept it, or recommend a good appraiser? Believe it or not, these are serious considerations that you must think about. The beginning of the assignment, or should we 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 *USPAP* requires the appraiser to disclose to the client any deficiencies in his or her level of competence, as well as what he or she will do to compensate for it. 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 appraiser, 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 appraiser never told me that this was the first appraisal that he or she ever did"? Do not feel intimidated because of your inexperience. We all had to start somewhere. Unfortunately, we are in more of a litigious society than we were in when I got started, and as a result, we have to be especially careful not to find ourselves as a party to the litigation instead of as the expert in it.

If the client is not comfortable with you or your experience level from 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 that you can do is try to boost your level of experience to impress a potential client. There are serious ethical considerations that go far beyond just appraisal.

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

- 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
- The possibility of a conflict of interest or the appearance of a conflict of interest

These items will be addressed over and over again throughout this book, and they must be understood at the start of the assignment, especially since many of these issues will affect your ability to accept the engagement.

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 considers 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 of the company. 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 on.

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 were for a divorce litigation in a jurisdiction that did not recognize goodwill, you would have to conduct your valuation in a manner that would meet the requirements of that jurisdiction. However, if the same company were being appraised for a sale, the methodologies employed in the appraisal would most likely be different.

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 may allow the appraiser 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. 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 you may run into. In chapter 4, 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 the appraisal. 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 side of the stick if you allow the client to limit the scope. Clients frequently look to save money and will often ask the appraiser to streamline the process. If expert testimony is anticipated, the judge or jury will remember only that the appraiser did not do a complete job. Regardless of whether you qualify your opinion because of your client's scope restrictions, the appraiser's reputation will be the most damaged element in the litigation. Be selective in when you allow scope limitations.

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 12, I will be discussing different types of reports (including the suggested content of each type), as well as their applicability in various types of assignments.

Conflicts of Interest

Having a possible conflict of interest, or the appearance of a conflict of interest, may be enough of a reason to turn down an assignment. An appraiser should explore the possibility that a conflict of interest exists. This conflict could be with the client, the client's representatives, or others. Even if there is not an actual conflict of interest, perception is often reality, and the perception that there is a conflict of interest may be enough of a reason for you not to do the job.

First, let me mention that there may not be a problem with a real or perceived conflict of interest *if* the appraiser discloses this fact. The *USPAP* requires an appraiser to disclose if there is a conflict of interest, but it does not prohibit the appraiser from doing the job. Disclosure is the key! If there is a conflict, or if you think that there might be a

conflict, I suggest that the disclosure take place in at least the following places: (*1*) the engagement letter with the client, (*2*) the cover letter accompanying the report, and (*3*) the certification section of the report. My motto is, When in doubt, disclose it! You can never disclose enough, if you want to avoid a problem.

Before you accept an assignment, you need to consider whether the conflict of interest will affect your service for the client. For example, you may feel that you can do a good job, and that's not a problem. However, if the appraiser happens to be with the CPA firm that prepares the company's tax returns, how would a third party, such as the IRS, view the appraiser when they feel that the CPA appraiser has the role of minimizing the taxes paid by the client? For that matter, how would you like to be in the position of making an adjustment for reasonable compensation after you have just signed the company's tax return, which shows an officer's compensation of $2 million? Although an actual conflict may not exist, you may subject the client to an unnecessary audit because of the appearance of a conflict. Frequently you will do a better service for your client by recommending another appraiser.

Engagement Letters

Always, and I mean always, have your client sign an engagement letter (sometimes called a "retainer agreement"), to avoid any potential misunderstanding between you and your client. I cannot emphasize strongly enough the need for a good engagement letter. Exhibit 2.1 contains a sample engagement letter for use in a business valuation assignment. This 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 own jurisdiction.

Let me point out some important stuff about the engagement letter. In the first paragraph, the name of the appraisal firm, not the appraiser, should appear, since 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 should, at a minimum, 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.

EXHIBIT 2.1
Sample Engagement Letter (Retainer Agreement)

The undersigned acknowledges this engagement of I Do Appraisals, Inc. to determine the fair market value of 100 percent of the common stock of XYZ Corporation, a New Jersey corporation, as of December 31, 1994, to be used as part of the litigation pending in the Superior Court of New Jersey entitled *Jones v. Smith,* Docket No. 12-3456.

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 I Do Appraisals, 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 effective date of the appraisal.

In the event sufficient records, documentation, or both cannot be supplied to I Do Appraisals, Inc. no such valuation report will be issued. It is expected that a formal valuation report will be issued as part of this assignment.

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. Information, estimates, and opinions contained in this report are obtained from sources considered reliable; however, I Do Appraisals, Inc. has not independently verified such information and no liability for such sources is assumed by this appraiser.
2. 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.
3. 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 by an officer of I Do Appraisals, Inc. Unsigned copies should be considered to be incomplete.
4. None of the contents of this valuation report shall be conveyed to any third party or to the public through any means without the express written consent of I Do Appraisals, Inc.
5. No investigation of titles to property or any claims on ownership of the property by any individuals or company has been undertaken. Unless otherwise stated in our report, title is assumed to be clear and free of encumbrances and as provided to the appraiser.
6. 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 shall not exceed the amount paid to the appraisers for professional fees and, then, only to the party or parties for whom this report was originally prepared.
7. The various estimates of value presented in this report apply to this appraisal only and may not be used out of the context presented herein. Any other use of this report may lead the user to an incorrect conclusion for which I Do Appraisals, Inc. assumes no responsibility.
8. The appraisal estimate of fair market value reached in this report is necessarily based on the definition of fair market value as stated in the Introduction. An actual transaction in the shares 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 of both the buyers and sellers at that time. I Do Appraisals, Inc. makes no guarantees as to what values individual buyers and sellers may reach in an actual transaction.
9. It should be specifically noted that the valuation assumes the business will be competently managed and maintained by financially sound owners, over the expected period of ownership. This appraisal engagement does not entail an evaluation of management's effectiveness, nor are we responsible for future marketing efforts and other management or ownership actions upon which actual results will depend.

EXHIBIT 2.1 *(Continued)*

10. 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.
11. It is assumed that there are no regulations of any government entity to control or restrict the use of the underlying assets, unless specifically referred to in the report, and that the underlying assets will not operate in violation of any applicable government regulations, codes, ordinances, or statutes.
12. Valuation reports may contain prospective financial information, estimates, or opinions that represent the view of the appraiser about reasonable expectations at a particular point in time, but such information, estimates, or opinions are not offered as predictions or as assurances that a particular level of income or profit will be achieved or that specific events will occur.
13. We assume that there are no hidden or unexpected conditions of the business that would adversely affect value, other than as indicated in this report.
14. Hazardous substances, if present, can introduce an actual or potential liability that will adversely affect the marketability and value of a business. Such liability may be in the form of immediate recognition of existing hazardous conditions, or future liability that could stem from the release of currently nonhazardous contaminants. In the development of the opinion of value, no consideration was given to such liability or its impact on value. We have not taken into account any and all future environmental considerations and potential liability.

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 the services are rendered. Currently, those rates range from $*XX* per hour to $*XXX* per hour.

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

a. $*XXX* per hour for all services rendered relating to depositions, trial preparation, court appearances, and testimony; a minimum fee of four hours will be charged for appearance at depositions, court appearances, or both.
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. Since it is considered unethical for us to perform these services on a contingency basis, it is important to us that our fees be 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 beyond thirty days. 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 business valuation services are not inexpensive and that 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 thirty days will have a service charge added at the rate of 1½ percent per month or part thereof. All costs relating to the collection of these fees will also be the responsibility of the undersigned including, but not limited to, attorney's fees, collection agency fees, etc. Reasonable attorney's fees will be considered to be up to 33⅓ percent of the outstanding balance.
- The final report is copyrighted by I Do Appraisals, Inc. It shall remain the property of our firm, and no copies or reproductions shall be allowed without the written consent of I Do Appraisals, Inc. until such time as any outstanding balance is paid.

(Continued)

EXHIBIT 2.1 ***(Continued)***

I Do Appraisals, Inc. reserves the right to withdraw from this engagement at any time for reasonable cause. It is not our intention to withdraw. In the event there is an outstanding balance, we further reserve the right not to make a court appearance in this matter. All working papers created by I Do Appraisals, Inc. will remain in the possession of I Do Appraisals, Inc. In the event of a withdrawal, we would be liable to return only those materials and documents supplied by the client and the unused portion of the retainer.

The undersigned gives I Do Appraisals, 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 with your check in the amount of $*X,XXX* to our office.

I Do Appraisals, Inc.
I.M. Goode
C.P.A., C.B.A., A.S.A., C.V.A., C.F.A.

ACKNOWLEDGMENT:

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

____

Client's Signature and Date

THIS BUSINESS VALUATION RETAINER AGREEMENT CONSISTS OF THREE (3) PAGES INCLUDING THIS ONE. ALL THREE (3) PAGES MUST BE RETURNED TO I DO APPRAISALS, Inc. AFTER EXECUTION OF THIS DOCUMENT WITH THE REQUESTED RETAINER IN ORDER TO RETAIN OUR FIRM. IF THIS DOCUMENT IS NOT RECEIVED BY I DO APPRAISALS, Inc. FULLY EXECUTED BY THE CLIENT WITH THE REQUESTED RETAINER BY (SOME DATE), I DO APPRAISALS, Inc. RESERVES THE RIGHT TO DEEM THE TERMS OF THIS AGREEMENT AND THE OFFER TO PERFORM BUSINESS VALUATION SERVICES NULL AND VOID.

- The type of report that will be issued to communicate the value estimate.
- A list of assumptions and limiting conditions that are expected to be part of the report (more about this shortly).
- The responsibilities of the client, in particular, to provide requested documentation on a timely basis.
- The method of determining fees and the terms of payment. Don't forget this one. We like to get paid for the work we do!

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. Whenever you pick up a real estate appraisal, the appraiser discusses the concept of highest and best use. In the *Dictionary of Real Estate Appraisal*, it is described 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."[1]

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 (legally permissible) allows it to be built. The land becomes worth more because of its allowed usage.

The business appraiser 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, 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, 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 an appraisal, a limited appraisal, or a calculation, which will soon be defined. For CPA appraisers, language relating to financial statement opinions should be included, as I have in the third paragraph of exhibit 2.1. 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 appraiser that my work is not being misconstrued as being an accounting type of service. For CPAs, better be safe than sorry!

At the inception of the engagement, it is important to have an understanding with the client regarding the scope of your work. At the time that this book was being written, the business valuation standards of the *USPAP* addressed only full business appraisals. Real estate standards had been developed that allowed for a limited appraisal and a restricted-use appraisal, but business valuation standards had not been changed. Although some appraisers interpret the *USPAP* to allow less than full compre-

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[1] Stephanie Shea Joyce, ed., *Dictionary of Real Estate Apraisal*, 3rd ed. (Chicago: Appraisal Institute, 1993).

hensive appraisals, it remains unclear whether business valuers and personal property valuers can issue less than a full report. Changes are constantly being made to the *USPAP*, and I believe that the intent is to allow these lesser types of reports. I also believe that clarification of the *USPAP* will eventually take place.

In the meantime, there will be times when you will be requested to perform less than a full appraisal. Considering the fact that we need to make a living and that the spirit of the *USPAP* is now to allow less than full appraisals under certain circumstances, it seems acceptable to do less than full appraisals when applicable. What does that mean? You should never do less than a full appraisal if the end result will be misleading or prone to error. Although Standards 1 and 2 of the *USPAP* pertain to real estate appraisals, you probably should read them to gain a more thorough understanding of their intent. This is discussed in more detail in chapter 12, "The Appraisal Report."

One of the best distinctions found between the various types of appraisal services that you might be asked to render was created by the Business Valuation Committee of the ASA, 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.
>   - (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.[2]

This information should be clearly spelled out in an engagement letter with the client. Limited appraisals and calculations are not part of the *USPAP*. Therefore, caution should be exercised concerning when these types of services should be provided.

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 that you will have to bill for.

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.

[2] ASA Standards, BVS-I, General Requirements for Developing a Business Valuation, Sec. II.B.

Therefore, this would be a good place to get some preliminary guidance about these matters. Rule 9-2 of the *USPAP* states that an appraiser should "adequately identify the business enterprise, assets, or equity under consideration."

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. Since I do not want to cover the standard of value until chapter 3, 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.

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.

Type of Report That Will Be Issued to Communicate the Value Estimate

The engagement letter should also include what type of report the appraiser is expected to issue. Our firm's policy is to issue a comprehensive 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. A further discussion of this problem appears in chapter 12.

List of Assumptions and Limiting Conditions Expected to Be Part of the Report

Most appraisal standards require the appraiser to include, as part of the report, any limiting conditions and assumptions made during the appraisal process. This allows a reader to understand more fully any limitations and assumptions that could have an impact on the conclusions reached by the appraiser. This section is similar to the "Disclaimer of Opinion" section of an accountant's compilation report, only with a lot more detail.

Many appraisers include the limiting conditions in the report but exclude them from the engagement letter. If you do not have these items in your engagement letter, slapping them on your report will not always work to protect you when your client says that he or she did not agree to accept your work subject to these conditions. I'm not an

attorney, but if the client signs your engagement letter with these items included, that seems like an acceptance of these terms to me. (P.S. My attorney thinks so also!)

Client Responsibilities

There is nothing worse than a client who does not cooperate with his or her own appraiser 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.

Five Steps of an Appraisal Assignment

As you can tell from the engagement letter in exhibit 2.1, 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 define the type of report that will be expected from you. The different types of reports are discussed in chapter 12. A formal report is a very time-consuming document to create, and as such, 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 an informal or a letter report. These types of reports are not always appropriate. The *USPAP*, in its current form, does not really have any provisions for business appraisers that allows anything less than a formal report. Real estate appraisals, covered by Standard 2, can issue three different types of reports. Business valuations, covered by Standard 10, do not have this distinction yet. An informal business valuation that is used in Tax Court may be tossed out by the judge for not complying with the *USPAP*. 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 an informal report but restrict its use. Our engagement letter will expressly prohibit the client from using the informal report as an expert report. When the appraiser 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 *USPAP*. This is generally a good compromise for the client, because they do not have to pay for the full report if they do not need it.

The Initial Document Request

Once the appraiser has been retained, the next step is to request information from the client. There are several schools of thought regarding the document request. Many appraisers send out a general request for information, such as the one that appears in exhibit 2.2. Other appraisers make the initial request much smaller. Depending on the facts of the situation, both of these methodologies make sense.

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 appraiser 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

EXHIBIT 2.2
General Document Checklist
XYZ Widgets Company, Inc.
Business Valuation
Valuation Date: December 31, 1996

For I Do Appraisals, Inc. to render a meaningful opinion relating to the estimate of value of XYZ Widgets Company, Inc. 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, 1992 through 1996.
2. Interim financial statements for the most recent twelve months.
3. A balance sheet as of December 31, 1996 [*use this only if the appraisal date is different from the date of the financial statements above*].
4. Federal income tax returns for the years ended December 31, 1992 through 1996; state income tax returns for the same time period, if applicable.
5. Copies of any forecasts or projections.
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. List of cash accounts and any significant cash investments.
8. Aged accounts receivable listing as of December 31, 1996, preferably aged.
9. List of items comprising inventory (quantity, description, and cost) and information on inventory-accounting policies as of December 31, 1996.
10. Fixed-asset register, depreciation schedule, or both, including real estate and equipment lists, date of acquisition, cost, depreciation method, useful life, and accumulated depreciation.
11. List of items comprising significant other asset balances as of December 31, 1996.
12. Accounts payable listing as of December 31, 1996, preferably aged.
13. Analyses of significant accrued liabilities as of December 31, 1996.
14. List of notes payable and other interest-bearing debt as of December 31, 1996.
15. List of items comprising significant other liability balances as of December 31, 1996.
16. Copies of sales, capital, or operating budgets.
17. Copies of any business plans.
18. Schedule of officers' compensation, owners' compensation, or both.
19. Schedule of key-man life insurance.
20. Reports of other professionals:
    a. Appraisals on specific assets
    b. Reports of other consultants

Other Operating Data

21. Brochures, price lists, catalogs, or other product information.
22. List of stockholders, showing the stock owned by each person.
23. Organization chart.
24. List of five largest customers over the past three years and the total amount of sales to that customer in each year.
25. List of five largest suppliers over the past three years and the total amount purchased from each of those suppliers in each year.
26. Details of transactions with related parties.

(Continued)

EXHIBIT 2.2 *(Continued)*

Legal Documents

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

Other Company Data

38. List of any of the following: patents, copyrights, trademarks, or other similar intangibles.
39. Details of any contingent liabilities (such as guarantees or warranties) or off- balance-sheet financing (such as letters of credit) as of December 31, 1996.
40. Résumés or a summary of the background and experience of all key personnel.
41. Copies of other value indicators, such as property tax appraisals.

Industry Data

42. List of trade associations.
43. List of trade publications.
44. Standard industrial classification code.
45. Copies of any surveys received as part of a membership in a trade association.

Miscellaneous

46. Any other information that is deemed to be pertinent for us to fairly express 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.

part of the appraiser, 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 after 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 had said no, I had not received about 70 percent of the items on my checklist, he only had to ask me 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 business appraisal 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. I may be one of the few authors who will admit that I am not perfect. (I know, I just told you something that some attorney will probably try to use against me in court!) 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 appraisers prefer to send out an initial request for tax returns and financial statements only. This allows the appraiser 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 management (these steps are discussed further in chapter 5). 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 2.3 and 2.4 show document checklists for a medical practice and a law 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.

You will notice that in the exhibits, the sections that are different are in italics for your convenience. Rather than have to constantly make changes, we find it easier to

EXHIBIT 2.3
Document Check List—Medical Practice
Dr. Smith, P.C.
Business Valuation—Medical Practice
Valuation Date: December 31, 1996

For I Do Appraisals, 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, 1992 through 1996.
2. Interim financial statements for the twelve months ended December 31, 1996.
3. A balance sheet as of December 31, 1996 (use this only if the appraisal date is different from the date of the financial statements above).
4. Federal income tax returns for the years ended December 31, 1992 through 1996; 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. Aged accounts receivable listing as of December 31, 1996, preferably aged.
8. *List of items comprising medical supplies inventory (quantity, description, and cost) as of December 31, 1996.*
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 31, 1996.
11. Accounts payable listing as of December 31, 1996, preferably aged.
12. Analyses of significant accrued liabilities as of December 31, 1996.
13. List of notes payable and other interest-bearing debt as of December 31, 1996.
14. List of items comprising significant other liability balances as of December 31, 1996.
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
    b. Reports of other consultants

Other Operating Data

19. List of stockholders, showing the amount of stock owned by each person.
20. Details of transactions with related parties.
21. *Information relating to accounts receivable submitted to a collection agency or law firm.*

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, written offers to purchase the entire practice or any portion thereof, or both.*
26. Copies of associates' or stockholders' employment contracts.
27. Details of any litigation, including pending or threatened lawsuits.

EXHIBIT 2.3 *(Continued)*

28. Details of any employee benefit plans, including pension plans, profit-sharing plans, and employee stock option plans.
29. Invoices for all legal fees paid during the last five years.

Other Company Data

30. Details of any contingent liabilities (such as guarantees or warranties) or off- balance-sheet financing (such as letters of credit) as of December 31, 1996.
31. *List of all personnel broken down by status with the firm, department, etc. For professionals, please indicate specialization, board certifications, medical school, where internship and residency were performed, and fellowships received.*
32. Copies of other value indicators, such as property tax appraisals.
33. *Appointment books for the past three years.*
34. *List of all hospital affiliations.*
35. *List of all specialties, subspecialties, or both.*

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, payroll tax returns, sales tax returns, bank statements, canceled checks, and other such documentation.

EXHIBIT 2.4
Document Checklist—Law Practice
I. Sueyou, P.C.
Business Valuation—Law Practice
Valuation Date: December 31, 1996

For I Do Appraisals, 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, 1992 through 1996.
2. Interim financial statements for the twelve months ended December 31, 1996.
3. A balance sheet as of December 31, 1996 [*use this only if the appraisal date is different from the date of the financial statements above*].
4. Federal income tax returns for the years ended December 31, 1992 through 1996; 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. Aged accounts receivable listing as of December 31, 1996, preferably aged.
8. *List of all unbilled work in process as of December 31, 1996.*
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. *Detailed lists of books and services in the law library.*
11. List of items comprising significant other asset balances as of December 31, 1996.

(Continued)

EXHIBIT 2.4 ***(Continued)***

12. Accounts payable listing as of December 31, 1996, preferably aged.
13. Analyses of significant accrued liabilities as of December 31, 1996.
14. List of notes payable and other interest-bearing debt as of December 31, 1996.
15. List of items comprising significant other liability balances as of December 31, 1996.
16. Schedule of officer's compensation, owner's compensation, or both.
17. Schedule of key-man life insurance.
18. Reports of other professionals:
    a. Appraisals on specific assets
    b. Reports of other consultants

Other Operating Data

19. List of stockholders, showing the amount of stock owned by each person.
20. *List of ten largest clients over the past three years and the total amount billed and collected from each client in each year.*
21. *Schedule of fees billed and collected, broken down by specialty (e.g., criminal, municipal, real estate, and matrimonial) for the past three years.*
22. Details of transactions with related parties.
23. *A schedule of all contingent fees received since December 31, 1996, for all matters started prior to that date.*
24. *A list of all contingent matters that have not been finalized and that were started on or prior to December 31, 1996.*
25. *A schedule of all contingent litigation matters for the past three years, indicating fees received, professional hours billed, and costs associated with each suit.*
26. *A schedule of all attorney time written off over the past three years.*
27. Payroll records for the last three years including, but not limited to, W-2 forms.

Legal Documents

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

Other Company Data

35. Details of any contingent liabilities (such as guarantees or warranties) or off-balance-sheet financing (such as letters of credit) as of December 31, 1996.
36. *List of all personnel, broken down by status within the firm, department, etc. For professionals, please indicate specialization and the year they were admitted to the bar.*
37. Copies of other value indicators, such as property tax appraisals.

Miscellaneous

38. 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.

have a master checklist set up for each of these professional practices, since we value many of them.

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 appraiser than the appraisal report! You should also have an idea of the type of information to request in the initial stages of the valuation assignment.

3 *Appraisal Principles and Theory*

Chapter Goals

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

1. Explain the principles of appraisal
2. Explain various definitions of value
3. Discuss the Internal Revenue Service's influence on appraisals
4. Expose the reader to many of the key revenue rulings

Principles of Appraisal

Three main appraisal principles comprise 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.[1] 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 will sell it. In *Basic Business Appraisal*, Miles points out that:

> 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.[2]

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.[3] To illustrate how the principle of substitution operates to determine value, assume that a new music soundtrack has been released and that from what I have heard about it, I wish to buy it. Let us further assume that the soundtrack is available as a cassette tape selling for $7.95 and as a compact disc selling for $12.95. If my only concern is to be able to listen to this music (that is, if I am not concerned about the quality differential in the sound), then from my standpoint, these two recorded media are equally desirable. Therefore, I would place the same value on the compact disc as I would place on the cassette tape. Therefore, *all other things being equal*, their exchange value *to me* would be equal, meaning that I would only pay $7.95 for the soundtrack.

The principle of substitution, in essence, states that nobody will pay more for something than they would pay for an equally desirable substitute. Logically, if two items are identical except for the price, a willing buyer would always gravitate to the item with the lower price. This is also illustrated in the investment field. If two invest-

[1] Raymond C. Miles, *Basic Business Appraisal* (Boynton Beach, Fla.: Institute of Business Appraisers, 1989).

[2] Ibid., 22.

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

ments have equal risk, an investor will invest in the item that will provide the greatest return on investment.

Application of the Principle of Substitution

As you will learn in a little while (unless you already know it!), there are three approaches that should be considered when one performs a business valuation. 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."[4] 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.

Definitions of Value

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

[4] Miles, *Basic Business Appraisal*, 27.

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.

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 2, I recommended that the standard of value, including a definition, be included in your engagement letter.

According to 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

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 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. This definition is similar to what appears in the "Market Value" section of the *USPAP*.

The concept of fair market value is frequently misunderstood, and therefore, many errors are committed by the inexperienced appraiser while 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 few 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 expert 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 what 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.[5]

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 appraiser'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 five-year payout, the other a seven-year payout. The value of these businesses can be determined using the present-value formula:

$$PV = FV \div (1 + k)^n$$

[5] Ibid., 43.

where:

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

A discount rate of 10 percent would yield the following present values:

Business 1	*Business 2*
$PV = FV \div (1 + k)^n$	$PV = FV \div (1 + k)^n$
$PV = \$100,000 \div (1 + .10)^5$	$PV = \$100,000 \div (1 + .10)^7$
$PV = \$62,092.13$	$PV = \$51,315.81$

The example illustrates that the cash equivalents of these two businesses are quite different in today's dollars. This part of the fair market 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 motivations not characteristic of a typical buyer or seller.[6]

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 appraiser must assume that the property has been placed on the open market.

The appraiser assumes a number of similar properties 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 using 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 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 interac-

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[6] Shannon P. Pratt, Robert F. Reilly, and Robert P. Schweihs, *Valuing a Business*, 3rd ed. (Burr Ridge, Ill.: Irwin Professional Publishing, 1996), 24.

tion 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, since 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 appraiser from assuming an "open market." Although limited, the appraiser'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."[7]

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 over-indebtedness, the only way a transaction could occur is if the seller finds a buyer willing 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 or intrinsic value" or "value to a particular investor based on individual investment requirements, as distinguished from the concept of market value, which is impersonal and detached."[8] 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 appraiser'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 affect-

[7] Miles, *Basic Business Appraisal,* 44.

[8] Pratt, Reilly, and Schweihs, *Valuing a Business,* 25.

ing value. According to the Institute of Business Appraisers, "Price is what you pay; value is what you hope to get."[9]

Fair Value

The definition of fair value in a business valuation context varies from state to state. The definition has been developed from case law, primarily in dissenting or oppressed stockholder actions. This concept is also used in many corporate dissolution statutes, but here also, the definition is an enigma. The appraiser 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.

One of the fundamental differences between fair value and fair market value is that in the former situation there is rarely a "willing" seller. 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 exhibit 3.1.

EXHIBIT 3.1
Differences Between Fair Market Value and Fair Value

Fair Market Value	Fair Value
1. Willing buyer	1. Willing buyer
2. Willing seller	2. *Not* a willing seller
3. Neither under compulsion	3. Buyer not compelled; *seller under compulsion*
4. Assumes a typical *hypothetical* buyer and seller	4. The impact of the proposed transaction not considered; the concept of *fairness to the seller a possible consideration*
5. A *price equitable to both*	5. A concept of "fairness" *to the seller*, considering the inability to keep the stock
6. Assumes both buyer and seller have *equal knowledge*	6. *No such assumption*
7. Assumes *reasonable knowledge of both* parties	7. *No such assumption*
8. Applicable to *controlling interests or minority blocks*	8. Applicable to *minority blocks*
9. Applies to *all federal tax valuations*	9. The most common value standard in *state dissenting and oppressed shareholder statutes*

The concept of fair value is driven by case law, and other than providing the reader of this book with an understanding that there is a difference between fair market value and fair value, I will not spend a great deal of time on the latter. In many states, fair value has been interpreted through case precedent as a pro rata portion of the control value of the enterprise. However, do not rely solely on my say-so. If you find your-

[9] *Institute of Business Appraisers Inc. Newsletter*, Jan. 1986.

self in a position that requires fair value to be used, you must consult local case law and statutes and, even better, the local attorney. Fair value must be thoroughly researched before this complex definition of value is applied.[10]

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 value definition would be applicable when an investor might have 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 $80,000 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.

An appraiser 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.

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.

Intrinsic Value

If you have ever heard the expression "Beauty is in the eyes of the beholder," you will probably understand the term *intrinsic value*. Although not really a standard of 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 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.

IMPORTANT

Author's Note: Throughout this book, unless otherwise noted, fair market value will be the standard of value applicable to the valuation methodologies discussed.

[10] For a further discussion of fair value, see Pratt, Reilly, and Schweihs, *Valuing a Business*, 27–28, 209, 245, 307–308, 544.

Internal Revenue Service Influence on Appraisals

Believe it or not, the IRS does more than just pick our pockets at tax time. Since 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. Appraisers 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.

Appeals and Review Memorandums 34 and 68

Appeals and Review Memorandums (ARMs) 34 and 68, which discuss the "formula method" for valuing goodwill, have been superseded. However, the importance of these documents should not be overlooked. ARM 34 was issued in 1920 in response to the need for guidance in valuing the intangible value lost by breweries and distilleries as a result of Prohibition. A suggested methodology to perform these valuations was put forth by the Treasury Department, including examples of rates of returns and capitalization rates. ARM 68 was an update to ARM 34. These were superseded by parts of Revenue Rulings 59-60 and 68-609.

Revenue Ruling 59-60

Revenue Ruling 59-60 is probably the most important treatise ever issued on valuation. This ruling started out by 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 as well. After you read this revenue ruling, reread it! After that, I suggest that you get into the habit of rereading it again 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 in it that you are going to 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 if I did not see valuation work regularly relying only on history, I would not make this statement.

Revenue Ruling 59-60 also is 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. When determining the fair market value of a business or business interest, the appraiser should consider the following.

1. The nature of the business and history of the enterprise since its inception.
2. The economic outlook in general and the condition and outlook of the specific industry in particular.
3. The book value of the stock and the financial condition of the business.
4. The earning capacity of the company.
5. The dividend-paying capacity of the company.
6. Whether the enterprise has goodwill or other intangible value.
7. Sales of the stock and the size of the block of stock to be valued.
8. 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.[11]

The applicability of these factors will be discussed in many of the methods of valuation that you will read about. I will point them out as we proceed. Chapter 11 contains an annotation of this important document, which is also reproduced in appendix 5.

Revenue Ruling 65-192

Revenue Ruling 65-192 modifies Revenue Ruling 59-60 by providing that the theory in 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 ARM 34 and ARM 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 6.

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 7.

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 appraiser.

The 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

[11] Rev. Rul. 59-60, 1959-1 CB 237, Sec. 4(.01).

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" (emphasis added). See appendix 8.

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 34 and ARM 68. For most appraisers, 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 seen in Revenue Ruling 65-192.

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 8. See appendix 9.

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 of 1954 and the basis of the inventory received in liquidation is determined under section 334(b)(2)." See appendix 10.

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 10. See appendix 11.

Revenue Ruling 81-253

Revenue Ruling 81-253, which describes 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, has been superseded by Revenue Ruling 93-12. The IRS's long-standing position was that no minority discount should be allowed when a gift of minority shares was given between family members. It was not a surprise that the IRS finally acquiesced on this point, since 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. Even though Revenue Ruling 81-253 has been superseded, I have included it as appendix 12 because it will provide you with a good indication of the IRS's "real" position about family gifting.

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 13.

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. Since the IRS did not play "gotcha" on the estate tax return, they got their second chance on the beneficiary's individual return. See appendix 14.

Revenue Ruling 93-12

Revenue Ruling 93-12, which supersedes Revenue Ruling 81-253, allows appropriate minority discounts to be applied when the 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 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 15.

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 which 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! The memorandum appears in appendix 16.

Chapter 14 of the IRC

Readers are advised to become familiar with the chapter 14 requirements of the IRC. Although not covered in detail in this book, these are covered in IRC sections 2701 through 2704.

Conclusion

If I did my job, you now have more of an idea about the principles of appraisal, definitions 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 only bound to follow the mandates of the IRS 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.

4 *Data Gathering*

Chapter Goals

In this chapter, I will attempt—

1. To explain which items have an impact on value.
2. To discuss internal information sources for gathering data.
3. To discuss external information sources for gathering data.
4. To inform you about some electronic and print data sources.

What Items Affect Value?

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 appraiser to demonstrate a 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 appraiser.

Internal Information

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 appraiser must consider the nonfinancial information to be as important and, in some instances, more important than the financial information. Too often, the 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 forty-seven things that are on my checklist." Although not every job will require forty-seven 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 appraiser. Some of the more important information that the appraiser should gather includes the following:

- The form of organization and ownership of the business
- The products and services
- Markets and marketing
- Physical facilities
- Equipment
- Personnel

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 appraiser will have to consider the comparability of information obtained about either other companies (known as "comparables" or "guideline companies") or industry composite data. Good comparability must be maintained to assure 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 appraiser 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 provides that any partner who withdraws from the partnership can cause a winding down and dissolution of the partnership. In this situation, the minority partner could cause a winding down, or liquidation, of the partnership, to obtain the proportionate share of the proceeds from the partnership's dissolution.

The ownership of the business is also important, since the appraiser 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 fifty owners with 2 percent interests 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, since it would give one of them control of the company. This could cause a premium to be associated with the 2 percent interest.

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 appraiser 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. 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 computers with 386 processors and DOS operating systems, and did not have the ability to sell other computers, the likelihood that the company would continue to be successful in the future is slim if the direction of the industry is toward computers with Pentium technology and Windows operating systems.

Markets and Marketing. Part of the valuation process includes understanding the markets served by the appraisal subject. Geographic diversification is frequently nonexistent for very small businesses. However, understanding the market for the products or services allows the appraiser to assess the degree of risk relevant to the lack of diversification. Understanding the market will also allow the appraiser to determine if there are alternative products in the marketplace that will have an effect on the subject company.

The marketing efforts of the subject company should also be considered, since 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 to 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 appraiser with forecasts that include significant growth, how can that growth be achieved without either expanding the current facilities or relocating into larger quarters? Either way, there will be an additional expense incurred by the company if they are to meet their expansion projections.

Equipment. It is generally a good idea for an appraiser to learn about the equipment that is employed by the business to accomplish its business purpose. Even if an appraisal of the equipment is unnecessary, the appraiser 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 appraiser should also inquire 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, since 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 appraiser should ask to review insurance policies to get an idea of the amount of coverage the company is carrying, so that the appraiser can "ballpark" the replacement cost of these assets. The appraiser 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.

Personnel. The appraiser should find out 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 appraiser 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 appraiser may find that the doctor does not trust anyone in his or her office to do the bookkeeping. Therefore, the doctor does 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 ten hours per week? The appraiser 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 ten 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 appraiser 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, 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 an appraiser 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 in this book about them.[1]

Legal documentation (including copies of legal contracts and agreements affecting the company) should also be obtained. This will allow the appraiser 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 in the future that can affect operations. 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.

Financial Information

The financial information requested will include annual financial statements for a relevant period of years. Most often, five years of data are obtained, but the appraiser 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

[1] For more information on ESOPs, you can see either Shannon P. Pratt, Robert F. Reilly, and Robert P. Schweihs, *Valuing a Business*, 3rd ed. (Burr Ridge, Ill.: Irwin Professional Publishing, 1993) 717-739, or James H. Zukin, ed. *Financial Valuation: Business and Business Interests* (New York: Warren Gorham & Lamont, 1990) 8-2–8-33 (updated annually), or you can take an excellent ESOP course offered by the American Society of Appraisers.

would like to get as many 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 tax code. This may make the appraiser 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 allows you to have 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, since 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 have 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.

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, since the minority interest generally does not have the ability to liquidate the assets to realize the fair market value.

The appraiser 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 valuer will also be required to perform research to obtain information about the environment in which the business operates. This infor-

mation is known as "external" information. Some of the more important information that should be looked into includes the following: (*1*) economic information, (*2*) industry information, and (*3*) guideline company information.

Revenue Ruling 59-60 specifically states that one of the factors to be considered in the appraisal of closely held businesses 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.

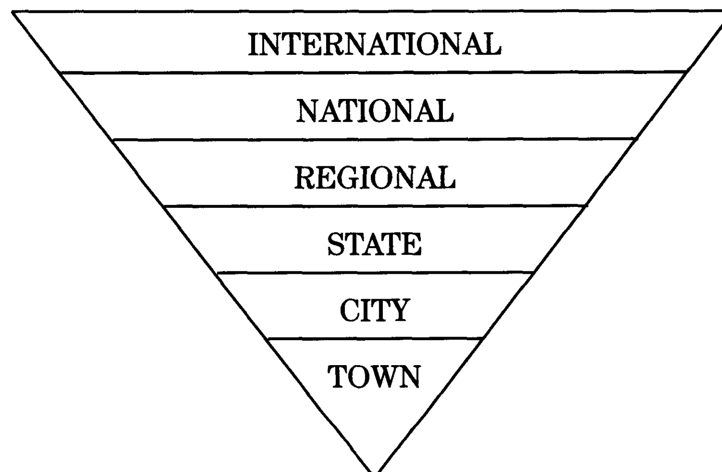
Economic Information

Various economic data should be gathered by the appraiser. 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.

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 appraiser 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 exhibit 4.1. A broad spectrum of information should be considered with respect to the economy. Starting with the big picture, the appraiser should consider the international economic factors that may affect either the appraisal subject or its customers or suppliers. The availability of supply, fluctuations in foreign currency, and trade restrictions are just a few items to consider.

EXHIBIT 4.1
The Global Economy



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 that should be considered for the local economy include the following:

- Labor supply
- Local unemployment
- Disposable income
- Wages
- Availability of material
- Taxes
- Growth trends

Key economic indicators that may be considered by the appraiser include, but should not be limited to, the following:

- 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

For each of these items, the relevancy to the appraisal subject should be considered. Rarely will all of these factors be considered in one appraisal. Do not use a boiler plate 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?

To find the economic data that you are looking for, your local librarian will be your greatest asset. Get friendly, be nice, and if all else fails, beg! For new appraisers who do not have library resources in their offices, the public library or a business college library may turn out to be your home away from home. Whether you have your own library or you use a public library, the following sources should be familiar to the appraiser:

- U.S. Department of Commerce, Bureau of Economic Analysis
- *Statistical Abstract of the United States*
- *Economic Report of the President*
- *Federal Reserve Bulletin*
- *Survey of Current Business*
- *Business Conditions Digest*
- *Monthly Labor Review*
- *The Wall Street Journal*
- Business magazines
- Online databases:
  - Economic Bulletin Board (STAT-USA)
  - Dialog
  - Dow Jones News Retrieval
  - CompuServe, America Online
- Trade magazines
- Professional magazines:
  - *Medical Economics*
  - *Electrical World*

- State agencies:
  - Employment
  - Planning
  - Economic development
- Chambers of commerce
- *Blue Chip Economic Indicators*
- *Blue Chip Financial Forecasts*
- *Value Line Investment Survey*
- *Stocks, Bonds, Bills, and Inflation*
- *Standard & Poor's Trends and Projections*
- *The Complete Economic and Demographic Data Source*

A brief explanation about some of these sources follows. This should give you an idea of the abundance of information available if you look for it.

Statistical Abstract of the United States. This publication provides statistical data about U.S. social, political, and economic organization. Statistical information is given 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), whichever is appropriate for the subject being analyzed. The data is also shown historically as percentage changes, 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 region. This book can be a useful resource tool, since 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, Washington, D.C. The publication is updated on an annual basis.

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. In the report transmitted to the Congress in February 1997, President Clinton covered such topics as health care

reform, investing in the United States, sustaining growth through the establishment of fiscal conditions, free trade, the efficiency of the U.S. government, and the economic outlook.

The *Annual Report of the Council of Economic Advisers* is an excellent source for various economic information 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 of the time. The data in these tables and charts give historical, current, and projected figures and are presented on an annual basis; for more current years, they are 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.

Federal Reserve Bulletin. The monthly issues of the *Federal Reserve Bulletin* focus on U.S. international transactions, production, income, lending, interest, the conditions of U.S. commercial banks, and agriculture, as well as on other economic topics. It touches on such subjects as Treasury and Federal Reserve foreign exchange operations and documents the *Monetary Policy Report to Congress* more frequently than in one issue per year.

Other beneficial information discussed in the *Federal Reserve Bulletin* is employment conditions, prices, the condition of the economy, and forecasts made by the 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, etc.; and statements made by the chairman of the Board of Governors in 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, and can be obtained from Publications Services, Board of Governors of the Federal Reserve System, Washington, D.C.

Survey of Current Business. This publication contains information pertaining to the economic situation of the United States. 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, U.S. involvement 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, reporting on topics of significance for the specific time period of the issue.

Each issue also has a section entitled "Business Cycle Indicators," which gives monthly statistical data on the leading, coincident, and lagging indexes, as well as on unemployment, production, output, prices, investment, income, savings, credit, and imports and exports. There are also charts on the cyclical indicators, demonstrated historically, and charts showing other economic measures of importance, such as international consumer prices, stock prices, production, and exchange rates.

Survey of Current Business is issued by the U.S. Department of Commerce, Economics and Statistics Administration and Bureau of Economic Analysis, and is distributed by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.

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.

Stocks, Bonds, Bills, and Inflation Yearbook is published annually by Ibbotson Associates, Chicago.

Cost of Capital Quarterly. This book is published annually by Ibbotson Associates, with quarterly updates also available. The purpose of the book is to provide additional data that can be used to estimate the cost of equity. 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.

Industry Data

Industry data that should be considered by the appraiser 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 appraiser 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 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 appraiser can use. I have found that people working at the trade organizations are generally as helpful as they can be.

If you go to your local library, you can look up trade associations in books such as Gale Research's *Encyclopedia of Trade Associations*.[2] If you subscribe to one of the many online computer services, they also have some form of this publication. Following are some of the other sources that you will find helpful for the industry outlook:

- *U.S. Industry & Trade Outlook*
- Standard & Poor's (S&P) industry surveys
- Brokerage house industry studies
- Regulatory agencies
- Financial publications
- *Predicast's Forecasts*

Data sources for financial information include the following:

- 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*

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[2] Published by Gale Research, Inc. 835 Penobscot Building, Detroit, Mich. 48226-4094.

- *RMA Annual Statement Studies*
- *S&P Analysts' Handbook*
- *D&B Industry Norms and Key Business Ratios*

Once again, a description follows of many of these data sources. This should help acquaint you with them.

U.S. Industry & Trade Outlook. Great news! 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 that stopped being published after 1994.

This publication includes a detailed analysis of hundreds of industries, including reviews and forecasts of these industries. Each chapter includes a discussion on economic and trade trends, including standardized graphs about the world market share, U.S. trade and export dependence, import penetration, output, and output per worker.

This publication is a must! Welcome back. It is available from McGraw-Hill, New York.

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 for each industry are given. Both report the operating and financial information for corporations; however, one reports it with and without net income, while 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, etc.), financial ratios (current ratio, quick ratio, asset turnover, etc.), 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. 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 com-

parisons 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 are 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 can be used in making industry comparisons. The industrial sectors analyzed include retailing, manufacturing, professional services, contracting, wholesaling, and other services.

Financial Studies of the Small Business is published by Financial Research Associates, Winter Haven, Fla.

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 standard industrial classification (SIC) numbers. 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, all with appropriate subdivisions (cash, inventory, payables, sales, etc.), and financial ratios are listed as well. These ratios 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.

Robert Morris Associates (RMA), the publisher of the book, receives its data from sources that submit the data 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 be used as industry guidelines when comparisons are made to other businesses in the industry, since 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 are in terms of fiscal years from April 1 through March 31 (e.g., 1993/1994). Robert Morris Associates is located in Philadelphia.

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 and the lower quartile, as well as for those companies of medium size.

The figures found in this publication can be used as a guideline in determining the financial condition of comparable companies: 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 the derivation of the ratios.

Industry Norms & Key Business Ratios is published by Dun & Bradstreet Information Services, a company of the Dun & Bradstreet Corporation.

Guideline Company Information

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 the ASA captioned this terminology as a means of differentiating what the business appraiser 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 appraisers 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 Industrial Classification Manual. To find guideline company information, the appraiser has numerous sources to consult. Usually, the starting point of this analysis is to determine the subject company's standard industrial classification (SIC) code. Once the appraiser knows the SIC code for the subject company, he or she can consult various sources that categorize companies in this manner. If the appraiser is not sure which SIC code is appropriate for the subject company, he or she can consult the *SIC Manual*. (Exhibit 4.2 contains a sample from this publication.) The *SIC Manual* statistically classifies business establishments by industry, classifying 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 industry group number, followed by an industry number. The industries are arranged in the book in numeric order. 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 provided for sale by National Technical Information

EXHIBIT 4.2
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 launderers and those primarily engaged in providing linen supply services to commercial and business establishments.

Industry Group No.	Industry No.	
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
Laundry collecting and distributing outlets operated by power laundries
Power laundries, family and commercial

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
Bobtailers, laundry and dry-cleaning
Cleaning and laundry pickup stations, not owned by laundries or cleaners
Press shops for garments
Truck route laundry and dry-cleaning, not operated 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.

Apron supply service
Coat supply service
Continuous towel supply service
Gown supply service, uniform
Linen supply service
Shirt supply service
Table cover supply service
Towel supply service, except wiping
Uniform supply service, except industrial 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
Dry-cleaning, coin-operated launderettes
Self-service laundry and dry-cleaning
Laundromats
Laundry machine routes, coin-operated

(Continued)

EXHIBIT 4.2 *(Continued)*

Industry Group No.	Industry No.	
721		**LAUNDRY, CLEANING, AND GARMENT SERVICES**
	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.

Cleaning and dyeing plants, except rug cleaning
Collecting and distributing agencies-operated by cleaning plants
Drapery dry-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
Carpet cleaning on customers' premises
Furniture cleaning on customers' premises
Rug cleaning, dyeing, and repairing plants
Upholstery cleaning on customers' premises

7218 Industrial Launderers

Establishments primarily engaged in supplying laundered or drycleaned industrial work uniforms and related work clothing, such as protective apparel (flame and heat resistant) and clean room apparel; laundered mats and rugs; 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
Flame and heat resistant clothing supply service
Industrial launderers
Industrial uniform supply service
Laundered mat and rug supply service
Radiation protective garments supply
Safety glove supply service
Towel supply service, wiping
Treated mats, rugs, mops, dust tool covers, and cloth supply service
Wiping towel supply service
Work clothing supply service, industrial

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.

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.

By the time this book went to press, the federal government had issued a new classification coding system, called the North American Industry Classification System (NAICS). The new sustem is not in use yet but will be in the near future. This is sure to create havoc. In the meantime, if you do not have access to the *SIC Manual*, you can try to use the classification code listed on the subject company's tax return, but this should be a last resort; frequently this number is incorrect.

If the appraiser knows of public companies that are in the same industry as the appraisal subject, the appraiser can turn to the *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 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.
- *Moody's Manuals*.
- *Value Line Investment Survey*.
- Computer databases:
  - — Disclosure
  - — Moody's Corporate Profiles
  - — S&P Corporate Descriptions
  - — CompuServe

Standard & Poor's Register of Corporations. This publication is the first of the three volumes of *Standard & Poor's 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 about the company 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.

Standard & Poor's Register of Corporations is published by Standard & Poor's, a division of McGraw-Hill, Inc. New York.

Standard & Poor's Register of Corporations, Directors & Executives—Indexes. This publication is volume 3 of *Standard & Poor's 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.

Standard & Poor's Register of Corporations, Directors & Executives—Indexes is published by Standard & Poor's, a division of McGraw-Hill, Inc. New York.

Moody's Manuals. *Moody's Manuals* consists of numerous annual editions of investment manuals, providing information on the New York and American Stock Exchanges and bond surveys. Among these manuals are the *Industrial, OTC Industrial, Municipal & Government, Transportation, Bank & Finance, Public Utility, International, OTC Unlisted,* and *News Reports.*

These various manuals provide information on publicly traded companies. The information includes a description of each company's history, the names of any subsidiaries, the names of company officers and directors, and a description of the company's primary operations. The manuals also give significant financial information about each company, including balance sheets, income statements, bond information and ratings, long-term debt, stock information, geographical listings, and SIC codes.

In addition, the manuals provide information on security issues, bond yields, preferred stock yields, the commodity price index, and industrial stocks; provide a chronological list of maturing industrial bonds and notes; and provide information on interim earnings and dividends, as well as on corporate bond and preferred stock ratings.

Moody's Manuals is published and copyrighted by Moody's Investors Service, Inc. a company of the Dun & Bradstreet Corporation.

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, which is alphabetized by company name and shows the price, beta, current price/earnings ratio, and 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 dis-

cussed, and statistics and graphs showing both current and historical data are provided. News on 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.

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 or through commercial vendors such as Disclosure. If you use the Internet, this information can be obtained from the Edgar database. The best descriptive information will be located in the Form 10-K.

Sources of forecasted financial data include the following:

- Brokerage houses
- The Institutional Brokers Estimate System (I/B/E/S), available through some of the databases
- *S&P Earnings Guide*
- *Nelson's Earnings Outlook*
- *Zack's Earnings Forecaster*
- *Bloomberg Financial Markets*

In addition to locating specific guideline company information, the appraiser 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 chapter 6, 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*
- *The Merger Yearbook*
- *HLHZ Control Premium Study*
- *Predicast's F&S Index of Corporate Change*

- Computer databases:;
  - — The Institute of Business Appraisers, Inc.
  - — M&A Database, ADP Network Services, Inc.
  - — M&A Database, Securities Data Co.

IMPORTANT

Much of the information that you will need can be obtained with the use of a computer service such as Dialog. This gives you access to hundreds of other databases. Be careful! If you do not know how to use this service efficiently, it can cost you a fortune in online charges. Take it from one who has learned the hard way!

A description of some of these data sources follows. This should help you failiari-ize yourself with them.

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 cancellation 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 10.

Mergerstat Review was formerly published by Merrill Lynch Business Advisory Services (Schaumburg, Ill.), a division of Merrill Lynch & Company, and is now published by Houlihan, Lokey, Howard & Zukin of Los Angeles.

The Merger Yearbook. This yearbook, which comes in two editions (U.S. and international), offers a listing of a particular year's transactions; corporate acquisitions, mergers, divestitures, and leveraged buyouts. The transactions featured include mergers and acquisitions that have statuses such as pending or fully or partially completed. The information is arranged by SIC code and provides the target company, their SIC

code, the buyer, and the value and type of the transaction. It also gives a brief explanation of the transaction.

The publication is updated annually, and can be a useful source in comparing the sales of similar companies. The *Merger Yearbook* is published and copyrighted by Securities Data Company, New York.

HLHZ Control Premium Study. The *HLHZ 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 company that acquired them 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 Houlihan, Lokey unaffected price is featured (the common stock price per share that has not been affected by the announcement of the acquisition), as is the Houlihan, Lokey control premium (found by subtracting the Houlihan, Lokey unaffected price from the purchase price, then dividing the difference by the Houlihan, Lokey unaffected price).

The book also contains a list of companies (grouped by their SIC codes) that were acquired during a twelve-month period. The data provided on these acquisitions is the Houlihan, Lokey 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 *HLHZ Control Premium Study* is published and copyrighted by Houlihan, Lokey, Howard & Zukin of Los Angeles.

Predicast's Forecasts. This publication is updated quarterly and provides forecasts of the economy, industries, products, and markets, as reported by the experts within the business and trade press. The forecasts are categorized by SIC code, and a listing of industries, together with their respective SIC codes, is provided to assist in searching. In addition to the SIC code, the primary product, annual growth, and long-range forecasts are given for each company.

This publication can also be useful in the search for forecasts on specific aspects of the economy, such as the GDP, the gross national product(GNP), employment, industrial production, consumption, investment, and various industries.

Predicast's Forecasts is published quarterly and copyrighted by the Information Access Company, a Thomson Corporation Company, Foster City, Cal.

Data Gathering—Mostly Electronic?

I am a believer in the old adage "if it ain't broke, don't fix it." With this in mind, I came across some great stuff on data gathering, and with the permission of Mary B. McCarter, A.S.A., C.F.A., and Eva M. Lang, A.S.A., C.P.A., I am able to adapt it into this book. This information was used for the AICPA Business Valuation Conference in New Orleans in 1995. The problem with this information is that it changes faster that you can imagine.

The electronic services mentioned in the following sections are available through traditional online services, CD-ROMs, diskettes, and the Internet. The following list does not attempt to be comprehensive. Sources that are of particular value to appraisers have been included. The decision on which sources to include was based on many factors, including depth of coverage, cost, ease of access, and availability of support. While every attempt was made to provide up-to-date information, the nature of this rapidly changing industry makes that virtually impossible. Before you attempt to access any of the information sources listed here, it is advisable to check with the vendor for the most current pricing and access information.

These data sources are arranged by business valuation function. The section titled "Sources of Economic Information" focuses on obtaining economic data at the national, regional, and local level. Subsequent sections focus on finding information on guideline public companies, merger and acquisition sources, and tax court cases, as well as related information. 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.

Before I go too much further, let's step back to discuss some basics. In this discussion, I will address the following:

- What is electronic data gathering?
- Data providers and vendors
- The Internet
- Sources of information

What Is Electronic Data Gathering?

Electronic data gathering involves the use of a computer to retrieve data either from a remote computer database, from a compact disk (CD-ROM), or from a floppy diskette. There is a major shift to the electronically accessible data format, and some companies only offer their products in electronic form. Before the Internet became generally available to the average user, online services and CD-ROM products dominated the options for obtaining information electronically.

Data Providers and Vendors

It is important to distinguish between the data providers, companies that are actually compiling the original data, and the vendors, which do not originate content but only distribute it. Most data providers, such as Standard & Poor's and Moody's, use a third-party vendor to distribute products electronically. These vendors include Dialog, Dow Jones News Retrieval, Lexis/Nexis, CompuServe, America Online, Genie, Profound, Prodigy, DataTimes, Newsnet, and the Microsoft Network (MSN). Vendors seldom offer the entire product line of a data provider. For example, the Standard & Poor's data offered through Dialog are more complete than the S&P data offered on CompuServe but are less extensive than the data purchased directly from S&P. Many data providers also offer products directly to consumers either online or on CD-ROM.

The Internet

The Internet is a specialized type of vendor because it places no limitations on who can contribute to it or on the content of the offerings. Any data provider can use the Internet as a distribution channel. The Internet is a network of computers located around the world and connected by telephone lines. The Internet has been in place in some form for over thirty years. For many years, access was effectively limited to government, scientific, and academic organizations because only technically oriented users were willing to learn the complex methods of accessing the system and there were few commercial providers offering access. The Internet has become available to general users in the last few years because of the development of the World Wide Web and Web browser software, which have made navigation much easier.

Here are a few definitions of some of the most widely used Internet terms. The World Wide Web is the most popular service on the Internet. The Web is an information-retrieval system using hypertext links to combine text with graphics, audio, and video. Hypertext links allow users to connect to the data by clicking or jumping from file location to file location in a nonlinear manner. Web browser software, such as Netscape or Mosaic, allows the user to navigate the Internet and take advantage of all the graphical and sound features of the World Wide Web. The Uniform Resource Locator (URL) is the addressing system that allows users to locate information on the Internet. An example is http://www.census.gov. A home page is the electronic equivalent of a front door. This is the top level of information at a data provider's Web site. Newsgroups are bulletin-board-like topic groups that allow people with common interests to share information. Telnet is a system that allows users to log into other computers on the Internet. These are but a few of the topics related to the Internet. There are a number of how-to books available that provide detailed descriptions of the Internet and its components.

Sources of Economic Information

The federal government collects vast amounts of economic data. The information is available in print form and on government-produced CD-ROMs, on bulletin boards, and

from other vendors through online services and diskette products. Federal and state governments are adding electronic data access options almost daily. We have already discussed many print sources earlier in this chapter, so there is no need to repeat them. The electronic data sources that will be discussed include the following:

- Cendata
- Economic Bulletin Board
- Federal Reserve Bank bulletin boards
- Newspapers available over the Internet
- Chambers of commerce; state and local governments; economic development boards

Cendata. This database is available online through Dialog and CompuServe, as well as through the Internet at http://www.census.gov or http://www.census.gov/stat_abstract/ (U.S. Statistical Abstract).

This database contains selected statistical data from censuses and surveys, press releases, and product information from the Bureau of the Census, U.S. Department of Commerce. The Dialog files, available in either a standard command-structure language file or a menu file, are complete text files that are updated daily. There is a vast amount of statistical data at this Web site; allow time to wade through all the files to find what you need.

Economic Bulletin Board. This is available through STAT-USA (formerly the Office of Business Analysis). It can be accessed via the Internet (telnet://ebb.stat-usa.gov).

This database contains government-compiled statistics in hundreds of areas, including employment, income, interest rates, and spending. It also contains business condition indicators from the *Survey of Current Business*. Begun in 1985, it helped launch the field of electronic reporting and is the most used bulletin board of its kind. It has an easy-to-use bulletin board interface. New users can log in as "guests" for an introductory look.

Individual Federal Reserve Banks. Available via the Internet, individual Federal Reserve banks can be accessed for economic data (gopher://ftp.shsu.edu/11/Economics/FRBBoston or gopher://gopher.great-lakes.net:2200/11/partners/ChicagoFed or http://www. libertynet.org/~fedresrv/fedpage.html for Philadelphia). The pricing can't be beat; it's free. This is one of these instances where you can get a lot more than you pay for!

The information varies from bank to bank, since not every Federal Reserve bank (FRB) has a bulletin board or an Internet site. Fed Flash, the bulletin board of the Dallas FRB, contains regional economic indicators, Treasury securities auction results, Eleventh District financial data, and selected texts from FRB publications.

Papers. Selected newspapers are available over the Internet. These can be accessed online through such databases as Dialog, EyeQ (Datatimes), Newsnet, or Dow Jones. They can also be accessed through various sites, including http://www.chicago.tribune.com (*Chicago Tribune*) or http://startribune.com (*Minneapolis Star Tribune*).

Many local and regional newspapers publish articles on conditions in an area's economy. The Dialog file is a collection of full-text articles from over fifty local daily newspapers. Almost every major city daily newspaper now has an Internet site. Most major daily papers are included in the Dialog database, making it a good source for economic data on specific metro areas. Historical coverage varies, but articles from selected papers such as the *Washington Post* date from 1983.

Chambers of Commerce; State and Local Governments; Economic Development Boards. Selected local economic resources are available on the Internet (http://www.accunet.com/smartkc/ for the Kansas City Area Development Council or http://www.viper.net/clients/Au.cc/ for the Auburn, Alabama Chamber of Commerce). Again, since it is available on the Internet, you can't beat the price—free.

An increasing number of state governments, local municipalities, chambers of commerce, and other economic agencies have Internet sites. Almost every major city now has an Internet site. The content varies from wonderful to worthless. Some cities post demographic and economic data and keep it updated, but many sites contain just advertising for local real estate firms. Some sites are heavily oriented toward the dissemination of tourist information and are short on meaningful demographic data.

Additional Sources of Economic Data. Business periodicals that cover national and international economic conditions (such as *BusinessWeek*, *Forbes*, *Barron's*, and the *Wall Street Journal*), are also available in electronic form from a variety of vendors. *The Economic Report of the President* is available electronically on the Internet. Dialog databases that contain economic data include Econbase: Time Series and Forecasts, and D&B-Donnelly Demographics, PTS U.S. Forecasts, and PTS U.S. Time Series. *The National Economic Review*, the only overview of the national economy prepared specifically for the business valuation industry, is available in print and on diskette from Mercer Capital Management, Inc.

Business Database Plus, discussed in the section "Sources of Industry Data," indexes a number of business journals that contain local/regional economic information. Lexis/Nexis contains more than 1,000 full-text publications, including regional and national newspapers and magazines. CompuServe has a number of sources of demographic information, including U.S. State County Reports, Supersite and Neighborhood Reports.

Sources of Industry Data

In addition to obtaining some really good information about the economy through online sources, you can obtain good industry information there. The following are some of the more popular industry sources that are discussed in this section:

- *U.S. Industrial Outlook/U.S. Global Trade Outlook*
- ABI Inform/Proquest Direct/Business Periodical CD
- Business Database Plus
- Trade and Industry Database
- Industry ratio and compensation data sources

U.S. Industrial Outlook/U.S. Global Trade Outlook. In 1994 the Department of Commerce ceased publication of the *U.S. Industrial Outlook*. It was replaced by *U.S. Global Trade Outlook*, which is more global in scope and provides analyses of world economic and trade trends and identifies opportunities for key U.S. industry sectors. The historical "Trends and Forecasts" tables from the *U.S. Industrial Outlook* are being published in the *U.S. Statistical Abstract*. This publication will now be replaced by the *U.S. Industry & Trade Outlook* discussed earlier in this chapter.

ABI Inform/Proquest Direct/Business Periodical CD. This database is available online through Dialog (ABI Inform) and UMI (Proquest Direct) and the CD-ROM version is available through UMI. You can either pay for what you use or spend about $14,420 for ABI Inform Index with Business Periodical Companion—Research Version. The price is not as bad as it seems if you use it a lot. If you only do a few business valuation assignments per year, justifying this expense to your partners may take up a good amount of your time. Use your time more wisely by playing golf!

This is actually one of the oldest and largest electronic sources of business information. The Dialog file indexes more than 1,000 business periodicals. Citations and lengthy abstracts are available for all articles, and a full-text version is available for most articles added to the database in recent years. The CD-ROM is also available in the "Select" version, covering 350 periodicals, and the "Global" version, covering 1,000 periodicals. The "Research" version priced here indexes 800 periodicals. This is a good source for articles on specific companies. Articles from 1971 to date are included in the Dialog file. Many local libraries offer the use of the CD-ROM version of ABI Inform to patrons.

Business Database Plus. This database is available online through CompuServe. You can also access detailed company profiles and industry descriptions at no additional charge.

The contents of this service includes the full texts of business and trade journals and industry newsletters. The "Business/Trade Journals" section contains articles from over 750 business periodicals from the most recent five years. This is a very comprehensive, yet inexpensive database, and it has a user-friendly menu interface. Users of CompuServe's WinCim software also have access to additional free information, including an extensive SIC listing. Be aware that articles in the newsletter sections of the database tend to be very technical and that many are from international newsletters.

Trade and Industry Database. This database is available through Dialog. It provides indexing, abstracting, and the complete text of over 300 trade and industry jour-

nals, as well as selected articles from an additional 1,200 publications. This is a good source for trade publications, but it duplicates many of the publications that are available less expensively in Business Database Plus. Trade and Industry Database contains articles going back to 1981.

Additional Industry Data Sources. Dialog offers a number of industry-specific databases. Information Access Company, the supplier of Business Database Plus, offers two industry-specific databases, Computer Database and Health Database, which are also available on CompuServe. Investext, a database of brokerage research reports, is available through several online services, including Dow Jones News Retrieval, Newsnet, Dialog, Datatimes, Information Access, and the Investext Group. Wilson Business Abstracts, available on CD-ROM, indexes trade periodicals.

Industry statistics compiled by the federal government are available in print through numerous U.S. Department of Commerce and Census Bureau publications such as *Business Conditions Digest.* Trade and industry magazines are listed in the *Standard Rate and Data Service Directory.* Other print sources that track industry statistics include *Moody's Industry Review*, *Value Line Investment Survey*, and *Predicast's Basebook.*

Industry Ratio and Compensation Data Sources. Media General Plus, and its companion CD-ROM product, Mega Insight, offer industry ratios for over 172 major industry groups. Media General Plus is available online through Dialog. Mega Insight, available directly from Media General, costs several thousand dollars for monthly updates. The Dialog file contains detailed financial and stock price information for approximately 5,100 public companies. The more extensive Mega Insight provides ten years of annual data, five years of quarterly data, and two years of daily stock prices for over 8,000 public companies. Salary Assessor, produced by the Economic Research Institute, contains salary information for more than 3,000 jobs compiled from salary surveys.

Shortly before this book went to press, Integra Information, Inc. released a terrific new CD-ROM 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 fourteen industry size ranges.

Integra gets its information from twenty-two databases, which makes this product one of the most extensive of its kind. Here's the best part—if you do not want to buy the CD-ROM, Integra will sell you individual reports by SIC code. This is too good to be ignored! (And no, I do not own the company!)

Finding Publicly Traded Guideline Companies

The following databases are searchable by SIC code to produce a list of companies by industry group. Most of these databases also include descriptions and financial information on the public companies. Among the databases discussed are (*1*) Moody's Corporate

Profiles/Company Data CD, (*2*) Standard & Poor's Corporate Descriptions/Corporations CD/S&P Online, and (*3*) Disclosure/Compact D/SEC CD.

Moody's Corporate Profiles/Company Data CD. This database is available as a CD-ROM from Moody's Investors Service or online through Dialog. The CD-ROM version costs in excess of $5,000, but fortunately, information can also be accessed and paid for based on what is downloaded through Dialog.

The CD-ROM contains business and financial information on over 10,000 public companies and includes Moody's press releases detailing corporate bond rating actions. Included are extensive company descriptions. Moody's also produces the International Company Data CD, which covers 7,500 foreign companies.

Standard & Poor's Corporate Descriptions/Corporations. This database is available online through Dialog (S&P Corporate Descriptions) or CompuServe (S&P Online). The CD-ROM version is available directly through Standard & Poor's Corporation. Information can be downloaded and paid for on an "as used" basis through Dialog and Compuserve, or you can purchase the CD-ROM with monthly updates for about $5,000.

The Dialog file contains financial and business information for more than 11,000 publicly traded companies. The S&P Corporations CD contains data (derived from the *S&P Corporation Records*) on 12,000 public companies, as well as data on 45,000 private companies from the *S&P Register of Corporations* and data on 70,000 executives from the *S&P Register of Executives and Directors*. The S&P Online Company Information on CompuServe is searchable by S&P industry codes and contains good market and financial profile data, but the descriptions are brief.

Disclosure/Compact D/SEC. This database is available as a CD-ROM from Disclosure, Inc. It is available online from Dialog and CompuServe. You can be the proud owner of the CD-ROM version for the low, low price of about $5,800 annually. As an alternative, it is available online from Dialog or CompuServe, based on what you download.

This resource includes financial statement information for more than 12,500 publicly traded companies, including ownership information and earnings estimates. Although Disclosure is a good choice for obtaining lists of companies in a specific SIC code, the business descriptions tend to be short. In CompuServe, use the "Company Screening" option to search the Disclosure database. Disclosure information can also be accessed through Dow Jones News Retrieval.

Additional Data Sources. Media General, accessible through Dialog, is another database that is searchable by SIC code. Hoover's Company Database, available through CompuServe, the Appraisal Profession Online, or the Internet, is a great source for detailed public company descriptions. Perhaps the most in-depth source of company and financial data is the CompuStat CD—PC Plus product from Standard and Poor's. CompuStat contains extensive historical financial information as well as company

descriptions and stock prices. The pricing varies with the number of users, but even the smallest firms can expect to pay at least $20,000 annually. Ouch!

The most economical method of creating a guideline company group uses the databases available through CompuServe: The Symbol Lookup database allows screening by SIC code, as does the Disclosure Company screening option. Company descriptions available in the Disclosure Basic Company Snapshot and the Hoover's Company Database are free of additional charges. At the other end of the pricing spectrum is Standard & Poor's CompuStat product, which contains twenty years of annual financial data on approximately 9,000 companies.

Publicly Traded Guideline Companies—Financial Statement Information

Several of the sources listed in the section "Finding Publicly Traded Guideline Companies" also contain financial statement information on public companies. Some of these include Moody's Corporate Profiles/Company Data CD, Standard & Poor's Corporate Descriptions/Corporations CD/S&P Online, and Disclosure/Compact D/SEC CD.

When evaluating sources of financial statement data, be aware that some sources present data "as reported" in the original SEC filings, while others recast the financial statement data into their own customized formats. Recast data are easier to download and manipulate but are more likely to contain errors.

EDGAR. The Electronic Data Gathering Analysis and Retrieval (EDGAR) database allows appraisers to access information that used to cost the client quite a bit of money. Because we were usually in a rush, appraisers had to rely on companies such as Disclosure to provide us with copies of various documents filed with the Securities and Exchange Commission for public companies. Now, this information can be accessed from your very own computer virtually free of charge. All it costs is the telephone call and the online charges. EDGAR can be accessed free via the Internet using http://www.sec.org or online with charges through Global Securities Information, Inc.

Publicly traded companies are required to submit their filings to the Securities and Exchange Commission electronically through the EDGAR system. The program is being phased in over a multiyear period, but all U.S. companies were required to file electronically by 1996. Unfortunately, not every filing is available for every company and there are no historical filings available. A number of data providers (including Standard & Poor's Corporation, West Law, and Mead Data Central) are now offering EDGAR products. CD-ROM versions are available from Moody's Investors Service and Disclosure, Inc.

Additional Data Sources. Lotus OneSource SEC Text is one of several Lotus products offering corporate information in a CD-ROM format. The Lotus OneSource products run approximately $10,000 annually per CD. The AICPA produces the CD-NAARS product, which includes data from 10-Ks. A number of Dun & Bradstreet databases also contain guideline company information and can be accessed through Dialog, Dow Jones

News Retrieval, or CompuServe. PTS Annual Report Abstracts and SEC Online on Dialog both contain 10-K information. Sheshunoff Information Services offers financial institution call report data on CD-ROM for $14,000 annually. If money is no object, consider the Laser D product from Disclosure. It contains SEC filings, as reported, on CD-ROM for just the low, low price of $133,100 annually (add $75,000 and they will throw in a Mercedes!).

Several of the databases mentioned here contain earnings estimates. I/B/E/S (recently acquired by Disclosure, Inc.) earnings estimates are available electronically on CompuServe and on the Disclosure D/SEC CD. Disclosure has introduced a new CD product, Compact D/IBES CD ROM, which contains detailed earnings estimates on over 5,000 companies. Information on the CD includes a company profile, price/volume data, industry estimates, and buy/sell recommendations. *Zack's Investment Research* makes earnings estimates available through CompuServe and Dow Jones News Retrieval.

A print version of I/B/E/S is available. Other print sources include the *Standard & Poor's Earnings Guide*, which contains consensus earnings estimates on more than 4,300 stocks. The *Value Line Investment Survey*, mentioned previously, includes at least two years of projected financial statement data for most companies. *Zack's Earnings Forecaster*, *Bloomberg Financial Markets* (Merrill Lynch), and *Nelson's Earnings Outlook* are other print sources. Analysts' reports are available from the major brokerage houses and contain earnings estimates, buy/sell recommendations, and sometimes forecasted financial information. *Nelson's Directory of Investment Research* lists the names of analysts and the industries they follow. Some public companies will make analysts' reports available to prospective investors.

Publicly Traded Guidelines Companies—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. The sources discussed below include MicroQuote II and Tradeline.

MicroQuote II. This database is available online through CompuServe. This information contains twelve years of pricing information on thousands of issues of stock. The data is available monthly, weekly, or daily. Quotes are available in a downloadable format.

Tradeline. This database is available online through Dialog or Dow Jones News Retrieval. 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.

Additional Data Sources. Dow Jones News Retrieval allows access to DJ Enhanced Quotes, Historical Dow Jones Averages, DJ Futures and Index Quotes, and DJ Real-Time Quotes. Stock quotes are available from numerous Internet sources, including QuoteCom

(http://www.quote.com.). Monthly price and volume information is included on the Disclosure Compact D/SEC product. Standard & Poor's CompuStat CD-ROM has extensive historical pricing data. Financial newspapers such as the *Wall Street Journal* and *Barron's* publish extensive quotes.

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. The application of the market approach has been made easier thanks to Securities Data Corporation and Bizcomps.

Securities Data Company. This company offers information about the mergers and acquisitions (M&A) of public and private companies. Even if you do not subscribe directly to this database, you can contact Securities Data Company and they will do the search for you. The search is free, but they charge a minimum of $300 for reports that you get from them.

The Securities Data Company database provides information on a wide array of topics covering eight major categories: worldwide corporate new issues, municipal new issues, worldwide M&A, joint ventures/strategic alliances, restructurings, corporate governance, venture capital financing, and trading information. The M&A section of this service is a comprehensive listing of deals and deal information and is searchable by SIC code. Over 600 data items are available for more than 100,000 transactions. While the database does contain some information on private company transactions, pricing data is rarely available. The new Windows interface makes this database easy to use and customize.

Bizcomps. This database is available via diskette through Wiley's ValuSource computer program. The database is updated annually. Compiled by Jack R. Sanders of Asset Business Appraisal, Bizcomps contains information on hundreds of small business sales. Deals are sorted by industry and contain revenue and cash flow multiples. Many appraisers who are familiar with the print editions of Bizcomps will want to check out this electronic version.

Cost of Capital and Betas

Information about cost of capital and betas, topics discussed in chapter 9, is available from ValueScreen Software, sold by Value Line Publishing, Inc. This product contains market data, projections, earnings estimates, and summary financial data for approximately 1,600 public companies. One can use Value Line projections to produce an estimate of expected returns on the market.[3]

Additional data sources include Standard & Poor's CompuStat CD, which is perhaps the best source for betas. *Standard and Poor's Stock Reports*, available in print and

[3] See David King, "The Equity Risk Premium for Cost of Capital Studies: Alternatives to Ibbotson," *Business Valuation Review* (September 1994), 123–129.

on CD-ROM, contains descriptive and summary financial information on hundreds of publicly traded companies as well as on betas.

The On-Site Interview

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 their own environment. Being at the business location will also make it easier for the appraiser to obtain trade journals and other information that he or she may not have been supplied 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 afterwards for not using a particular methodology. Exhibit 4.3 contains a monograph published by the Institute of Business Appraisers, Inc. and entitled "Questions to Ask When Appraising a Business."

EXHIBIT 4.3
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.

From HOW TO PRICE A BUSINESS by Raymond C. Miles. Copyright © 1982. Reprinted with permission of Prentice Hall.

EXHIBIT 4.3 *(Continued)*

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?

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?

(Continued)

EXHIBIT 4.3 *(Continued)*

- 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?
- 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?

EXHIBIT 4.3 *(Continued)*

- 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?
- 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 their 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 banks(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?

(Continued)

EXHIBIT 4.3 *(Continued)*

- 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?
- 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?
- Details?
- 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?
- 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?
- 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?

An appraiser 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 appraiser 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 expected to go. The history could even be written by the client.

It's terrible to say, but frequently appraisers 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 must be to consider whether the appraisal assignment is impaired if you do not get to speak to management. It is not uncommon in litigation assignments for the appraiser to be prevented from speaking to 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.

In the situation in which you are prevented from getting information from management, you must determine if the missing information will prevent you from being able to give a unqualified opinion 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 opinion 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?"

In litigation engagements, the appraiser 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, since 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 going on so that 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.

5 *Data Analysis*

Chapter Goals

In this chapter, I will attempt to explain what to do with all 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:

1. Economic analysis
2. Industry analysis
3. Subject company analysis
4. Financial analysis
5. Financial statement adjustments

Introduction

Data analysis is an important component of the valuation process. Since an assessment of risk is a goal of the appraiser, 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 appraisers, it is our role to assess how much the future will resemble the past; only then can we determine the value of the business.

Economic Analysis

During the analysis of the economy, the appraiser attempts to determine the economic risks associated with the subject business. Questions regarding the demand for the company's goods or services and regarding the sources of supply are frequently asked. The outlook for the general economic trends that might affect the 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 boilerplate as part of a report. 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 might they be if the appraisal subject was a cardiovascular surgeon?

Another component of the economy that should be considered by the appraiser 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 economy is just going into it or if it is about to end. Depending upon where the company is in the economic cycle, the short-term and long-term projections may be radically different. This would be important to the "willing" buyer, since he or she would have to ride out the balance of the cycle. Since valuation is a prophecy of the future, this is extremely important.

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 appraiser 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.

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 appraiser to use industry forecasts

to help predict how the subject company will perform in the future. Questions frequently raised about the industry include the following:

- 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?

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 paint manufacturer with $30 million in sales is most likely not going to be a major factor in an industry dominated by companies such as Sherwin-Williams, with $3 billion in sales.

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.

Another important consideration is whether this industry follows another industry. For example, while appraising a retail furniture store, the appraiser must consider the residential real estate industry. There is approximately a six-month lag between the furniture industry and real estate sales. Logically, if people stop buying homes, there will not be as much of a need for new furniture.

Sometimes, it is necessary to analyze another industry in addition to the appraisal subject's industry. This can be illustrated by a company that provides goods or services to a particular industry. A company that installs automatic teller machines would be highly dependent on the banking industry. Therefore, an analysis of the banking industry could be an essential part of the industry analysis for a company that is an electrical-mechanical firm.

Subject Company Analysis

Another important element of a business valuation is the analysis of the appraisal subject. In this situation, the appraiser 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 were to be consummated?

Some of the more common questions raised here include the following:

- 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 the 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, once again, have an impact on the risk assessment of the subject company. What we are trying to do is determine whether the appraisal subject is more or less risky than other companies in the industry. This will assist the appraiser in developing market multiples, discount rates, and capitalization rates.

Financial Analysis

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 appraiser assess whether the company is more or less risky in relation to its peer group. Comparing the company to itself allows the appraiser to determine how the company has performed over the past few years. This can help give the appraiser an idea of future trends that may occur.

During the financial analysis, the appraiser attempts to identify unusual items, non-recurring 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 appraiser:

- Trend analysis
- Comparative analysis
- Common-size financial statements
- Financial ratios

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.

During the trend analysis, the appraiser attempts to identify positive and negative trends affecting the company. The appraiser 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 and will be removed during the normalization process and not be considered in the forecast of future net earnings or cash flows.

Comparative 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
- *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 an appraiser 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.

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 5.1 illustrates a common-size analysis taken from an actual report.

Common-size statements are also useful in allowing the appraiser to perform an analysis about the company's financial performance over a period of years. Trends can be more readily identified, which will allow the appraiser to make projections or evaluate the budget information provided by management.

Financial Ratios

The use of financial ratios allows the appraiser to analyze the performance of the subject company in terms of liquidity, performance, profitability, and leverage. These ratios

EXHIBIT 5.1
Common-Size Financial Analysis

A common-size balance sheet has been presented in table 1. The balance sheet indicates a high level of current assets as a percentage of total assets, with a very small investment in property and equipment. The composition of the balance sheet between current assets, property and equipment, and other assets has remained stable over the periods analyzed. The balance sheet also indicates a high level of total liabilities as a percentage of invested capital. The level has remained stable since the year ended September 30, 1992, when it increased by 23 percent. This high percentage of debt appears to be due to the growth of the company over the period, as well as the distributions that have been paid to stockholders out of the retained earnings of the company.

Another method of analyzing this information is to compare Johnson Electric Supply's common-size balance sheet with that of the industry in which the company operates. To make a comparison of industry data, *RMA Annual Statement Studies*, published by Robert Morris Associates, *Industry Norms & Key Business Ratios*, published by Dun & Bradstreet Information Services, and the National Association of Electrical Distributors' *Performance Analysis Report*, published by Management Foresight, were used. This data is presented in table 2.

The company's current assets as a percentage of total assets are higher than the industry data, while their investment in fixed assets is lower. This is due to the significant accounts receivable balance in comparison to the industry data. Johnson's accounts receivable balance ranges from 8 percent to 17 percent more than the compiled data, depending on the source used. The company's inventory balances are in line with the industry's.

The company's accounts payable are significantly higher than the industry's, regardless of which source is considered. The notes payable are also much higher. Total liabilities as a percentage of total assets range from 17 percent to 28 percent higher than the industry averages depending on which source is considered. As a consequence, stockholders' equity as a percentage of total assets is much lower than that of its industry counterparts. This could be reflective of the company's growth as well as the distributions that have been paid to the stockholders over the years.

EXHIBIT 5.1 *(Continued)*
TABLE 1
***Common-Size Balance Sheet*[1]**

Assets	*Dec. 31, 1994 (%)*	*Sept. 30, 1994 (%)*	*Sept. 30, 1993 (%)*	*Sept. 30, 1992 (%)*	*Sept. 30, 1991 (%)*	*Sept. 30, 1990 (%)*
Current assets						
Cash	0.17	1.98	0.64	5.77	3.48	1.17
Trade accounts receivable	44.25	51.22	55.97	49.82	45.11	46.91
Inventories	44.11	36.43	32.66	27.77	39.63	36.26
Capitalized sec. 263(a) costs	1.44	1.41	1.47	1.21	2.14	1.41
Prepaid expenses	1.13	0.38	0.00	0.00	0.41	0.00
Exchanges	0.09	0.01	0.02	0.05	0.00	0.00
ABCD stock investment	0.16	0.00	0.00	0.00	0.00	0.00
Prepaid corporate income taxes	0.00	0.00	0.00	0.00	0.02	0.00
Total current assets	91.36	91.44	90.76	84.62	90.79	85.75
Property and equipment						
Furniture, fixtures, and equipment	9.06	8.86	11.03	9.09	11.69	10.49
Autos and trucks	1.95	1.90	2.72	2.43	1.89	1.49
Leasehold improvements	4.70	4.62	5.53	4.61	5.93	5.24
Total	15.71	15.38	19.28	16.13	19.51	17.22
Less accumulated depreciation	-10.58	-10.29	-13.43	-10.36	-11.74	-8.49
Net fixed assets	5.13	5.09	5.85	5.77	7.77	8.73
Other assets						
Officers' life insurance cash value	2.76	2.57	2.33	1.03	0.57	4.40
Federal sec. 444 deposit	0.34	0.34	0.53	0.20	0.30	0.60
Loans receivable	0.41	0.40	0.54	0.45	0.58	0.51
ABCD stock	0.00	0.16	0.00	0.00	0.00	0.00
Officer's loan receivable	0.00	0.00	0.00	7.92	0.00	0.00
Total other assets	3.51	3.47	3.39	9.61	1.44	5.51
TOTAL ASSETS	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities and Stockholder's Equity						
LIABILITIES						
Current liabilities						
Accounts payable	35.07	45.54	32.33	27.23	28.80	26.00
Current portion of long-term debt	38.56	28.96	41.58	43.18	21.49	27.68
Accrued liabilities	2.59	2.45	2.60	2.03	2.19	2.92
Sales tax payable	0.48	0.62	0.75	0.53	0.83	0.73
Payroll taxes payable	0.05	0.04	0.05	0.04	0.05	0.04
Employee loans and exchanges	0.00	0.00	0.00	0.00	0.08	0.01
Deferred sec. 481(a) income	—	—	—	—	—	0.31
Corporate income taxes	—	—	—	—	—	0.14
Total current liabilities	76.75	77.61	77.30	73.01	53.43	57.84
Long-term liabilities						
Long-term debt net of current portion	1.37	1.53	0.00	3.05	0.00	0.66
TOTAL LIABILITIES	78.12	79.14	77.30	76.06	53.43	58.50
STOCKHOLDERS' EQUITY						
Common stock	2.10	2.07	2.76	2.30	2.96	2.64
Retained earnings	35.18	33.94	40.17	38.50	65.31	58.23
Treasury stock	-15.40	-15.15	-20.23	-16.87	-21.70	-19.37
TOTAL STOCKHOLDERS' EQUITY	21.88	20.86	22.70	23.94	46.57	41.50
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	100.00	100.00	100.00	100.00	100.00	100.00

[1] Due to rounding, figures may not add up to the totals given.

(Continued)

EXHIBIT 5.1 *(Continued)*
TABLE 2
***Common-Size Comparison With Industry Composite Data*[1]**

	Johnson Electric Sept. 30, 1994 (%)	*RMA (%)*	*D&B (%)*	*NAED (%)*
Assets				
Current assets				
Cash	1.98	4.60	10.90	4.73
Accounts receivable	51.22	43.10	34.20	42.79
Other receivables	—	—	.60	—
Inventory	36.43	35.20	34.00	36.83
Other current assets	1.80	1.20	3.60	2.62
Total current assets	91.43	84.10	83.30	86.40
Total property and equipment	5.09	10.50	10.20	9.70
Total other assets	3.47	5.40	6.50	3.90
TOTAL ASSETS	100.00	100.00	100.00	100.00
Liabilities and Stockholders' Equity				
LIABILITIES				
Current Liabilities				
Accounts payable	45.54	26.70	23.60	28.03
Notes payable	28.96	16.70	6.60	14.24
Other current liabilities	3.11	9.30	11.40	6.39
Total current liabilities	77.61	52.60	41.60	48.83
Other liabilities				
Notes payable	1.53	6.60	9.30	9.29
Other liabilities	—	2.70	.10	—
Total other liabilities	1.53	9.30	9.40	9.29
TOTAL LIABILITIES	79.14	61.90	51.00	58.12
TOTAL STOCKHOLDERS' EQUITY	20.86	38.10	49.00	41.88
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	100.00	100.00	100.00	100.00

In addition to the common-size balance sheet, a common-size income statement has also been prepared and is presented in table 3. The income statement reflects relative stability, with gross profits ranging from 21 to 24 percent. The data for the short period ended December 31, 1994, may not be comparable, since all year-end adjustments (such as for section 263[a] costs) have not been made. Operating profits or pretax income as a percentage of sales have also not varied significantly from year to year.

TABLE 3
Common-Size Income Statement
***Johnson Electric Supply Corp.*[1]**

	For the Period Ended—					
	Dec. 31, 1994 (%)	*Sept. 30, 1994 (%)*	*Sept. 30, 1993 (%)*	*Sept. 30, 1992 (%)*	*Sept. 30, 1991 (%)*	*Sept. 30, 1990 (%)*
Net sales	100.00	100.00	100.00	100.00	100.00	100.00
Cost of sales	75.96	79.48	79.85	79.95	74.67	77.01
Gross profit before other operating revenue	24.04	20.52	20.15	20.05	25.33	22.99
Other operating revenue	0.04	1.20	1.81	1.10	0.00	0.00

[1] Due to rounding, figures may not add up to the totals given.

EXHIBIT 5.1 *(Continued)*
TABLE 3 *(Continued)*

	For the Period Ended—					
	Dec. 31, 1994 (%)	*Sept. 30, 1994 (%)*	*Sept. 30, 1993 (%)*	*Sept. 30, 1992 (%)*	*Sept. 30, 1991 (%)*	*Sept. 30, 1990 (%)*
Gross profit on sales	24.09	21.73	21.96	21.15	25.33	22.99
Expenses						
Salaries	12.37	10.63	12.27	11.41	13.82	12.58
Selling expenses	1.90	1.25	1.18	1.27	1.71	1.53
General and administrative expenses	8.63	8.93	8.23	7.71	10.06	8.58
Total expenses	22.90	20.81	21.67	20.39	25.58	22.68
Net income from operations	1.19	0.92	0.29	0.76	-0.25	0.31
Other income and deductions	0.89	0.60	1.19	1.10	1.32	0.79
Income before taxes	2.07	1.52	1.47	1.86	1.07	1.10
Income taxes	0.00	0.09	0.17	0.20	0.18	0.14
NET INCOME	2.07	1.43	1.30	1.65	0.89	0.96

TABLE 3A
Common-Size Income Statement
***Johnson Electric Supply Corp.*[1]**

	For the Period Ended—					
	Dec. 31, 1994[2] (%)	*Sept. 30, 1994 (%)*	*Sept. 30, 1993 (%)*	*Sept. 30, 1992 (%)*	*Sept. 30, 1991 (%)*	*Sept. 30, 1990 (%)*
Salaries						
Executive	—	1.08	1.39	1.57	2.03	2.39
Outside salesmen	—	1.26	1.53	0.78	0.87	0.73
Inside and office salesmen	—	3.05	1.73	4.18	4.82	3.70
Receiving and shipping	—	1.01	3.59	0.97	1.16	1.14
Delivery	—	0.22	0.29	0.23	0.26	0.27
Office—administrative	—	1.74	1.68	1.58	1.96	1.52
Engineer	—	0.97	0.86	0.81	0.87	0.70
Showroom	—	0.42	0.51	0.78	0.82	0.91
Lebanon	—	0.10	0.00	0.00	0.00	—
Souderton	—	0.22	0.00	0.00	0.00	—
Pottstown	—	0.55	0.69	0.51	1.04	1.20
Total salaries	12.37	10.63	12.27	11.41	13.82	12.57
Selling expenses						
Salesmen expenses	—	0.25	0.31	0.39	0.52	0.41
Advertising	—	0.25	0.20	0.23	0.34	0.43
Christmas expense	—	0.02	0.01	0.01	0.05	0.06
Truck expense	—	0.53	0.53	0.51	0.63	0.48
Meetings and conventions	—	0.13	0.08	0.09	0.14	0.15
Seminars and training	—	0.07	0.05	0.04	0.03	—
Total selling expenses	1.90	1.25	1.18	1.27	1.71	1.53
General and administrative expenses						
Hospitalization	—	0.88	1.06	1.03	1.22	0.71
Stationery and office	—	0.10	0.10	0.12	0.19	0.19
Postage	—	0.09	0.14	0.11	0.14	0.12
Telephone	—	0.31	0.35	0.34	0.51	0.47

[1] Due to rounding, figures may not add up to the totals given.
[2] Detail not provided for interim period.

(Continued)

EXHIBIT 5.1 *(Continued)*
TABLE 3A *(Continued)*

	For the Period Ended—					
	Dec. 31, 1994 (%)	*Sept. 30, 1994 (%)*	*Sept. 30, 1993 (%)*	*Sept. 30, 1992 (%)*	*Sept. 30, 1991 (%)*	*Sept. 30, 1990 (%)*
Rent	—	0.90	0.94	1.12	1.61	1.21
Light and heat	—	0.36	0.42	0.38	0.45	0.35
Maintenance and repairs	—	0.45	0.37	0.38	0.39	0.29
Payroll processing	—	0.03	0.04	0.04	0.05	0.03
Insurance	—	0.25	0.44	0.24	0.32	0.33
Legal and accounting	—	0.30	0.43	0.44	0.42	0.31
Credit expense	—	0.04	0.00	0.01	0.05	0.01
Donations	—	0.12	0.10	0.20	0.28	0.29
Interest	—	0.61	0.87	0.53	0.59	0.88
Dues and subscriptions	—	0.05	0.06	0.08	0.09	0.04
Credit card fees	—	0.02	0.02	0.01	0.02	0.02
Warehouse supplies	—	0.03	0.02	0.01	0.02	0.02
Service charges	—	0.03	0.03	0.03	0.00	0.02
Computer expense	—	0.44	0.44	0.25	0.27	0.26
Computer maintenance	—	0.14	0.14	0.24	0.34	0.25
Depreciation	—	0.29	0.29	0.43	0.74	0.70
Bad debts	—	1.96	0.19	0.13	0.26	0.37
Payroll taxes	—	0.86	1.01	0.90	1.07	0.89
Other taxes	—	0.19	0.27	0.25	0.32	0.27
Miscellaneous expenses	—	0.07	0.05	0.05	0.05	0.03
Profit-sharing contribution	—	0.41	0.45	0.38	0.55	0.48
Director's fees	—	0.00	0.00	0.00	0.07	0.05
Total general and administrative expenses	8.63	8.93	8.23	7.71	10.06	8.58

Once again, to make a meaningful comparison, industry data from *RMA Annual Statement Studies, Industry Norms & Key Business Ratios,* and the NAED report were used for analytical purposes. Johnson's gross profit on sales, operating expenses and profit, and net income before taxes are in line with the industry, as presented in table 4.

TABLE 4
Common-Size Income Statement
Comparison With Industry Composite Data[1]

	Johnson Electric Sept. 30, 1994 (%)	*RMA (%)*	*D&B (%)*	*NAED (%)*
Net sales	100.00	100.00	100.00	100.00
Cost of sales	79.47	78.50	72.00	79.25
Gross before other operating revenue	20.53	21.50	28.00	20.75
Other operating revenue	1.20	N/A	N/A	00.00
Gross profit on sales	21.73	21.50	28.00	20.92
Operating expenses	20.81	19.50	N/A	19.87
Operating profit	.92	2.00	N/A	1.09
Other income (expenses)	.60	-.50	N/A	.38
Net income before taxes	1.52	1.60	N/A	1.42

[1] Due to the different methods used in compiling survey results, figures may not add up to the totals given.

are compared against industry data, guideline company data, or both, for the assessment of risk.

Different industries sometimes use different financial ratios, but the basic ratio analysis is the same. However, the same financial ratio will have different meanings depending upon the industry being considered. For example, you would expect the inventory turnover ratio for a perishable food business to be greater than for an automobile dealership. A description of some of the more common ratios follows.

IMPORTANT

NOTE: Some sources use average figures instead of year end. Make certain that you are consistent in your calculations, to make certain that you are using the same basis when comparing with industry sources of ratios.

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 + Accounts Receivable) ÷ Current Liabilities. Quick assets include cash, marketable securities, and current 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 appraiser whether the subject company has a strong enough cash position to meet its short-term obligations. This ratio can also assist the appraiser 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.

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 appraiser 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 stockholders' equity. A proper capital structure should include a portion of debt, since 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 liabilities. 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 1 1/3 times the regular payment period; that is, if a company's typical terms call for payment in thirty days, the collection period should not exceed forty 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 therefore be 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 appraiser. 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. Since a proper capital structure will generally include an appropriate mix of debt and equity, some appraisers prefer to value the company in this manner. What this really does is allow the appraiser to value the company on an invested capital basis, eliminating differences in leveraging between the subject company and the guideline companies. This becomes more important in the valuation of larger companies, since the companies being used for comparison purposes may be publicly traded. We will discuss this further in chapter 6.

The return-on-equity ratio is considered to be one of the most important financial ratios, since it measures profitability, turnover, and leverage all in one ratio. The mathematical breakdown of the return on equity ratio is as follows:

$$\frac{\text{Net income}}{\text{Equiy}} = \frac{\text{Net income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Equity}}$$

Another analytical tool used by appraisers is the compound growth rate. Compound growth rates are frequently used by the appraiser 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 appraiser. The mathematical formula for calculating compound growth as a percentage is as follows:

$$\left(\sqrt[(n-1)]{\text{amount}_n \div \text{amount}_1}\right) - 1$$

The compound growth rate is often calculated for 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.

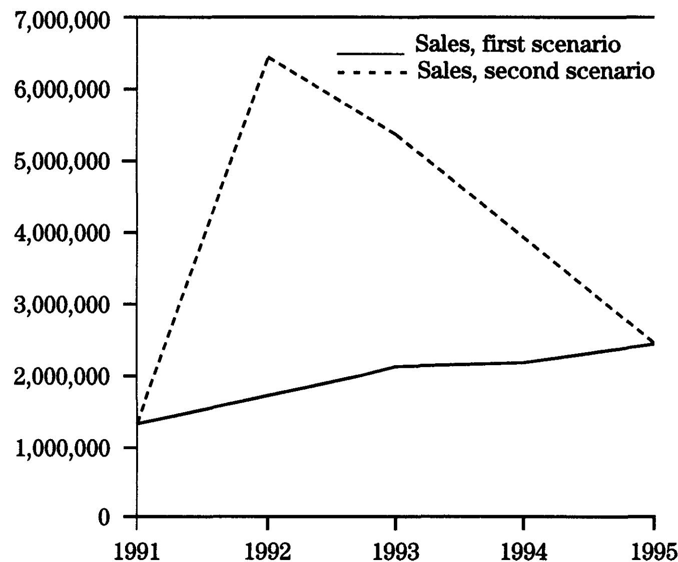
When looking at growth, the appraiser should also examine the year-to-year change as well as the actual numbers. Over a longer period of time, this is very often more meaningful than the compound growth rate. Let's look at a simple example to illustrate this concept. Assume that Smith Company had sales as follows:

Year	*Amount*
1991	$ 1,350,000
1992	1,675,000
1993	2,100,000
1994	2,200,750
1995	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 minus 1). 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*
1991	$ 1,350,000
1992	6,450,000
1993	5,375,000
1994	3,900,000
1995	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. Graphically, these trends look like this:



The appraiser 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. In this instance, the appraiser would probably not use compound growth rates, since 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.

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 appraiser should be mindful that an equity investor is concerned with the ability of the subject company to provide earnings, cash flow, or both that will provide a return on investment (e.g., dividends) to the willing buyer.

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 appraiser with information about the gross profit that the company has been able to achieve. Since the selling price of the goods is dictated by the 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 an appraiser and a forensic accountant, there are times when one professional may perform both functions.

Since this book is not intended for discussing forensic accounting, I won't. However, if you want to read more on this topic, I would recommend *Investigative Accounting*, written by Kalman Barson, C.P.A., and published by John Wiley & Sons.

Discretionary Costs

Several items included in the company's income statement may be discretionary and should be investigated by the appraiser. 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, since 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 appraiser should analyze the financial statements for consistency from period to period. The appraiser

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 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, since a review of a spreadsheet of the past several accounting periods may highlight discrepancies that exist between the reporting periods. For example, during a review of the insurance expense, the appraiser sees that the expense has been as follows:

	1995	1994	1993	1992	1991
Insurance expense	$47,395	$45,977	$22,984	$62,255	$39,888

Reviewing the preceding figures for consistency reveals that something happened in 1992 and 1993 that warrants further explanation. An inquiry by the appraiser determined that in 1992 this "cash basis" company made a $21,000 insurance payment that was for 1993. The owner decided to accelerate the expense into 1992, so that she could reduce her taxes for that year. Let's hear it for the matching principle!

Financial Statement Adjustments

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. Since 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 compensation for the officers, an adjustment should probably not be made to the income stream.

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 generally categorized as either (*1*) comparability adjustments, (*2*) nonoperating/nonrecurring adjustments, or (*3*) discretionary adjustments.

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 appraiser 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.

Nonoperating/Nonrecurring Adjustments

Another type of adjustment is intended to remove those items that appear in the subject company's income statement and are unrelated to the business operations or those that are not likely to recur in the future. An example of a nonoperating income item would be rental income from a condo in Vail, Colo., that is owned by a company in New Jersey that manufactures chemicals. In this instance, the normalization adjustments would be to remove all income and expenses relating to this nonoperating asset. A willing buyer of the chemical company would not be buying the condo. Therefore, these items are adjusted, so that what is left would represent the operating income of the company.

Nonoperating assets and liabilities are generally removed from the valuation analysis, so that the value reached would be indicative of the operating entity. Afterwards, the value of these items are added or subtracted to reach the value of the equity of the company. After all, the buyer may purchase only the operations, but the seller would continue to own the assets that were not sold.

Nonrecurring items are also adjusted during the normalization process, since 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 onetime $1 million contract that resulted in a net profit of $350,000. Since 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

There also may be other items to be 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 only be appropriate when controlling interests are being valued. 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 tells 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.

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 them going forward? Many factors should be considered in the determination of reasonable compensation. Consider among others, 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 is an issue. One of the best constructed judicial opinions in this area can be found in *Mad Auto Wrecking, Inc. v. Commissioner*, T.C. Memo. 1995-153, RIA T.C. Memo. P. 95153, 69 CCH T.C.M. 2330. 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.

Where do you look for reasonable compensation? I can write a book on that subject! Reasonable compensation can be 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. For example, the National Institute of Business Management publishes an annual survey entitled *Executive Compensation Survey Analysis.*[1] Another resource is Gale Research's *American Salaries and Wages Survey.*[2] This publication covers much more than executive salaries and has proven to be a useful tool.

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 "headhunters" to find out what compensation a specific position would command in the marketplace. I generally call two or three firms so that I 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. It is not that they are bad, but they present officer's compensation as a percent 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 5.2 shows sections from four reports that addressed reasonable compensation.

EXHIBIT 5.2
Reasonable Compensation

Report 1

Officers' salaries have been adjusted to reflect reasonable compensation for Dr. Brown (Ph.D.) and Mr. Cherry. Dr. Brown's 1993 reasonable compensation was based on a research director position, as reported in the *American Salaries and Wages Survey,* second edition, published by Gale Publishing. This survey indicated that the midpoint of compensation was $81,500, with a low of $37,000 and a high of $137,000.

Mr. Cherry's reasonable compensation was determined by reviewing the *1994 Executive Compensation Survey,* published by the National Institute of Business Management. For companies in wholesale trade, with sales volume under $5 million, the total compensation for key top management positions was as follows:

Chief executive officer	$96,000
Marketing officer	$82,000
General sales officer	$90,000

These figures are medians, with the range as low as $46,700 and as high as $194,000. Since Mr. Cherry's duties fit into several different categories, an average of these three positions was used. This average approximates $90,000. For years prior to 1993, a deflation factor of 5 percent per year was applied in order to determine reasonable compensation for those years.

Report 2

The officer's salary has been added back in its entirety, since the value of Richard Green's services to the company is truly a return on investment, as opposed to compensation for services. The business is currently run by its full-time manager, Stanley Smith, and Mr. Green's services are not required for the

(Continued)

[1] Published by National Institute of Business Management, 1101 King Street, Alexandria, Va. 22314.

[2] Published by Gale Research, Inc., 835 Penobscot Building, Detroit, Mich. 48226-4094.

EXHIBIT 5.2 *(Continued)*

business to continue operating. This is not to diminish the value of Mr. Green's past contributions to this business, but the current salary being paid to him could be eliminated by a willing buyer. Mr. Green currently visits the business for approximately one week per month, and it is this appraiser's understanding that the business could operate without him at this stage of the business's life cycle.

Report 3

Officers' salaries have been adjusted to reflect a reasonable level of compensation for the officers involved in managing the company. Steven and Thomas Kildare perform all of the daily management functions. Steven Kildare has an employment contract that guarantees him $132,000 annually, while Thomas Kildare has no such contract.

Thomas Kildare works 6 to 6.5 days per week, beginning almost each day around 7 A.M. for a meeting with personnel from the various divisions. A twelve-hour day is about average, and longer days are not uncommon.

To determine reasonable compensation, several sources were consulted. The *1994 Executive Compensation Survey*, published by the National Institute of Business Management, reflects median total compensation for 1993 for the following officers, which would best cover the job duties of Steven and Thomas Kildare:

CEO	$ 177,500
Financial	96,000
Sales/marketing	110,000
	$ 383,500

The median sales volume of the respondents in this survey was approximately $4.6 million, with the largest concentration of companies being located in the New England region. The appraisal subject is located in the Southeast.

After considering the size and geographical differential between Georgia Pest Control and the survey group, reasonable compensation for both Mr. Kildares, combined, is estimated to be $350,000.

RMA Annual Statement Studies reflects the median compensation for officers as a percentage of sales of 9.7 percent, with a lower range of 6.3 percent and an upper range of 14.0 percent. Using 9.7 percent of sales ($4,148,895 in 1993) as a measurement, reasonable compensation would be approximately $402,000 for both officers.

Based on the information reviewed, this appraiser prefers the *1994 Executive Compensation Survey*, since it addresses particular functions as opposed to a percentage that does not reflect how many officers are included in the end result. In our opinion, $350,000 seems to be a reasonable level of compensation for the officers. Other years will be inflated or deflated by 5 percent for cost of living.

Report 4

To determine Sharon Brown's reasonable compensation as the manager of Physical Therapy Associates, three sources were consulted:

1. A salary survey prepared by the American Physical Therapy Association (APTA), based on 1992 data
2. The *1994 Survey of Executive Compensation*, prepared by the National Institute of Business Management, based on 1993 data
3. *Basic Statistics About Home Care 1994*, published by the National Association for Home Care (NAHC)

In the survey prepared by APTA, the "median gross earned income" of a sole owner of a physical therapy practice in 1992 was $85,000. We spoke to John Smith, Director of Research Services at APTA, to determine how gross earned income was defined. He clarified that gross earned income is income after expenses of the practice and is equivalent to take-home salary.

In addition to the incomes of the sole owners of a physical therapy practice, the survey provided the following median incomes:

By geographic region (Middle Atlantic)	$55,800
By primary employment setting (Home health)	$54,600

EXHIBIT 5.2 ***(Continued)***

By years of experience (16 or more years)	$55,000
By highest earned academic degree	$48,755

According to APTA, the median, nonsupervisory salary for physical therapists in private practice was $48,000 in 1992. In the *1993 Active Membership Profile Report*, compiled by APTA, full-time self-employed females had a mean gross earned income of $93,699.

The *1994 Survey of Executive Compensation* included companies performing nonfinancial services in SIC Code 80-82. The median sales volume of the respondents in the group was $2.4 million, and the largest geographic concentration was the east north central region.

According to the survey, the median total compensation for the chief executive officer was $120,000. This figure includes perquisites as extra compensation.

The final survey used came from the National Association for Home Care, where it was reported that the chief executive officer of Home Health Agencies averaged $64,570 in 1993 and the average compensation of physical therapists was $50,495.

One additional factor should be considered in the determination of reasonable compensation for Sharon Brown. According to Ms. Brown, the amount billed to Visiting Therapists Association in 1993 was $797,556. According to the VTA contract, Physical Therapy Associates was paid $49.80 per visit. This indicates that there were approximately 16,015 visits in 1993. Ms. Brown claims that she performed 3,246 of these visits.

Assuming that total revenues of $917,171 were earned at $49.80 per visit, the total visits in 1993 to all patients would be 18,417. Subcontractors were paid $593,089 in 1993. The per-visit amount paid to subcontractors was as follows:

Total visits	18,417
Sharon Brown's visits	3,246
Subcontractor visits	15,171
Amount paid to subcontractors	$ 593,089
Amount per visit	$ 39.09

If Ms. Brown were a subcontractor, her compensation would have been $126,886 (3,246 visits x $39.09). However, a prudent business person would consider hiring a full-time salaried physical therapist, or possibly two individuals, to cover the number of visits made by Ms. Brown. Even if one of these people was compensated as a manager, the total payroll would be less than paying a subcontractor for more than 3,000 visits.

After considering all of the information, including Ms. Brown's efforts as a physical therapist, we believe that a reasonable level of compensation would be approximately $110,000. This places the heaviest weight on the self-employed income figures, with an added allowance for Ms. Brown's personal performance of therapy services. This also seems reasonable based on the executive compensation survey, since companies with median sales of $2.4 million were paying $120,000 to the chief executive officer.

The prior years' salaries have been calculated using a 6 percent deflation factor.

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 Internal Revenue Service (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" and would 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 in which the amount of entertainment expense differs significantly from industry data. In this situation, the appraiser 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 appraiser should try to estimate the normal vehicle expenses for the business. Similar companies can be a good source for these data. My all-time favorite automobile adjustment was during a valuation of a two-doctor neurosurgery practice. Each doctor had a Lamborghini on the books (each 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 reason-

able 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. 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 appraiser should check to see if the amount of compensation would be the same if it were paid to a non-family member. If my daughter performs secretarial services for my firm, she should not be compensated as a professional.

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 appraiser 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 the 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 in 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 appraiser 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 of the condo in Vail that we discussed previously. Since the asset was considered to be nonoperating, all associated income and expenses, including interest, should be removed during the normalization process.

The appraiser should also pay attention to sizable amounts of interest related to debt used to finance excessive compensation and perquisites. A company may be borrowing for working capital and, in turn, 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 appraiser 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 appraiser 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 appraiser to value the equity or the invested capital. More about this in chapter 6.

Normalizing the Financial Statements

The starting point of the normalization process is to obtain or prepare historical financial statements for an appropriate period. Although five years is frequently used, it is not always appropriate. These statements are then normalized if the appraiser is estimating the value of a controlling interest in the enterprise. Since in many cases, minority interests have a lack of control over the items being adjusted, the normalization process may not be appropriate. (I have repeated this point several times because it's important!) Exhibit 5.3 contains a sample normalization section of an actual valuation report. Our firm was retained by the husband of the business owner while they were going through a divorce. This example is an extreme case, with more adjustments than normal. However, it covers all of the adjustments and then some!

The example shown in exhibit 5.3 is an abnormality in the sense that the owner of the business was so flagrant about her disregard for the tax laws. However, this report section should be viewed as a good learning tool, since it contains almost all of the types of adjustments that were discussed previously.

Once the financial statements have been normalized, the appraiser 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 appraiser 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 can write yourself.

EXHIBIT 5.3
Sample Normalization of Income Section

In addition to the balance sheet adjustments, the company's income statement needed to be adjusted. The adjustments made are intended to normalize the net income to an economic basis. The "normalization" process removes nonoperating, nonrecurring, and other items that would not be expected to continue in the hands of the "willing buyer."

In this appraisal, *many* items appear to have been included in the corporate tax returns that are personal in nature. It appears that serious tax fraud is being committed, and many of the adjustments shown in the table on the next page reflect these abuses. They are explained in the footnotes to the table.

To review this business as if it were being considered by a "willing buyer," we not only have normalized the income statement but have also estimated the normalized cash flow of the enterprise. This will be used later in this report to perform valuation calculations.

Cash Flow Normalization

	1993	*1992*	*1991*	*1990*
Net income (as reported)	$ (3,516)	$ 18,371	$ 19,111	$ 59,833
Officer's salary [1]	82,500	115,005	103,300	68,298

EXHIBIT 5.3 *(Continued)*

	1993	*1992*	*1991*	*1990*
Depreciation [2]	19,935	20,989	24,298	23,203
Outside services [3]	5,200	7,400	—	—
Consulting [4]	2,400	7,000	11,250	—
Education [5]	—	2,000	1,000	1,415
Office supplies [6]	16,501	22,224	—	—
Repairs [7]	984	3,000	8,885	107
Furniture and fixtures [8]	10,000	19,000	5,807	45,694
Office equipment [9]	3,200	2,972	1,000	495
Office expense [10]	2,873	5,263	23,031	13,033
Licenses and fees [11]	—	55	—	—
Auto lease [12]	9,000	7,200	6,452	2,488
Rent [13]	6,100	5,000	3,600	3,600
Entertainment [14]	1,502	300	2,954	621
Retirement plan [15]	30,000	30,000	30,000	17,000
Disability insurance [16]	1,713	1,713	1,709	1,713
Travel [17]	2,317	784	—	598
Maintenance [18]	2,530	2,400	309	2,215
Sundry [19]	67	66	103	755
Contributions [20]	2,489	2,510	1,786	545
Professional fees [21]	5,200	500	2,551	187
Advertising [22]	690	225	—	—
Dues and subscriptions [23]	68	28	75	—
Stockholder loan [24]	5,137	1,000	17,873	14,000
Cash advances [25]	5,895	700	6,750	5,925
Medical supplies [26]	18,263	—	12,641	—
Subcontractors [27]	—	—	632	2,000
Leasehold improvements [28]	3,500	—	—	—
Interest [29]	375	45	769	2,228
Taxes [30]	—	521	—	—
Sharon Brown [31]	—	—	2,000	—
Office salaries [32]	—	—	—	7,425
Postage [33]	—	—	—	84
Automobile [34]	(4,000)	(4,000)	(4,000)	(4,000)
Officer's salary [35]	(110,000)	(103,400)	(97,196)	(91,364)
Gross Cash Flow	$ 120,923	$ 168,871	$ 186,690	$ 178,098

1. The officer's salary, as reflected in the corporate tax return, has been added back in its entirety. Reasonable compensation for the officer will be computed as a separate item at the end of this process.
2. Depreciation has been added back in its entirety. Since cash flow is being calculated, depreciation expense representing noncash charges must be added back to net income. In addition, most of the assets listed on the depreciation schedule appear to be personal in nature, not business related, so an adjustment would be necessary regardless, since the depreciation does not reflect the economic wear and tear of business assets.
3. Outside services have been adjusted for 1992 and 1993 as a result of payments made to Robert and Bonnie Brown, Ms. Brown's children, as well as payments to Ronald Brown, her husband, and Arnold Pincus, Ms. Brown's brother. These items are not deemed to be valid business expenses, and as such, they are added back to derive the normalized cash flow of the business.
4. Consulting expenses have been adjusted for payments made to Arnold Pincus and John Williams, an individual affiliated with a company called Unlimited Pleasures, which appears to relate to the redecorating of Ms. Brown's personal residence. Documentation requested regarding these expenses was not provided; however, a significant number of payments were made to Unlimited Pleasures, John Williams, or both, and have been charged to various accounts in an attempt to hide the expenses.

(Continued)

EXHIBIT 5.3 *(Continued)*

5. Education expenses have been adjusted to reflect payments made to Arnold Pincus, which are deemed to be personal expenses.
6. Office supplies have been adjusted for a significant number of items charged on an American Express credit card and various MasterCard credit cards, as well as payments to a company called Room Service, which are all deemed to be personal expenses. These expenses appear to be excessive, considering the type and size of business that is being appraised, and *even* if they are business-related, they are not reasonable and necessary business expenses.
7. Repairs have been adjusted to add back items charged on American Express to jewelry stores, payments to Unlimited Pleasures, payments to lawn services, and similar nonbusiness expenses.
8. As indicated in the discussion on fixed assets on the balance sheet, there are a significant number of personal assets that have been reflected on the depreciation schedule of the company. A substantial number of payments to Unlimited Pleasures, Macy's, Country Workshop, and Room Service have been deemed personal. It appears that Ms. Brown refurnished her home out of the business account.
9. Payments charged to office equipment include such items as Bernie's Bicycle, Unlimited Pleasures, American Express, Nordstrom, and other such payees, and have been deemed personal.
10. The office expense has been adjusted for payments to Robert and Bonnie Brown, ShopRite Liquors, K. McDougall, American Express, MasterCard, Unlimited Pleasures, and other such nonbusiness items, and have been deemed personal.
11. Licenses and fees have been adjusted in 1992 to reflect credit card fees. Since such a large portion of the credit card charges is personal in nature, we have added back one payment as being personal.
12. Automobile lease payments have been added back in their entirety, since a provision for reasonable auto expenses will be deducted later in this process.
13. Payments made to the Brown family have been added back, since the business rents space outside of the personal residence. There is no justification for the second office. It appears that this second office has been set up to try to justify an extraordinary amount of personal items charged relating to the personal residence, including landscaping, furniture, leasehold improvements, etc.
14. Certain entertainment expenses were added back, primarily items charged on credit cards, because we were not provided with adequate documentation to show that these were valid business expenses.
15. Retirement plan contributions have been added back for the portion that relates to Sharon Brown, since this will be calculated as part of reasonable compensation. These are considered to be discretionary expenses, and Sharon Brown's portion has been estimated.
16. Payments made to the Equitable, representing disability insurance, have been added back as being perquisites that are personal to the shareholder.
17. Travel expenses have been adjusted for payments to American Express, MasterCard, and similar sources for which we did not obtain adequate documentation to support the validity of the expense.
18. Maintenance expenses have been adjusted for personal landscaping and lawn care, as well as other similar expenses deemed personal.
19. Sundry expenses have been adjusted for payment to the Township of East Bonntown Municipal Court in Gaitertown, as well as other items deemed personal.
20. Contributions have been added back. Although they are not reflected in deductible business expenses in the tax return, they are allocated to the stockholder because of the election to be treated as an "S" corporation, under the tax law. These items are not only discretionary but also do, in fact, require an outflow of cash, and therefore have been added back in determining the gross cash flow of the business.
21. Professional fees have been adjusted for various payments deemed to be personal. These payments include payments to Gerry Conway, Ms. Brown's former divorce lawyer; Sheldon O'Hara, Ms. Brown's current divorce lawyer; and Skip & Jones, another law firm providing divorce services, as well as payments to Stock & Stock. These items were all deemed personal and have been adjusted for accordingly.

EXHIBIT 5.3 *(Continued)*

22. Advertising expense has been adjusted. Such items as payments to Neiman Marcus and American Express were deemed personal and therefore adjusted in the normalization process.
23. Dues and subscriptions have been adjusted to add back various subscriptions to magazines that are deemed personal. Since the nature of Physical Therapy Associates' business is providing services in the home, as opposed to in an office, these subscriptions have no business purpose and are considered to be discretionary items.
24. Over the years, various items were paid either to Sharon Brown or on behalf of Sharon Brown and were charged to a stockholder loan account. This stockholder loan was set up at the inception of the corporation when the assets of a sole proprietorship were transferred into the corporation. In fact, the stockholder loan should have been equity in the corporation, and it was purposely set up in this manner so that Ms. Brown could withdraw funds as she had done over the years. Removal of these funds is actually an improper withdrawal, and therefore, they have been added back in determining the cash flow of the business.
25. The company uses a Merrill Lynch WCMA account as its checkbook. Accordingly, a credit card was issued to the company, which Ms. Brown uses for her own personal purposes. Cash advances were taken at various times over the years, and all of these cash advances have been added back as being personal in nature.
26. Medical supplies have been adjusted in 1991 and 1993 to reflect payments to Arnold Pincus, Unlimited Pleasures, Room Service, MasterCard, and American Express. Many of these items are the same items that have been charged elsewhere, and without adequate documentation being provided to us to prove that these are valid business expenses, they have been deemed personal in nature and have been adjusted accordingly.
27. The subcontractor's expense has been adjusted in 1990 and 1991 to reflect payments to Sharon Brown and Arnold Pincus.
28. In 1993 payments made to Ray Shine and Robert Brown in the amounts of $1,000 and $2,500, respectively, were charged as leasehold improvements. These are deemed personal and have been added back in determining gross cash flow.
29. Interest expense has been added back in its entirety, since there is no valid business reason for interest to be paid by this business. Had Ms. Brown not chosen to use the business account as a personal checkbook, the business would have had adequate cash flow and no interest would have been paid. Furthermore, some of this interest represents payments to Ms. Brown herself or represents accounting adjustments reflecting balances due to Ms. Brown. Since this is not expected to recur in the hands of a "willing buyer," these items have been adjusted.
30. The tax payment of $521 was added back in 1992, since this payment was made to the Internal Revenue Service and it could not be determined what this payment represented. It is possibly personal in nature, and as such, we have made this assumption and adjusted it in determining gross cash flow.
31. Payments in the amount of $2,000 were paid to Sharon Brown and did not show up in the shareholder loan account. We were unable to ascertain which account this was charged to, but based on the many personal items withdrawn from this business, we have assumed that this does not represent a business expense.
32. Office salaries have been adjusted in 1990 for payments to Robert Brown and Bonnie Brown that are not considered to be valid business expenses.
33. Postage has been adjusted for a payment made to Unlimited Pleasures. This is not deemed to be a business expense.
34. Automobile expenses have been adjusted by factoring in an additional expense of $4,000 per year, representing an additional allowance determined by the appraiser to compensate for either depreciation expense or reasonable wear and tear on a modest business vehicle. The lease payments previously added back relate to luxury vehicles that would not ordinarily be leased in the normal course of business. However, a reasonable expense allowance should be factored in, since Ms. Brown uses her vehicle to go out to many patients, which is clearly for a valid business reason.
35. *[See report 4 of exhibit 5.2.]*

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 appraiser 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 are 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 okay with this stuff. These types of textbooks are like watching paint dry on a wall, real excitement!

6 *The Market Approach*

Chapter Goals

In this chapter, I will explain the market approach. There is a lot of important information here! After an introduction to the market approach, I will cover—

1. The guideline company method.
2. The transaction (merger and acquisition) method.
3. The industry method (also known as "rules of thumb").
4. The advantages and disadvantages of the various methods.

Introduction

The market approach is probably the most fundamental approach in a fair market value appraisal. Since fair market value is supposed to come from the "market," it seems natural that this approach should be greatly emphasized. The application of this approach can, at times, be the most difficult approach to use in a business appraisal. In real estate appraisal, the appraiser looks for similar properties to the piece of real estate being appraised, to estimate 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 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 and 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, and on one acre of land and has two bedrooms, two baths, and a well-maintained interior. Property C sold for $190,000 on the same block as property B, and it is also on one acre, has two bedrooms, and 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 in the following table.

	Property A	*Property B*	*Property C*	*Property D*
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 comparing 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 appraiser. 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 appraiser 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 in chapter 3. 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 company method, (*2*) the transaction (merger and acquisition) method, and (3) the industry method (sometimes called "rules of thumb").

Regardless of the method used, the appraiser 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 valuers do not always have the same luxury. The data that is available is significantly different for different types and sizes of companies. The data used will either come from publicly traded companies or come from those that are closely held. Both of these sources can present real problems to the business appraiser.

Guideline Company Method

The guideline company method of appraisal is based on the premise that pricing multiples of publicly traded companies can be used as a tool 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 appraiser 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 that can be used, with certain adjustments, to apply against 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 appraiser during the appraisal process. The similar companies, formerly known as "comparative companies," or "comparables," are now known as "guideline companies." This terminology was suggested by the Business Valuation Committee of the

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 appraiser 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;[1] Stockdale;[2] and Bolten, Brockardt, and Mard.[3] The following are some of the factors to consider, though not necessarily in any special order:

- 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

[1] B. Graham, D. Dodd, and S. Cottle, *Security Principles and Technique*, 4th ed. (New York: McGraw-Hill Book Co., 1962).

[2] John J. Stockdale, "Comparison of Publicly Held Companies With Closely Held Business Entities," *Business Valuation Review* (Dec. 1986): 3-9.

[3] Steven E. Bolten, James W. Brockardt, and Michael J. Mard, "Summary (Built-Up) Capitalization Rates for Retailers," *Business Valuation Review* (March 1987): 6-13.

- Years in business
- Financial market environment
- Quality of earnings
- Marketability of shares
- Operating efficiency
- Geographical diversification

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 Home Depot may involve similar businesses, but let's face it, where's the relevance?

How do we really identify guideline companies? I indicated earlier the criteria for determining similarity. In the real world, the search for guideline companies can be accomplished the old-fashioned way, by legwork in the library, or the modern way, sitting at your desk in front of a computer. I opt for the latter alternative. It's much faster and a lot less work. The steps performed to identify guideline companies include the following:

1. Identify the SIC code of the appraisal subject.
2. Using a database such as Standard & Poor's or Disclosure, enter your search criteria into the computer. This may include the SIC code, country of location, and maximum sales volume (see the following section, "Size Criteria").
3. After the possible guideline companies are identified by the initial set of criteria, we then examine the corporate description included in databases such as Standard & Poor's. This allows us to look at the narrative about the company to further determine if the company appears to be similar enough to use in our analysis.
4. For those companies that pass muster, we will now download financial information that is included as part of the Form 10-K filed in EDGAR or a similar database. This will allow us to take a further 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.

Size Criteria

Believe it or not, you can still use public company data when applying the market approach to smaller companies. In addition to the selection criteria used for your search

of guideline companies, it is generally a good idea to place a size restriction of no more than ten to twenty-five times the sales volume of the appraisal subject. Shannon Pratt had indicated in an earlier edition of *Valuing a Business* that a magnitude of ten times is a good upper limit. Our firm has found that going to a magnitude of twenty-five times the appraisal subject's sales volume sometimes works. There are many appraisers 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 small local computer manufacturer. Here also, common sense must be applied. If the guideline companies are too big, they lose relevance to the appraisal subject.

Individuals who disagree with the use of public company data for small, closely held companies generally state that the size differentials are generally so great that the result is meaningless. I disagree. First, there are many public companies that are small. I have found there are many companies traded over the counter with sales volumes below $10 million. 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 from many of our appraisal subjects—granted, a few less perquisites for the owners and more reliable financial statements, but little management depth and not much more ability to raise additional capital.

One of the requirements to consider when using guideline companies is that their stock should be actively traded. 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.

Many of the small public companies are relatively "thinly traded." Little activity makes it a bit more uncomfortable for the appraiser, but it does not mean that it cannot be used. After all, what is the alternative? In general, thinly traded data can be used, albeit cautiously, if the appraiser can determine adequate information about the thin trading. 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 an appraiser must struggle to decide who are the logical players in the market. 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.

Adjustments to Publicly Traded Information

Part of using public company information in the valuation process requires the appraiser to obtain and analyze the financial and operating data of the guideline companies. The appraiser will use this information to assure 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 would require the appraiser 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 appraiser 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 5, 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 frequently encountered as a result of the differences between public companies and closely held companies are for (*1*) inventory accounting such as LIFO-FIFO, (*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 appraiser 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 an appraiser. For the nonaccounting types, LIFO inventory valuation is relatively complicated and requires more than a few words to explain it properly. Since this book is a valuation text and not a book on LIFO, you will have to trust me.

The number of adjustments that an appraiser 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.

Using Valuation Multiples

Valuation multiples are considered to be usable if the appraiser has good information on companies that are "similar enough" to the appraisal subject and if the engagement is to value the equity of the appraisal subject. The multiples used frequently result in a minor-

ity, marketable estimate of value, since 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 a price to earnings multiple of 15 (assume an incredible coincidence 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.

Following are some of the more commonly used multiples:

- Price to net earnings
- Price to pretax earnings
- Price to cash flow
- Price to sales
- Price to operating income
- Price to book value
- Price to dividend-paying capacity or dividend yield
- Price to gross profit
- Price to EBIT
- Price to EBDIT

Those appraisers 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 con-

siders 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 faster or slower than the manner in which depreciation is being recorded. Capital expenditures can greatly affect the cash flow of the company and, therefore, have an impact 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 aftertax basis. If the company has a unique tax structure (S corporation, limited liability corporation, IC DISC, etc.), better comparability may be achieved by using pretax earnings. Of course, an appraiser 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, since 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, etc.).

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 appraisers are of the belief that "cash is king." Let's face it, the more cash you have, the more you can buy. Therefore, it seems logical that a great emphasis should be placed on cash flow. In many small companies, there is little difference between cash flow and earnings.

Price to Sales. A price to sales multiple is generally appropriate in two situations. The first situation is when the appraisal subject is "homogeneous" to the guideline com-

panies 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.

An interesting observation about price to sales multiples (also called "price to gross revenues" (P/G) multiples) was written by Raymond C. Miles in "P/E vs. P/G vs. P/Book Ratios—Which Is the Best Measure of Business Value?"[4] In his article, Miles discusses an empirical study that he performed from the market database maintained by the Institute of Business Appraisers and consisting of approximately 10,000 transactions involving smaller closely held businesses. Miles's study shows a higher correlation between the price to gross multiple than any other multiple for these types of businesses.

If you think about this, it makes sense. Many small businesses include all types of personal items in their expenses. This drives down the profit. A price to earnings multiple would also be affected by this. Most willing buyers of small companies may separate these personal expenses from the business, but few do enough due diligence to truly be accurate. However, it is common for willing buyers of these businesses to have a provision in the contract for sale that allows them to work with the seller for some period of time before the transaction is consummated. This is done so that the buyer can be there to count the cash in the register at the close of business. They are frequently there to supervise cash counts at the end of the day to ensure that they are getting the sales volume that they think they are purchasing. Sales in these businesses are frequently more accurate than expenses (for cash businesses, the owner generally becomes more honest with the listing business broker than he or she was with the IRS).

One of the many areas of controversy among appraisers is whether the "price" in the price to sales ratio should be the price of the equity or the price of the total invested capital (debt and equity). Some argue that since sales are listed above interest expense in the income statement, the application of a price to sales ratio should be on an invested capital basis. For smaller businesses, the value derived by applying a price to sales multiple results primarily in the value of the assets and liabilities that will be sold, not the equity or invested capital of the business. Sales of small closely held businesses are frequently consummated as "asset" sales as opposed to "stock" sales and, therefore, rarely include the liabilities anyway.

The typical sale of a small closely held business excludes certain assets and liabilities that will stay with the seller. These sometimes include cash, accounts receivable, company cars driven personally by the seller, and nonoperating assets such as marketable securities, accounts payable, accrued expenses, and various types of borrowings. This means that when the appraiser values the equity of an appraisal subject using

[4] *Valuation* (Jan. 1993), 40-45 published by the American Society of Appraisers.

a price to sales multiple, the resulting value will generally exclude these other items. The value of the assets and liabilities that were not part of the deal must be added or subtracted from the estimate of value reached by applying the multiple. You may want to check with a business broker to see how the appraisal subject's particular type of business is sold.

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 only be measured after the appraiser 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, since 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 stock holdings. 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, since 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 would it take to replace the individual with someone of sufficient talent, experience, etc., 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 appraiser 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 buy-

out 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.

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 appraiser can use the 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, Colo., 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.

When an invested capital method is used, the appraiser will determine the value of the company's total invested capital (equity plus debt) rather than just the equity. When an appraiser 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:

1. Add the market value of the publicly traded guideline companies' equity (price per share times the number of shares outstanding) to the guideline companies 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.
2. 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 appraiser is using an aftertax basis, interest expense is added back to earnings or cash flow, net of taxes, since there is a tax benefit that is derived from the deductibility of interest expense.
3. Once an estimate of value has been reached on a total invested capital basis, the appraiser 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, I will illustrate these computations with an example. 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 appraiser to adjust these multiples for the qualitative differences between the guideline companies and the appraisal subject. 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.

Different risk factors considered by the appraiser 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 an appraiser must think about in the application of not only the market approach, but also (as you will see in chapter 8) 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 appraiser. 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 appraiser 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 impact 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.

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 appraiser 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 appraiser 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 those of 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 appraiser must pay particular attention to the capital structure of similar companies to analyze the appraisal subject. Companies that were heavily leveraged in the late 1980s found themselves in trouble when the recession hit the United States. Bankruptcy filings were at an all-time high, indicating that too much debt was dangerous. 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 appraiser may want to consider using an invested capital approach using EBIT or EBDIT 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 perks, and therefore, the interest and the liability should be treated as nonoperating items, since 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 increases the risk of the enterprise.

Product Risk. Product risks relate 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 would be the effect that the fax machine had on the teletype machine.

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 would be 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 would 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, within the printing industry, four-color printing presses provide a capability that does not exist for companies without these types of machines. A commercial printing operation that does not have a particular type of press is 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. (What about gas stations?) This increased risk will generally cause a willing buyer to pay less for a business, since he or she must be able to generate a faster return on the investment to compensate for the possible impact of new regulations. Obviously, only those regulations that can be reasonably forecasted can be considered in this analysis. Do not forget about possible cleanup costs if a problem is discovered. An appraiser 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 a litigation in today's society can be the end of any successful business. Even if successful, a 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.

Valuation Considerations

Since valuation is premised on investment theory, the appraiser 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 appraiser 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 appraiser 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 twelve months
- Last fiscal year
- Year ahead
- Average (mean) over number of years
- Weighted average over number of years

Regardless of which time period an appraiser 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 appraiser. 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 appraiser's (or management's) ability to forecast the future. For example, if the company has cyclical earnings, the appraiser 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.

If the appraisal subject is experiencing modest growth, the appraiser should consider a weighted average earnings, the earnings for the latest twelve months, or pro forma earnings. In high-growth companies, the appraiser should consider a discounted future benefits method (this will be discussed in chapter 8). Since 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 6.1.

EXHIBIT 6.1
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:

Year	*Earnings*		*Factor*		*Extension*
1996	$ 25,000	×	5	=	$ 125,000
1995	15,000	×	4	=	60,000
1994	10,000	×	3	=	30,000
1993	5,000	×	2	=	10,000
1992	1,000	×	1	=	1,000
			15		$ 226,000

$226,000 ÷ 15 = $15,066

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 only appropriate 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 it. It is not too often that an appraiser 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 appraiser may want to consider a weighted average earnings, the latest twelve months' earnings, or pro forma earnings, assuming that a turnaround is expected to take place. If it is not, declining earnings may also require the appraiser 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 appraiser 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 read 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. 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 appraiser 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, an appraiser may wish to compensate for stock prices on October 19, 1987, when there was a 500-point drop in the Dow Jones Industrial Average. These types of unusual stock market corrections can cause the pricing multiples to be skewed.

Exhibit 6.2 shows the application of the market approach using guideline company information. As you review this table, there are several points to keep in mind. First,

EXHIBIT 6.2
Example of the Guideline Company Approach
Guideline Company Information

Guideline Companies	*Fiscal Year-End*	*Price/Earnings Ratio*	*Percentage of Sales*	*Multiple of Book Value*
Apple Company, Inc.	12/31/95	8.70	55.30	2.85
Bananas R Us, Inc.	10/31/95	9.30	47.43	4.65
Fruits, Inc.	12/31/95	8.50	35.25	3.65
Cherry Corp.	12/31/95	6.60	54.80	3.90
Grapes Corp.	11/30/95	7.80	48.20	4.25
Median multiple		8.50	48.20	3.90
Selected multiple		6.20	44.00	2.50

The selected multiples are now applied against the figures of the appraisal subject.

	Price/Earnings	*Price/Sales*	*Price/Book Value*
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[1]	$ 5,948,565	$ 6,152,758	$ 6,039,555
Net nonoperating assets	+ 250,000	+ 250,000	+ 250,000
Total entity value	$ 6,198,565	$ 6,402,758	$ 6,289,555
Rounded	$ 6,200,000	$ 6,400,000	$ 6,300,000

[1] This example intentionally omits any calculation of valuation discounts or premiums, which are discussed in chapter 10.

the selection of the guideline companies came 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, since it eliminates highs and lows that may skew the average.

The first question that you are probably asking yourself is how the selected multiples were chosen. This is accomplished by comparing the appraisal subject to the guideline companies. Growth is frequently the most important factor to consider. The price to earnings multiple reflects lower earnings growth for the appraisal subject, more volatility in the earnings, less depth in management, and all of the other risk factors discussed previously. After the detailed comparison, the appraisal subject was found to be more closely related to Cherry Corp. but slightly more risky. Overall, the earnings stream appeared to be about 25 percent more risky than that of the group. Getting to a 6.2 multiple is then the subjective judgment of the appraiser.

The review of the sales multiple reflects a closer relationship to the guideline companies. In this instance, profit margins and growth are the most important factors. The

appraisal subject has relatively stable sales levels and, in that regard, was analyzed to be better than Fruits, Inc. but not as strong as Bananas R Us, Inc. The stability adds strength through reduced risk and, therefore, was considered a major factor in the selection of the multiple. Another factor considered by the appraiser was the correlation with the return on sales between the companies. Again, however, that is the appraiser's subjective judgment, derived by the analysis performed.

The price to book multiple is analyzed and derived based on the companies' balance sheets. Financial ratios, including the return on equity, are considered in choosing this multiple. The results, as presented in exhibit 6.2, represent the value of the company on a marketable, minority basis, since the pricing multiples come from the public stock market. This also assumes that discretionary normalization adjustments were not made for the appraisal subject. The stock market activity consists primarily of minority shareholders who trade in a free and active market. This brings the value to a minority basis. The value indication stays on a minority basis if the appraiser 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.

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) was being valued, a discount for lack of marketability would probably be required, since a closely held stock is not as marketable as its publicly traded counterpart.

The selection of the multiple is a subjective process based on the analysis that the appraiser 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 multiple is 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 oper-

ating entity to reach the final entity value. However, this assumes that the nonoperating income and expenses were adjusted in the first place. Most appraisers round out the conclusion, since the valuation process is not an exact science and precision is not possible.

Now that we have the basic concept 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 appraiser must take to accomplish this. Let's use one of the guideline companies from exhibit 6.2 for our example. Apple Company, Inc. had a price to earnings ratio of 8.70 on December 31, 1995. If the price of Apple's stock was $47.50 on this date, this means that Apple's earnings would have to have been $5.46 per share. The price to earnings ratio would have been calculated as follows:

Price/earnings = Multiple
$47.50/$5.46 = 8.70

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 above. First, the price. To determine the market value of the company's equity, we would multiply the price per share times 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 Apple's equity $47.5 million.

Apple'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.

Now we need to adjust the earnings. The earnings previously calculated for Apple were $5.46 per share. This means that the net income, after taxes, was $5.46 million. 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	× 40%	
Tax benefit	$ 200,000	300,000
Net income debt-free		$ 5,760,000

Apple's earnings have now been adjusted to an invested capital basis of $5.76 million, or $5.76 per share. The new price to earnings ratio for invested capital would be:

\$52.50/\$5.76 = 9.11

This same calculation would be performed for each of the guideline companies. The appraiser then selects the appropriate multiple to apply to the appraisal subject's debt-free net income. In this situation, our appraisal subject had an aftertax net income of \$959,446. Their 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 6.2 and do the new calculations. For simplicity, exhibit 6.3 already has the new price to earnings multiples for the guideline companies on an invested capital basis.

EXHIBIT 6.3
Guideline Company Method Using Invested Capital
Guideline Company Information

Guideline Companies	*Fiscal Year-End*	*Price/Earnings Ratio*
Apple Company, Inc.	12/31/95	9.11
Bananas R Us, Inc.	10/31/95	10.15
Fruits, Inc.	12/31/95	9.45
Cherry Corp.	12/31/95	7.30
Grapes Corp.	11/30/95	8.90
Median multiple		9.45
Selected multiple		6.90

The selected multiples are now applied against the figures of the appraisal subject.

	Price/Earnings
Aftertax earnings	\$ 959,446
Add: Interest (net of taxes)[1]	90,000
Debt-free net income	\$ 1,049,446
Multiple	× 6.90
Value of operating invested capital[2]	\$ 7,241,177
Net nonoperating assets	+ 250,000
Total value of invested capital	\$ 7,491,177
Rounded	\$ 7,500,000

[1] Interest expense for the year was \$150,000. Effective tax rate was 40 percent.

[2] We have once again intentionally omitted valuation discounts or premiums from this example.

Exhibit 6.3 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, since 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 6.3, the appraiser 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	$ 6,200,000

The value of the equity is similar to the values illustrated in exhibit 6.2. Rarely will they be exactly the same.

Advantages of Using the Guideline Company Method

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 appraiser 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 appraisers 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 appraiser 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 an appraiser. These items are discussed in chapter 10.

Appraisals of larger closely held companies can be performed using these methods, since 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 Company Method

Despite the fact that the public market affords certain advantages to an appraiser, many appraisers 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 (e.g., 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. As I was writing this section of the book, AT&T announced the layoff of about 40,000 employees. The company's stock jumped three points. If the Federal Reserve Board raises interest rates, the stock market tends to react based on the expectation that future growth will be limited because of less borrowing and the increased costs of borrowing. There can be no doubt that emotion plays a considerable role in the market's performance.

Another disadvantage of using publicly traded methods is that it is frequently difficult to interpret and understand much of the stock market data that are disseminated. Despite the amount of information available about public companies, there is often a considerable amount of information that is not available about the 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. Since the appraiser 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 appraiser to know.

For those appraisers 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.

Transaction (Merger and Acquisition) Method

The spirit of Revenue Ruling 59-60 is frequently applied by the use of the transaction (or merger and acquisition) method of appraisal. In this method, transaction data is used in a manner similar to that in the guideline 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 of the entire company instead of a share of stock.

The transaction method can generally be applied by using either public company or private company data. Since the entire company has been sold, the transaction results 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.

Sources of data about acquired or merged companies were discussed in chapter 4. 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 one 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 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. Since this process is so closely related to the guideline company method, there is little need to elaborate further.
- *Closely held market.* The real difference in the transaction 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 these data. I believe that some data may be better than no data. As long as the appraiser 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. There are three sources that our firm has found to be somewhat useful in our quest for transaction data for the closely held business: (*1*) Bizcomps, (*2*) the Institute of Business Appraisers (IBA) Market Data Base, and (*3*) business brokers. Recognizing that each of these sources of information also has certain deficiencies, the appraiser is faced with using common sense and sanity tests to ensure the reasonableness of the results.

Bizcomps

The Bizcomps publication includes sales information by SIC category as accumulated by Jack Sanders. Each year, this regional, and now national, publication expands the number and size of the transactions included in it. A major disadvantage to using these

data is the fact that the transactions cannot be independently verified. This limits the usefulness of the information, since it can be used only in the context of information out of a publication that someone else compiled, as opposed to the appraiser. Real estate appraisers verify each transaction, whereas in this situation, business appraisers must rely on someone else's work and have limited knowledge about the target companies. Although Mr. Sanders is not being questioned about the contents of his publication, verifiable data is generally considered to be more reliable.

The Bizcomps data are limited in many SIC categories but plentiful in others. The data are limited, which generally presents the appraiser with the problem of not knowing all of the facts that surrounded the transaction. This is almost always a problem with gathering closely held data, but once again, it should not stop the appraiser from using this source. Just be careful!

Pricing multiples can be determined from this data, and since it relates to entire closely held companies that have been sold, it already includes discounts for lack of marketability. If a particular business was listed on the market for a while before finally being sold, and if a price adjustment was made during the listing period or through the negotiations between the seller and buyer, the transaction price that is reported would already reflect the market.

IBA Market Data Base

The IBA Market Data Base is a much larger version of Bizcomps. Available only to IBA members,[5] this database is the largest known source of market transactions of small closely held businesses. Similar limitations apply because of the lack of data and verifiability, but this database includes about 10,000 transactions. 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.

In an attempt to better understand the significance of the transaction data included in the database, an empirical study was undertaken by Raymond Miles, and his results were presented at an IBA national conference. 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

[5] The annual cost of membership to the IBA is approximately $225.00. Access to the database is free for members. All that a member has to do is call IBA headquarters (561) 732-3202 and ask for the SIC code or codes to be covered in the search, and the information is generally mailed to the member within forty-eight hours. This information can also be sent via e-mail in an Excel format.

all sales in the IBA Market Data Base, while price-to-earnings multiples are only available for some sales.

- Empirical data for all business categories, in aggregate, do 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 show 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.[6]

Exhibit 6.4 contains an excerpt of an actual report that illustrates how the IBA data base can be used effectively. Because of its limitations, this should never be used as the only valuation method in an appraisal. However, it can be used as strong evidence of the market if the particular industry has not changed much in recent years. The IBA data in this exhibit, as well as some to follow, were allowed to be reproduced as a courtesy by the Institute of Business Appraisers.

EXHIBIT 6.4
Use of IBA Market Data

To determine the value of Karl D. Smith, D.M.D., P.A., using the market approach, an attempt was made by this appraiser to gather information regarding guideline practices bought and sold in the open market. The information located is maintained in a market data file 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, 544 such transactions were located under Standard Industrial Classification Code 8021, "Offices and Clinics of Dentists." Of these 544 transactions, 139 were eliminated. A portion of these was

(Continued)

[6] Raymond C. Miles, *Business Appraising in the Real World—Evidence From the IBA Market Data Base* (document presented at the IBA National Conference, Orlando, Fla., Feb. 7, 1992).

EXHIBIT 6.4 *(Continued)*

eliminated based on the description of the business, since 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 before 1985 were also eliminated, since financial as well as technological changes have affected the practice of dentistry. The remaining transactions more adequately reflect Dr. Smith's practice. They are presented in the following table:

Data for Market Comparison[1]

Business Type	*Annual Gross ($000's)*	*Annual Earnings ($000's)*	*Sale Price ($000's)*	*Sale Price Gross*	*Price Annual Earnings*	*Geographical Location*	*Year Month of Sale*
Dentist	13		25	1.92		Southwest	88/12
Dentist	37		30	0.81		Southwest	88/08
Dentist	38		18	0.47		Southwest	89/03
Dentist	40		73	1.83		TX	87/07
			★★★				
Dentistry, general	628		380	0.61		TX	90/01
Dentistry, general	644	326	550	0.85	1.69	CA	93/12
Dentistry, general	650	273	400	0.62	1.47	PA	92/11
Dentist, general	659		500	0.76		Northeast	90/05
Dentistry, general	666		550	0.83		PA	94/05
Dentist	690		800	1.16		Southwest	88/06
Dentist	695	462	550	0.79	1.19	PA	89/07
Dentistry, general	708	328	310	0.44	0.95	CA	92/03
Dentist	735		750	1.02		Southwest	88/01
Dentistry, general	753	324	400	0.53	1.23	CA	91/05

Several items should be noted about the data presented. The information is submitted by members of the Institute of Business Appraisers who have been involved in actual transactions. As the geographic locations indicate, these transactions have taken place across the United States. A review of the data demonstrates that there is little correlation to the multiples calculated based on various geographical locations in the country. Therefore, it does not appear that these transactions are sensitive to geographic location. As the year and month of sale column indicates, the transactions utilized have taken place throughout the period beginning in 1985 and ending in June 1994.

With respect to the date of sale, it is common to hear arguments about old data. Raymond C. Miles, C.B.A., A.S.A., executive director of the Institute of Business Appraisers, published a paper entitled "In Defense of Stale Comparables," in which Miles examined the almost 10,000 entries in the database, and demonstrated that most industries are unaffected by the date of the transaction when smaller businesses are involved. Miles performed a study that examined the multiples across various industries and time periods to see if, in fact, the multiples changed. The conclusion reached was that the multiples do not appear to be time-sensitive, since inflation affects not only the sales price but also the gross and net earnings of the business. Therefore, this information can be used to provide actual market data.

A cross section of these data was analyzed to determine the potential statistical significance of sales price to gross, and price to annual earnings, multiples. These are presented, broken down by total transactions, Mid-Atlantic/Pennsylvania/NewYork transactions, and businesses whose annual gross sales range from $400,000 to $800,000. A mean, median, and mode were calculated to derive three statistical measurements from these transactions. This is presented below. In some cases, the mode was not a meaningful statistic and has not been included.

SOURCE: Data courtesy of the Institute of Business Appraisers.

[1] To save space in this exhibit, we have excluded approximately 500 transactions from the actual table.

EXHIBIT 6.4 *(Continued)*

	Sales Price/ Gross	*Sales Price/ Annual Earnings*
Total Transactions		
Mean	0.59	2.43
Median	0.59	1.43
Mode	0.55	1.47
Mid-Atlantic/PA/NY		
Mean	0.60	1.88
Median	0.62	1.47
Revenues from $400,000 to $800,000		
Mean	0.62	2.73
Median	0.62	1.45

The annual earnings reported in the database are the owner's discretionary cash flow, as opposed to net earnings after owner's compensation. Therefore, we have calculated the owner's discretionary cash flow as follows:

Sustainable net income (as previously discussed)	$ 110,000
Reasonable shareholders' compensation (1993)	154,500
Owner's (shareholders') discretionary income	$ 264,500

Using the pricing ratios above, we have calculated the estimate of value as follows:

	Sales Price/Gross	*Sales Price/ Annual Earnings*	*Sales*	*Annual Earnings*	*Sales Price/ Gross Value*	*Sales Price/ Annual Earnings Value*
Total Transactions						
Mean	0.59	2.43	650,000	264,500	383,500	642,735
Median	0.59	1.43	650,000	264,500	383,500	378,235
Mode	0.55	1.47	650,000	264,500	357,500	388,815
Mid-Atlantic/PA/NY						
Mean	0.60	1.88	650,000	264,500	390,000	497,260
Median	0.62	1.47	650,000	264,500	403,000	388,815
Revenues from $400,000 to $800,000						
Mean	0.62	2.73	650,000	264,500	403,000	722,085
Median	0.62	1.45	650,000	264,500	403,000	383,525

According to the information calculated above, there appears to be a significant correlation in the value estimates reached based on actual transactions. Applying gross sales multipliers to the practice revenues, a value estimate is reached ranging from $357,500 to $403,000. The annual earnings multipliers representing the owner's discretionary cash result in a range of value between $378,235 and $722,085.

The only clear outliers in the data presented are eight transactions with very high multipliers, ranging from 12.50 to 65.00. These multipliers are anomalies when compared with the remaining transactions and are skewing the means for total transactions and for transactions with revenues ranging from $400,000 to $800,000. Therefore, values calculated with these means will not be considered in this valuation. The remaining values range from $358,000 to $497,000, when both multipliers are considered.

Sales price to annual earnings ranges from $378,000 to $497,000, while sales price to gross revenues ranges from $358,000 to $403,000.

The issue is whether sales price to annual earnings or sales price to gross revenues is a better indicator of the market value of the practice. Raymond C. Miles published a paper entitled "P/E vs. P/G vs. P/Book Ratios—Which Is the Best Measure of Business Value?" in *Valuation* (January 1993). The results of the study performed indicated that "price to earnings and price to gross were equally valid when using

(Continued)

EXHIBIT 6.4 *(Continued)*

the market data method to appraise closely-held businesses. Price to book value ratio, on the other hand, shows very low correlation with market value." Mr. Miles offers the following explanations of why price to gross is as equally valid as price to earnings:

- One of these is that the data in the IBA Market Data Base is subject to some imperfections as a result of the data sources from which it is taken.
- Although contributors of data are asked to report "earnings" as profit before taxes, interest, and owner's compensation, this is not done in all cases. Thus there is probably some inconsistency in the earnings figures in the database. If so, such inconsistency will have a negative effect on the apparent correlation between price and earnings.
- Gross sales are easier to define than earnings, and accordingly there is not likely to be any appreciable error effect in the reporting of gross sales.
- There is another possible explanation for the relatively good correlation between selling price and gross sales. This is that potential buyers may place more emphasis on what *they* could do to produce income from a company than what the present owners have done in the past. Thus, buyers may be more interested in the available gross revenue from the business than in the earnings under prior management.

A review of the values computed previously reveals that those utilizing the sales price to gross multipliers fall within a tighter range than those utilizing price to annual earnings multipliers. This, together with the observations made by Mr. Miles, would indicate that the values resulting from application of price to gross multipliers may be more reliable.

Furthermore, since the practice is located in the Mid-Atlantic region and it generates revenues ranging from $400,000 to $800,000, the values calculated for these cross sections of data are more indicative. Therefore, using the market approach, the value of Dr. Smith's practice is estimated to be $400,000.

The value estimate above omits those items that are generally not sold as part of the practice. In general, only the equipment, patient list, and goodwill value is sold. To properly reflect the value of the entire practice under this method, the additional assets and liabilities must be considered. Therefore, we have estimated the value as follows:

Value from the above	$ 400,000
Cash	50,739
Accounts receivable	171,251
Accounts payable	(26,296)
Notes payable	(6,007)
Value of operating entity	$ 589,687

Subtracting the net nonoperating liabilities of $1,603 results in a value of $588,084, or $588,000 rounded.

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, 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 appraiser.

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 the confidentiality, since their expert will want to do the same. This is exactly what happened in the report excerpted in exhibit 6.5.

EXHIBIT 6.5
Business Broker Information

This valuation method uses information that comes from the actual sales transactions of similar property 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 owner'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:

Average net profit	$ 110,500
Multiple	× 1.81
Estimate of value	$ 200,005
Rounded	$ 200,000

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. a business broker who specializes in the sale of food route businesses. Mr. Smith provided us with the actual sales transactions of ten routes that were used as "guideline companies." (A guideline company is used in a business valuation in a manner that is similar to the way "comparables" are used in valuing real estate. It is recognized that closely held businesses can be used as guidelines in the determination of value, even though they are not truly comparable.)

Table 1 provides financial data regarding the ten guideline companies. All ten 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*[1]**

Route	*Type*	*Sales*	*Gross Profit*	*Net Profit*	*Purchase Price*	*Gross Profit (%)*	*Price/Net Multiple*[2]
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

[1] Supplied by Busbroke, Inc.
[2] Calculated by the appraiser.

(Continued)

EXHIBIT 6.5 *(Continued)*

Route	*Type*	*Sales*	*Gross Profit*	*Net Profit*	*Purchase Price*	*Gross Profit (%)*	*Price/Net Multiple*[2]
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
						AVG.	2.13

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 is willing to pay on a figure that is considered to be net profit but, in fact, excludes the owner's compensation.

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, the following items should be noted:

1. The guideline companies reflect a gross profit (sales less direct cost of sales) of between 12 percent to 26.98 percent, while XYZ Dairy Products, Inc. has averaged only 10.35 percent over the last five years.
2. Many of the guideline companies reflect a net profit to the owners of $85,000 to $90,000 based on sales of $300,000 to $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 appraiser for each actual transaction, resulting in ratios of 1.20 to 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 was 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:

1. Brand X represented approximately 90 percent of XYZ Dairy Products, Inc.'s business.
2. 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.

EXHIBIT 6.5 *(Continued)*

3. In the early 1980s 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.
4. In approximately 1984, Roberts Foods, Inc. purchased Brand X. According to the deposition of Sam Jones, when Roberts took over Brand X, many distributors were concerned about Brand X "going warehouse" (i.e., distributing through a central warehouse instead of directly to the supermarkets).
5. 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 ten guideline companies.
6. 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 valuer using *RMA Annual Statement Studies*, published by Robert Morris Associates (RMA). This publication contains statistical data broken down by Standard Industrial Classification (SIC) code based on information submitted in financial statements to RMA member banks. 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.

The use of 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. Since brokers are involved in the market, it is only natural that they should be able to provide good market information in the appraiser's local area.

Advantages of Using Transaction Data Methods

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 appraiser is able to estimate the value of the appraisal subject based on the prices of entire companies that changed hands. Since most closely held transactions involve entire companies, this method is a logical application of the market approach.

The acquisition transactions used in this method are considered to be an objective source of information, since 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 Transaction Data Methods

Although the 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 appraiser 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 appraiser recognizes that appraisers 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 an appraiser turns to closely held data. Private company transactions are difficult to locate, particularly since 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 ten 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 since 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 acquisition methods will have to be discounted for the minority interest. The problems with these discounts will be discussed later.

Industry Method

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 appraiser should pay close attention to that method. If enough transactions take place using a particular method, the end result is that 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 industry methods is that they generally provide a sanity check on other valuation methods. The disadvantages of industry methods 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, capital structure, etc.) about the companies that made up the rules-of-thumb transactions are not known.

Rules of thumb are sometimes used in the application of the market approach, but care must be exercised by the appraiser. Rules of thumb *should not be used alone*, since appraisers 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 6.6, the potential uses and dangers of rules of thumbs are discussed. This exhibit is based on excerpts from actual reports.

EXHIBIT 6.6
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 the rule of thumb for an accounting practice. Over the years, accounting practices are said to have been sold for an

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EXHIBIT 6.6 *(Continued)*

amount that ranges between 50 percent and 150 percent of gross billings. This means that an accounting practice with gross billings of $1 million dollars 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 appraiser. According to Ronald Klein, C.P.A., "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 appraisers 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, C.A., C.B.V., A.S.A., suggests two different methods: (*1*) fair market value of furniture, fixtures, and equipment plus 20 to 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, while method 2 yields a value of $730,489.

The *1993 Business Brokers Reference Guide*, published by Business Brokerage Press, lists four different methods. These methods, with their calculated range of values, are as follows:

1. 1 to 1.5 times annual adjusted earnings plus fixtures, equipment, and inventory: $212,073 to $286,272
2. Net assets plus 25 to 30 percent of gross annual revenues: $567,935 to $629,805
3. 20 to 60 percent of annual fee revenues plus fixtures, equipment, and inventory: $311,155 to $806,115
4. 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*, published by Valuation Press, Glenn M. Desmond, A.S.A., M.A.I., 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*, 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 ten different methods that yield values for the practice ranging from $212,000 to $1.4 million.

The Market Approach Illustrated

Exhibit 6.7 illustrates the application of the market approach. This exhibit has been included at the end of this chapter to show that you do not have to be appraising a large company to use the market approach effectively. Don't get too caught up with the numbers; rather, try to understand the concepts that are being discussed. Without the balance of the report, you are at a disadvantage in fully understanding the appraisal.

Exhibit 6.7 shows how the appraiser analyzes the guideline company data in an appraisal. The exhibit also shows how you can present this analysis in your report. You

are probably wondering about the 10 percent control premium and the 50 percent discount for lack of marketability that were in the exhibit. Be patient! We will be discussing these items in chapter 10.

EXHIBIT 6.7
The Market Approach
The Market Price of Stocks of Corporations Actively Traded in the Public Market

The final factor of the eight attributes listed in Revenue Ruling 59-60 is a market comparison between the appraisal subject and other companies that are traded on public stock exchanges. This is the basis for the market approach to valuation.

To apply the market approach, this appraiser performed a computerized database search looking for guideline companies that could be considered "comparable" to Paintco. Comparability is generally difficult to achieve in business valuations, since privately owned businesses tend to adapt to the management of the company. Smaller companies often take on the personality of the individual owner, and it is not until the company is considerably larger that it becomes managed by a team of professional managers who are responsible to multiple owners rather than just one or two.

Paintco is approaching the size for which guideline companies can sometimes be located. In addition to using computerized databases, this appraiser used other information in an attempt to locate guideline companies. The appraiser conducted a computerized search of the Disclosure database and used the following parameters:

1. The company's primary Standard Industrial Classification code had to be 2851, representing companies that manufacture paints, varnishes, lacquers, enamels, and allied products.
2. The company had to be located in the United States.
3. The company should have sales no greater than $300 million. This represents approximately twelve times the size of Paintco.

As a result of our search, we located several companies that met the foregoing criteria. Information about these companies is as follows:

1. *Del Paint Corp.* This company manufactures and distributes architectural paint and industrial coating products. It has 169 shareholders and 25 employees. The ticker symbol is DDXQ. According to its Form 10-K for its latest fiscal year dated March 31, 1994, the company received a going-concern statement in the auditor's report. In particular, this audit report stated:

    > The accompanying financial statements have been prepared assuming that the company will continue as a going concern. As discussed in Note 15 to the financial statements, the company has suffered recurring losses from operations, and has a net capital deficiency that raised substantial doubt about its ability to continue as a going concern.

    Additional information reflected in the financial statements indicates that this company has been experiencing a negative sales growth of 7.8 percent, based on sales of approximately $3.3 million in 1990, falling to $2.4 million in 1994. In each of the preceding five years, the net income was negative.

2. *Crystallume.* This company develops advanced products, incorporating synthetic diamond films and coatings for use in products such as cutting tools and semiconductor products. It has 129 shareholders and 29 employees. According to its latest Form 10-K for the fiscal year ending September 30, 1994, revenues have fallen from $2.6 million in 1992 to $1.3 million in 1994, with losses increasing from $1.6 million to $4.0 million during the same period. The company is considered a development-stage company.

3. *Pratt & Lambert, Inc.* This company is listed as inactive, since its name has been changed to Pratt & Lambert United, Inc. The company's ticker symbol is D. POZ. The business description

(Continued)

EXHIBIT 6.7 *(Continued)*

is: "develops, produces and sells architectural finishes and chemical specialties, comprised of industrial coatings and adhesives." According to the most recent Form 10-K, which was for the fiscal year ended December 31, 1993, the company had 2,037 shareholders and 1,425 employees. Sales during the period 1989 through 1993 fell from approximately $246 million to $242 million for a five-year growth rate of negative 0.3 percent. During the same period, the company's profitability fell from $6.4 million to $6.2 million, an approximate growth rate of negative 0.9 percent.

4. *Luminall Paints, Inc.* This company formerly manufactured interior and exterior paints and coatings. It no longer operates.

5. *Lilly Industries, Inc.* This company formulates, manufactures, and sells liquid and powder industrial coatings for use on furniture, doors, paneling, appliances and automotive parts. Its ticker symbol is LICIA, and according to its latest Form 10-K for the fiscal year ended November 30, 1993, the company has 1,891 shareholders and 1,175 employees. Sales have grown from approximately $220 million in 1989 to $284 million in 1993, for a growth rate of approximately 6.6 percent. During the same period, net income fluctuated annually but effectively grew from $12.5 million to $16 million, for a compound annual growth rate of 6.4 percent.

6. *Hydromer, Inc.* This company researches and develops coating solutions for medical devices, antifog solutions, meter covers, aircraft windows and goggles, packaging coatings, and overcoating for boats and ships, which reduces drag. According to its Form 10-K for the year ended June 30, 1994, the company has 340 shareholders and 10 employees. The company's net sales grew from $612,000 to $941,000 during the fiscal year ended June 30, 1990, and dropped to $389,000 during its latest fiscal year. Net income during this period rose from $34,000 to $331,000, and was $18,000 during its latest fiscal year.

7. *Guardsman Products, Inc.* This company develops, manufactures, and distributes coatings such as paints, varnishes, and lacquers for the home appliance, residential furniture, office furniture, and specialty coatings industry. According to its Form 10-K for the latest fiscal year ending December 31, 1994, the company has 1,780 shareholders and 1,109 employees. The company's sales have grown from $139 million to approximately $202 million during the period 1990 through 1994, representing a compound annual growth rate of 9.7 percent. During the same period, net income grew from $2.8 million to $5.9 million, for a compound annual growth rate of 20.8 percent.

Of the companies discussed above, several had to be eliminated from our analysis for various reasons. Del Paint Corp. was eliminated, not only because of their going-concern status in their financial report but also because there was no active market for the stock since September 30, 1991. Crystallume was eliminated because it is a development-stage company and, therefore, is not useful as a guideline company. As indicated previously, Luminall Paints, Inc. has no current operations and, therefore, must also be excluded from this analysis. A closer review of the trading activity of Hydromer, Inc. indicates that this, too, must be eliminated because of inadequate trading volume.

For fair market value to be determined by the market, there must be an adequate amount of market activity to allow a representative value to be established by the market. Without this activity, a few motivated buyers or sellers could influence the market price of a company's stock, which would violate the concept of fair market value.

The companies remaining in this analysis include Pratt & Lambert United, Inc. Lilly Industries, Inc. and Guardsman Products, Inc. In addition to using computerized database search capabilities, the appraiser reviewed annual reports, 10-K filings, 10-Q filings, and other assorted documents deemed applicable for this analysis. In the case of Pratt & Lambert United, Inc. and Lilly Industries, Inc. the computerized database activity only reflected information through the end of 1993. Upon receipt of 1994 information, it was determined that both of these companies have a sales volume of approximately $330 million, slightly larger than our initial search criteria. Despite the size differential, these companies will be used in this analysis. Tables GC-1 through GC-3, which follow, reflect selected financial data for these companies.

EXHIBIT 6.7 *(Continued)*

TABLE GC-1
Pratt & Lambert United, Inc.

	Fiscal years ending December 31,—				
	1990 ($ Thousands)	*1991 ($ Thousands)*	*1992 ($ Thousands)*	*1993 ($ Thousands)*	*1994 ($ Thousands)*
Income Statement Data					
Revenues	243,098	238,953	235,628	241,761	328,901
Cost of goods sold	163,434	160,034	157,120	160,603	231,915
Gross profit	79,664	78,919	78,508	81,158	96,986
Other operating expenses	67,562	68,716	68,285	69,993	84,571
Operating income	12,102	10,203	10,223	11,165	12,415
Interest expense	3,538	2,889	1,954	1,598	3,496
Other income (expense), net	757	534	455	639	893
Income before income taxes	9,321	7,848	8,724	10,206	9,812
Income taxes	3,702	3,092	3,561	3,995	4,295
Net income available to common	5,619	4,756	5,163	6,211	5,517
Earnings per share	0.98	0.85	0.70	1.09	0.92
Balance Sheet Data					
Cash and equivalents				2,443	3,370
Accounts receivable				39,950	63,174
Inventories				38,401	62,326
Other current assets				5,829	9,459
Total current assets				86,623	138,329
Net fixed assets				34,807	46,358
Intangible assets				247	95,395
Other assets				6,601	11,461
Total assets				128,278	291,543
Current liabilities				43,893	73,199
Long-term debt				20,069	71,103
Other long-term liabilities				4,542	6,845
Stockholders' equity				59,774	140,396
Total liabilities and equity				128,278	291,543
Common shares outstanding at end of year (000)				5,585	10,607

TABLE GC-2
Lilly Industries, Inc.

	Fiscal years ending November 30,—				
	1990 ($ Thousands)	*1991 ($ Thousands)*	*1992 ($ Thousands)*	*1993 ($ Thousands)*	*1994 ($ Thousands)*
Income Statement Data					
Revenues	231,615	220,508	236,476	284,325	331,306
Cost of goods sold	161,626	150,669	152,480	189,111	214,809
Gross profit	69,989	69,839	83,996	95,214	116,497
Other operating expenses	52,687	57,527	61,158	65,644	74,480
Operating income	17,302	12,312	22,838	29,570	42,017

(Continued)

EXHIBIT 6.7 *(Continued)*

	Fiscal years ending November 30,—				
	1990 ($ Thousands)	*1991 ($ Thousands)*	*1992 ($ Thousands)*	*1993 ($ Thousands)*	*1994 ($ Thousands)*
Interest expense	2,635	2,437	1,662	1,925	2,919
Other income (expense), net	2,205	899	731	294	554
Income before income taxes	16,872	10,774	21,907	27,939	39,652
Income taxes	6,850	4,417	9,201	11,784	16,350
Net income available to common	10,022	6,357	12,706	16,155	23,302
Earnings per share	0.61	0.41	0.55	0.70	1.00
Balance Sheet Data					
Cash and equivalents				7,384	26,581
Accounts receivable				39,936	42,231
Inventories				22,727	23,885
Other current assets				174	360
Total current assets				70,221	93,057
Net fixed assets				33,776	35,753
Intangible assets				55,471	50,978
Other assets				7,576	10,464
Total assets				167,044	190,252
Current liabilities				36,951	51,453
Long-term debt				40,621	28,026
Other long-term liabilities				8,344	11,349
Stockholders' equity				81,128	99,424
Total liabilities and equity				167,044	190,252
Common shares outstanding at end of year (000)				23,123	23,250

TABLE GC-3
Guardsman Products, Inc.

	Fiscal years ending December 31,—				
	1990 ($ Thousands)	*1991 ($ Thousands)*	*1992 ($ Thousands)*	*1993 ($ Thousands)*	*1994 ($ Thousands)*
Income Statement Data					
Revenues	139,053	140,927	152,197	177,806	201,888
Cost of goods sold	90,301	94,328	102,917	116,943	132,984
Gross profit	48,752	46,599	49,280	60,863	68,904
Other operating expenses	43,512	44,133	45,595	52,703	58,251
Operating income	5,240	2,466	3,685	8,160	10,653
Interest expense	1,475	1,026	703	991	1,188
Other income (expense), net	425	425	372	-153	374
Income before income taxes	4,190	1,865	3,354	7,016	9,839
Income taxes	1,424	909	1,376	2,495	3,936
Net income before extraordinary items	2,766	956	1,978	4,521	5,903
Extraordinary items	–959	–1246		150	
Net income available to common	1,807	–290	1,978	4,671	5,903

EXHIBIT 6.7 *(Continued)*

	Fiscal years ending December 31,—				
	1990 ($ Thousands)	*1991 ($ Thousands)*	*1992 ($ Thousands)*	*1993 ($ Thousands)*	*1994 ($ Thousands)*
Earnings per share	0.38	0.13	0.27	0.60	0.70
Balance Sheet Data					
Cash and equivalents				4,472	5,630
Accounts receivable				23,289	29,517
Inventories				22,893	31,324
Other current assets				6,367	7,090
Total current assets				57,021	73,561
Net fixed assets				22,284	27,977
Intangible assets				14,301	32,923
Other assets				3,348	2,591
Total assets				96,954	137,052
Current liabilities				23,225	31,188
Long-term debt				19,013	27,805
Other long-term liabilities				9,354	13,633
Stockholders' equity				45,362	64,426
Total liabilities and equity				96,954	137,052
Common shares outstanding at end of year (000)				7,913	9,482

A financial analysis has been performed of these guideline companies, to compare Paintco's financial results with that of the public counterparts to determine similarities and dissimilarities between the companies. Selected financial ratios appear in table GC-4. These ratios have been used to make qualitative assessments about the similarities and dissimilarities between the companies.

TABLE GC-4
Financial Ratios (1994)

	Guardsman	*Lilly*	*Pratt*	*Paintco (Adjusted)*
Quick ratio	1.13	1.34	0.91	1.69
Current ratio	2.36	1.81	1.89	3.63
Net sales/cash	35.86	12.46	97.60	29.40
SG&A expense/sales	0.29	0.22	0.26	.48
Receivables turnover	6.84	7.85	5.21	5.99
Receivables day sales	52.63	46.53	70.11	60.93
Inventory turnover	6.45	8.99	3.72	2.35
Inventory day sales	55.86	40.58	98.09	155.55
Net sales/working capital	4.76	7.96	5.05	3.10
Net sales/net plant and equity	7.22	9.27	7.09	10.16
Net sales/current assets	2.74	3.56	2.38	2.26
Net sales/total assets	1.47	1.74	1.13	1.83
Net sales/employees	182,045	281,963	230,808	133,242
Total liabilities/total assets	0.53	0.98	0.52	0.23
Total liabilities/invested capital	0.79	0.41	0.37	0.20

(Continued)

EXHIBIT 6.7 *(Continued)*

	Guardsman	*Lilly*	*Pratt*	*Paintco (Adjusted)*
Total liabilities/common equity	1.13	0.91	1.08	0.29
Times interest earned	9.28	14.58	3.81	1.76
Current debt/equity	0.00	0.07	0.52	0.00
Long-term debt/equity	0.43	0.28	0.51	0.08
Total debt/equity	0.43	0.28	0.63	0.38
Total assets/equity	2.13	1.91	2.08	1.29
Pretax income/net sales	0.05	0.12	0.03	neg.
Pretax income/total assets	0.07	0.21	0.04	neg.
Pretax income/invested capital	0.11	0.29	0.05	neg.
Pretax income/common equity	0.15	0.40	0.07	neg.
Net income/net sales	0.03	0.07	0.02	neg.
Net income/total assets	0.04	0.12	0.02	neg.
Net income/invested capital	0.06	0.17	0.03	neg.
Net income/common equity	0.09	0.23	0.04	neg.
5-year compound growth rate—EPS	16.50%	13.15%	-0.02%	39.15%
5-year compound growth rate—revenues	9.77%	9.36%	7.85%	-0.01%
Size of revenues ($000)	201,888	331,306	328,901	26,648

Several factors can be noted from the financial ratios. The compound growth rate of adjusted earnings per share of Paintco from 1990 through 1994 was significantly higher than that of the public companies because the large losses became smaller. Although Pratt & Lambert United had a slightly negative growth rate, they managed to hold their own at almost a break-even level. Lilly Industries and Guardsman Products had growth rates of 13.15 percent and 16.50 percent, respectively, during this same period. The compound growth rate of revenue from 1990 through 1994 was slightly negative for Paintco during a period when these public companies grew at almost 8 to 10 percent.

With respect to profitability, all of the public companies are profitable. Paintco, on the other hand, after normalizing the financial statements, reflects losses in four out of the five years. Another factor reviewed is the size of the companies. Paintco is significantly smaller than these public companies. Despite its sales being closer to those of Guardsman Products, Inc. Guardsman is still almost 7.6 times the size of Paintco. On the bright side, however, Paintco reflects better liquidity than these public companies, which is in part attributable to the lack of debt reflected on the company's balance sheet. Paintco's current ratio and quick ratio are stronger than those of all of these companies. However, its inventory turnover is considerably lower than that of Lilly and Guardsman, and just slightly lower than Pratt's. The amount of inventory being carried by Paintco is quite a bit higher than that of any of these public companies. Overall, Paintco appears to be significantly weaker than these guideline companies, due to its lack of profitability and high levels of inventory.

Because of these weaknesses and its poor profitability, Paintco is a considerably more risky investment. After analyzing these companies, this appraiser examined the market multiples of these guideline companies in an attempt to use them as a starting point in this portion of the appraisal. Table GC-5 reflects selected market multiples for these companies.

TABLE GC-5
Market Multiples

Company	*Three-Year Average Earnings per share*	*Latest-Year Earnings per share*	*Latest-Year Tangible Book Value per share*	*Dec.31,1994 Market Price per share*
Pratt & Lambert	$ 0.90	$ 0.92	$ 4.24	$ 18.875
Lilly Industries	$ 0.75	$ 1.00	$ 2.08	$ 13.375
Guardsman Products	$ 0.52	$ 0.70	$ 3.32	$ 12.563

EXHIBIT 6.7 *(Continued)*

Company	*Market Price To:* Three-Year Average Earnings (Times)	Latest-Year Earnings (Times)	Latest-Year Tangible Book Value (Times)	Aftertax Return on Ending Equity (%)
Pratt & Lambert	20.97	20.52	4.45	4.00
Lilly Industries	17.83	13.38	6.43	23.00
Guardsman Products	24.16	17.95	3.78	9.00

These market multiples will be discussed in the section entitled "Valuation Calculations."

Another manner in which the market price of the stocks of corporations actively traded in the public market is applied in practice is by reviewing the mergers and acquisitions of companies to determine pricing multiples that are calculable as a result of these transactions. The next computerized search performed by the appraiser was an attempt to locate mergers, acquisitions, or both that took place in 1993 and 1994. Using Dialog's Security Data Corporation Worldwide Merger and Acquisition File, several transactions were located. These are shown in the following table.

Target Company	Acquirer Company	Announcement Date	Effective Date	Deal Value ($ Millions)	Transaction Type
London Chemical	Cookson Group	4/5/94	7/4/94	26.0	Asset acquisition
Rust-Oleum	RPM Inc.	5/3/94	6/28/94	176.5	Asset acquisition
Valspar Corp.	Valspar Corp.	12/15/93	10/19/94	5.1	Buyback
United Coatings	Pratt & Lambert	2/28/94	8/4/94	108.3	Merger
Sherwin Williams	Sherwin Williams	7/21/93	N/A	186.8	Buyback
Grow Group	Corimon Int'l Holdings	5/28/93	6/8/93	2.5	Partial acquisition
Valspar Corp.	Valspar Corp.	10/21/92	N/A	5.0	Buyback
DeSoto, Inc.	Investor Group	7/23/92	12/4/92	0.7	Partial acquisition
Grow Group	Corimon CA	7/22/92	10/20/92	56.3	Partial acquisition
Lilly Industries	Lilly Industries	6/29/92	N/A	8.9	Buyback
Lilly Industries	Lilly Industries	2/3/92	N/A	7.8	Buyback
Valspar Corp.	Valspar Corp.	10/19/94	N/A	31.7	Buyback
Sherwin Williams	Sherwin Williams	7/20/94	N/A	193.5	Buyback
Moline Paint Mfg.	Guardsman Products	7/18/94	8/31/94	23.1	Merger
Coronado Paints	Wattyl Ltd.	7/5/94	7/5/94	33.0	Asset acquisition

Further research was performed to find out more details about these transactions. The asset acquisition of London Chemical by Cookson Group could not be used in this analysis because of a lack of information. London Chemical, Inc. combined with Specialty Coating Systems and Nova Tran, all owned by Union Carbide, did not have separately stated financial information available. Therefore, market multiples could not be calculated for this transaction. Several of these transactions were buybacks of the company's own stock and have been eliminated from this analysis because of the size of the company. For example, in its Form 10-K for the fiscal year ended October 29, 1993, *Valspar Corp.* reflected sales of approximately $700 million. In their Form 10-K, *Sherwin Williams* reflects net sales of almost $3 billion. Clearly, there would be nothing gained from using information of companies this size in the analysis of the fair market value of Paintco.

Buybacks of Lilly Industries' stock have also not been used, since this company is being used as a possible guideline company and any buyback of the company's own stock would have already been reflected in the market multiples calculated.

Similar to this situation was the merger between United Coatings, Inc. and Pratt & Lambert, Inc. Information about the target company was not available, but as a result of the merger, this information is included in the financial results of Pratt & Lambert. Therefore, we believe that the use of Pratt &

(Continued)

EXHIBIT 6.7 *(Continued)*

Lambert as a guideline company will reflect the impact of this transaction. An attempt was also made to obtain information about Coronado Paints, which was acquired by Wattyl Ltd., an Australian company, but because this company was privately owned, such information was not available. Therefore, this transaction also could not be used in this analysis.

Adequate information could also not be located for the partial acquisition of DeSoto, Inc. DeSoto is primarily a large domestic manufacturer of household detergents. The company believes that it is the sixth or seventh largest domestic manufacturer of household detergents, and therefore, we did not feel that this transaction would be a good indication of the value of Paintco, even if information could be obtained.

The other transactions not considered in this analysis were the partial acquisitions of Grow Group. Grow Group's revenues were approaching $400 million at their year end of June 30, 1993. We felt that this company was too large for a meaningful determination to be made in this appraisal. This left only two transactions. The merger of Moline Paint Manufacturing with Guardsman Products will be reflected in the market multiples previously discussed.

The final transaction was the acquisition of Rust-Oleum Corp. by RPM, Inc. The deal value of this transaction was approximately $176.5 million. A limited amount of information was located about this transaction. In the latest twelve months ended October 31, 1993, Rust-Oleum had sales of $132.6 million, a net income of $8 million, and assets of $81.5 million. This resulted in a price/earnings ratio of 21.97 and a price/book ratio of 7.25. The company had positive cash flow, long-term debt of $20 million, and stockholders' equity of approximately $24.4 million. The company's return on its equity was 32.99 percent. Combining these attributes with a positive cash flow of approximately $16.8 million made Rust-Oleum an attractive acquisition for RPM, Inc. No additional information could be located, since Rust-Oleum is not traded on a public exchange.

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 appraisal methods employed within each approach are discussed in the following section.

The Market Approach

Guideline Company Method

As indicated previously, three potential guideline companies were located that could be applicable to this appraisal. Market multiples displayed in table GC-5 reflect the investing public's perception of the value of the stock of these public companies. The market price of a share of a publicly traded stock reflects a minority, marketable interest, since public companies generally consist of many owners, all of whom are deemed to be minority owners because of the lack of control that they can exercise over the corporate entity. These shares are considered marketable because one only has to contact his or her stockbroker to turn this investment into cash within a three-day period.

The guideline company method attempts to use these market multiples to determine the value of the appraisal subject. Once the appraiser analyzes the differences between the subject company and the guideline companies, appropriate adjustments are made to the market multiples for the public companies, to reflect the difference in risk between the entities as it would relate to the willing buyer. In this instance, Paintco is considerably weaker than the public companies. Although its liquidity ratios seem stronger, almost all of the other ratios calculated indicate a severe weakness on the part of the company.

Size differential also significantly affects the determination of risk. Guardsman Products is the closest in size to Paintco, although a company with approximately $202 million in sales is run much differently than a company with approximately $27 million in sales. Guardsman's revenues have been growing at a compound annual growth rate of 9.77 percent, while Paintco has faltered at a negative 0.01 percent. Lilly and Pratt are both substantially larger than Paintco, with revenues of approximately $330 million each. Also, each of these companies has compound annual growth rates with respect to revenues of approximately 8 percent or 9 percent, which once again separates these companies from Paintco.

As discussed earlier in this valuation, Paintco does not appear to have an earnings capacity as a combined entity with its A&B division. Therefore, the application of an earnings multiple does not make sense. However, this does not eliminate the possible usefulness of a guideline company method. A

EXHIBIT 6.7 *(Continued)*

market price to the latest year's tangible book value was calculated in table GC-5 for these public companies. They were as follows:

Pratt & Lambert	4.45
Lilly Industries	6.43
Guardsman Products	3.78

Analyzing these companies' balance sheets, the appraiser has determined that there are several distinct differences that would require adjustment to the public company multiples. Paintco's total assets on an adjusted basis were approximately $17 million, whereas the smallest of these three public companies had total assets of $137 million. Paintco is also carrying considerably more inventory than Guardsman and Lilly and quite a bit more inventory than Pratt. Paintco is turning its accounts receivable slightly faster than Pratt but slower than Guardsman and Lilly. The stockholders' equity for each of the three guideline companies has grown from prior years, while Paintco's stockholders' equity has remained flat. The acquisition of the guideline companies would result in the purchaser buying productive capacity, whereas a purchase of Paintco's assets primarily consists of accounts receivable, an excessive amount of inventory, relatively old equipment, and real estate that houses it. Paintco's projected losses result in expected bank borrowings of approximately $1.5 million by 1997, since the company's cash balance is expected to dissipate quickly. A willing buyer would no doubt consider the capital infusion necessary in order to create a turnaround for the company.

After considering the facts and circumstances surrounding this appraisal, we believe that a market multiple of no greater than 1.5 would be appropriate. Under this methodology, this results in an estimate of value as follows:

Stockholders' equity (as adjusted)	$ 13,223,421
Less: Nonoperating assets	556,765
Operating equity	$ 12,666,656
Multiple	× 1.5
Value before adjustments	$ 18,999,984
Adjustments	
Control premium (10%)	1,899,998
	$ 20,899,982
Discount for lack of marketability (50%)	10,449,991
Operating value	$ 10,449,991
Nonoperating assets	556,765
Value estimate	$ 11,006,756
Rounded	$ 11,000,00

Conclusion

By now, either you should be very excited and ready to forge ahead, or you may be suffering from an anxiety attack. The market approach chapter contained a lot of stuff. We discussed methodologies, the selection of multiples, the assessment of risk, and the advantages and disadvantages of these methods. I hope you realize that the market approach 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

7 *The Asset Based Approach*

Chapter Goals

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

1. When to use the asset based approach
2. The advantages and disadvantages of the asset based approach
3. The adjusted book value method
4. Communicating with other appraisers
5. How to find other appraisers
6. The liquidation value method
7. The cost-to-create method

Introduction

The asset based approach is also commonly known as the "cost approach" or the "replacement cost 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 appraiser estimates value by adjusting the asset values of the individual assets and liabilities of the business to fair market value. This approach frequently cannot be used alone, because it cannot be easily applied to intangible assets. This approach is generally considered to be a "floor" value for an enterprise being valued as a going concern.

Most Common Applications of the Asset Based Approach

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 the enterprise. If goodwill or another type of intangible value exists, it will be added to the value derived under this approach.

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 the 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 gen-

erally 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.

Minority interests will not often be valued using an asset based approach, since the minority shareholder does not have the ability to liquidate the assets. This will be explained further in my discussion about adjusting the balance sheet, but essentially, 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

The asset based approach has both advantages and disadvantages. Some of the advantages include the following:

- 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.
- On a control basis, this approach generally provides a "floor" value for a business enterprise.

The disadvantages of using an asset based approach include the following:

- This approach is applicable only to tangible assets and liabilities and identifiable intangible assets; therefore, it may not recognize the full earning power or cash-generating power of a total business enterprise.
- The asset based approach provides the appraiser with the cost of duplicating the business being appraised, but it may not necessarily result in the most economically sound method of finding a substitute for the business.
- This approach is frequently more time-consuming to apply than the other approaches, particularly for smaller businesses for which market data about the assets and liabilities may not be readily available. In this case, an income approach can be used.

The asset values derived using this approach allow an appraiser 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 approaches. 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 cause a liquidation.

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 3. 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 a 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.

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 will be easily ascertained by the business appraiser, but others will not. There will be times when the business appraiser will look to other appraisers (such as real estate or machinery and equipment appraisers) to provide the values of certain assets.

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, appraisers will adjust the values to fair market value and then apply a minority discount. 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,[1] 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. The stock was being valued on

[1] *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).

a minority, nonmarketable basis. The company had amassed a large portfolio of highly appreciated real estate that was not valued at fair market value, since 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 appraisers. Get a copy of this case![2] 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, since it will not affect the value.
- *Marketable securities.* Marketable securities should be adjusted to their fair market value. Frequently, 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 for collectibility. 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.

  For cash-basis taxpayers, accounts receivable will generally have to be added to the balance sheet. 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. An appraiser 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 (FIFO, LIFO, etc.).

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[2] A more detailed analysis of this case appears in Pratt's *Valuing a Business*, 2nd ed. (Burr Ridge, IL.: Irwin Professional Publishing, 1989) 595–599.

— Determine if the inventory can be sold, and if it cannot, adjust the book value accordingly.

— If LIFO is used by the company, adjust the value to reflect the current cost to replace the inventory. Although LIFO provides a better matching on the income statement, FIFO provides a better balance sheet valuation.

— If proper inventory records are not maintained by the company, 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 too far back may prove to be meaningless (what's too far?).

- *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.
- *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 will be to value the property using an income or market approach. This will also generally require the services of a real estate appraiser.
- *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, 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 improve-

ments may be considered to be 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 kind 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 work force, 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 will actually be paid. If the payable has been on the company's books for a long time, the appraiser may want to present value the liability based on when it might actually be paid. Cash-basis taxpayers may need to have accounts payable added to the balance sheet, since 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 appraiser uses this information in the financial analysis portion of the assignment. Therefore, incorrect classification will result in the use of incorrect ratios when the comparison is made with guideline company data or industry composite data.

  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 0 percent government financing, and as such, they are essentially the same as an interest-free loan. The appraiser 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 appraiser 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. Since 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. The 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. The facts of this ruling relate to a decedent who owned a controlling interest in a real estate holding company. The tax basis of the property was relatively low, resulting in a capital gains tax upon the liquidation of the company.

The decedent's estate determined that the net asset value of the decedent's stock interest should be reduced by the capital gains taxes that were built into the stock. Part of the problem with this situation was that the decedent's estate represented that they did not plan to liquidate the property. The issue raised in this private letter ruling was whether the Internal Revenue Service would allow the built-in tax to be used to reduce the value of the stock, since any logical willing buyer would consider the tax as part of a purchase of the stock.

Before the Tax Reform Act of 1986, a tax-free liquidation of the corporation could have been accomplished under the General Utilities Doctrine.[3] The issue that was focused on, however, was not the tax-free liquidation but the fact that there was no plan of liquidation, and liquidation was not being contemplated. Appendix 16 contains this private letter ruling.

[3] See old Internal Revenue Code sections 336 and 337, as amended by section 631 of the Tax Reform Act of 1986.

In my opinion, this ruling is problematic. 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*,[4] 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. Be prepared, however, for a fight from the Internal Revenue Service. Exhibit 7.1 presents selected sections of a real valuation situation in which we were involved.

EXHIBIT 7.1
Real Estate Holding Company Valuation

Valuation Calculations

In this instance, there is only one valuation method that is appropriate. In section 5, paragraph b, 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, which follows, reflects the balance sheet of the corporation at December 31, 1993, per the corporate tax return. Certain adjustments have been made in table 1 to reflect the fair market value of the underlying assets.

TABLE 1
Balance Sheet Analysis

	Book Value (12/31/93)	*FMV Adjustments*	*Adjusted Book Value (12/31/93)*
Cash	$ 81,081		$ 81,081
Stockholder loan	184,783		184,783
Fixed assets	111,266	814,309*	925,575
Net worth	**$ 377,130**	**$ 814,309**	**$ 1,191,439**

*Fixed assets consist of the real estate and a 1990 Oldsmobile Cutlass Cierra 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*, January 1994 edition, published by the N.A.D.A. Used Car Guide Co. The adjustment brings these assets to fair market value.

Based on the above, the enterprise value of Smith Holding Co, Inc. as of December 31, 1993, is estimated to be $1,191,439 before applicable premiums or discounts.

(Continued)

[4] T.C. Memo. 1994 - 539, RIA TC Memo. 94539, 68 CCH T.C.M. 1044 (1994).

EXHIBIT 7.1 *(Continued)*

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 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, or 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*, published by Commerce Clearing House, Inc. (January, 1994), the concept of "highest and best use" is discussed with respect to real estate. In the *Dictionary of Real Estate Appraisal*, 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 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, as pointed out in the "Valuation Methodologies" section of this report, 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 for 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.

EXHIBIT 7.1 *(Continued)*

According to the real estate appraisal that was performed:

During the mid 1980's, Jackson County's strong attraction and appeal led to tremendous price increases and corresponding increases in new development.

Price escalations were experienced in some years in excess of 30% per year, which were significantly sustained through 1984 to 1987. 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 years 1988 through 1992 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 1992 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 corporation level, which is 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 would appear 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 the 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 December 31, 1993, thirty-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 between a safe U.S. Treasury bond investment or a 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 includible 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 was sold.

Another issue that has been addressed by various cases is whether liquidation was being contemplated. The Internal Revenue Service has taken the position, and the Tax Court has concurred, that if liquidation was not being contemplated, associated costs should not be permitted.

(Continued)

EXHIBIT 7.1 *(Continued)*

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.

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:

U.S. Treasury bonds	
Five-year	5.14%
Ten-year	5.77%
Twenty-year	6.41%
Thirty-year	6.28%
Corporate bonds (seasoned issues)	7.28%
Corporate bonds	
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 alternate 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 ÷ 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 ends up 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 x 62.5%)

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 appraisers 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 the profit, eliminating any tax. If the hypothetical willing buyer is assumed to 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. There-fore, it appears that a reasonable argument can be made for making this type of adjustment.

Changes from LIFO to FIFO will also 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. The result may 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.

The problem with this methodology for a going concern is that the result will not include unidentifiable intangible assets, such as goodwill, assuming that there are any. The value of these assets can be determined by some form of a market approach or an income approach, possibly even the excess earnings method *if there is no better basis for determining the value of the intangibles.*

Communication Among Appraisers. Communication among appraisers is an important component in the valuation process. The business appraiser 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. To keep the lines of communication open and clear, the business appraiser should be familiar with certain terminology used by these other professional appraisers. Let's discuss some of the important terms:

- *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."[5] 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. Since 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 fifty-seven-year-old machine with fifty-seven-year-old technology, when the new and improved models are so much more efficient?

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[5] John Alico, ed., *Appraising Machinery and Equipment* (New York: McGraw-Hill Book Co., 1989) (sponsored by the American Society of Appraisers).

- *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.

  The 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 would not pay the new price for 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 would be used for the same purpose and in the same place as it would 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 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 appraiser 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, since they, by definition, do not make a contribution to the business operations of the appraisal subject.

Working With Other Appraisers. 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, since 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, while the business appraiser 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. 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, gemstones rough, 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, antiques and decorative arts, antique firearms, armor and militaria, antique furniture, Asian art, automatic musical instruments, automotive specialities, books, equines, ethnographic art, fine arts, fine arts photography, furs, Native American art, numismatics, oriental rugs, Pre-Columbian art, residential contents, silver and metalware, 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, town houses, 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, town houses, and two- to four-unit residential income properties.

- The National Association of Independent Fee Appraisers:
  - IFA (member)
  - IFAA (agricultural member)
  - IFAS (senior member)
  - IFAC (appraiser-counselor)

By now, you must feel like alphabet soup. Your local yellow pages will assist you in finding many of these types of individuals. Many 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.

The Adjusted Book Value Method Illustrated. In exhibit 7.2, the adjusted book value method is illustrated. The example in exhibit 7.2 was part of an appraisal that was being used by the client for planning purposes. In this instance, the client did not want to spend additional money for real estate, machinery, and equipment appraisals. This happens fairly often. Therefore, the appraiser must be careful to include all of the necessary language in the "Statement of Assumptions and Limiting Conditions" section of the valuation report.

EXHIBIT 7.2
Adjusted Book Value Method

An analysis of Johnson & Jones was performed by the appraiser as of December 31, 1992, the date of the most recent financial statements of the company. According to the financial statements, Johnson & Jones reflected a book value of $678,908 at December 31, 1992. To reflect the assets and liabilities at their fair market value, an analysis was performed by the appraiser. Items requiring adjustment were as follows.

Fixed assets are recorded on the books of the company with a net book value of $1,179,474 at December 31, 1992. The depreciation reflected on the books does not always reflect the economic depreciation for these assets and, therefore, must be analyzed further to determine whether an adjustment is necessary to value these assets.

The fixed assets consist of real estate, equipment, and vehicles. To value these assets, insurance replacement costs, accounting depreciation schedules, real estate tax assessed values, and automobile "blue books" were used.

EXHIBIT 7.2 *(Continued)*

The replacement cost insurance limits are as follows:

Building at 104-106 N. Main Street	$ 2,590,900
Personal property	1,270,700
Building at 357 N. Roddy Street	$ 209,500
Personal property	139,600

Although insured for the replacement cost, the value of the property after depreciation is more accurately reflected in the real estate tax assessments of Fuller County. According to both Hatsville and Smithtown, the assessed value of the properties is based on a 100 percent assessment, with the most recent reassessment taking place in September 1990. The tax assessors' offices did not feel that there was a material difference in the values of the properties from the reassessment date to the valuation date. Therefore, the real estate will be considered to be valued as follows:

Hatsville	$ 464,600
Smithtown	137,100
	$ 601,700

The personal property insurance amounts exclude vehicles. A review of the useful lives reflected in the depreciation schedule indicates that most of the equipment is being depreciated over a ten- to twelve-year period. This is considered reasonable for all equipment other than the continuous-batch washer, which management estimates to have a twenty-year useful life.

After adjusting the useful life to twenty years, the economic value of the continuous-batch washer is approximately $408,000. Adding this to the net book value of the other equipment results in an approximate value of $892,000.

The insured value of the personal property is $1,410,300. The depreciated value of $892,000 is approximately 63 percent of the replacement cost of $1,410,300. A review of the date of acquisition of this equipment indicates a substantial portion being purchased between 1989 and 1992. In view of this, the depreciated value of $892,000 seems reasonable for this appraisal.

The final group of fixed assets are the vehicles used in the business, which have a net book value of $125,377. A review of the depreciation schedule was performed by the appraiser, and comparisons were made to values reported in the January 1993 editions of the *N.A.D.A. Official Used Car Guide*, published by the N.A.D.A. Official Used Car Guide Co., and *The Truck Blue Book*, published by Maclean Hunter Market Reports. In some instances, a scrap value was assigned by the appraiser. For purposes of this appraisal, the fair market value of the vehicles has been estimated to be $199,825.

Fixed assets have therefore been restated as follows:

Real estate	$ 601,700
Equipment	892,000
Vehicles	199,825
Total	$1,693,525

Johnson & Jones has intangible assets recorded on its books, which have resulted from a customer list acquisition. For appraisal purposes, the net book value of $37,692 will be reflected at $0 at this stage of the appraisal. The intangible assets will be valued later in this report.

As a result of the changes described above, the adjusted book value of Johnson & Jones, excluding intangible value, is estimated in the following table.

Adjusted Book Value
Excluding Intangible Assets

	Book Value (12/31/92)	*Adjustments*	*Adjusted Book Value (12/31/92)*
Cash	$ 78,934	—	$ 78,934
Accounts receivable	479,487	—	479,487

(Continued)

EXHIBIT 7.2 *(Continued)*

	Book Value (12/31/92)	*Adjustments*	*Adjusted Book Value (12/31/92)*
Inventories	71,564	—	71,564
Prepaid expenses	42,048	—	42,048
Fixed assets (net)	1,179,474	514,051	1,693,525
Intangibles (net)	37,692	(37,692)	—
Cash value officers' life insurance	46,622	—	46,622
Accounts payable	(408,320)	—	(408,320)
Long-term debt	(570,662)	—	(570,662)
Capitalized leases	(166,378)	—	(166,378)
Accrued expenses	(111,556)	—	(111,556)
Net worth	$ 678,905	$ 476,359	$ 1,155,264

The adjusted book value of Johnson & Jones, without intangible assets, has been estimated to be $1,155,264 as of the appraisal date, or $1,200,000 rounded.

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 generally include 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 "force" the liquidation. Obviously, an owner will want to maximize the amount to be 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, since 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 appraiser 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 appraiser 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 appraiser 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.

> **Example:** XYZ Fuel Oil Corp. is a well-established, old-time 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 appraiser's valuation. First, many customers have converted from home heating oil to natural gas, which explains why the company's sales gallonage has 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 realize that it costs them only the price of the extra fuel oil to fill up the trucks and have their drivers 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 the customer list is to sell it, especially since the company has been losing money each year.

At a minimum, this method can be used to set the lower limit of the range of the possible fair market values of a controlling interest in a going concern. 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.

If the appraisal is for tax purposes, be careful to follow, or at least consider, the case law. The Internal Revenue Service, and particularly the tax courts, have frowned on a liquidation methodology unless a plan of liquidation is in place.

Exhibit 7.3 highlights a liquidation analysis section of an appraisal report that included an equipment appraisal. This assignment required the concept of highest and best use to be applied in the fair market value determination of a going concern.

EXHIBIT 7.3
Liquidation Value Method

As explained in the section of this report entitled "Valuation Methodologies," the value of a business should be determined in accordance with the concept of its highest and best use.

In *Basic Business Appraisal*, by Raymond C. Miles, ***highest and best use*** is defined as "the legally permissible and reasonably feasible present use, or series of future uses, that will result in the greatest economic benefit to the owner of the property." Applying this concept to Southeast Explosives and Southeast Equipment requires a determination of whether the business's highest and best use is as a going concern or as if in liquidation.

Miles also states:

> In extreme cases, an appraiser may sometimes be asked to appraise a business which, though profitable, is only marginally so, and rather than continuing as an operating business, might better be liquidated. The business would be discontinued, its assets being sold individually for whatever price they might bring, and the liabilities of the business would then be satisfied from the proceeds of the sale of assets.

Southeast Explosives and Southeast Equipment are not even marginally profitable and are not expected to be profitable in the future. A going-concern value assumes the company will continue in business and looks to its earning power and cash-generation capabilities as indicators of fair market value. In this case, the business does not exhibit these characteristics. It has been experiencing losses, and this is expected to continue into the future.

Therefore, the highest and best use, resulting in the greatest economic benefit to the owners, would be in liquidation and not as a going concern. Since we have concluded that the highest value would be produced from a liquidation valuation, we have not applied a market or income approach typically used in valuing a going concern.

However, an asset based appraisal is in order. To prepare a liquidation analysis of Southeast Explosives and Southeast Equipment, a listing must be made of all of the companies' assets and liabilities, both tangible and intangible. Appropriate sale or liquidation values must then be determined for

EXHIBIT 7.3 *(Continued)*

each item in the listing. The balance sheets at June 30, 1993, as prepared by the companies' accountant, are the starting point for the analysis. The following table details the calculation of the net proceeds to be received upon liquidation.

Net Proceeds From Liquidation

	Historical Value June 30, 1993			
	Southeast Equipment	*Southeast Explosives*	*Adjustments*	*Liquidation Values (July 22, 1993)*
Tangible assets				
Cash (1)	$ 12,798	$ 24,078	$ —	$ 36,876
Money market fund (1)	—	127,753	—	127,753
Due from Southeast Equipment (2)	—	41,381	(41,381)	—
Accounts receivable (3)	1,302	—	5,040	6,342
Fixed assets (4)	4,875	2,113	96,012	103,000
Proceeds from asset sales	$ 18,975	$ 195,325	$ 59,671	$ 273,971
Identifiable liabilities				
Payroll taxes payable (5)	—	$ 2,606	$ 459	$ 3,065
Accrued payroll (6)	—	—	1,800	1,800
Accounts payable (7)	—	—	4,174	4,174
Union benefits payable (8)	—	—	3,497	3,497
Due to Southeast Explosives (2)	41,381	—	(41,381)	—
Loan to shareholder	1,500	—	—	1,500
Total liabilities	$ 42,881	$ 2,606	$(31,451)	$ 14,036
Net proceeds before liquidation expenses				$ 259,935
Liquidation expenses				
Legal and accounting				$ 5,000
Overhead				1,000
Income taxes				—
Total liquidation expenses				$ 6,000
Net proceeds from liquidation				$ 253,935
Rounded				$ 254,000

1. Cash in bank accounts and the money market account have not been adjusted, since the balances at June 30, 1993 are indicators of the cash balances at July 22, 1993. According to Bill Jones, there were no significant changes in cash between June 30, 1993, and July 22, 1993.
2. The intercompany receivable/payable due from one of the companies to the other has been eliminated, since if the companies were liquidated together, the amount would not be paid by one company to the other.
3. Since the companies maintain their books on a cash basis, accounts receivable are generally not reflected on the balance sheet. However, on June 30, 1993, there was a small balance on the books of Southeast Equipment. This appraiser reviewed documentation at the valuation date that indicates that total accounts receivable for both companies were $6,676 at that time. Not all of it has been collected. Allowing for the time to collect and possible bad debts, this appraiser has reduced the accounts receivable by 5 percent. Therefore, the accounts receivable at July 22, 1993 are $6,342.

(Continued)

EXHIBIT 7.3 *(Continued)*

4. The value of the majority of the fixed assets has been determined through an equipment appraisal performed by Brown Appraisal Associates. Their appraisal resulted in a fair market value in exchange of $103,000 for three drill systems, an air compressor, a 1989 truck, a 1987 truck, and various other items. Fair market value in exchange is the fair market value of the equipment after a deduction for sales and marketing expense. This value is higher than an auction value, which was estimated by Brown to be $84,000. This, however, represents a forced liquidation value and is not appropriate for this appraisal.
5. Payroll taxes payable of $3,065 were due at the valuation date.
6. The accrued payroll of $1,800 is payroll due for Messrs. Jones and Masterson for work performed prior to the valuation date.
7. Accounts payable of $4,174 were verified as of the valuation date.
8. Union benefits payable of $3,497 were verified as of the valuation date.

Upon liquidation, the net proceeds before any liquidation expenses would be $253,935. However, the costs associated with the liquidation must also be considered. As mentioned previously, Shannon Pratt, author of *Valuing a Business*, states that "it is essential to recognize all costs associated with the enterprise's liquidation. These costs normally include commissions, the administrative cost of keeping the company alive until the liquidation is completed, taxes and legal and accounting costs."

Brokerage commissions have already been deducted in the determination of the fair market value in exchange of the fixed assets. Legal and accounting costs that will be incurred are estimated to be $5,000. The overhead costs that will continue to be incurred while the companies are in the process of liquidating are estimated to be minimal. There may be some miscellaneous amounts due for items such as insurance and some administrative costs. Salaries will not be paid, since no additional jobs will be performed. Therefore, these overhead costs are estimated to be $1,000.

There would be realized gains from sales of the fixed assets in liquidation; however, there are significant net operating loss carryforwards available, which would offset these gains. Therefore, we have estimated that there will be no taxes due upon liquidation of the assets.

In certain cases, the net liquidation proceeds are discounted, since time is needed to sell the assets. The liquidation proceeds will not be received until some time after the valuation date; therefore, the proceeds are worth less at the valuation date than when they are actually received. In this case, the liquidation proceeds available as computed represent the value at the valuation date, since the cash and accounts receivable are readily liquidated. In addition, the equipment appraiser has considered the time needed to sell the fixed assets in his valuation. Therefore, it is not necessary to discount the estimated net proceeds.

Therefore, the final value of these companies, on a combined basis, is estimated to be $253,935, or $254,000 rounded.

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 appraiser values the intangible assets as well. This method requires the appraiser 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 as we discussed earlier in this chapter when we 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.

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 them. So let's move on.

8 *The Income Approach*

Chapter Goals

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

1. When to use the income approach
2. Advantages and disadvantages of using the income approach
3. Using pretax or aftertax information
4. Using debt free methods
5. The capitalization of benefits method
6. The discounted future benefits method
7. The excess earnings method
8. Common errors in applying the income approach

Introduction

Revenue Ruling 59-60 suggests that an appraiser 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—

- Net income after tax.
- Net income before taxes (pretax income).
- Cash flow (gross or net).
- Debt-free income.
- Debt-free cash flow (gross or net).
- Earnings before interest and taxes (EBIT).
- Earnings before depreciation, interest, and taxes (EBDIT).

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:

- 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 on this theme is the reciprocal of the market multiple price/earnings, which would be earnings/price. An earnings/price ratio is also a capitalization rate.
- Discounting—a multiple-period valuation model that converts a future series of benefit streams into value by bringing them to present value at a rate of return that reflects the risk inherent in the benefits stream.

In general, the capitalization rates and discount rates used for various benefit streams will be different in each situation. Capitalization rates and discount rates are discussed in chapter 9.

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?). If the owner sells 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 non-operating assets is added to the result to obtain the value of the equity. In the "debt free" 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

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, since *investment value* is a standard of value and not an approach to valuation. Although the appraiser 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.

The income approach is based on the assumption that an investor would 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 appraiser cannot find good information about market multiples or capitalization rates to apply to the company's benefit stream. Instead, the appraiser 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 appraiser will go a long way by having knowledge about the rates of return available in the marketplace.

Advantages and Disadvantages of the Income Approach

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 of the Income Approach

The income approach has some definite advantages, including the following:

- The income approach 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.
- This approach requires a simple mathematical application that is frequently performed more quickly than the other approaches.

- At times, the income approach is the only approach that can be used to value intangible assets.

Disadvantages of the Income Approach

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 have been 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 appraiser to exercise judgment, which is subjective. At times (most), it is a difficult number to defend on its own merits.

Selecting Benefit Streams

The benefit stream(s) to be used in the application of the income approach depend on many factors. These factors are somewhat similar to those factors that were discussed in chapter 6 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 (i.e., 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 appraiser will frequently depend on the nature of the business and its capital structure. For example, net income (aftertax) 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 aftertax 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 appraiser. Companies that are heavily leveraged compared with guideline companies or industry composite figures may be more appropriately valued on a debt-free 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 appraiser 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 appraiser 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, future earnings are considered to be too speculative, and as such, they cannot be used in valuations submitted to the courts. In these jurisdictions, the primary emphasis becomes the historic figures. Aren't they progressive in their thinking? Since when does a willing buyer purchase history?

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 an appraiser values a controlling interest, adjustments are commonly made, as discussed in chapter 5. For minority appraisals, however, many of the adjustments that would have been made for control are not made. The appraiser will use a normalized benefit stream for both valuations, but the minority valuation will most likely not contain the adjustments relative 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 and on a debt-free 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 Aftertax Information

In general, it should not really matter whether the appraiser is working with pretax or aftertax information. The key is to be consistent. The use of either pretax or aftertax 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.

Following are some of the advantages of using pretax information:

- 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.[1]
- Noncorporate entities can be valued without considering the tax impact of itemized deductions, personal exemptions, etc.
- 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. Since "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.

There is also something to be said for using aftertax information. Following are some of the advantages:

- Most data derived from the public market are reported on an aftertax basis. This makes the comparison more meaningful if guideline companies from the public market are used.
- Aftertax 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, ESOPs, and initial public offerings, because of the available information being reported in this manner.

There is a big controversy in the appraisal field regarding the valuation of non-tax paying entities such as S corporations and limited liability companies. One school of thought is that since these entities do not pay taxes, the reported results are already aftertax. This would increase the cash flow available to the stockholders and make these companies more valuable. The other school of thought is that all of these entities should be tax-effected based on the premise that the willing buyer may not be eligible to continue the tax election of the seller, and the population of willing buyers would be too restricted to meet the definition of fair market value. A corporation is frequently the purchaser of another entity. If the seller was an S corporation, the willing C corporation buyer could not qualify to be a stockholder under current law.

For the nonaccountants reading this book, a C corporation is a typical taxpaying corporation. An S corporation is a legal corporation that, for tax purposes, is treated like

[1] It is also acceptable to tax-effect pass-through entities and value these entities on an aftertax basis. In these circumstances, many appraisers 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.

a partnership. This means that the shareholders pay personal taxes on the profit instead of corporate taxes being paid by the entity.

The Internal Revenue Service has frequently taken the position that pass-through entities should be tax effected. However, as long as the discount or capitalization rates that are used are consistent with the benefit stream being discounted or capitalized, the answer will be the same. Even in a tax-related valuation, pretax information can be used.

Although this is a fascinating topic to debate, I am not going to do it. It's my book and I get to do what I want to! However, I encourage you to purchase back issues of the *Business Valuation Review*.[2]

Debt-Free or After-Debt

This is like Shakespeare. To be or not to be . . . Should the appraiser consider using a debt-free or an after-debt 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 either 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

An appraiser 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 a return on their investment. Many profitable companies go out of business, but it is rare that we see a business with a solid cash flow go under. Therefore, cash flow is the name of the game. Similar to pricing multiples (as discussed in chapter 6), 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 may gen-

[2] *Business Valuation Review* is published by the Business Valuation Committee of the American Society of Appraisers. The editorial office would love to sell you back issues of this publication. They can be contacted at (303) 758-6148.

erally be funded from internally generated cash flow, new equity, new debt, or a combination of these items.

Defining Cash Flow

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. Understanding the valuation terminology is an important part of the education process, so that the appraiser can be conversant in business valuation jargon. The following definitions of cash flow have been used by professional appraisers, 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. The basic net cash flow model is as follows:

	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
=	Net cash flow

In the foregoing model, the net cash flow 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 allowing 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 could not be used in that situation because it is rare that an appraiser 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, since 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 appraiser 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 an appraiser 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. Since 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 makes the net cash flow model for invested capital appear as follows:

	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
=	Net cash flow

Net cash flow to the equity owner is defined as the gross cash flow generated by the business operations, adjusted for—

- Amounts that are required for working capital that are needed to meet the growth expectations of the appraisal subject.
- Amounts that are required by the business for the fixed assets needed to maintain the productive capacity necessary to meet the increasing demands of the business.
- Amounts that will be used to repay long-term debt principal.
- Amounts representing additional long-term debt borrowings.
- Amounts for dividends paid to senior equity securities (e.g., preferred stock dividends).

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 appraiser. 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 will-

ing buyer would have control of the cash flow. If a minority valuation is being performed, the appraiser will generally not make changes to that which 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. Since cash flow is frequently used in business valuation, the discussion on 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 they are on a control basis) 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 with industry practice or expected future treatment. This could include a change in inventory accounting from LIFO to 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.

Historical operating results should also be analyzed to gain an understanding of the quality of the earnings reported. This includes asking and answering at least the following questions:

- 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 appraiser 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 growth, decline, 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. Since this rate cannot be maintained, the appraiser 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 forecasted indefinitely into the future, the appraiser 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.

The next question that the appraiser 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 for 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 entire 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 relative 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 either is expected to take place or is in the process of taking place, the projections should extend to the period after the combination is complete.

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, since 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 9.

A common error made among inexperienced appraisers who rely on computer software to assist with (or do) the projections is to the allow these programs to determine the period to be used in the projection. Most software programs allow either a five-year or a ten-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 appraisers consider this period to be a normal business cycle, while others focus on Revenue Rulings 59-60 and 68-609, which suggest 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

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*,[3] the court found that "past earnings are important only insofar as they reasonably forecast the future earnings." In the *Estate of Kirkpatrick*,[4] 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.

[3] 305 F.2d 383 (1962).

[4] T.C. Memo. 1975-344.

It is up to the appraiser 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 appraiser 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 projections seem highly speculative.

What if the forecast is incorrect? *You can be absolutely certain that your valuation will be wrong!* 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 writing this book from a lounge chair from my private beach resort somewhere warm! The concept of fair market value requires the appraiser 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.

One of the real-world difficulties that will take place regarding your projections, especially if the appraiser is testifying in a court proceeding, is when the opposing attorney gives the appraiser subsequent financial data beyond the valuation date, to prove that the forecast was wrong. This is where the cross-examining attorney tries to be a hero and says, "Gotcha."

The appraiser 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 appraiser attempts to perform. The analysis of the company's historical results, economic and industry forecasts, and other similar information should be used to project the future results for the appraisal subject. All of the information gathered during this analysis will assist the appraiser in making reasonable forecasts. Work with management to get the forecast to a reasonable level.[5] 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 appraiser frequently obtains projections from the company's management. If these projections are to be used, the appraiser should attempt to compare previous projections against actual results (even budget versus actual). This will give the appraiser a comfort level regarding management's ability to project the future of the business. If the appraiser is not comfortable with management's projections, there are several options on how to proceed. The following are some of them:

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[5] Unlike any other class of appraisers, 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.

- 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 appraisers do not wish to turn away an assignment, there are times when the projection 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 projected 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 less variables to be attacked, especially if the valuation might be used in a litigation.

Avoid accepting management's forecast without doing a reasonableness check. My experience has seen the following scenario too often. The subject business has normalized earnings for the last five years as follows:

1993	$178,000
1994	$170,000
1995	$180,000
1996	$175,000
1997	$200,000

Now the client helps us with the projection. Going through a divorce, the client projects 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:

1998	$180,000
1999	$170,000
2000	$150,000
2001	$135,000
2002	$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 his or her business. In this case, the projections might be the following:

1998	$225,000
1999	$250,000
2000	$275,000
2001	$300,000
2002	$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 appraiser is to maintain an objective attitude, which includes recognizing that your own client may try to help you get to the 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 is the value of the operating assets less liabilities of the enterprise. The value of the nonoperating assets less liabilities is then added to the value of the operating entity, to obtain the value of the total enterprise. Some of the valuation methods included in the income approach are (*1*) the capitalization of benefits method, (*2*) the discounted future benefits method, and (*3*) the excess earnings method.

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 in the future to the owners. 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:

$$PV = \frac{E_1}{(1+k)^1} + \frac{E_2}{(1+k)^2} + \frac{E_3}{(1+k)^3} + \ldots \frac{E_\infty}{(1+k)^\infty}$$

where:

E = Benefit stream
k = Discount rate

If you do not like long equations, this one can be reduced to the following:

$$PV = \sum_{n=1}^{n=\infty} \frac{E_n}{(1+k)^n}$$

where:

E = Benefit stream
k = Discount rate
n = Time period 1 to infinity

For those mathematical neophytes (like myself), the symbol Σ 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 value 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:

$$PV = \frac{E_1}{k - g}$$

where:

E = Benefit stream expected in the next period
k = Discount rate
g = Growth rate from time $t = 0$ to time t = 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:

Value = Benefit stream ÷ 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 ($k - g$). Since 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.

To apply this methodology 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 investor. 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 8.1 illustrates this point.

EXHIBIT 8.1
Matching the Benefit Stream With Capitalization Rates
An Example

Let's assume that Doodles, Inc. was valued by an appraiser as having an equity value of $1 million. Based on Doodles's income statement used for the valuation, the following capitalization rates would apply:

	Benefit Stream		*Cap. Rate*		*Value ($)*
Revenues	$ 10,000,000	÷	10.00	=	1,000,000
Cost of sales	9,000,000				
Gross profit	$ 1,000,000	÷	1.00	=	1,000,000
Operating expenses	600,000				
EBIT	$ 400,000	÷	0.40	=	1,000,000
Interest expense	50,000				
Pretax income	$ 350,000	÷	0.35	=	1,000,000
Taxes	100,000				
Net income	$ 250,000	÷	0.25	=	1,000,000

For right now, don't worry about how I calculated the capitalization rates. 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 benefits stream will be capitalized by a rate that reflects the risk of the benefits stream being capitalized. The appraiser 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:

Benefits Stream ($)	*Cap. Rate (%)*	*Value ($)*
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:

Benefits Stream ($)	*Cap. Rate (%)*	*Value ($)*
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 next time.

The objective in a single-period capitalization method is to determine through analysis—and if necessary, adjustments—the levels of benefit streams 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 benefits stream. Nonrecurring items and GAAP adjustments will probably be made when these items are considered to affect the benefit stream available to the minority interest in the future. Since 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 benefits stream may be required, even in a minority situation. Adjustments may be appropriate when there are nonrecurring items or when the controlling party may be abusing control to the detriment of the minority owner (in this instance, an oppressed-shareholder action may be lurking in the wings). 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. If the appraisal is performed for federal estate tax purposes, histori-

cal earnings would more likely be stressed, although the revenue rulings indicate that past earnings should be used to reflect probable future earnings. The courts are beginning to recognize the importance of future earnings, and therefore, they are allowing appraisers to use forecasts and projections if they are properly supported.

One of the most fundamental concepts to consider when one does a business appraisal is that there must be a consistent matching of the capitalization rate with the benefits stream being capitalized. Even if the capitalization rate is developed from information from the public stock market (which primarily relates to minority shares), adjustments may be made to the benefits stream being capitalized. The benefits stream (not the capitalization rate!) will determine whether the valuation result is control or minority. There is probably a valid argument that can be made to support the premise that capitalization rates (or discount rates) that are derived from the public stock market contain an element of minority interest in them. Therefore, if you believe that these discount and capitalization rates are applicable to minority interests[6] but you apply them to an income stream that reflects control, the appraiser can probably justify a slightly smaller minority discount, if the subject of the appraisal were a minority interest. But if the appraisal subject were a minority interest, why would the appraiser make control adjustments to the income stream?

Service businesses with few fixed assets are generally valued based on net income (pretax or aftertax) or possibly based 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 $\frac{1}{5}$ or 20 percent).

If a business tends to be cyclical in nature, an averaging 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 are used, they should represent probable future earnings. Do not rely purely on historical data! Willing buyers do not buy history!

When a business is growing, a multiperiod method (soon to be discussed) should be considered, since the benefits 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 appraiser should ignore the historical data that are no longer representative of the current business. This means that even though the revenue rulings suggest 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.)

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[6] Numerous articles that discuss this subject in detail have appeared in *Business Valuation Review*. Some authors believe that publicly traded stocks trade at a value close to the control value and there is no true distinction between a control and minority discount rate. After all, why should the required rate of return be different for the same investment? Others believe the opposite is true.

Adjustments made to the benefits 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. Additional adjustments can be made for any of the following items:

- *An excess or deficiency of net working capital.* An abundance of working capital may be considered to be a nonoperating 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?
- *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.
- *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.

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 inventory to FIFO inventory does not necessarily require a corresponding adjustment to the cost of goods sold, since 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 benefits stream results in an indication of value for the entire operating enterprise (shareholder's equity or invested capital); partial benefit streams can also be cap-

italized to estimate the value of portions of the enterprise (excess earnings can be used to estimate the value of the intangibles).

Exhibit 8.2 shows the mechanics of the capitalization of benefits method without valuation discounts or premiums.

EXHIBIT 8.2
Example of Single-Period Capitalization Method

Adjusted net income	$ 1,000,000
Forecasted growth	× 1.05
Estimated future income	$ 1,050,000
Capitalization rate	÷ 25.0%
Indicated value from operations	$ 4,200,000
Add: Net nonoperating assets	357,350
Total enterprise value	$ 4,557,350
Rounded	$ 4,600,000

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 nonoperating assets	357,350
Total enterprise value	$ 4,557,350
Rounded	$ 4,600,000

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. Since investments rarely go to perpetuity, a long time horizon is generally substituted as the holding period for most investments in small to medium-sized 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 benefits stream residual method or an asset residual method, soon to be discussed. The benefits stream residual method assumes that the benefits stream being discounted will eventually stabilize and, therefore, the stabilized benefits stream can then be capitalized into perpetuity and discounted back to the valuation date. The asset residual method assumes that the benefits stream being discounted will stop at some point in the future as a result of the business's 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 benefits stream of the business will eventually stabilize. This is similar to the assumption about single-period capitalization models. Don't panic: I hope to clear this up for you with some examples in a little bit.

Since 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:

$$\sum_{n=1}^{n=\infty} \frac{E_n}{(1+k)^n}$$

where:

E = Benefits 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 to the equation another component 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:

$$\sum_{n=0}^{n=t} \frac{E_n}{(1+k)^n} + \frac{FV_{t+1}}{(1+k)^t}$$

where:

E = Benefits 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 of the company. Use one or the other, but not both!

Exhibit 8.3 illustrates the mechanics of the discounted future benefits method. In the example in exhibit 8.3, 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 $356,667. 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 7 percent). This means that the next year's (year 6) net income is assumed to be $74,900 ($70,000 × 1.07).

EXHIBIT 8.3
Example of the Discounted Future Benefits Method

Year	*Forecasted Cash Flow*		*26% Present-Value Factors*		*Present-Value Future Cash Flow*
1998	$ 40,000	×	.79365	=	$ 31,746
1999	49,000	×	.62988	=	30,864
2000	57,500	×	.49991	=	28,745
2001	64,300	×	.39675	=	25,511
2002	70,000	×	.31488	=	22,042
TV	356,667	×	.31488*	=	112,307
			Total		$ 251,215

* The terminal value is usually discounted at the same rate as in the final year of the projection if an end-of-year discounting convention is used.

The next step is to capitalize the stable benefits stream by using a capitalization rate equal to the discount rate used in the present value computations above and subtracting the assumed long-term growth rate (in this case 5 percent). Therefore, the capitalization rate in this example would be 21 percent (0.26 - 0.05). Note: Don't worry yet about where these rates come from, because we will spend more time on this subject later in this book.

The TV is therefore calculated as follows:

$$\$74{,}900 \div 0.21 = \$356{,}667$$

The second item needing an explanation is the fact that the discount factor used to present value the terminal value is the same factor that was applied to the year 5 forecasted net income. Since 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. Since year 5 is used for both the forecasted net income for that year and the terminal value, both years should have the same present value factor used. What this is assuming is 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 midyear convention is assumed, the present value factor that would be used for the terminal value might not be the same as the factor used for year 5. There is a debate among the appraisal profession on whether the year 5 factor should be used in a midyear model. A midyear convention would change the basic formula to the following:

$$V = \frac{E_1}{(1+k)^{.5}} + \frac{E_2}{(1+k)^{.5}} + \frac{E_3}{(1+k)^{2.5}} + \frac{E_4}{(1+k)^{3.5}} + \frac{E_5}{(1+k)^{4.5}} + \frac{TV_{5+1} \div (k-g)}{(1+k)^{4.5}}$$

or

$$V = \frac{E_1}{(1+k)^{.5}} + \frac{E_2}{(1+k)^{.5}} + \frac{E_3}{(1+k)^{2.5}} + \frac{E_4}{(1+k)^{3.5}} + \frac{E_5}{(1+k)^{4.5}} + \frac{TV_{5+1} \div (k-g)}{(1+k)^{5}}$$

where:

E = Benefits 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. There is one school of thought that indicates that the same factor should be used for the final forecast period and the terminal period. I disagree. Another school of thought says that since 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.

There may not be one correct answer for which model the appraiser may use, but the model chosen should be properly explained. Keep in mind that a midmonth 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 a 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 percent to 5 percent range. Since 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 percent 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 fair market 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 benefits 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 fair market value of the business at that point is calculated by subtracting the long-term sustainable growth rate from the discount rate used to present value 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 benefits stream. After the terminal benefits stream is capitalized, it must then be discounted to its present value (at the valuation date). Exhibit 8.3 demonstrates the basic mechanics of this methodology. Exhibit 8.4 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 of the business. We actually received a pretty reasonable forecast. The exhibit illustrates what we did with it.

EXHIBIT 8.4
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 appraiser, 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*		
	1996	1997	1998	1999	2000
Total company					
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
Product A					
Sales	$ 2,054	$ 1,149	$ 310	$ 0	$ 0
Cost of sales	1,050	567	152	0	0

EXHIBIT 8.4 *(Continued)*

	Historic		*Forecast*		
	1996	1997	1998	1999	2000
Gross profit	$ 1,004	$ 582	$ 158	$ 0	$ 0
Other products					
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 1996 and 1997 banner years. Even when allowing for a compound growth rate of about 20 percent in the continuing segment of the business, profits in 1998 through 2000 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 generally result in an incorrect conclusion of value. Revenue Ruling 59-60 discusses the future in at least fifteen 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 both. The formula for the discounted future earnings method is as follows:

$$\sum_{n=1}^{n=t} \frac{E_n}{(1+k)^n} + \frac{FV_{t+1}}{(1+k)^t}$$

where:

- E = Forecasted income
- n = Year in which the income is achieved
- k = Required rate of return
- FV = Terminal value, which is the estimated income 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 1998, $4,000 in 1999, and $76,000 in 2000. When a fluctuation of this type takes place, a multiperiod model such as this one is generally deemed to be appropriate for valuing the entity. A single-period capitalization method such as the capitalization-of- earnings method would only be appropriate if projected earnings are relatively stable and predictable out 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 5 percent, will be used for the calculation of the terminal value.

(Continued)

EXHIBIT 8.4 *(Continued)*

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 2 percent each 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 forecast, the selection of a proper discount rate becomes necessary. Since 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 (see the section of this report entitled "Discount and Capitalization Rates"). This results in the value estimate of XYZ Company, Inc. being calculated as follows:

$$PV = \frac{90{,}000}{(1 + .32)^1} + \frac{4{,}000}{(1 + .32)^2} + \frac{76{,}000}{(1 + .32)^3} + \frac{FV}{(1 + .32)^3}$$

In this instance, the terminal value is determined by growing the last year's forecasted 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 forecasted to be no greater than the long-term rate of inflation, the growth from 2000 to 2001 is still expected to be a bit higher than that rate in the short term. Therefore, a 10 percent growth rate has been used to determine the stabilized income after 1996. 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:

$$FV = \frac{76{,}000 \times 1.10}{.32 - .05} = \frac{83{,}600}{.32 - .05}$$

$$FV = \$309{,}630$$

The insertion of the terminal value into the equation indicated above results in the present value of the future earnings of XYZ Company, Inc. to be determined as follows:

$$PV = \frac{90{,}000}{(1 + .32)^1} + \frac{4{,}000}{(1 + .32)^2} + \frac{76{,}000}{(1 + .32)^3} + \frac{309{,}630}{(1 + .32)^3}$$

$$PV = 68{,}182 + 2{,}299 + 33{,}043 + 134{,}622$$

$$PV = \frac{90{,}000}{1.32} + \frac{4{,}000}{1.74} + \frac{76{,}000}{2.30} + \frac{309{,}630}{2.30}$$

$$PV = \$238{,}146$$

The present value of the future benefits of XYZ Company, Inc. results in an estimate of value of $238,146, or $238,000 rounded.

The Excess Earnings ("Formula") Method

An argument can probably 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. Also, since this is my book, I've put it where I want it to go. 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 Ruling 68-609, which provides a method for valuing intangible assets. Note that I said "valuing intangible assets," not entire companies.

The excess earnings method involves valuing the subject company's tangible assets and liabilities at fair market value and adding to that an amount that represents the company's intangible value. The net tangible assets are valued using the adjusted book value method, which was discussed in chapter 7. 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, EBDIT, etc.—becomes the numerator in the capitalization model. These excess earnings are derived by forecasting the normalized annual net income (aftertax 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 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?

The appraiser needs to understand the theoretical basis of using this method, to avoid making many of the common errors that are made in practice. The following are important guidelines for using this method:

- Since valuation is a "prophecy of the future," the appraiser should estimate the normalized future annual income. A common error is to calculate a weighted average net income for the five prior years or purely use 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 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 accounts receivable, fixed assets, etc. should be higher, to reflect the amount of risk related to the 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 intangible assets. Recognizing the riskiness of the intangible assets will be one of the most difficult jobs for the appraiser. 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 9.
- 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 8.5 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 incorrectly applied, and the result is a poor valuation.

EXHIBIT 8.5
Capitalization of Excess Earnings

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 *	900,000
Total entity value	$ 3,100,000

*Nonoperating assets are included in the adjusted book value but are excluded from the calculation of the return on the net tangible assets. Only operating assets are included in that computation. Nonoperating income and expenses related to these assets are "normalized" as part of the income statement adjustments.

In using the excess earnings method, rules similar to those discussed in the single-period capitalization model apply. Since 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, since the assets and liabilities are adjusted to their fair market values, this method implies a control val-

uation. This method will not be appropriate for minority interests, since they cannot liquidate the 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 appraisers. 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.

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 line items on the balance sheet that may be attributable to nonoperating assets or liabilities. The appraiser 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 up the balance sheet to assess the amount of risk attributable to these assets. Obviously, a balance sheet with all cash would 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 based on the borrowing power of the company. This calculation appears in exhibit 8.6. 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, since the latter is considered to be more risky.

EXHIBIT 8.6
Return on Net Tangible Assets

Tangible Assets	*FMV*		*Loan (%)*		*Loan Amount*
Accounts receivable	$ 150,000	×	80	=	$ 120,000
Inventory	$ 80,000	×	60	=	$ 48,000
Fixed assets	$ 200,000	×	50	=	$ 100,000

(Continued)

EXHIBIT 8.6 *(Continued)*

Tangible Assets	*FMV*		*Loan (%)*	*Loan Amount*
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%			
Aftertax 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.

Another source of rates of return on net tangible assets is the market itself. The appraiser cannot necessarily use public companies because the returns measured also include intangible assets, but sources such as trade associations and Robert Morris Associates' *RMA Annual Statement Studies* may help provide information about returns on tangible net worth. The problem with using these 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, since 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 8 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 25 percent, then the rate of return for *only* the intangibles *has to be higher* than 25 percent, so that on a weighted basis, the 8 percent plus the intangibles return equals 25 percent. This concept is illustrated in exhibit 8.7.

EXHIBIT 8.7
Excess Earnings Method—Rates of Return Comparison

Assume that the following calculation was deemed appropriate by the appraiser:

Estimated future income (normalized)	$ 1,000,000
Less: Return on net tangible assets ($800,000 x 15%)	120,000
Excess earnings	$ 880,000
Capitalization rate	÷ 40%

EXHIBIT 8.7 *(Continued)*

Intangible value	$ 2,200,000
Plus: Adjusted book value	800,000
Total entity value	$ 3,000,000

The capitalization of benefits method applied to the estimated future income, instead of the excess earnings, would necessitate a capitalization rate as follows:

$1,000,000 income ÷ $3,000,000 value = 33.33% capitalization rate

This means that the appraiser 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	$800,000/$3,000,000	×	15%	=	0.40
Intangible component	$2,200,000/$3,000,000	×	40%	=	29.33
Weighted average capitalization rate					33.33

The example in exhibit 8.7 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 appraiser will use 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 appraisers to the belief that this methodology is appro-

priate for all types of businesses. As time went by, the Internal Revenue Service 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 only to value 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 appraisers.

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. Adding the adjusted book value of the other assets and liabilities to this amount results in the value of the enterprise.

The problems with this methodology are plentiful. The most basic problem is the false assumption that the earnings of a business can be easily split between the amounts attributable to the tangibles and intangibles. The appraiser must determine the appropriate rates of return on the net tangible assets (other than goodwill) owned by the company. There are 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, since this method is so easily misapplied, it is not widely favored by experienced appraisers.

In *Business Valuation News*, Shannon Pratt stated:

> 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.[7]

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.[8]

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[7] Shannon Pratt, "The Excess Earnings Method," *Business Valuation News* (Sept. 1985), 4–12 (now known as *Business Valuation Review*, published by the Business Valuation Committee of the American Society of Appraisers).

[8] 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).

In an article entitled "Closely Held Business Valuations: The Uninformed Use of the 'Excess Earnings/Formula' Method," Jeffrey Fox, A.S.A., 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." [9]

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 that "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 appraiser 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 a 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 appraiser 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. Exhibit 8.8 contains a discussion of an actual case (as well as an excerpt from the valuation report) demonstrating the magnitude of error that can result for even a small business.

EXHIBIT 8.8
Excess Earnings Method—A Problematic Result

As part of a divorce litigation, the business owner's accountant, who represented our client's husband, performed an excess earnings calculation for his auto parts client as follows:

Average annual earnings	$ 29,145
Adjustments:	
Reasonable compensation	40,000
Adjusted earnings	$ (10,855)
Return on tangible assets ($222,635 × 8%)	17,811
Excess earnings	negative

Since there were no excess earnings, the conclusion was that there was no intangible value above the $222,635 of net tangible assets. Therefore the conclusion was $223,000 for the business.

As part of our analysis, it was determined that there was an additional $150,000 of unreported income. Factoring this amount into the other side's excess earnings calculation resulted in the following revised valuation for this company:

SOURCE: Data courtesty of the Institute of Business Appraisers

(Continued)

[9] *Business Valuation News*, September 1984.

EXHIBIT 8.8 *(Continued)*

Average annual earnings	$ 179,145
Adjustments:	
Reasonable compensation	40,000
Adjusted earnings	$ 139,145
Return on tangible assets ($222,635 x 8%)	17,811
Excess earnings	$ 121,344
Capitalization rate	÷ .30
Intangible value	$ 404,480
Tangibles (net)	+ 222,635
Value of business	$ 627,115
Rounded	$ 627,000

The revised calculation yields a value estimate of $627,000 based on the excess earnings method. The problem is that this calculation totally ignores the real world.

In the real world, businesses such as this one are bought and sold every day. Buyers pay more than book value for these types of businesses. During our market analysis, we located transaction data for businesses similar to the one being appraised. A selected portion of the discussion in our appraisal report follows. There is obviously a considerable amount of additional analysis than what is illustrated below, but the intention is clear that the excess earnings method does not reflect the market.

XYZ Auto Parts Distributors, Inc.

Based on the information analyzed, it appears that XYZ's pretax earnings should be adjusted to reflect owners' discretionary cash flow as follows:

	1993
Reported net income	$ 21,930
Gross profit adjustment	150,000
Officers' compensation	49,725
Owners' discretionary cash flow	$221,655

A common method utilizing the owners' discretionary cash flow in the valuation of small, closely held businesses is to apply a multiplier to the cash flow. This result represents the intangible value of the business plus the assets (such as equipment and fixtures) that are normally included in the sales price. This is added to the other assets and liabilities of the company in determining the overall value of the company. The most common multipliers range from one to five, depending upon the risk of the business.

To assist in determining the appropriate multiple, we contacted the Institute of Business Appraisers, Inc. a professional appraisal organization, which maintains a proprietary database of actual transactions of closely held businesses all over the United States. As a result of our search, twenty-eight such transactions were located under Standard Industrial Classification Code 5013, "Wholesaler of Auto Parts." Of these twenty-eight transactions, thirteen were eliminated based on the description of the business, as they appeared to be something other than an auto parts wholesaler. For example, some of the entries eliminated included auto parts importers, auto batteries distributors, and truck electronic equipment distributors. The remaining transactions are presented in the table that follows.

Data for Market Comparison

Business type	*Anual Gross ($000's)*	*Annual Earnings ($000's *)*	*Sale Price ($000's)*	*Sale Price/ Gross*	*Price/ Annual Earnings*	*Geographic Location*	*Year/ Month of Sale*
Auto parts, dist.	42	—	75	1.79	—	FL	92/07
Motor vehicle supplies	93	2	37	0.40	18.50	OR	91/05
Auto parts, dist.	193	43	75	0.39	1.74	FL	92/07

EXHIBIT 8.8 *(Continued)*

Business type	*Anual Gross ($000's)*	*Annual Earnings ($000's *)*	*Sale Price ($000's)*	*Sale Price/ Gross*	*Price/ Annual Earnings*	*Geographic Location*	*Year/ Month of Sale*
Auto parts, dist.	209	42	30	0.14	0.71	FL	92/07
Auto parts, wholesale	399	—	134	0.34	—	—	88/01
Product dist.	400	120	222	0.56	1.85	CA	93/12
Auto parts, wholesale	650	—	33	0.05	—	CA	90/05
Auto parts, wholesale	670	110	230	0.34	2.09	TN	90/03
Automotive supply	724	96	155	0.21	1.61	CA	86/12
Auto parts, dist.	730	15	350	0.47	23.33	Mid-Atl.	84/03
Automotive supplies, dist.	937	120	350	0.37	2.92	CA	90/08
Motor parts/supplies	1200	167	495	0.41	2.96	FL	92/09
Auto parts, wholesale	2000	125	656	0.33	5.25	OH	91/04
Auto parts dist.	3251	264	1200	0.37	4.55	—	83/05
Auto parts, wholesale	11200	1124	5417	0.48	4.82	PA	93/10

* Reported annual earnings before owner's compensation, interest, and taxes.

Several items should be noted about the data presented above. The information is submitted by members of the Institute of Business Appraisers who have been involved in actual transactions. As the geographical location indicates, these transactions have taken place across the United States. As the "Year/Month of Sale" column indicates, they have also taken place during a variety of time periods. A review of the data demonstrates that there is little correlation to the multiples calculated based on various geographical locations in the country. Therefore, it does not appear that these transactions are sensitive to geographic location.

With respect to the date of sale, it is common to hear arguments about old data. Raymond C. Miles, C.B.A., A.S.A., executive director of the Institute of Business Appraisers, published a paper entitled "In Defense of Stale Comparables," in which he examined the almost 10,000 entries in the database and demonstrated that most industries are unaffected by the date of the transaction when smaller businesses are involved. Miles performed a study that examined the multiples across various industries and time periods to see if, in fact, the multiples changed. The conclusion reached was that the multiples do not appear to be time-sensitive, inflation affects not only the sales price but also the gross and net earnings of the business. Therefore, this information can be used to provide actual market data.

A cross section of these data was analyzed to determine the potential statistical significance of sales-price-to-gross and price-to-annual-earnings multiples. These are presented, broken down by total transactions, Mid-Atlantic/Pennsylvania transactions, and businesses whose annual gross sales exceed $1 million. We attempted to calculate a mean, median, and mode to determine three statistical measurements in determining the multiples determined in these transactions. This is presented as follows.

	Sales Price/ Gross	*Sales Price/ Net*
Total		
Mean	0.44	5.86
Median	0.37	2.96

(Continued)

EXHIBIT 8.8 *(Continued)*

	Sales Price/ Gross	*Sales Price/ Net*
Mid-Atlantic/PA		
Mean	0.48	14.08
Median	0.48	14.08
Over $1M Gross		
Mean	0.40	4.40
Median	0.39	4.69

To assist in the determination of the value of XYZ, we have applied these multiples to the annualized sales and owners' discretionary cash of XYZ. This appears in the next table.

	Sales Price/ Gross	*Sales Price/ Net*	*Sales*	*Net*	*Value*	*Value*
Total transactions						
Mean	0.44	5.86	2,678,718	221,655	1,178,636	1,298,898
Median	0.37	2.96	2,678,718	221,655	991,126	656,099
Mid-Atlantic/PA						
Mean	0.48	14.08	2,678,718	221,655	1,285,785	3,120,902
Median	0.48	14.08	2,678,718	221,655	1,285,785	3,120,902
Over $1M Gross						
Mean	0.4	4.40	2,678,718	221,655	1,071,487	975,282
Median	0.39	4.69	2,678,718	221,655	1,044,700	1,039,562

According to the information calculated above, there appears to be a significant correlation in the value estimates reached based on actual transactions. Applying gross sales multipliers as well as applying net multipliers representing owners' discretionary cash, the values reached range from approximately $950,000 to $1.3 million. The only clear outliers from this range are the multipliers of owners' discretionary cash for the Mid-Atlantic region. This is clearly attributable to a multiple of 23.33 times in an actual transaction from this region. Since this multiple appears to be an anomaly, it should be discarded from this valuation.

What the data presented above demonstrate is that actual transactions—regardless of the region part of the country, year of sale, or size of the company—correlate well, and can be used as a statistical measurement of the value of XYZ. A closer review of this information shows the value of the intangible and fixed assets to be approximately $1.2 million. The value of the other assets and liabilities should then be added to this value to determine the enterprise value of the company.

In this instance, the balance sheet at October 31, 1994, reflects stockholders' equity in the amount of $118,706. Included in the determination of this amount, however, is a liability to the stockholders of XYZ. However, this company was undercapitalized, and in essence, this loan reflects an equity investment in the company. In addition, the net fixed assets in the amount of $18,272 should be subtracted, since their value is included in the $1.2 million figure. Therefore, the correct stockholders' equity of the company should be $222,635.

Adding this amount to the $1.2 million value determined previously results in an estimate of value for the enterprise of approximately $1.42 million.

The information in exhibit 8.8 indicates that the value concluded by the other side ($627,000) was substantially lower than what was derived from market transactions ($1.42 million). For the other side's conclusion to have been close to ours, the value of the intangibles would have to have been $1.2 million, which would have meant a pretax capitalization rate of approximately 8.2 percent. I do not think that I need to belabor how ridiculous this would be!

The automobile parts distributorship case in this exhibit was a slam dunk when we got to court. The judge ruled in our client's favor and found the excess earnings method to be flawed.

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 10, we are taught as appraisers to build up a capitalization rate by starting with a discount rate developed for cash flow (assuming we use Ibbotson 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 with 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 Shannon Pratt refers 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 determine the value of the intangibles. Using this method, the company is valued in its entirety, and then the appraiser 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:*[10]

> Intangibles, for purposes of valuation, are divided into two categories.
>
> 1. Intangibles with a determinable useful life, and
> 2. Intangibles with a nondeterminable useful life.

[10] January 1994 edition.

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 and/or going concern value,
2. the assets must be susceptible to valuation, and
3. the assets must have a determinable, limited useful life.

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."[11] 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.
>
> Since 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 Service in Appeals Review Memorandum (ARM) 34.
>
> An example of the form of the computation prescribed by the ARM 34 is as follows:

[11] Nicholas Fiore, "Valuing Intangibles," 162 *Journal of Accountancy* (Sept. 1986): 12.

Example 1

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:

Preceeding 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	25,000
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 is 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	8,000
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:

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 Service 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:

a. nature of the business,
b. risk involved, and
c. 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 Service 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 (e.g., 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. Since good appraisal practice dictates that the appraiser 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 Internal Revenue Service 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 appraiser 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 also 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 this method only. 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 came up with.

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 aftertax considerations, and the derivation of net cash flow from the appraisal point of view.

9 *Discount Rates and Capitalization Rates*

Chapter Goals

In this chapter, I will attempt to explain—

1. Discount rates and capitalization rates in general.
2. The use of pretax or aftertax rates.
3. Discount rates.
4. The factors that affect the selection of a discount rate.
5. The components of a discount rate.
6. The capital asset pricing model (in English, no subtitles).
7. Alternatives to the capital asset pricing model.
8. Capitalization rates.
9. The factors that affect the selection of a capitalization rate.
10. The data sources for discount rates 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 not already confused, I've got to try harder. One of the most difficult tasks that the appraiser faces is selecting an appropriate discount or capitalization rate.

The discount and capitalization rates used will depend on what is being discounted or capitalized. Some possibilities include the following:

- Net income (aftertax)
- Net income (pretax)
- Gross cash flow
- Net cash flow
- Excess earnings
- Dividends/dividend-paying capacity
- EBIT
- EBDIT

The determination of which benefit stream will be discounted or capitalized will depend on various factors, including the availability and reliability of data. These data can relate either to market information about discount or capitalization rates or to the subject company's information. The appraiser 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 appraiser also considers the alternative rates of return on comparable investments available to the "willing buyer." This is the principle of substitution at work.

Discount Rates

If this were a finance text, I would probably include a rather complex explanation of discount rates. Fortunately for both of us, it is not a finance text. 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. The benefit stream will generally be considered over some predictable time period in the future.

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. 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, appraisers 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 they are called, 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 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 thirty-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 appraiser 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 appraiser.

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 such 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 to be an internal factor; this is clearly within the control of management. The ability to bring these 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 appraiser.

Another internal factor includes the quality of the available data. High-quality data are 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.

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.* In some instances (when the long-term growth rate is known), the discount rate can be derived from a capitalization rate.

The formula most often seen in the literature for the derivation of a capitalization rate is the following:

$$c = k - g$$

where:

c = Capitalization rate
k = Discount rate
g = Long-term sustainable growth

By moving the formula around, the appraiser can determine a discount rate as follows:

$$k = c + g$$

Every discount rate, regardless of how it is derived, includes the following basic components: (*1*) the risk-free rate of return, (*2*) the general risk premium, and (*3*) the specific company risk premium. Exhibit 9.1 provides an example of the components of a discount rate.

EXHIBIT 9.1
Components of a Discount Rate

Risk-free rate	6.0%
General risk premium	7.0%
Specific risk premium	5.0%
Discount rate	18.0%

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.

Sources of risk-free rates of return most commonly include U.S. Treasury bonds. More often than not, long-term rates are used to simulate the long-term holding period of a closely held business. The twenty-year bond is frequently used, although the thirty-year bond has been used as well. The twenty-year bond has become popular among appraisers because of the fact that many appraisers use the equity risk premium data provided by Ibbotson Associates and these are based on twenty-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. As a matter of fact, as I was writing this section of the book, our government announced that it would be closing down due to its inability to borrow more money (something about those donkeys and elephants in Washington, D.C.). Some appraisers 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 Treasuries.

Intermediate-term rates (from one to ten 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, since the nature of a short-term vehicle 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 do long-term investments. If you really want more of an explanation about this stuff, read a finance textbook. It will also cure insomnia!

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. Another consideration in using a shorter-term or lower Treasury rate is a higher risk premium, since the change tends to be larger.

General Risk Premium. The general risk premium is sometimes called the "equity risk premium." This component of the discount rate 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.

Appraisers have been attempting to develop alternative ways to determine the general risk premium. 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 appraisers believe that comparing low-quality bonds with stocks may better equate the risk of a closely held stock.

The equity risk premium for corporate equity securities can be obtained from various sources. By far the most commonly used source is *Stocks, Bonds, Bills and Inflation Annual Yearbook* (the *SBBI Yearbook*), published by Ibbotson Associates of Chicago. Ibbotson data are a compilation of investment returns for several types of financial assets since 1926. Business appraisers are generally interested in the information relating to risk-free returns, market equity returns, small company stock premiums, and the calculated differentials between them. Exhibit 9.2 contains a selection of data from the Ibbotson publication.

The Ibbotson studies are considered to be the most comprehensive compilation of data relating to the general risk premium connected to equity investments. Several observations can be noted about the data contained in exhibit 9.2. It is generally recommended that the arithmetic mean numbers be used instead of the geometric mean numbers. The explanation of why this is so is good reading material if you are an obsessive-compulsive. Suffice it to say that everyone whom this author has heard speak on the subject recommends the arithmetic mean numbers. Since many of these people are pretty smart, I figure that I would listen to them. Ibbotson also says that we should use the arithmetic mean, and since he wrote the book, I vote for him!

In addition to the overall general risk premium, a type of premium that is generally considered by the appraiser is the small company risk premium. The Ibbotson data provide information about returns for small company stocks. These are companies in the ninth and tenth decile of the public market. In recent years, this information is being broken down even further. To put things into perspective for you, Ibbotson's 1997 *SBBI Yearbook* indicates that the size of the tenth decile of the New York Stock Exchange was below $94 million for the market value of equity capital for these companies. This is still a lot larger than most of the companies that we will value on a regular basis.

The Ibbotson data indicate that the returns for these smaller companies have been higher than those of the larger companies. Exhibit 9.2 indicates that there is a small company risk premium of 5.0 percent (17.7 – 12.7) over the period 1926 to 1994. This means that smaller companies will have an added risk element that is attributable to size.

The size premium is usually considered to be part of the subject company's specific company risk premium, whether stated separately or on a combined basis. It is a good idea to make certain that the size premium is treated outside the general risk premium, because it will make a difference in the calculation of discount rates under certain methods of calculating the rates.

Several other size premiums studies, including those by Price Waterhouse, have been performed. These have been published in *Business Valuation Review.* More data are becoming available every year, providing the appraiser with better breakdowns about size. However, when the subject company is a small or medium-sized closely held company, all of these studies may not be very helpful. They make interesting reading, but how do they help us value the local shoe store?

The rates of return appearing in Ibbotson are aftertax with respect to the corporate entities, but pretax to the investor. I am not sure why, but this seems to confuse an awful lot of appraisers. Since public companies report their results on an aftertax basis,

EXHIBIT 9.2
Stocks, Bonds, Bills, and Inflation—Selected Data

Total Returns, Income Returns, and Capital Appreciation of the Basic Asset Classes	**Summary Statistics of Annual Returns From 1926 to 1996**			
Series	*Geometric Mean (%)*	*Arithmetic Mean (%)*	*Standard Deviation (%)*	*Serial Correlation (%)*
Large company stocks:				
Total Returns	10.7	12.7	20.3	–0.01
Income	4.6	4.6	1.3	0.81
Capital Appreciation	5.9	7.8	19.6	–0.01
Small Company Stocks:				
Total Returns	12.6	17.7	34.1	0.09
Long Term Corporate Bonds:				
Total Returns	5.6	6.0	8.7	0.10
Long-Term Government Bonds:				
Total Returns	5.1	5.4	9.2	–0.01
Income	5.1	5.2	2.9	0.96
Capital Appreciation	-0.3	0.1	8.0	–0.17
Intermediate-Term Government Bonds:				
Total Returns	5.2	5.4	5.8	0.18
Income	4.7	4.8	3.1	0.96
Capital Appreciation	0.3	0.4	4.4	–0.19
U.S. Treasury Bills:				
Total Returns	3.7	3.8	3.3	0.92
Inflation	3.1	3.2	4.5	0.64

Total return is equal to the sum of three component returns: Income return, capital appreciation return, and reinvestment return.

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Ibbotson data are logically aftertax to the corporations. However, what should we consider the Treasury bonds to be? These returns are actually before tax to the government, or aftertax when you consider that the government does not pay taxes. A source of confusion is that the rates of return are pretax to the investor. Since we are normally being asked to value the business enterprise, personal taxes have no relevance.

The data used in the Ibbotson studies are not specific to a particular industry. They apply to the overall market. This means that the companies included in this compilation may not be similar to the appraisal subject. The information contained in the Ibbotson studies also spans a very long time. Many appraisers argue that a shorter time horizon should be used in calculating the equity risk premium. The problem is defining an appropriate time period so that the data make sense. During any of the decades covered by these data, there were aberrations in the data that may make the data invalid at any specific point in time. It would be difficult to choose a time period without something weird happening. Interest rates at the beginning of the 1980s were at an all-time high. Black Monday occurred in October 1987, when the stock market dropped 500 points in one day. And let's not forget the 1986 Tax Reform Act that made my real estate limited partnerships worth pennies on the dollar (another great investment for yours truly!).

Total stock returns, as used in the Ibbotson 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 Ibbotson are considered to be cash returns. Ibbotson data used in determining discount rates should be applied to the net cash flow as opposed to 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, since other factors (capital expenditures, working capital needs, and net borrowings) are taken into consideration.

Although Ibbotson data are the most widely used source for the equity risk premium, it may not be applicable for small closely held companies. Since the Ibbotson data come from the public marketplace, the companies included are significantly larger than many of the businesses that will be appraised by most of us. The return data also consider the marketability of the public company, which does not exist for the closely held company.

Specific Risk Premium. This component of the discount rate allows for the specific risk characteristics of the appraisal subject. These risk elements are not covered by the general risk premium. The specific risk premium can increase considerably depending on the risk associated with the appraisal subject. The specific risk premium can also be negative. This would occur in a situation in which 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 risk premium. It is a matter of

judgment and experience. There are no mystical tables that an appraiser can turn to, nor can the appraiser be totally comfortable with this portion of the assignment.

To approximate the specific risk premium, the appraiser can consider doing the following:

- Review the industry specific price/earnings ratio and use the inverse to approximate a capitalization rate.
- Add the anticipated growth rate, if determinable.
- Review the various risk elements that should have been analyzed throughout the appraisal and that would substantiate an added component for risk. The added component may also be a subtraction, if appropriate.

The Capital Asset Pricing Model

The capital asset pricing model (CAPM) is a method of determining a discount rate, and it is 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 appraiser uses the CAPM to develop a discount rate to be used in the valuation of a smaller business, the appraiser has probably lost his or her mind, but if the CAPM is used in this situation, the premium must be great enough to accommodate the difference between the return on the entire market and that which applies to smaller companies. These data are available in the Ibbotson study.

The appraiser should be familiar with all of the tools available in the profession, since 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.

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. Since 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, since 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:

$$k_e = R_f + [ß \times (R_m - R_f)]$$

where:

k_e	=	Expected return
R_f	=	Risk-free rate
$ß$	=	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 equity risk premium)

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, as you will soon see, the CAPM is similar to the build up method, which is more commonly used by appraisers of smaller businesses. Always keep in mind that the three main components of a discount rate include a risk-free rate, a general (equity) risk premium, and a specific company risk premium. In the discussion that follows I will demonstrate that the CAPM has similarities with this much simpler 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 Ibbotson'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.

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 for the market, based on the volatility that takes place when one uses guideline companies as a surrogate for the appraisal subject. Since 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 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 appraiser to compare the median beta of these similar companies in order to predict the volatility of the appraisal subject if it were a public company.

Various sources can be used to determine betas. First of all, it 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*). The most common sources for finding betas are Standard & Poor's Tear Sheets, the Media General Computer database, *Value Line* (containing about 3,500 stocks), and Wilshire Associates (containing about 10,000 stocks).

IMPORTANT

A Word of Caution: Different sources of betas vary the manner in which they are calculated. It is important that the appraiser be consistent when he or she uses published betas. It is preferable to get them all from the same source or calculate your own.

Since betas are calculated with respect to the entire market, the general risk premium ($R_m - R_f$) should be calculated using an R_m that is representative of the return from the entire market. Some appraisers 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?).

The *SBBI Yearbook* is the most commonly used source for R_m. This is derived from a study of the 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. Since 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 fifth 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, while the R_f in parentheses is a long-term average R_f. The beta is generally chosen by examining a list of guideline companies. 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 ten years) is expected.

The equity risk premium, which can also be considered the general risk premium (as discussed previously), can be determined from a number of different sources. One of the more common sources is Ibbotson's *SBBI Yearbook*. The equity risk premium is based on the historical average. If R_f is equal to Treasury bonds, the equity risk premium should be measured by the difference between stocks and Treasury bonds. If R_f is equal to Treasury bonds minus a horizon premium, the equity risk premium should be measured by the difference between stocks and Treasury bills. All we want to do is to be consistent in using this data.

Another source for equity risk premiums is *Quantitative Analysis*, published by Merrill Lynch. This is a source of estimated forward-looking equity risk premiums. Other forward-looking sources include *Global Investor's Digest* and *DRI/McGraw-Hill*. Another source is *Cost of Capital Quarterly*, published by Ibbotson Associates. Although this publication is a bit pricey ($995 a year), it contains some good stuff. Exhibit 9.3 contains a sample section from this publication.

EXHIBIT 9.3
Excerpt from Cost of Capital Quarterly

STATISTICS FOR SIC CODE 365 — Household Audio and Video Equipment

This Industry Comprises Seven Companies

Industry Description

Household audio and video equipment; phonograph records and prerecorded audio tapes and discs.

Sales($millions)

Total	2,819
Average	402.7
Three Largest Companies	
Zenith Electronics Corporation	1,469.0
Harman Iinternationals Inds	1,170.2
Polk Audio Inc.	41.7
Three Smallest Companies	
Boston Acoustics Inc.	41.1
Koss Corp.	33.4
Carver Corp. /WA	22.2

Total Capital ($millions)

Total	1,655
Average	236.4
Three Largest Companies	
Harman Internationals Inds	906.2
Zenith Electronics Corporation	602.3
Boston Acoustics Inc.	79.8
Three Smallest Companies	
Polk Audio Inc.	18.3
Go Video Inc.	13.7
Carver Corp. /WA	12.5

Annualized Statistics For Last 10 Years (%)

	Average Return	Standard Deviation
S&P 500	15.18	16.71
Ind Composite	13.79	39.88
Lg. Composite	—	—
Sm. Composite	—	—

Distribution of Sales ($millions)

	Latest	5 Yr. Avg.
90th Percentile	—	—
75th Percentile	—	—
Median	41.2	32.2
25th Percentile	—	—
10th Percentile	—	—

Distributions of Total Capital($millions)

	Latest	5 Yr. Avg.
90th Percentile	—	—
75th Percentile	—	—
Median	22.3	26.9
25th Percentile	—	—
10th Percentile	—	—

Industry Sales and Income ($billions)

	Sales	Operating Income	Net Income
Current Yr.	2.8	0.1	0.0
Last Yr.	2.3	0.1	–0.1
2 Yrs. Ago	2.0	0.0	–0.1
3 Yrs. Ago	2.1	0.1	0.0
4 Yrs. Ago	2.1	0.0	–0.1

Industry Market Capitalization ($billions)

	Equity	Debt
Current Yr.	1.2	0.5
Last Yr.	1.1	0.4
2 Yrs. Ago	1.0	0.4
3 Yrs. Ago	0.5	0.4
4 Yrs. Ago	0.6	0.4

Number of Companies and Total Capital ($billions)

Large Cap	Mid Cap	Low Cap	Micro Cap	Total Cap
AAA, AA, AA				
0	0	0	0	0
0.0	0.0	0.0	0.0	0.0
BBB				
0	0	0	0	0
0.0	0.0	0.0	0.0	0.0
BB, B, CCC, CC, D				
0	0	2	0	2
0.0	0.0	1.5	0.0	1.5
Not Rated				
0	0	0	5	5
0.0	0.0	0.0	0.1	0.1
Totals				
0	0	2	5	7
0.0	0.0	1.5	0.1	1.7

☐ S&P Rating

Growth Over Last 5 Years (%) / **Compound Annual Equity Returns (%)** / **Betas (in Decimal)**

	Net Sales	Operating Income	Net Income	5 Yrs.	10 Yrs.	Unlevered Asset Beta	Levered Equity Beta
75th Percentile	—	—	—	—	—	—	—
Median	9.16	13.50	12.86	4.84	–1.03	0.07	0.23
25th Percentile	—	—	—	—	—	—	—
Ind. Composite	7.18	36.97	30.72	25.63	6.75	0.42	0.59
Lg. Composite	—	—	—	—	—	—	—
Sm. Composite	—	—	—	—	—	—	—

Margins(%) / **Capital Structure Ratio (%)**

	Operating Margin Latest	Operating Margin 5Yr. Avg.	Net Margin Latest	Net Margin 5Yr. Avg.	Return on Assets Latest	Return on Assets 5Yr. Avg.	Return on Equity Latest	Return on Equity 5Yr. Avg.	Debt/Total Capital Latest	Debt/Total Capital 5Yr. Avg.	Debt/MV Equity Latest	Debt/MV Equity 5Yr. Avg.
75th Percentile	—	—	—	—	—	—	—	—	—	—	—	—
Median	8.78	8.14	3.48	1.62	5.29	2.49	6.42	3.80	15.30	12.00	18.06	13.63
25th Percentile	—	—	—	—	—	—	—	—	—	—	—	—
Ind. Composite	4.78	2.82	1.20	-2.08	2.27	–3.71	2.79	–5.87	30.08	33.69	42.84	50.80
Lg. Composite	—	—	—	—	—	—	—	—	—	—	—	—
Sm. Composite	—	—	—	—	—	—	—	—	—	—	—	—

Equity Valuation Ratios (in Decimal) / **DCF Growth Rates (%)** / **Yields (% of Price)**

	Price/Earnings Latest	Price/Earnings 5Yr. Avg.	Market/Book Latest	Market/Book 5Yr. Avg.	Price/Sales Latest	Price/Sales 5Yr. Avg.	Analysts	Dividends Latest	Dividends 5Yr. Avg.	Cash Flow Latest	Cash Flow 5Yr. Avg.
75th Percentile	—	—	—	—	—	—	—	—	—	—	—
Median	14.47	26.32	1.80	2.00	0.39	0.43	16.00	0.00	0.00	5.64	2.59
25th Percentile-	—	—	—	—	—	—	—	—	—	—	—
Ind. Composite	34.25	NMF	1.94	1.64	0.41	0.35	16.00	0.47	0.32	-0.25	-6.88
Lg. Composite	—	—	—	—	—	—	—	—	—	—	—
-Sm. Composite	—	—	—	—	—	—	—	—	—	—	—

Cost of Equity Capital (%) / **Cost of Debt (%)** / **Weighted Average Cost of Capital(%)**

	CAPM S-L Form	CAPM S-L Sm Cap	3-Factor F-F	DCF Analysts	DCF 3 Stage	Cost of Debt	WACC CAPM S-L Form	WACC CAPM S-L Sm Cap	WACC 3-Factor F-F	WACC DCF Analysts	WACC DCF 3 Stage
75th Percentile	—	—	—	—	—	—	—	—	—	—	—
Median	8.57	10.33	17.57	16.00	19.48	10.23	7.92	9.08	14.95	14.40	18.37
25th Percentile-	—	—	—	—	—	—	—	—	—	—	—
Ind. Composite	11.20	13.18	21.53	16.55	NMF	10.20	9.84	11.22	17.07	13.58	NMF
Lg. Composite	—	—	—	—	—	—	—	—	—	—	—
Sm. Composite	—	—	—	—	—	—	—	—	—	—	—

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There have been several articles written about the merits of using forward-looking equity risk premiums over a reliance on the historical data published by Ibbotson.[1] It seems logical to use forward-looking data, since 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 equity risk premiums 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 can cause the market to be not as efficient as it could be (among other factors).

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. Since future returns and betas cannot be measured, historical data must be used as a surrogate.

Adapting CAPM for the Closely Held Business. Getting back to the real world requires an appraiser to modify the CAPM if it is to be used for closely held companies. The assumption of a well-diversified portfolio that eliminates unsystematic risk is a poor assumption. The owner of a closely held company rarely can 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 as follows for the valuation as of closely held companies:

$$k_e = R_f + \beta(R_m - R_f) + \alpha$$

where:

α = Alpha, unsystematic risk (specific company)

The alpha may be a specific company risk adjustment, an adjustment for a small company risk premium, or both. Since the CAPM assumes a diversified portfolio, an additional factor should be considered that is specific to the investor in a closely held company. 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.

The CAPM is frequently expanded to include the unsystematic risk by splitting the alpha into additional components that change the CAPM formula to the following:

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[1] See articles written by David King and Roger Grabowski in *Business Valuation Review*, vol. 13 no. 3 (September 1994) and vol. 14 no. 2 (June 1995).

$$k_e = R_f + \beta(R_m - R_f) + SCP + SCA$$

where:

k_e	=	Expected return at the appraisal date
R_f	=	Risk-free rate at the appraisal date
β	=	Beta, systematic risk (volatility)
$(R_m - R_f)$	=	Long-term average risk premium of the market as a whole over the long-term average risk-free rate
SCP	=	Small company premium
SCA	=	Specific company adjustment

The *SCP* and *SCA* constitute the alpha factors.

The small company premium is generally obtained from Ibbotson Associates. Ibbotson measures the returns in the ninth and tenth decile of the stock market (lowest 20 percent). However, this information is based on companies with an average capitalization of about $90 million. In an unpublished study, Ibbotson Associates' managing director of research indicated that for companies with as small as a $10 million capitalization, the small company premium doubles (capitalization, not sales).

The small company 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. This is 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, smaller companies have tremendous illiquidity premiums.

The specific company adjustment is based on the appraiser's judgment. The factors used to make this adjustment are similar to those that are used for selecting market multiples. However, growth is not considered for the specific company adjustment, although it is considered for market multiples.

It is generally considered unacceptable to have the SCP or SCA inside of the equity risk premium, that is, affected by the beta factor. Beta must only be applied to the "normal" equity risk premium. The following table is an adaptation from Fishman, Pratt, Griffiths, and Wilson's *Guide to Business Valuations*.

$$R_f + \beta(R_m - R_f) + SCP + SCA$$

	Risk-free rate
+	Equity risk premium × Median comparative company beta
=	Comparative company return
+	Specific company risk premium (*SCA* + *SCP*)
=	Net cash flow discount rate
+	Incremental adjustment for earnings
=	*Net earnings discount rate*
–	Long-term growth rate
=	*Net earnings cap rate for next year*
÷	1 + Growth rate
=	*Net earnings cap rate for current year*

This table illustrates the proper use of the CAPM, but it also demonstrates how to adjust discount rates for cash flow to discount rates for earnings, and then to a capitalization rate for next year's earnings as well as the current year's earnings. This table also shows the relationship between these items.

Alternatives to the Capital Asset Pricing Model

There are many alternatives to the CAPM (thank goodness!). Although this book cannot possibly cover every alternative, I want to discuss some of the more common methods of deriving the ultimate discount rate. More often than not, the same methods are used to develop capitalization rates. 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/earnings reciprocal plus growth
- The build up method
- Factor rating method
- Weighted average cost of capital

Price/Earnings Reciprocal Plus Growth. One of the methods used to calculate a discount rate is to take the reciprocal of an industry-specific price/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, since the price/earning ratios will be determined from guideline companies. Since an earnings/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 (remember that $k - g = c$; therefore, $c + g = k$).

The difficulty in this method is figuring out what the market's expectations are for long-term sustainable growth and how they are reflected in the market price of the stocks. This is not published anywhere. Some appraisers 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.

The Build Up Method. Many appraisers, especially those who work with smaller privately held companies, use a "build up" method of developing a discount rate. The build up method embodies all of the elements of the CAPM including a (*1*) risk-free rate, a (*2*) general risk premium, and a (*3*) specific risk premium. The general risk premium will normally be developed from the total market as opposed to industry-specific data. Because guideline companies are generally used to determine betas, the equity risk premium includes an element of industry risk in it.

The appraiser frequently cannot get industry specific data to use in the development of the general risk premium. Instead, the general risk premium will be developed

from the Ibbotson data for the overall market. In this instance, the specific company risk premium must include a risk factor relating to the difference between the industry and the overall market. All this means is that the specific company risk premium may be slightly higher if the industry is more risky than the entire market. Exhibit 9.4 contains a demonstration of the build up method.

EXHIBIT 9.4
The Build Up Method

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	7.44[1]
Equity risk premium	6.90[2]
Small company risk premium	5.30[3]
Specific company risk premium	3.00[4]
Discount rate	22.64
Less: Long-term growth	2.00
Capitalization rate	20.64
Plus: Excess earnings premium	6.00
Capitalization rate for excess earnings	26.64

1. *Federal Reserve Bulletin,*—twenty-year Treasury bonds, week ended May 20, 1994.
2. Ibbotson Associates,—*Stocks, Bonds, Bills and Inflation 1994 Yearbook* difference between total returns on common stocks and total returns on long-term government bonds from 1926 to 1993 (12.3 - 5.4).
3. Ibbotson Associates—*Stocks, Bonds, Bills and Inflation 1994 Yearbook* difference between total returns on small company stocks and total returns on common stocks from 1926 to 1993 (17.6 - 12.3).
4. Appraiser's judgment based on the analysis discussed throughout this report relative to the risk associated with the company's ability to perform in the future based on the economic, industry, financial, technological, management, and other business risks.

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.

Added to the safe rate is an equity risk premium, which represents the premium that common stockholders require 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 decile, indicating that smaller companies require a larger return due to the risk associated with size. The ninth and tenth decile of the public marketplace has been measured by companies that are capitalized at an average capitalization of $70 million, which is considerably larger than the appraisal subject.

For this reason, a fourth component, known as a specific company risk premium, has been added to determine an appropriate discount rate. This specific company risk premium takes into consideration the detailed analysis performed by the appraiser, 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 XYZ Company.

EXHIBIT 9.4 ***(Continued)***

Summing all of 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 long-term growth from the discount rate. Long-term growth has been estimated at 2 percent, since the company has been growing in line with the industry and the outlook for the industry includes modest growth over the long term. There is no indication that the company is postured for more growth than the industry.

The derived capitalization rate of 20.64 percent is used in this appraisal for the capitalization of income, with the assumption that both income and cash flow will approximate the same amount. In this instance, the company has not utilized borrowed funds for operations, and it has reinvested working capital and purchased capital assets at a rate that is equivalent to the noncash charges used to determine the cash flow generated by operations. Therefore, it appears that net income and cash flow should be about the same going forward.

An additional 6 percent premium has been added to this capitalization rate, to determine the capitalization rate for excess earnings. This is based on the appraiser's estimate of the amount of risk associated with the intangible assets of the business. Since intangible assets by their nature are considerably more risky than the entire business enterprise, which consists of tangible and intangible assets, a higher capitalization rate must be considered in the calculation of intangible value.

Factor-Rating Method. Another way of determining a discount rate is known as the factor-rating method. This has become more popular among business brokers than among appraisers. However, this method is not really 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 appraiser, but they generally range from 0 to 3. 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 appraiser should be considering in the risk analysis of the company.

Instead of deriving a specific risk premium of twenty, the appraiser may derive ten different risk factors of two each. Guess what—same result! Quite frankly, I would rather defend a single figure than ten different figures. The same analysis goes into the thought process, but if you are performing the appraisal for a litigation, why would you want to give the cross-examining attorney the opportunity to try to rip you apart ten times? Once is generally bad enough!

There is nothing empirical about the 0 to 3 range for the factors. There is nothing empirical about the specific risk premium. It is judgment. That's right, judgment. As a matter of fact, it is subjective judgment. As appraisers, it is our job to be "objectively subjective."

Weighted Average Cost of Capital. The next method for determining a discount rate is known as the weighted average cost of capital (WACC). (Now you know why this business is so wacky! I know, bad joke!) 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 appraiser uses a debt-free method to determine the value of the invested capital of the appraisal subject (Invested capital = Debt and equity).

The theory behind a WACC is simple. Since a company is financed partly with debt and partly with equity, the return on investment should consider the risk of each element. Since 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:

$$(k_e \times W_e) \quad + \quad (k_d\,[1 - t\,] \times W_d)$$

where:

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 9.5 contains a demonstration of the calculations.

EXHIBIT 9.5
Weighted Average Cost of Capital

Assume that after the appraiser analyzes the company, its industry, and other pertinent factors, he or she determines 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[1]	300,000
Other assets	175,000	Equity	900,000
Total	$1,400,000	Total	$1,400,000

Based on these facts, the WACC would be calculated as follows:

$$(k_e \times W_e) \quad + \quad (k_d[1\text{-}t] \times W\,d)$$
$$(.20 \times .75) \quad + \quad (.09[1 - .40] \times .25)$$
$$.15 \quad + \quad .01 \quad = \quad .16$$

The capital structure is as follows:

Debt	$ 300,000
Equity	900,000
Total	$1,200,000

[1] Long-term debt contains all of the debt on the balance sheet. The short-term portion of the long-term debt should also be included in the calculation.

Exhibit 9.5 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. We need to know the answer to get the answer! This is the same circular logic that we encountered with cap rates. 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.

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 frequently 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.

Other 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, intangible assets, etc.). Liabilities would have to be considered as well in this analysis. This is similar in concept 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 resulting in a discount rate for net cash flow include the arbitrage pricing model and the dividend yield plus growth model. Since 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 into the rate.

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, since 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 and 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 rates and capitalization rates used in the multiperiod and single-period models discussed in chapter 8 will result in the same conclusion. What is effectively being done in these models is to remove growth from the numerator (top) and denominator (bottom) of the equations. I discussed this math stuff in the last chapter, as well.

A simple mathematical proof follows. Assume that during an appraisal, the forecasted benefit stream for next year was \$110 and was expected to grow each year thereafter by 10 percent. Assume a 25 percent discount rate. A multiperiod model would result in the present value being calculated for the earlier years as follows:

$$PV = \frac{110}{(1 + .25)^1} + \frac{\left(\frac{110 \times 1.10}{.25 - .10}\right)}{(1 + .25)^1}$$

$$PV = 88 + 645$$

$$PV = 733$$

As a reminder, the terminal value grows the last year of the forecast period to the following year (110 × 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 appraiser 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.

The appraiser needs to apply good judgment in selecting a growth rate for the company. 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. I always enjoy seeing inexperienced appraisers use an incredibly high growth rate for a business without thinking of the implications of the use of a high growth rate. Imagine a company growing so fast that it eventually takes over the gross domestic product of the United States and maybe the world. A company can only grow so much. Even Microsoft will run out of computers eventually! 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 in the books. In fact it frequently is.

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.

Since 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 candy store would become the candy supplier to the world. I don't think so! All businesses are subject to cycles similar to life (rapid growth, slow growth, stagnation, and death). Therefore, the growth rate assumed in any given valuation must take into consideration the existing state of "maturity" of the subject company.

Sources of Data on Capitalization Rates

The ideal source for data on capitalization rates is the public (or private) market for corporate securities. However, if the appraiser is able to locate transactions that can be used in the determination of capitalization rates, the market approach would be used, rather than the income approach. For example, assume that the following transactions were located from the public market:

	ABC Corp.	*XYZ Corp.*	*PDQ Corp.*
Sales price	$ 10,000,000	$ 5,000,000	$ 20,000,000
Net income	1,500,000	750,000	3,000,000
Cash flow (net)	1,000,000	500,000	2,000,000
Revenues	20,000,000	10,000,000	40,000,000
The implied capitalization rate is as follows:			
Net income	15%	15%	15%
Cash flow (net)	10	10	10
Revenues	200	200	200

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. In chapter 6, 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, since 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 debt-free income streams must incorporate assumptions regarding typical capital structures (debt and equity), not necessarily the actual structure of the subject company, since the public companies are more likely to have a better debt-to-equity relationship than the smaller, closely held company. This could require the appraiser to make certain adjustments to compensate for the different risk of the appraisal subject because of its par-

ticular capital structure. This problem is reduced if the merger and acquisition data come from private company transactions of similarly sized companies.

On occasion, the appraiser 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, 103 times 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, since 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 appraiser 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), since the times and facts are different. In my home state (New Jersey), a common error seen in matrimonial valuations is when the appraiser refers to the *Dugan* case and implies that the appropriate capitalization rate is 33 ⅓ percent because a multiple of 3 was discussed in the judge's opinion. A case in 1982, when interest rates were 16 percent, can be expected to vary from a case in 1998, when interest rates were about 7 percent. Furthermore, many valuation issues end up being litigated because the positions of the opposing experts are too diverse and, in many cases, indefensible.

The information maintained in the market data file of the Institute of Business Appraisers is another source for determining capitalization rates. This information can allow the appraiser to determine the capitalization rates for revenues and the owner's discretionary cash flow. The same caution must be applied as was discussed in chapter 6, but this information is considerably better than trying to create your own capitalization rate from scratch.

Other sources that can be cautiously used to help an appraiser develop capitalization rates include the following (see appendix 18 for publication information):

- Robert Morris Associates, *Annual Statement Studies*
- Joseph H. Marren, *Mergers & Acquisitions*
- Prentice-Hall, *Almanac of Business Financial Ratios*
- Shannon P. Pratt, *Valuing Small Businesses and Professional Practices*
- Roger Vignocchi, ed., *Merger & Acquisition Source Book*

The problem with using some of these references is that the information presented is based on book value and not fair market value. Sometimes, it may be better than nothing.

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, 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 appraiser. In theory, net cash flow is the cash available to the common stockholders and, therefore, has taken into consideration items such as working capital needs, fixed-asset requirements and long-term debt repayments and borrowings. The more confidence the appraiser has after considering all of these factors, the lower the discount rate.

Many experienced appraisers have written that the range most often seen in practice between the rate used for net cash flow and net earnings is approximately 3 to 6 percent. This does not mean, however, that this range is an absolute and should always be used. In a masters thesis entitled "Empirical Research Study of Rates of Return on Earnings and Cash Flow,"[2] Joseph A. Agiato, C.P.A., C.B.A., A.S.A., indicates that his study confirms the 3 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. Since earnings consider fewer factors than does cash flow, there is a normal tendency to believe that the rate for earnings should be higher. The higher the forecasted growth rate, the higher the net income discount rate premium, assuming all other factors are the same.

[2] This thesis is on file at Lindenwood College, St. Charles, Mo.

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 appraiser 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

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 appraiser must approximate growth and add that growth to the earnings/price ratio. The difficulty is establishing the proper amount of growth that is implied in the market price/earnings multiples. Rarely in the financial information about the guideline companies selected do we find growth rates other than what are being forecast by the analysts. We would need the actual growth implicit in the price of the stock to be more accurate. Assuming that we could figure out the growth that is implied in the price/earnings multiples of the guideline companies, discount rates would be easier to calculate.

The earnings/price ratio is directly observable in the market, which provides the appraiser 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 *The Value Line Investment Survey*, but they are the 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.

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 the net cash flow would be equal to the dividend yield. If this were the case, the discount rate for the net cash flow minus growth would equal the dividend yield. Therefore, the discount rate for the net cash flow, based on the dividend yield, would be available in the newspapers for public companies.

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 appraisers determine the "correct" rate in valuing smaller companies. Let's keep in mind that our role as

appraisers is not to determine discount and capitalization rates, but rather to give an opinion on the valuation of the appraisal subject. Regardless of the method used to get these rates, the answer has to make sense. The principle of substitution alerts appraisers 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 rate or the capitalization rate selected by the appraiser should match the benefit stream being discounted or capitalized. It is theoretically incorrect to use the same rate for different streams, since 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 owners' discretionary cash flow. This equates to a capitalization rate of 33 ⅓ percent to 100 percent for this income stream. Therefore, if this is the market, shouldn't we, as appraisers, 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 pretax income stream. This pretax stream would be capitalized at a rate that is less than the multiple used for the owner's discretionary cash flow, since the risk of the amount being capitalized is reduced by subtracting one or two additional items in deriving the pretax income. This is similar to the net cash flow model discussed in chapter 8. Exhibit 9.6 illustrates this concept.

A few observations can be made about the example in exhibit 9.6. 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.

EXHIBIT 9.6
Discount and Capitalization Rates

Assume that ABC Corporation has the following forecasted net cash flow:

Normalized net income	$ 150,000
Plus: Noncash charges	+ 25,000
Minus: Fixed-asset additions	– 65,000
Minus: Working capital additions	– 10,000
Plus or Minus: Change in debt	+ 20,000
Net Cash Flow	$ 120,000

EXHIBIT 9.6 *(Continued)*

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 Ibbotson data. Also assume that the long-term sustainable growth rate is 5 percent. What is the discount rate for the net cash flow? What is the capitalization rate for the net cash flow? What about the discount and capitalization rates 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 rate and capitalization rate for use with earnings instead of cash flow, the following mathematical calculations can be performed:

- Normalized net income ÷ Net cash flow (150,000 ÷ 120,000) = 1.25
- Discount rate for earnings (24% × 1.25 = 30%)
- Capitalization rate for earnings (19% × 1.25 = 23.75%)

* The use of Ibbotson data results in a discount rate for net cash flow, since the total return (dividends and capital appreciation) is measured in the Ibbotson equity risk premium.

The mathematical relationship does not always work in practice. If a multiperiod model is going to be used by the appraiser, 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 Aftertax Rates

Although the issue of whether to use pretax or aftertax income streams and capitalization rates is one of the points that creates more confusion among lawyers and judges, the resulting value for the appraisal subject should be the same regardless of whether pretax or aftertax income is used in the valuation. The capitalization rate will be adjusted depending on which income stream is used. Exhibit 9.7 contains an example that should illustrate this point.

EXHIBIT 9.7
Pretax or Aftertax? It Really Does Not Matter

Assume that the value of XYZ, Inc., is being determined using a capitalization of income method. XYZ, Inc., has a forecasted pretax income of $100,000 and an aftertax income of $65,000 (assuming a 35 percent tax rate). If the appraiser has determined that the appropriate capitalization rate based on pretax information in the market was 20 percent, the valuation calculation would be as follows:

	Pretax	*Aftertax*
Forecasted income	$ 100,000	$ 65,000
Capitalization rate	÷ .20	÷ .13
Estimated value	$ 500,000	$ 500,000

If the value of the business was estimated to be $500,000 on a pretax basis, using a 20 percent capitalization rate derived from the market, then the value on an aftertax basis should be the same. If the numerator is changed from $100,000 (pretax) to $65,000 (aftertax), the denominator (capitalization rate) must be changed by the same methodology. Mathematically, this can be explained by the following formula:

$$c_{pt} \times (1 - t) = c_{at}$$

where:

c_{pt} = Pretax capitalization rate
t = Effective tax rate
c_{at} = Aftertax capitalization rate

This results in the following:

$$20\% \times (1 - .35) = 13\%$$

The example in exhibit 9.7 should help you to understand the fact that it does not matter if pretax or aftertax income is used as long as the capitalization rate used correlates to the type of income being capitalized. This same premise holds true for cash flow, EBIT, EBDIT, 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.

Conclusion

If I didn't do a very good job, you are probably totally confused. If I did an okay job, you are still confused. I'm sorry. I never promised you a rose garden. I hope that despite the uncertainty, you now have more of an idea about discount rates and capitalization rates. What you have really learned is that these rates come from the market. An appraiser has a poor chance of getting them right without some luck. Better to be lucky than smart!

10 *Premiums and Discounts*

Chapter Goals

In this chapter, I will attempt to explain—

1. Valuation premiums and discounts in general.
2. Minority discounts.
3. Discounts for lack of marketability.
4. Small company discounts.
5. Discounts from net asset value.
6. Key person discounts.
7. Control premiums.
8. 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 discounts and premiums that we see in business valuations:

- Minority discount
- Discount for lack of marketability
- Small company discount
- Discount from net asset value
- Key person discount
- Control premium

Exhibit 10.1 shows the type of value derived from the various methods discussed throughout this book. The appraiser needs to understand the type of value estimate that each of these methods yields 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 appraiser must realize that the result from this method is a marketable, minority interest. This means that a control premium will usually be added to bring the minority value to a control value. Then the appraiser will 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!

Many appraisers 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. Appraisers must apply correct methodology, whether or not it is supported by court decisions. 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. Court decisions generally follow the conclusions that appraisers reach from their own valuation research, but often with a five- to ten-year delay. Therefore, by using court decisions, we are generally following decisions that were made a long time ago.

EXHIBIT 10.1
Type of Value

Method	*Control/Minority*	*Marketable/Nonmarketable*
Market approach		
Guideline company method	Minority	Marketable
Transaction method—public companies	Control	Marketable
Transaction method—private companies	Control	Nonmarketable
Asset based approach		
Adjusted book value method	Control	Nonmarketable
Liquidation method	Control	Nonmarketable
Cost-to-create method	Control	Nonmarketable
Income approach		
Capitalization of benefits method	Control or minority	Marketable or nonmarketable
Discounted future benefits method	Control or minority	Marketable or nonmarketable
Excess earnings method	Control	Nonmarketable

Minority Discount

A minority 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, thus reducing its 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 minority 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.

Minority 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:

$$1 - \left(\frac{1}{1 + \text{Control premium}}\right)$$

Exhibit 10.2 illustrates this concept.

If you have ever done this stuff before, you probably know that an appraiser is supposed to be able to support the size of the discount taken. If you have never done this before, you now know. 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 an appraiser

EXHIBIT 10.2
Calculating the Minority Discount

If the control value equals $120 per share and the control premium equals 20 percent, the minority value would be calculated as follows:

$$1 - [1 \div (1 + 0.2)] = 16.67\% \text{ minority discount}$$

The 16.67 percent minority discount would be subtracted from the control value to derive the freely traded minority value. This is calculated as follows:

$120 × 16.67% = $20 discount
$120 − $20 = $100 freely traded minority value

faces is supporting the size of the valuation discounts and premiums. It is really pretty humorous to see an appraiser 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 of 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. Let's assume that we are valuing a 10 percent minority interest in XYZ Corporation. The minority interest gets regular dividends, and through our analysis we value this interest based on a capitalization of dividends paid directly to the minority interest. To keep it simple, assume the value was computed as follows:

$100,000 (dividends) ÷ 20% (cap rate for dividends) = $ 500,000 (value)

Let's now assume that instead of valuing the minority interest directly, we valued the entire company in the valuation process. Let's go one step further and say that we came up with a value of $10 million for 100 percent of the company. The next step would be to value the pro rata share by taking 10 percent of the entire company, or $1 million. The difficulty in valuing the minority interest in this fashion now appears when we have to figure out the appropriate discount to apply to get to the minority value. If we had the knowledge of the minority value from our original calculation, the discount could be calculated as follows:

$1,000,000	(pro rata control)
− $ 500,000	(pro rata minority)
$ 500,000	(discount = 50%)

In this instance we have calculated the discount directly by subtracting the minority value from the control value. However, if we know the minority value, we do not need to calculate a control value, do we? If the minority interest can be valued directly, the need for a minority discount is eliminated. The problem arises when we cannot value the minority interest directly. In this instance, the appraiser must estimate a minority discount to be applied to a control value.

Several of the more common sources of information used to measure the discount include *Mergerstat Review* and *HLHZ Premium for Control Study*. Each of these

sources is referenced in chapter 4 and measures control premiums. Since the control premiums are used to calculate the minority discount, these sources are the most widely used. Unfortunately, there are no sources that measure minority discounts directly. One of the problems the appraiser faces is that these different studies measure the control premiums differently, and therefore, the implied minority discount may be different depending on the source used to calculate the discount.

Mergerstat Review always uses the public price five days prior to a takeover announcement. 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 based on rumors of a deal, the public price may already have started to climb, which thus understates the premium.

The *HLHZ Premium for Control Study* starts with 1986 data and analyzes the prices of the target company's stock further away from the transaction date. The analysts who publish this study attempt to select a price that was unaffected by preannouncement 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, since 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, 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. This would effectively change the price paid if the spin-off were planned. 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 appraiser determine the fair market value of the appraisal subject. Business transactions are frequently consummated using various payment options, which include 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. The *Mergerstat Review* data are reported based on face value. The *HLHZ Premium for Control Study* tracks only cash tender offers. Therefore, that study includes a much smaller database in return for having all prices in cash.

Exhibit 10.3 illustrates how the control premium data can be used in the calculation of the minority discount.

EXHIBIT 10.3
Percent Premium Paid Over Market Price

Year of Buyout	*Number of Transactions*	*Average Premium Paid Over Market (%)*[1]	*Median Premium Paid (%)*	*Implied Minority Interest Discount*[2]
1980	169	49.9	44.6	30.8
1981	166	48.0	41.9	29.5
1982	176	47.4	43.5	30.3
1983	168	37.7	34.0	25.4
1984	199	37.9	34.4	25.6
1985	331	37.1	27.7	21.7
1986	333	38.2	29.9	23.0
1987	237	38.3	30.8	23.5
1988	410	41.9	30.9	23.6
1989	303	41.0	29.0	22.5
1990	175	42.0	32.0	24.2
1991	137	35.1	29.4	22.7
1992	142	41.0	34.7	25.8
1993	173	38.7	33.0	24.8
1994	260	41.9	35.0	25.9
1995	324	44.7	29.2	22.6
1996	381	36.6	27.3	21.5

SOURCE: Mergerstat Review 1997 (Los Angeles: Houlihan, Lokey, Howard & Zukin, 1997). Discount calculated by the Trugman Valuation Associates Inc.

[1] The premium paid over market is a percentage based on the buyout price over the market price of the seller's stock five business days prior to the announcement date.

[2] Formula: $1 - [1 \div (1 + \text{Median premium paid})]$.

Discount for Lack of Marketability

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 have an element of liquidity that closely held shares do not have. This is the reason that a DLOM will 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. 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.[1] 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 allow "small" corporations 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.[2] The exemptions for these securities are granted under Rule 144.

> Rule 144 (17C.F.R. 230.144 1980) allows the limited resale of unregistered (restricted) 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.[3]

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.[4] In 1997 this rule was changed again, shortening the required holding period for these

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[1] "Discounts Involved in Purchases of Common Stock (1966–1969)" in *Institutional Investor Study Report of the Securities and Exchange Commission*, H.R. Doc. No. 64, pt. 5, 92d Cong., 1st Sess. 1971, 2444-2456.

[2] Kasim L. Alli and Donald J. Thompson, "The Value of the Resale Limitation on Restricted Stock: An Option Theory Approach" *Valuation* (March 1991): 22-33 (published by the American Society of Appraisers).

[3] Ibid., 23.

[4] Richard A. Brealey and Stewart C. Myers, "How Corporations Issue Securities," chap. 4 of Richard A. Brealey and Stewart C. Myers *Principles of Corporate Finance*, 4th ed. (New York: McGraw-Hill, Inc. 1991), 354-356.

stocks to one year. The overall effect of these regulations on restricted stock is that when 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:

- 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

Let's discuss some of these studies. Too often, appraisers are using 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.[5]

[5] *Institutional Investor Study Report of the Securities and Exchange Commission*, 2444.

Exhibit 10.4 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 percent to 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

EXHIBIT 10.4
SEC Institutional Investor Study

	Discount							
	-15.0% to 0.0%		*0.1% to 10.0%*		*10.1% to 20.0%*		*20.1% to 30.0%*	
Trading Market	*No. of Trans-actions*	*Value of Purchases*	*No. of Trans-actions*	*Value of Purchases*	*No. of Trans-actions*	*Value of Purchases*	*No. of Trans-actions*	*Value of Purchases*
Unknown	1	$ 1,500,000	2	$ 2,496,583	1	$ 205,000	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 (non-reporting companies)	5	8,329,369	9	5,265,925	18	25,122,024	17	11,229,155
Total	26	$ 34,681,849	67	$ 52,337,982	78	$ 102,965,021	77	$ 110,863,863

	30.1% to 40.0%		*40.1% to 50.0%*		*50.1% to 80.0%*		*Total*	
Trading Market	*No. of Trans-actions*	*Value of Purchases*	*No. of Trans-actions*	*Value of Purchases*	*No. of Trans-actions*	*Value of Purchases*	*No. of Trans-actions*	*Value of Purchases*
Unknown	2	$ 3,332,000	0	$ 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 (non-reporting companies)	25	29,423,584	20	11,377,431	18	13,505,545	112	104,253,033
Total	67	$123,621,711	35	$ 22,105,728	48	$ 33,569,418	398	$ 480,145,572

Source: *Institutional Investor Study Report of the Securities and Exchange Commission,* H.R. Doc. No. 64, pt. 5, 92d Cong.,1st Sess. 1971, table XIV-45.

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. 118 (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.[6] 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.

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 ten registered investment companies.[7] 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 become 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

[6] Milton Gelman, "An Economist-Financial Analyst's Approach to Valuing Stock of a Closely Held Company," *Journal of Taxation* (June 1972): 353-354.

[7] Robert E. Moroney, "Most Courts Overvalue Closely Held Stocks," *Taxes* (March 1973): 144-154.

> 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.[8]

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.*
>
> * Edwin A. Gallun, 33 T.C.M. 1316 (1974), allowed 55 percent. Est. of Maurice Gustave Heckscher, 63 T.C. 485 (1975), allowed 48 percent. Although Est. 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![9]

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.[10] The results of this well-documented study were published in the September 1976 issue of *Taxes*. Using an approach that was similar to Moroney's, Maher compared the prices paid for restricted stocks with the market prices of their unrestricted counterparts. The data used covered the five-year period 1969 through 1973. The study showed that "the mean discount for lack of marketability for the years 1969 to 1973 amounted to 35.43 percent."[11] 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, since he distinguished between a discount for lack of marketability and a discount for a minority interest.

> 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.

[8] Ibid., 154.

[9] Robert E. Moroney, "Why 25% Discount for Nonmarketability in One Valuation, 100% in Another?" *Taxes* (May: 1977): 316-320.

[10] J. Michael Maher, "Discounts for Lack of Marketability for Closely Held Business Interests," *Taxes* (Sept. 1976): 562-571.

[11] 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.[12]

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.[13] Trout was with the Graduate School of Administration, University of California, Irvine and with Trout, Shulman & Associates. Trout's study of restricted stocks covered the period 1968 to 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 sixty 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 Study*.[14] Standard Research studied twenty-eight 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 four of the twenty-eight 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, which was 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 (Shannon Pratt's firm) analyzed private placements of restricted stocks for the period January 1, 1981, through May 31, 1984.[15] In discussing

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[12] Ibid.

[13] Robert R. Trout, "Estimation of the Discount Associated With the Transfer of Restricted Securities," *Taxes* (June 1977): 381-385.

[14] "Revenue Ruling 77-287 Revisited," *SRC Quarterly Reports* (Spring 1983): 1-3.

[15] The Willamette Management Associates study is unpublished but is discussed in Shannon P. Pratt, Robert F. Reilly, and Robert P. Schweihs, *Valuing a Business* (Burr Ridge, Ill.: Irwin Professional Publishing, 1996), 341.

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 thirty-three 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 thirty-three 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 attributed 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.

Silber Study

In 1991, another study of restricted stock was published, but it included transactions during the period 1981 through 1988. This study, by William L. Silber, substantiated the earlier restricted stock studies and found an average price discount of 33.75 percent.[16] Silber identified sixty-nine 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 to the total number of shares outstanding. Silber also noted that the size of the discount was inversely related to the credit worthiness of the issuing company.

FMV Study

FMV Opinions, Inc. conducted a study from 1979 through April 1992.[17] In spite of the long time period covered, this study analyzed only a little over 100 transactions involv-

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[16] William L. Silber, "Discounts on Restricted Stock: The Impact of Illiquidity on Stock Prices," *Financial Analysts Journal* (July-Aug.1991): 60-64.

[17] Lance S. Hall and Timothy C. Polacek, "Strategies for Obtaining the Largest Discount," *Estate Planning* (Jan./Feb. 1994): 38-44.

ing 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, only found an average discount of about 23 percent.

Management Planning Study

As this book was in final stages of production, Management Planning, Inc. of Princeton, New Jersey, released a new study, which is included in a new book entitled *Quantifying Marketability Discounts*, by Z. Christopher Mercer, A.S.A., C.F.A. The Management Planning study includes restricted stock transactions for the period 1980 to 1995. This makes the study the most recent one available.

Since I have to stop making more changes to the first edition of my book, let me cut to the chase. The average discount appears to be 27.7 percent, while the median discount is 28.8 percent. There is some very interesting analysis included that is worth reading.[18]

More About the DLOM

All of the studies about restricted stock generally deal with minority blocks of stock in public companies. Therefore, the restricted stock studies may be a useful guide in assessing a DLOM for a minority interest. However, a control value may also need to 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. The average DLOM 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.

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.

Robert W. Baird & Co., a regional investment banking firm, has conducted eight studies over time periods ranging from 1980 through June 1997, 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 that was conducted consisted of an analysis of 2,241 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 percent and 60 percent, with the higher discounts occurring at the time that interest rates were high. The median discounts ranged from 40 percent to 66 percent. The results are presented in exhibit 10.5.

[18] For more information about this study, contact Management Planning, Inc. at 101 Poor Farm Road, P.O. Box 611, Princeton, N.J. 08540 or (609) 924-4200.

EXHIBIT 10.5
The Value of Marketability as Illustrated in Initial Public Offerings of Common Stock

Study	No. of IPO Prospectuses Reviewed	No. of Qualifying Transactions	Discount	
			Mean (%)	Median (%)
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	2,241	310	44	43

SOURCE: "The Value of Marketability as Illustrated in Initial Public Offerings of Common Stock," from *Business Valuation Review*, September 1997, a publication of the American Society of Appraisers.

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 were 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.

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.[19] Willamette also attempted to adjust the 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 74.4 percent. Their results are in the data presented in exhibit 10.6.

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 com-

[19] See Pratt, Reilly, and Schweihs, 344-348.

EXHIBIT 10.6
Summary of Discount for Private Transaction P/E Ratios to Public Offering P/E Ratios Adjusted for Changes in Industry P/E Ratios

Time Period	*Number of Companies Analyzed*	*Number of Transactions Analyzed*	*Median Discount (%)*
1975-1978	17	31	54.7
1979	9	17	62.9
1980-1982	58	113	55.5
1984	20	33	74.4
1985	18	25	43.2
1986	47	74	47.5
1987	25	40	43.8
1988	13	19	51.8
1989	9	19	50.4
1990	17	23	48.5
1991	27	34	31.8
1992	36	75	52.4

SOURCE: Willamette Management Associates, in Shannon P. Pratt, Robert F. Reilly, and Robert P. Schweihs, *Valuing a Business*, 3rd ed. (Burr Ridge, Ill.: Irwin Professional Publishing, 1996), 348. This material is reproduced with permission of the McGraw-Hill Companies.

panies that are appraised, since many of these companies, because of their financial condition (among other reasons), could not go public.

As far back as 1977, in Revenue Ruling 77-287, the Internal Revenue Service recognized the effectiveness of restricted stock study data in providing useful information on the quantification of DLOMs. 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 these data for assisting in quantifying DLOMs.

It appears that DLOMs determined by courts have increased somewhat in recent years compared to earlier years, due at least in part to the availability of the empirical data discussed. Cases in which the evidence discussed in these paragraphs was presented and the DLOM determined by the court was clearly distinguished from any other discount, include *Estate of Mark Gallo vs. Commissioner*, 50 T.C.M. 470 (1985), 36 percent; *Estate of Martha B. Watts*, 87-2 U.S.T.C. para. 13726 (11th Cir., 1987), 51 T.C.M. 60 (1985), 35 percent; and *Estate of Joyce V. Hall v United States* (89 T.C. 19), 36 percent. District court decisions have recognized higher DLOMs.

A more recent court case did not allow the large discount taken by the taxpayer's appraiser, but the written opinion is worth reviewing as a learning tool. Despite the appraiser's research and logical argument, the court in *Mandelbaum* did not allow the 70 percent and 75 percent discounts taken in the appraisal.[20] The court, however, was

[20] Bernard Mandelbaum et al v. Commissioner, T.C. Memo 1995-255.

extremely methodical in its opinion, and although the decision has its faults, it can be used as a guide for appraisers, particularly in the tax arena. For more information regarding published court decisions, I recommend *Federal Tax Valuation Digest*[21] and *Marketability Discounts in the Courts, 1991-1996.*[22] While the former publication strictly addresses court cases involving tax matters, the latter publication addresses all types of court cases, including family dissolution and shareholder disputes.

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 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 entitled "Why 25% Discount for Nonmarketability in One Valuation, 100% in Another?"[23] In this article, Moroney points out eleven different factors that should be considered 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 com-

[21] Edited by Idelle A. Howitt (New York: Warren, Gorham & Lamont, annual).
[22] Written by Janet Hamilton as a supplement to Shannon Pratt's *Business Valuation Update* (March 1997).
[23] *Taxes* (May 1977): 316-320.

pany. 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.

A discussion of how each of these factors relates 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, 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.

A Real-World Consideration

Since this book pertains to the valuation of small and medium-sized businesses, let's discuss the real world of DLOMs. The purpose of this discount is to recognize the lack of liquidity of a company's stock or ownership equity. One of the main reasons why smaller companies have difficulty selling is that there are risks associated with them. Risk is supposed to be captured in the discount and capitalization rates. Remember that we discussed this in the previous chapter. So, if we have a high enough discount rate, do we really need a DLOM? Maybe!

If valued properly (whatever that means!), smaller companies will generally have risks built into the selling price. If you ask a business broker how long it takes to sell the typical business, the answer will rarely be longer than six months. Of course, there are exceptions. However, this shows that a small closely held company can frequently be sold in a reasonable time period. What is the added holding period worth in terms of lack of liquidity? If the company is profitable, the owner will continue to get a return on his or her investment even during the period in which the owner is trying to sell the company. This would reduce the discount substantially. Conversely, if the company is losing

money or has no available cash flow to be distributed to the owner, the period of sale could seem like an eternity. This could justify a larger discount.

What am I really trying to say? There is no easy answer to this problem. Each situation will have to be based on the facts and circumstances of that case. The size of the discounts will have to be well thought-out and supported. There are many reasons why a company may take time to sell, but we have to be careful not to double count this when determining the specific company risk premium in the discount or capitalization rates. More often than not, appraisers do not place enough emphasis on many of the risk factors (such as dependence on a key person or reliance on a single customer) and do not adequately provide for these factors in the value of the company before discounts. The appraiser also needs to concern himself or herself with the market for the property. If large corporate acquirers are looming out there and the company is in a "hot" industry, a sale may be fast. A quick sale may also take place if the business is one in which the owner is actually buying a job, such as a food delivery route.

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 appraiser must 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* seem to indicate 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, therefore, 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 frequently have all of his or her investment in one business and, therefore, has liquidity needs that are very different than 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 result 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 appraiser 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, since 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 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 do large companies. Miles included the following table, "Correlation Between Company Size and Price to Earnings Muliplies," in an article entitled "Price/Earnings Ratios and Company Size Data for Small Businesses," published in the September 1992 issue of *Business Valuation Review*:

Range of Company Size (in thousands of $)	Mean P/E
0 to 49	1.66
50 to 99	2.11
100 to 149	2.44
150 to 199	2.74
200 to 249	3.06
250 to 499	3.44
500 to 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 such studies regarding the size of companies in the public marketplace have been published in the *Business Valuation Review;* the results are consistent.

Discount From Net Asset Value

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. A discount from net asset value is determined by reviewing the prices of the shares of publicly traded guideline companies with respect to their published net asset values.

The discount from net asset value may also have applicability in the valuation of smaller, closely held businesses in certain situations. This discount may be applicable when a company is valued as a going concern but the earnings do not support the value of the underlying assets. Liquidation may not necessarily be the highest and best use of the property, since there may be contractual obligations that make liquidation a poor alternative. Exhibit 10.7 contains a section of a valuation report that addresses this issue.

EXHIBIT 10.7
Discount from Net Asset Value
Reconciliation of Values

Throughout this appraisal, several acceptable appraisal methods were used to estimate the fair market value of Jackson Engineering. The results were as follows:

Adjusted book value	$ 352,303
Liquidation value	$ 247,908
Excess earnings	$ 341,532

A willing buyer of Jackson Engineering would be purchasing a group of assets and employment. The business does not generate any excess cash flow that would be available to the buyer. This is further indicated by the $71,000 loan from the stockholder, which has been reclassified as an equity contribution.

Since a return on the investment appears to be out of the question, a buyer would be willing to purchase Jackson Engineering based on a discounted net asset value. There are many companies bought and sold in this manner. The reason for a discount to be taken against the value of the net asset value is so that the purchaser is able to obtain a return on investment. Why would someone buy an investment for $10 if he or she would only receive a $10 return? The buyer would be better off putting the money in a savings account and earning a rate of return.

The discount taken from the net asset value would depend on the risk associated with the assets purchased. Cash obviously has no risk and would therefore only warrant a small discount, enough to provide a return to the buyer. Other assets are more risky. This appraiser has estimated the discount on a line-by-line basis to determine the value of Jackson Engineering to a willing buyer. The results are as follows:

	Adjusted Book Value (July 16, 1996)	Market Value Discount	Fair Market Value (July 16, 1996)
Cash	$ 52,407	0%	$ 52,407
Accounts receivable	296,264	25%	222,198
Fixed assets	31,032	25%	23,274
Accounts payable	(11,600)	0%	(11,600)
Payroll taxes payable	(6,865)	0%	(6,865)
Accrued payroll	(8,935)	0%	(8,935)
Net asset value	$ 352,303		$ 270,479

Based on the facts and circumstances of this appraisal and the analysis performed as part of this process, it is my opinion that the fair market value of Jackson Engineering was approximately $270,000 on July 16, 1996.

Key Person Discount

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 to 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 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, as well as on how long it may take to find a replacement and bring that replacement up to the level where the key person had been.

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 appraiser to value a controlling interest in a company that made baked goods. The appraiser 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. His children took over the running of the company after his death, and the company started to grow in a way that it had never experienced in the past. (I wonder if the IRS would assess a key person premium?)

Adding a key person discount may also increase the possibly 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!

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. Shannon Pratt recognized these prerogatives of control in his earlier writings, and they continue to

hold true today. These rights are considered in assessing the size of the control premium, and they include the right to—

- 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.
- Register the stock for an IPO.
- Declare dividends.
- Change the articles of incorporation or bylaws of the corporation.

I stated earlier that 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 appraiser uses information from the public stock market as the starting point of the valuation.

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

Since I may not have made this statement often enough already, be careful to avoid double counting! Certain valuation methods result in a control value for the company. Adding a control premium would result in double counting and should be avoided. For example, using merger and acquisition data would result in a control valuation, since the merger and acquisition data generally come from the sale of entire companies. The excess earnings method is also considered to be a control valuation method, since the appraiser is required to adjust the balance sheet items to fair market value. Minority interests could not benefit from this, since they cannot sell off these assets.

Control premium studies, such as the ones discussed earlier in this chapter, are regularly used to assist the appraiser in determining the premium that is paid in the marketplace for control. 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's 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, a 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. 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! 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 appraiser must think through and support the conclusions reached.

Application of Discounts and Premiums

The proper application of discounts and premiums requires the appraiser to understand the impact of the discounts and premiums. Some discounts and premiums are additive, while others are multiplicative. For example, the application of minority discounts and DLOMs is multiplicative as opposed to additive. This can be illustrated as follows. Assume a minority discount of 25 percent and a DLOM of 35 percent. If these discounts were additive, the appraiser 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 minority discount (25%)	25.00
Value on a minority, marketable basis	$ 75.00
Less DLOM (35%)	26.25
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 comparing the control value with public prices are mutually exclusive.

The small company discount that is determinable from the *Mergerstat Review* data and from other sources is possibly 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 minority discount are mutually exclusive. When a discount from net asset value is applied, a minority 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 they are always multiplicative.

Other Discounts and Premiums

There will be times when other discounts and premiums will be appropriate. Some of these occasions may involve swing vote premiums, blockage discounts, 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.

A blockage discount is another type of discount, although it applies only to publicly traded companies. This discount may occur 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 for all of the shares to be sold. The tax courts have been pretty clear on the point that a blockage discount cannot be taken on closely held shares.

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 10.8 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 appraiser 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 other related entities. At the last minute, a proposed settlement fell apart. During this time, a second family faction decided they would hold the remaining family hostage by trying to coerce a buyout of their interests as well. This family was anything but close.

Using the uncertainty of litigation differently in an appraisal of another entity that was related to the subject in exhibit 10.8, 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 10.9 contains the section of our report dealing with this issue. The examples in exhibits 10.8 and 10.9 were part of seven valuation reports that were prepared for a decendent's estate tax return. The cumulative discount taken for the decendent'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 52 percent combined discount. The only reason that the case settled at this level was that the IRS threatened to open up the twenty-five real estate and machinery appraisals that were used by us in determing the value of the various business interests. Power is a wonderful leverage tool!

Some appraisers handle these miscellaneous discounts differently. Some adjust income streams, some adjust discount rates or multiples, and some choose to ignore

EXHIBIT 10.8
Discount for Uncertainty of Litigation

At April 11, 1993, the date of the decedent's death, the Jones family litigation was still ongoing. Despite a possible settlement in September 1992, a four-year litigation continued to shadow the Joneses' entities. A willing buyer would have to consider the risks associated with this litigation, since it was not finalized until August 1993, 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
Total	$ 2,126,800

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, since 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.

EXHIBIT 10.8 ***(Continued)***

This litigation would render this partnership interest virtually worthless due to the contingencies associated with it. The only reason why a settlement was able to take place was that the other Jones entities involved in the litigation interacted and that 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 appraiser feels that a discount of 100 percent is justified in this instance.

EXHIBIT 10.9
Discount for Uncertainty of Litigation

On April 11, 1993, the Jones family litigation was still ongoing. Despite a possible settlement in September 1992, a four-year litigation continued to shadow the Joneses' entities. A willing buyer would have to consider the risks associated with this litigation, since it was not finalized until August 1993, 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 September 1992 tentative settlement 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 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. Since 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.

them completely. Short of ignoring them completely, there is no definitive method of handling these items. The appraiser should use common sense. The manner in which the appraiser 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 anti discounts because they feel that the non-business owner spouse is "getting the shaft." In actuality, they will probably receive a windfall if no discounts are provided for. However, use your head. If you know that your jurisdiction is anti 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.

11 *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 also be able to use this chapter as a review of most of the appraisal concepts that we have covered.

Revenue Ruling 59-60

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 italics print are intended to emphasize a particular point. The boldface has been done by the author, not the Internal Revenue Service. This ruling is so important to business valuation, that I was tempted to bold the entire document. Relax, I didn't!

Revenue Ruling 59-60 is said to be one of the greatest business valuation treatises ever written. 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 Internal Revenue Service expanded its applicability to income taxes as well. 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 one hundred times, 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.

> ***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 revenue ruling is applicable to other types of entities, Revenue Ruling 65-192 expanded this ruling 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 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 2 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 revenue 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 following situations must apply:

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 companies such as Microsoft or IBM, 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 non-assignable lease with ten 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 appraiser 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).* Since fair market value assumes a reasonable period of expo-

sure 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 is 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 the market for the property).* 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 only occur 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?

> .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 Internal Revenue Service concedes that there is no established market for closely held stocks. This admission indicates that fair market value cannot truly be achieved, since there is virtually no market. This concept starts to recognize 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 a 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 10. Revenue Ruling 77-287 is reproduced in appendix 11.

> ***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 an appraiser. 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 revenue ruling points out the importance of using *common sense, informed judgment, and reasonableness* in performing the assignment. There is no substitute for these items. Common sense plays a big role in the valuation process, because the decisions that are made by an appraiser are often subjective. Since 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. Since the valuation process is so subjective, the appraiser 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 appraiser 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 appraiser performs whether it is on the economy, the industry, or the finances of the company— cannot be considered in a vacuum. All of these items must be considered for the appraiser 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.

The risk analysis is discussed in chapter 5. Multiples are discussed in chapter 6. Discount rates and capitalization rates are discussed in chapter 9.

> .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.***

The most important lesson learned in this section of the revenue ruling is that valuation is based on the future (the principle of future benefits is discussed in chapter 3). Relying on history alone to perform appraisals is clearly wrong. The only time history can be used is if it is expected to represent what will happen in the future.

The revenue ruling also points out that the market is the best source of value. Publicly traded stocks are a good consensus of the market, since these stocks are actively traded in a free and open market. However, since this information is not available for closely held businesses, the appraiser should use the actively traded stocks of companies that are in the same or 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 6 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 ten 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 would 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 appraiser has to know where the company has been to predict where the company is going. History is an important element in any business valuation exercise, since it allows the appraiser 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.

A thorough understanding of the company should be obtained by the appraiser. 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 a considerable amount of additional information that is gathered in the early part of the assignment. These items are discussed in chapter 4.

Revenue Ruling 59-60 also indicates that events of the past that are not expected to recur in the future should be disregarded, since 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 5).

> (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 revenue 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 appraiser must consider the impact of the economy and the industry on the appraisal subject. For example, if the appraisal subject is a building contractor who primarily builds residential housing, and mortgage interest rates at the date of the appraisal are very high but are forecasted to go down substantially, a conclusion could be drawn that the current operations, which probably slowed down considerably because of the high rates, will most likely pick up again in the future because of 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 was changing to small personal computers, and the appraisal subject was 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 revenue ruling also tells the appraiser to consider the possible impact of competition on the appraisal subject. If you are valuing a company that has 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 almost too good to be true, it probably is!

The next area covered by the revenue 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 much in favor 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!) 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 appraiser 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 revenue ruling is pretty clear on the fact that the appraiser 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 nonoperating 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 revenue ruling tells the appraiser to obtain at least two years of balance sheets for the appraisal subject, so that a comparison can be performed. In practice, most appraisers 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 appraiser understand how the company has arrived at its current financial position. A review of the comparative balance sheets will help the appraiser 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.

Particularly 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 appraiser's decision whether to value equity or invested capital. Changes in the capital structure may also affect many of the financial ratios that the appraiser uses as an analytical tool.

Revenue Ruling 59-60 suggests that the appraiser review differences in the rights of the different classes of stock that may exist, and that the appraiser pay particularly close attention to voting differences, dividend preferences, and rights in liquidation. These items will affect the level of control that is afforded to 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 revenue ruling tells the appraiser to obtain at least five years of income statement data in sufficient detail so that the appraiser can properly understand the data's components. Five years is not automatically the correct number of years. There will be times when a company's business cycle is longer or shorter, and the appraiser 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 revenue ruling also tells the appraiser to consider operating and nonoperating income and expense items separately. Since 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 revenue ruling emphasizes that the appraiser 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 less reliable criteria 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, since the controlling shareholders have the ability to control the level of dividends actually disbursed. In fact, most closely held companies do not pay dividends, since 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 8) demonstrates this process.

For business valuations of minority interests, the actual dividends paid are more important than the dividend-paying capacity. Since the minority interest cannot control the level of dividends to be paid, the capacity does not mean as much as the actual dividends paid. There may be some situations in which the minority stockholders have the right to receive dividends despite nonpayment. This situation may lead to an oppressed shareholder action, and therefore, capacity should not be ignored. The appraiser may need to consult with legal counsel in those situations in which dividends are not being paid although there is a capacity to do so.

> (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 revenue 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 revenue ruling indicates that the appraiser should value the entire company, and it is the excess over the value of the net tangible assets that becomes the intangible value. The revenue ruling is a bit ambiguous in this section because it starts off by discussing goodwill and concludes with other intangibles as well.

Most appraisers recognize that the revenue ruling suggests 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 appraiser 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 indication of value. The smaller blocks may be used if the appraiser is valuing a small block of stock, but it may be very inappropriate for a controlling block.

This revenue ruling also indicates that a blockage discount is inappropriate for large blocks of stock of a closely held corporation. A sale of a large block of stock of a closely held company will generally not have the same impact as the possible depressing effect (supply may be greater than demand) that a large block of stock may have on the public market. However, the revenue ruling recognizes that it is more difficult to sell a minority interest in a closely held company 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, 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.*

Here is the reason that appraisers employ the guideline company method of appraisal. Revenue Ruling 59-60 tells the appraiser 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 good guideline companies. "Comparability" must relate to numerous factors and not be restricted to only companies in the same or similar line of business. Review the items discussed in chapter 6 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 revenue 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 revenue ruling is consistent with modern-day valuation theory, since 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 have 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, associated with section 337 liquidations.[1] This should create a favorable argument for corporate-level taxpayers, since 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 an appraiser. The revenue ruling indicates that the investing public's opinion should be given more importance 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.***

[1] 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.

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 appraiser 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 revenue ruling states that while 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 appraiser to analyze the results of the different valuation methods used to derive a final estimate of value. Even between similar assignments, the information that the appraiser may obtain will provide more or less confidence in the application of certain methods. Companies have different balance sheet compositions, which could affect the amount of 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 bonafide*

> ***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 not necessarily binding for gift tax purposes. Factors surrounding the buy-sell agreement must be considered by the appraiser to determine that 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 Internal Revenue Service 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 appraiser. 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 about Revenue Ruling 59-60. Considering the fact that Revenue Ruling 59-60 was promulgated in 1959, it has proven to have 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 (*Uniform Standards of Professional Appraisal Practice* or standards issued by the American Society of Appraisers, the Institute of Business Appraisers, NACVA, or someday the AICPA), 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.

12 *The Appraisal Report*

Chapter Goals

In this chapter, I will explain the following:

1. The components of an appraisal report
2. The types of valuation reports
3. The preparation of the business valuation report
4. The defense of the business valuation report
5. 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 full, formal report may be too expensive for a client, although it may be required because of the nature of the assignment. This is a constant problem the appraiser faces.

Components of an Appraisal Report

In addition to being covered by the *USPAP*, appraisers are covered by the standards of the appraisal organizations to which they belong. CPAs are covered by various standards promulgated by the AICPA for consulting services, the presentation of historical financial statements, and the presentation of prospective financial information. Non-CPAs do not have the same level of standards to contend with when financial information is included in the business valuation report. Regardless of whether the appraiser is a CPA, Standard 10 of the *USPAP*, as well as the rest of the *USPAP*, *must* be followed for all FIRREA engagements, which are engagements that involve a federally related transaction. Many government agencies are now requiring that the *USPAP* be followed. In my opinion, it will only be a matter of time before the Internal Revenue Service and the Securities and Exchange Commission will also require the *USPAP* to be followed.

Since the *USPAP* is so important, Standard 10 is worth reviewing. According to the standard, 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 appraiser to draw certain conclusions, and the basis for the conclusions reached. The appraiser should also disclose any unusual assumption or limiting condition that directly affects the appraisal and should explain its effect on value.

The intent of the *USPAP* is to assure that the appraiser 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 not, how will the reader properly understand the context in which the analysis has been done?

In my opinion, a good appraisal report should at least contain the required disclosures from the *USPAP*, including, but not limited to, the following:

- Letter of transmittal
- Description of the assignment
- Sources of information used in the appraisal

- Assumptions and limiting conditions
- Economic data
- Industry information
- Subject company information
- Financial statement analysis
- Valuation section
- Appendixes, schedules, and exhibits

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 in the sample reports included in chapter 13.

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 has been appraised. The appraiser 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 gift tax purposes, estate tax purposes, divorce litigation, etc.).

The description section will also generally disclose the identity of the client. The client may not always 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.

Finally, this section of the report should include the definition of value being used in the report; a complete definition should be included. Most of the time, it will be fair market value. If a different standard of value is used, it should be very clearly defined.

Sources of Information Used in the Appraisal

Appraisal reports are supposed to be replicable by any qualified reader. Therefore, an appraisal report should include all the sources considered by the appraiser in providing an opinion of value. This allows a qualified reader to independently review the various sources used by the appraiser to draw a similar conclusion (or at least understand how the appraiser derived his or her conclusion). (Some appraisers prefer to put this section

in an appendix at the back of the report, rather than in the report itself.) It is advisable to list all the items that were reviewed but, most important, those that had an impact on your opinion. 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 in the assignment.

Assumptions and Limiting Conditions

This is one of the most important sections of the report. It contains the appraiser's assumptions covering the entire report, such as the assumption that the information being provided by the client is being accepted as valid without independent verification. This should be considered as the appraiser's disclaimer. The accounting profession knows all about disclaimers.

Appraisers are a little bit more subtle about the way that they disclaim certain items. Instead of the typical accountant's assumptions, which hit the reader between the eyes on page 1 of the accountant's report, the appraiser's assumptions are placed more subtly within the report. Some appraisers prefer to put this section in an appendix at the back of the report. 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 that the client acknowledges that he or she is accepting 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 2 for the discussion of engagement letters.) Some of the more common assumptions and limiting conditions are illustrated in the sample reports in chapter 13.

Economic Data

The appraisal report should contain a discussion of the economy, particularly how it affects the appraisal subject (see chapter 4 for a detailed discussion about the economic analysis that should be done). Remember to make this section relevant to the appraisal subject. There are some commercial vendors that 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, the brain surgeon probably is not. Including a long discussion about interest rates in a valuation report for a brain surgery practice will be not only boring but also out of place.

Industry Information

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, since they had a major effect on the appraisal subject's business. For more information about industry analysis, see chapter 4.

Subject Company Information

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 appraiser to demonstrate his or her knowledge of the subject company. One of the greatest faults that I find in other appraisers' reports is that they either skip this section or they 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 have discussed previously. It helps justify discount rates, capitalization rates, minority discounts, and control premiums. These items are discussed in detail in chapter 4.

Financial Statement Analysis

This is the section of the appraisal report that would include 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 of the company, including the operational expectations for the company (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 will also need it in 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 Section

All the methods that were considered as part of the appraisal should be discussed 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 appraisers 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 appraisers 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. This is also the section in which some appraisers discuss premiums and discounts and include a detailed justification for those that were applied in the report, as well as for the size of the premiums or discounts.

Appendixes, Schedules, and Exhibits

This section of the report will generally include the necessary backup documentation that supports the appraisal. Some appraisers will include a comparative balance sheet and income statement in this section; others may also include here all of the valuation calculations. To me, there is nothing worse than reading an appraisal report in which the appraiser 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

During a typical business valuation engagement, the appraiser may be asked to issue one type of report or several different types. These may include *(1)* formal reports, *(2)* informal reports, *(3)* letter reports, and *(4)* oral reports.

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 opinion 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 opinion 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 what each of these report types is.

Formal Reports

A formal report is covered by Standard 10 of the *USPAP*. A formal 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 formal business valuation report can range from forty to eighty pages or more.

Many appraisers are interpreting the *USPAP* to allow business appraisers to provide their clients with less than a formal report. The reason for this is that Standard 2, pertaining to real estate appraisal reports, was changed a few years ago, to allow for three different levels of reporting: a self-contained appraisal report, a summary appraisal report, and a restricted appraisal report. The comments included in the *USPAP* make the following explanation:

> The essential difference among the three options is the use and application of the terms *describe*, *summarize* and *state*. Describe is used to connote a comprehensive level of detail in the presentation of information. Summarize is used to connote a more concise presentation of information. State is used to connote the minimal presentation of information.

Standard 10, pertaining to business valuation, does not include language that allows the business appraiser to have these options for *USPAP* engagements. Similar to the manner in which lawyers and CPAs interpret tax law, the legislative (or in this instance, nonlegislative) intent is to allow us to provide our clients with the appropriate level of reporting for the facts and circumstances of the assignment.

Informal Reports

Less-than-formal 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. For example, a business owner may not want the appraiser to include a section in the report that describes the company. However, this description would be important to a third party who is not familiar with the appraisal subject.

An informal report contains considerably less information than a formal report. This type of report frequently contains little more than valuation calculations. Most of the narrative is excluded, and many sections of the report are brief. This can sometimes be thought of as an "agreed-upon procedures" report. The appraiser limits the discussion to the explanation of the financial schedules attached to the report. This type of report can range from five to twenty-five pages.

Letter Reports

Just as the name implies, this type of report is nothing more than a letter stating the opinion of value. Reference is generally made to all of the work that has been done, including the fact that your working papers contain all of the supporting documentation for your opinion. This type of report can range from one paragraph to several pages. It is also possible to issue fairly long letters.

Some attorneys ask me what the difference is between a formal report and a letter report. My standard answer is "about $3,000." Writing a long, narrative report takes time. Although I'm not going to discuss in this book how to charge for your time, consider the amount of time that it will take you to write an eighty-page report.

Oral Reports

Oral reports are also acceptable, although not advisable. Some attorneys prefer oral reports in litigation as a strategy of 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.

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 formal 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. For those business appraisers who belong to appraisal organizations, standards exist that must be followed. The CPA business appraiser should be familiar with these standards. They can be followed by the CPA and will generally result in a good work product. Knowledge of these standards can also 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 went past 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 have also woken from your nap and ordered your own copy of the *USPAP*.

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 and, therefore, 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) requires that a testifying expert submit a formal written report and that it be signed by the expert personally. The expert's report must contain a complete statement of any and all opinions to be expressed. If the statement is not in the report, the expert will be precluded from offering such opinions in a deposition or a trial. The expert must also disclose all information considered to formulate his or her opinion.

These new rules should 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 an advocate of our own opinion. 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 discussing 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's 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 courtrooms, 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 does not demonstrate that the appraiser 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.

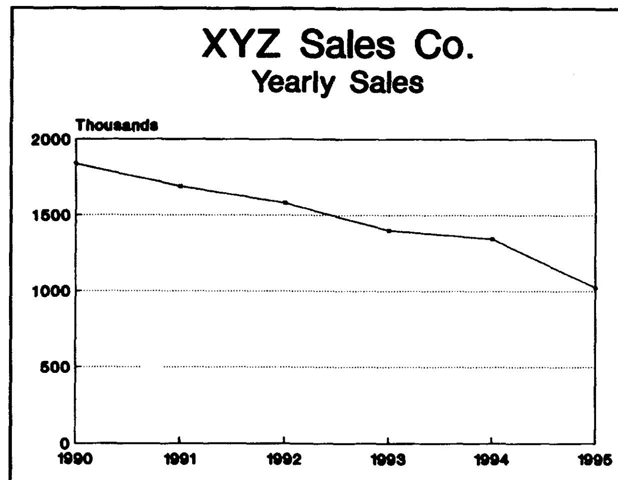
Your appraisal report is your opportunity to demonstrate your knowledge. If you include items in your report, they should be explained well. Don't be afraid to quote other sources. Use recognized sources in your report to support your work. Quoting sources such as the government (the IRS, revenue rulings, the Bureau of Labor and Statistics, and others) makes your work hard to dispute. Judges and juries show a great deal of respect for information that you use 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.

Another way to use your report as a selling tool is to emphasize a particular section of your report, 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 to 20 percent, you would still have to justify your rate, but clearly not as much as when 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:

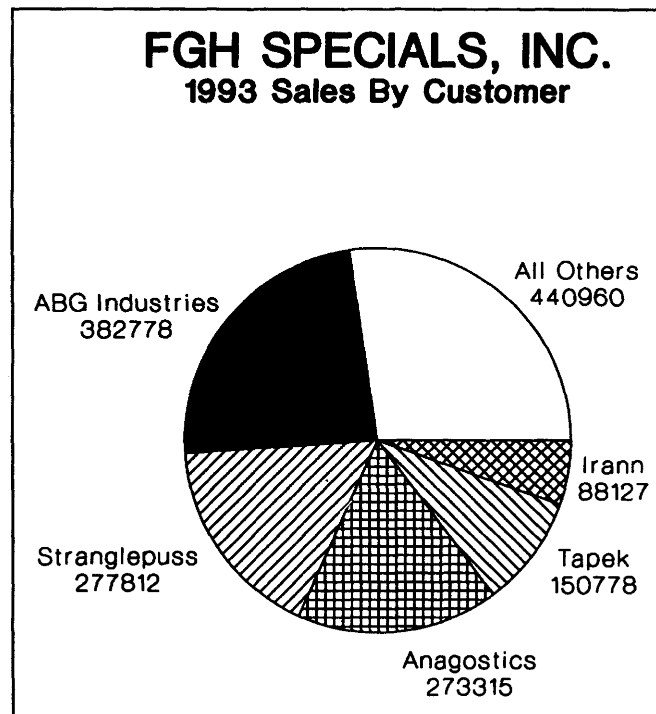
> Further support for these high capitalization rates comes from an examination of the venture capital market. "Professional venture capitalists require a minimum of 40 to 50 percent rates of return on the small company 'superstars' of tomorrow" according to Bradley A. Fowler, Esq. in an article published 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 Price Waterhouse 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 appraiser 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. Look at the impact of a picture:



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 appraiser 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 text.

No matter how much the appraiser points out that a company incurs risk for having most of its sales come from few customers, there is nothing like a pie chart, another effective picture, for demonstrating this point:



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, since our reports tend to vary all of the time. Instead, we use plain dividers and print on clear labels whatever needs to be on the divider. The appearance of an appraisal report can also help sell the report. If it appears cosmetically pretty, 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, that 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 my report than I do going over working paper files. At trial, I will use my report 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 You 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 appraiser structure his or her report to point out the

flaws in the methodologies and conclusions of the other appraiser. Having the other side's report in advance will frequently allow the appraiser to emphasize those areas that are known to be a point of contention in the litigation battle of the experts.

The best way to illustrate this point is to use some real examples. Exhibits 12.1 through 12.4 contain excerpts of some reports that our firm has prepared in the past. In exhibits 12.1 and 12.2, the subject business was a restaurant-tavern that was being valued for divorce purposes. In his report, the other side's expert included a statement that he knew that "comparable company" information was impossible to find and, therefore, the market approach was ignored. He also made the statement that "everyone knows that the rule of thumb for these types of businesses was 1 times gross sales."

Following the section contained in exhibit 12.1, we included an analysis in our report applying the price-to-annual-sales and price-to-annual-earnings multiples, similar to the sample analyses in chapter 6, exhibit 6.4. We were also able to use the inverse of the price/earnings ratio (earnings/price ratio) to support the build up of our capitalization rate to be used for earnings. The earnings/price ratio is a capitalization rate, and there is little better evidence of the cap rate than 205 market transactions.

EXHIBIT 12.1
Responding to the Other Side's Report—Part 1

To determine the value of John's Tavern using a market comparison approach, an attempt was made by this appraiser to gather information regarding similar businesses bought and sold in the open market. Due to the nature of closely held businesses, this information is difficult to obtain, *but not impossible.* The information that we were able to locate was what is maintained in a market data file maintained by the Institute of Business Appraisers, Inc. This information consists of actual sales throughout the United States over approximately the last ten years. The following table lists these data:

Data for Market Comparison

Sales Price/Annual Sales

Business Type	*Annual Sales*	*Annual Earnings*	*Owners' Compen-sation*	*Sales Price*	*Annual Sales*	*Sales Price Annual Earnings*	*Geographical Location*	*Year/ Month of Sale*
Restaurant	$ 360,000	$ N/A *	N/A	$ 136,000	0.38	—	Cal/Ariz/Nev	83/07
Restaurant	426,000	99,000	N/A	20,000	0.05	0.20	Texas	86/03
Restaurant	283,000	N/A	N/A	65,000	0.23	—	Mid-West	85/
Restaurant	96,000	N/A	N/A	33,000	0.34	—	Cal/Ariz/Nev	87/02
Restaurant	276,000	N/A	N/A	147,000	0.53	—	Cal/Ariz/Nev	83/07
Restaurant	200,000	30,000	N/A	85,000	0.43	2.83	Mid-Atlantic	82/04
Restaurant	36,000	N/A	N/A	20,000	0.56	—	Cal/Ariz/Nev	84/08
Restaurant	192,000	55,000	N/A	10,000	0.05	0.18	Texas	86/07
Restaurant	192,000	N/A	N/A	80,000	0.42	—	Cal/Ariz/Nev	86/04
Restaurant	192,000	N/A	N/A	50,000	0.26	—	Mid-West	85/
Restaurant	188,000	N/A	N/A	105,000	0.56	—	Cal/Ariz/Nev	83/07
Restaurant	180,000	46,000	N/A	52,000	0.29	1.13	Cal/Ariz/Nev	85/05
Restaurant	180,000	24,000	N/A	63,000	0.35	2.63	Texas	85/10
Restaurant	90,000	N/A	N/A	56,000	0.62	—	Cal/Ariz/Nev	84/11
Restaurant	179,000	N/A	N/A	97,000	0.54	—	Cal/Ariz/Nev	83/07

SOURCE: Data courtesy of the Institute of Business Appraisers.
*N/A = Not available.

(Continued)

EXHIBIT 12.1 *(Continued)*

Business Type	*Annual Sales*	*Annual Earnings*	*Owners' Compen-sation*	*Sales Price*	*Annual Sales*	*Sales Price Annual Earnings*	*Geographical Location*	*Year/ Month of Sale*
Restaurant	88,000	20,000	N/A	20,000	0.23	1.00	Mid-Atlantic	82/10
Restaurant	168,000	30,000	N/A	62,000	0.37	2.07	Texas	86/03
Tavern	24,000	N/A	N/A	14,000	0.58	N/A	Cal/Ariz/Nev	83/07
Tavern	30,000	N/A	N/A	28,000	0.93	N/A	Cal/Ariz/Nev	83/07
Tavern	36,000	N/A	N/A	42,000	1.17	N/A	Cal/Ariz/Nev	83/07
Tavern	40,000	N/A	N/A	18,000	0.45	N/A	Cal/Ariz/Nev	83/07
Tavern	40,000	N/A	N/A	16,000	0.40	N/A	Cal/Ariz/Nev	83/07
Tavern	44,000	N/A	N/A	47,000	1.07	N/A	Mid-West	85/
Tavern	46,000	N/A	N/A	21,000	0.46	N/A	Cal/Ariz/Nev	83/07
Tavern	48,000	N/A	N/A	39,000	0.81	N/A	Cal/Ariz/Nev	83/07
As you can see, the list goes on and on . . .								
Tavern	48,000	N/A	N/A	18,000	0.38	N/A	Cal/Ariz/Nev	83/07
Tavern	51,000	N/A	N/A	30,000	0.59	N/A	Cal/Ariz/Nev	83/07
Tavern	55,000	N/A	N/A	14,000	0.25	N/A	Cal/Ariz/Nev	83/07
Tavern	96,000	N/A	N/A	22,000	0.23	N/A	Cal/Ariz/Nev	83/07
Tavern	96,000	N/A	N/A	56,000	0.58	N/A	Mid-West	85/
Tavern	96,000	N/A	N/A	44,000	0.46	N/A	Mid-West	86/
Tavern	104,000	N/A	N/A	50,000	0.48	N/A	N/A	86/
Tavern	106,000	N/A	N/A	20,000	0.19	N/A	Cal/Ariz/Nev	83/07
Bar	106,000	35,000	N/A	46,000	0.43	1.31	Mid-Atlantic	85/09
Tavern, beer	108,000	32,000	N/A	60,000	0.56	1.88	Cal/Ariz/Nev	85/05
Beer bar	108,000	N/A	N/A	44,000	0.41	N/A	Cal/Ariz/Nev	86/07
Tavern, beer	110,000	24,000	N/A	70,000	0.64	2.92	Cal/Ariz/Nev	84/05
Tavern	112,000	N/A	N/A	55,000	0.49	N/A	Cal/Ariz/Nev	83/07
Tavern, beer	114,000	36,000	N/A	62,000	0.54	1.72	Cal/Ariz/Nev	85/02
Tavern	119,000	N/A	N/A	40,000	0.34	N/A	Cal/Ariz/Nev	83/07
Tavern, beer	120,000	12,000	N/A	55,000	0.46	4.58	Cal/Ariz/Nev	85/03
By now, you should get the point. This must feel like you are watching an Eveready commercial!								
Tavern	120,000	N/A	N/A	40,000	0.33	N/A	Cal/Ariz/Nev	83/07
Tavern	120,000	N/A	N/A	45,000	0.38	N/A	Cal/Ariz/Nev	83/07
Tavern, beer	120,000	24,000	N/A	70,000	0.58	2.92	Cal/Ariz/Nev	85/07
Tavern, beer	120,000	48,000	N/A	70,000	0.58	1.46	Cal/Ariz/Nev	85/05
Tavern	121,000	N/A	N/A	60,000	0.50	N/A	Cal/Ariz/Nev	83/07
Tavern	124,000	N/A	N/A	50,000	0.40	N/A	Cal/Ariz/Nev	83/07
Tavern	126,000	N/A	N/A	85,000	0.67	N/A	Cal/Ariz/Nev	83/07
Tavern	133,000	N/A	N/A	72,000	0.54	N/A	Cal/Ariz/Nev	83/07
Tavern	138,000	N/A	N/A	66,000	0.48	N/A	Cal/Ariz/Nev	83/07
Tavern	142,000	N/A	N/A	50,000	0.35	N/A	Cal/Ariz/Nev	83/07
Tavern	144,000	N/A	N/A	70,000	0.49	N/A	Cal/Ariz/Nev	83/07
Tavern	148,000	N/A	N/A	76,000	0.51	N/A	Cal/Ariz/Nev	83/07
Bar	155,000	N/A	N/A	75,000	0.48	N/A	California	85/
For the sake of space, I have eliminated from this exhibit approximately 100 transactions that were included in our report.								
Tavern	155,000	N/A	N/A	125,000	0.81	N/A	Cal/Ariz/Nev	83/07
Tavern	156,000	N/A	N/A	65,000	0.42	N/A	Cal/Ariz/Nev	83/07
Tavern	156,000	N/A	N/A	75,000	0.48	N/A	Cal/Ariz/Nev	83/07
Tavern	157,000	N/A	N/A	75,000	0.48	N/A	Cal/Ariz/Nev	83/07
Tavern	157,000	N/A	N/A	90,000	0.57	N/A	Mid-West	86/
Tavern	160,000	N/A	N/A	100,000	0.63	N/A	Mid-West	85/

EXHIBIT 12.1 *(Continued)*

The foregoing table indicates sales of 205 similar types of businesses throughout the United States, covering a period from 1982 through 1990. This information must be used cautiously by an appraiser, since full comparability of these various businesses to the appraisal subject cannot be assured due to the lack of information about the transactions. Furthermore, these businesses were located throughout the United States and, therefore, may not be representative of a good comparable business for the appraisal subject. An appraiser cannot rely solely on this data, but it can be used as a reasonable test of the estimate of value that is ultimately derived, particularly because of the large number of transactions.

Now it was time to address the statement that everyone knows that the rule of thumb in this type of business is 1 times the gross receipts. Exhibit 12.2 contains that part of our report.

EXHIBIT 12.2
Responding to the Other Side's Report—Part 2

Business Broker's Rules of Thumb

Although rules of thumb are not valid appraisal methods, they do exist in the real world and should be considered. The difficulty in applying a rule of thumb is that frequently individuals will hear about different rules of thumb for the same type of business, sometimes with wide variations in the derived value. To test values for reasonableness, this appraiser has used the *Business Brokers' Reference Guide 1991* published by Business Brokerage Press. In this publication, there are nine different rules of thumb published for pricing restaurant businesses. One specifically indicates that no alcohol is sold, but the other eight are as follows:

1. 4 times monthly gross sales plus inventory
2. 40 to 50 percent of annual sales plus inventory
3. One year's annual adjusted earnings plus inventory
4. 1 to 1.5 times annual adjusted earnings and fixtures, equipment and inventory
5. 40 to 45 percent of annual gross revenues
6. 40 percent of annual gross sales
7. 1 times the annual adjusted earnings plus fixtures, equipment, and inventory
8. 35 percent of annual gross sales

These methods are used to determine the pricing of restaurant businesses for sale, which indicates that the fair market value must also include those assets and liabilities that would not be transferred to the new owner. These calculations appear as follows:

Method 1: 4 times monthly gross sales plus inventory

4 × ($ 599,614/12)	+	$ 13,985
4 × $ 49,968	+	13,985
$ 199,872	+	13,985
Sales value		$ 213,857
Add: Net assets		534,149
Total value		$ 748,006
Rounded		$ 750,000

(Continued)

EXHIBIT 12.2 *(Continued)*

Method 2: 40 to 50 percent of annual sales plus inventory

45% × $ 599,614	+	$ 13,985
$ 269,826	+	13,985
Sales value		$ 283,811
Add: Net assets		534,149
Total value		$ 817,960
Rounded		$ 820,000

Method 3: One year's adjusted earnings plus inventory

$ 62,941	+	$ 13,985
Sales value		$ 76,926
Add: Net assets		534,149
Total value		$ 611,075
Rounded		$ 610,000

Method 4: 1 to 1.5 times annual adjusted earnings plus fixtures, equipment, and inventory

1.25 × $62,941 + $31,390	+	$ 13,985
78,676 + 31,390	+	13,985
Sales value		$ 124,051
Add: Net assets		534,149
Total value		$ 658,200
Rounded		$ 660,000

Method 5: 40 to 45 percent of annual gross revenues

42.5% × $613,394	
Sales value	$ 260,692
Add: Net assets	534,149
Total value	$ 794,841
Rounded	$ 795,000

Method 6: 40 percent of annual gross sales

40% × $ 599,614	
Sales value	$ 239,846
Add: Net assets	534,149
Total value	$ 773,995
Rounded	$ 775,000

Method 7: 1 times the annual adjusted earnings plus fixtures, equipment and inventory.

$ 62,941 + $ 31,390 + $ 13,985	
Sales value	$ 108,316
Add: Net assets	534,149
Total value	$ 642,465
Rounded	$ 640,000

(Continued)

EXHIBIT 12.2 *(Continued)*

Method 8: 35 percent of annual gross sales

35% × $ 599,614	
Sales value	$ 209,865
Add: Net assets	534,149
Total value	$ 744,014
Rounded	$ 745,000

As can be seen from the above, the values derived using various rules of thumb range from a low value of $610,000 to a high value of $820,000. It should be obvious from the wide range of values that various rules of thumbs can be dangerous if not applied properly by an appraiser. The sales value calculated under these various methods range from a low of $77,000 to a high of $284,000. Of the eight methods calculated, more than half exceed $200,000. It would appear that the sales values calculated at the higher end are more appropriate, based upon the price-to-annual-sales ratio calculated previously in this report. The market data indicated a value of approximately $300,000. In any event, rules of thumb are clearly dangerous, since so many exist for the same type of business.

The section contained in exhibit 12.2 not only pointed out the danger of relying on rules of thumb but also served to embarrass the other expert. Imagine how many more rules of thumb could have been located if we looked! Bold, emphatic statements made by the other side can be used against them and can place the rest of their work on shaky ground.

Exhibit 12.3 shows a different valuation assignment. In this instance, we were retained to prepare a limited valuation report. The limitation was that we were asked to value a minority stockholder's interest by doing a critique of the other side's report without performing a complete appraisal of our own. Key sections of this report should help demonstrate how we used the other side's report to help our position. In this valuation, the other expert was retained by the estate of a deceased shareholder to value the minority interest. The other expert's value for the minority interest was $210,000.

EXHIBIT 12.3
***Responding to the Other Side's Report—Part 3*[1]**

Limited Valuation Report

Trugman Valuation Associates Inc. was retained by Acme Building Maintenance, Inc. to critique the valuation study of Acme Building Maintenance, Inc. prepared by Smith and Company, CPAs, and to appraise the one-third stock ownership interest of John Jones (deceased) in Acme Building Maintenance, Inc.

The format of this critique follows the order of the Smith report. There are numerous errors in the Smith report, both factual and based on the application of the revenue rulings referred to in their report. This will be evident as we proceed.

[1] Sections in bold are the author's annotations.

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(Continued)

EXHIBIT 12.3 ***(Continued)***

It is our understanding that Mr. Jones died on May 19, 1992, not May 20, 1992, as indicated on page 1 of the Smith report.

This may seem like a minor point, but the more of these small inaccuracies that can be pointed out, the more doubtful the trier of fact will feel about the other side's report.

In the "History and Background Information" section of this report, Smith indicates that Mr. Jones was the "office manager" for the business. It is our understanding that there were no office employees. Therefore, whom did he manage? Also, the business paper work was done by Jeffrey Johnston and Paula Roberts, the other two owners of the company.

The Smith report omits a detailed discussion of the duties of the officers, the background of the officers, the evolution and demise of the customer base and, most importantly, that almost all work is obtained through the bidding process. Our review of the records indicates that 90.4 percent of the recurring monthly business comes from banking institutions; four customers comprise 79.4 percent of the total monthly business.

Since risk plays an important part of any business valuation analysis, we took the opportunity to point out a major factor that was omitted from the other side's report.

In the section entitled "Economic Outlook for the Industry and in General," Smith has an almost nonexistent discussion of the banking industry. They ignore the fact that some of the company's larger customers were in financial difficulty, and they state, "The company under study, however, has 'weathered' this turmoil in the industry and has demonstrated its ability to 'hold' a sufficient client base."

Since Acme Building Maintenance, Inc.'s business comes from the competitive bidding process, the company's only weathering has been that some of their customers have yet to be taken over by the regulators. The banking industry is in serious trouble, and there is no certainty of continued patronage through the bidding process. Most bids carry a thirty-day cancellation provision that can be exercised at any time.

Another factor that has been completely ignored is the relationship of the customers with Jeffrey Johnston. If Mr. Johnston leaves this business or if his contact at a bank leaves the customer, Acme Building Maintenance, Inc. may be significantly affected. This business is highly dependent on one individual who maintains the contacts that allow the company to bid on and win contracts. Despite these factors indicating high risk, Smith concludes, "The outlook, therefore, for the company under study is excellent." *The conclusion reached is contradicted by the facts in this situation.*

In the section entitled "Book Value of the Stock and the Financial Condition of the Business," the Smith report indicates that they "adjusted the balance sheet for accounts receivable and accounts payable at December 31, 1992." Although they analyzed the January 1993 disbursements to come up with their estimate of $10,000 for accounts payable, *two significant items were omitted from their analysis.*

The company's payroll is paid twice a month. The payroll for the period December 16 to December 31, 1992, was paid on January 2, 1993. Therefore, a liability should have been included in the Smith report in an amount equal to the gross payroll for that period, or $23,647.

Also omitted is the liability for workman's compensation insurance. The premium adjustment for the period March 1, 1992, to March 1, 1993 was $7,884. An estimated 10/12 of this amount, or $6,570, would have been a liability on December 31, 1992.

The next item that should be disputed in the Smith report is the revaluation of the equipment to an insurance value. First of all, the revaluation of assets is totally inappropriate in the valuation of a minority interest, unless the minority shareholder has the right to liquidate these assets. This is not the case here. Second, even if the revaluation were proper, the value in use on a depreciated basis would be considerably less than the replacement cost used for insurance purposes. Smith uses an incorrect standard of value in this analysis.

Based on our analysis, exhibit B of the Smith report should be as follows:

Book value		$(7,289)
Add:	Accounts receivable	165,516
Less:	Accounts payable	(10,000)
	Payroll payable	(23,647)
	W/C insurance payable	(6,570)
Adjusted net book value		$ 118,010

EXHIBIT 12.3 *(Continued)*

In the section entitled "Earning Capacity of the Company," Smith relies on Revenue Rulings 59-60 and 68-609 to perform their calculations. One of the key theoretical components missed by Smith is the fact that these revenue rulings result in a value of a controlling interest, not that of a minority interest. The minority shareholder does not have the right to control the daily operations of the business, determine compensation, make decisions about the business, or declare dividends. This is not to be confused with an oppression situation, in which the minority shareholder may have certain rights under the appropriate statute.

The earning capacity discussion should therefore be limited to the earning capacity of the minority stockholder. The adjustments made in exhibit D of the Smith report are inappropriate, as well as incorrect.

Assuming that this valuation was performed on a control basis, there are errors in Smith's adjustments. Adjustment 1 assumes that the conversion from cash basis to accrual basis is evenly distributed over all five years. This is highly unlikely, since the business was growing during this period.

Furthermore, the spreading of $155,516 is incorrect because Smith failed to include the other payables for the company. Even if we accept their methodology, this adjustment would be $25,050 rather than $31,103.

Adjustment 2 is also incorrect. The Smith report adds back automobile usage for personal commuting purposes estimated at "30 miles per day per officer for 230 work days per year." Smith ignores the fact that two of the officers commute approximately 1.5 miles each way, and Mr. Jones's commute was approximately 20 miles. Besides using incorrect mileage, the use of the Internal Revenue Service mileage allowances is inappropriate because this amount takes into consideration items such as depreciation and car insurance, which the company does not pay.

Granted, there is a minor amount of personal automobile expense included in the figures, but the adjustment is so minor that it should be treated as insignificant. This would get lost in the final rounding in the conclusion of overall value.

The third adjustment removes personal accounting services relating to the manner in which the officers were compensated. This will not be discussed.

For sports fans, this is known as giving up a single. Once in a while, it is better to concede a point than to fight what the other side has done. The result of this is so minor that it has virtually no effect on the conclusion reached.

The fourth adjustment, however, adds back the total expense called "consulting services," which includes officers' compensation, in addition to other compensation. Even if this add back were proper, the Smith report has included an add back for compensation of more than just the officers of the company.

The breakdown of consulting services that we reviewed included $7,500 in 1992 for Bob Jobes (a salesman) and $823 in 1989 and $8,818 and in 1990 for Don Weiner (a salesman). These add backs are improper.

No mention is made in the Smith report about the fact that payments to Tom and Paula Roberts, who both work for the company, are included in the consulting services expense. This becomes important when compensation is subtracted in the next step because of the manner in which Smith determines reasonable compensation.

The Smith report refers to several salary surveys that are dated from 1988 to 1990. *To begin with, these surveys are out of date.* **[This illustrates that the appraiser did not even take the time in the assignment to get current information. This demonstrates a quick, sloppy job!]** Next, no consideration is given to the role that each officer plays in the company, the number of hours worked, or the fact that there are four people, not three.

The Smith report indicates that "we believe $55,647 is reasonable compensation for the officers of 'Acme Building Maintenance Inc.' for 1992." We find this level of compensation to be significantly lower than what would be required to replace these individuals, based on their respective duties.

Since Jeffrey Johnston is the chief executive officer responsible for sales, financial aspects of the business, and the overall direction of the company, it is our opinion that he could not be replaced for less than $100,000.

Tom Jacobson is responsible for the janitors and logistical operations, and works, on average, seventy to seventy-five hours per week. His reasonable compensation is estimated to be $75,000 annually.

(Continued)

EXHIBIT 12.3 *(Continued)*

Paula Roberts performs various duties including sales, and handles paperwork for the company. She owned her own business prior to Acme Building Maintenance, Inc. which was merged with Jeffrey Johnston's former company. She could not be replaced for less than $50,000.

John Jones, deceased, was responsible for preparing the work schedule for three night people, answered telephones, and acted as the "inside" office person. Based on our understanding of Mr. Jones's duties, as well as his salary background when he was an employee of Mr. Johnston's company, we have considered $50,000 to be reasonable compensation for him. Therefore, reasonable compensation would be $275,000, not $139,118.

One other important factor must be brought to your attention about the Smith report: *All of the calculations are flawed because their 1989 figures are for a six-month period.* In 1989, the company changed its fiscal year end from June 30 to December 31. The Smith report includes figures for the six months ending December 31, 1989, rather than for a full year.

This is one of the worst errors that could have been made. All that had to be done was to look at the figures as compared with the other periods and it would have been obvious that something was wrong. They never looked!

In the section entitled "Dividend-Paying Capacity," Smith states that "dividends are not a reliable criteria of value with Acme Building Maintenance Inc." This is only partially true. We agree that dividend-paying capacity should not be used for determining the enterprise value, but the valuation of a minority interest is the matter at hand. A minority stockholder in a closely held corporation only realizes value based on the dividends paid, the appreciation in the stock being held, or a combination of the two.

Appreciation of a minority interest is relatively insignificant in a company such as Acme Building Maintenance, Inc. since there is virtually no market for the stock. The only measure of value would be the dividends to be paid to the stockholder. In this instance, Mr. Jones received dividends in the form of excess compensation based on the amount he was paid for his labor.

Although Mr. Jones received dividends through his compensation, the other stockholders were compensated for their labor without excess. A review of the reasonable compensation entitlement compared with the actual salary paid indicates an excess of approximately $36,000 annually.

Since Mr. Jones's work responsibilities were redistributed either to the other stockholders or to new employees, the compensation portion of Mr. Jones's entitlement is unavailable for future dividends. However, $36,000 is available to be paid to the stockholders as dividends. Each stockholder would be entitled to a proportionate share based on common stock ownership.

Mr. Jones's minority stockholding would be entitled to a dividend based on the capacity to pay approximately $12,000 annually. To determine the value of this stock, the value of this anticipated benefits stream can be discounted by an appropriate rate of return, indicative of the risk of the investment. Using a discount rate of 25 percent, based on a ten-year holding period, an income stream of $12,000 paid annually would be worth approximately $43,000.

In the section of the Smith report entitled "Goodwill," Smith incorrectly applies Revenue Ruling 68-609. Smith indicates that they consider Acme Building Maintenance, Inc. a "high risk" business, then claim that they "have used the relevant 'high risk' capitalization rate." They also use a 10 percent rate of return on the tangible assets to further recognize "the risk of the venture." Justifying their rate, Smith states, "Risk-Free rates of return are currently much less than 10%."

The Smith report demonstrates a basic lack of knowledge about this revenue ruling. First, Revenue Ruling 68-609, as indicated previously, is a control premise methodology. Second, Revenue Ruling 68-609 states that this approach "should not be used if there is better evidence available from which the value of intangibles can be determined." The revenue ruling then continues by stating that "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 here as the ones ordinarily to be adopted, the same rate of capitalization should be used in determining the value of the intangibles."

This revenue ruling is frequently misapplied by individuals without proper education in valuation. The revenue ruling makes a reference to capitalization rates of 15 percent to 20 percent and to rates of return on tangible assets at 8 percent to 10 percent, depending upon the risk involved.

EXHIBIT 12.3 *(Continued)*

This revenue ruling also states that "*the above rates are used as examples and are not appropriate in all cases*" (emphasis added). Many inexperienced valuers make this mistake when they do not fully understand the financial theory behind these rates. These rates are intended to reflect the rate of return required by the market place for an investor to invest in assets with the degree of risk residing in the asset.

At the end of 1992, risk-free securities, generally measured by long-term government bonds, were paying approximately 7.44 percent. Investors in equity securities of small companies in the public stock market have received, on average, a 17 percent return over the period 1926 to 1992, according to Ibbotson & Associates in *Stocks, Bonds, Bills and Inflation 1993 Yearbook*. Small companies are defined in this publication as those that are in the lowest 20 percent of the stock market (average capitalization of $44 million).

Clearly, if an investor can expect a 17 percent return from a diversified portfolio of companies with an average capitalization of $44 million, an investor would require a much higher rate of return to invest in Acme Building Maintenance, Inc. Furthermore, Revenue Ruling 68-609 is used to value the intangible assets, which alone are more risky than the entire enterprise. This would warrant an even higher rate of return.

Another indication of how far off the Smith report is with respect to these rates is that according to *RMA Annual Statement Studies 1992*, published by Robert Morris Associates, the mean return on tangible net worth was 35.1 percent for companies with assets of less than $500,000 for companies in Standard Industrial Classification 7349, described as "Services-Cleaning & Maintenance-Building." No prudent investor would require less than they could get elsewhere for the same type of investment.

In addition to the errors regarding the rates, the Smith report used a weighted average earnings in order to perform the calculation of goodwill. This, too, is incorrect. Revenue Ruling 68-609 states that "the past earnings to which the formula is applied should fairly reflect the probable future earnings." In a growing company, a weighted average will never reflect probable future earnings. Therefore, based on the foregoing comments, we believe that the methodology employed by Smith is incorrect, and even if it was considered correct, it was incorrectly applied.

In the next section of the Smith report, entitled "Sales of Stock and the Size of the Block of the Stock to be Valued," Smith discusses a minority discount. They also mention that "studies of inheritance tax case law have shown discounts ranging from 0 percent to 33 percent of value." They conclude a 25 percent discount. This is acceptable.

Smith does not discuss the discount for lack of marketability of the closely held stock. This additional discount is clearly indicated, since it will be extremely difficult to sell a closely held company stock, especially a minority position in the company. Numerous tax court cases have allowed total discounts ranging from 0 percent to 80 percent.

Discounts for lack of marketability have been studied through analyses of restricted stock transactions. The summary listed in the following table appeared in the *Guide to Business Valuations*, published by Practitioners Publishing Company.

Summary of Restricted Stock Studies

Study	*Years Covered in Study*	*Average Discount (%)*
SEC overall average[a]	1966–1969	25.8
SEC nonreporting OTC companies[a]	1966–1969	32.6
Gelman[b]	1968–1970	33.0
Trout[c]	1968–1972	33.5[i]
Moroney[d]	—[h]	35.6
Maher[e]	1969–1973	35.4
Standard Research Consultants[f]	1978–1982	45.0[i]
Willamette Management Associates[g]	1981–1984	31.2[i]

(Continued)

EXHIBIT 12.3 *(Continued)*

Notes:

a. From "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.

b. From Milton Gelman, "An Economist-Financial Analyst's Approach to Valuing Stock of a Closely Held Company," *Journal of Taxation* (June 1972): 353-354.

c. From Robert R. Trout, "Estimation of the Discount Associated With the Transfer of Restricted Securities," *Taxes* (June 1977): 381-385.

d. From Robert E.Moroney, "Most Courts Overvalue Closely Held Stocks," *Taxes* (March 1973): 144-154.

e. From J. Michael Maher, "Discounts for Lack of Marketability for Closely-Held Business Interests," *Taxes* (Sept. 1976): 562-571.

f. From Standard Research Consultants, "Revenue Ruling 77-287 Revisited," *SRC Quarterly Reports* (Spring 1983): 1-3.

g. From an unpublished Willamette Management Associates study covering the period from January 1, 1981, through May 31, 1984.

h. Although the years covered in this study are likely to be 1969-1972, no specific years were given in the published account.

i. Median discounts.

The minority discounts and the discount for lack of marketability must be factored into the valuation of Mr. Jones's minority interest, since it is virtually impossible to sell a minority interest in a closely held business, such as Acme Building Maintenance, Inc. In reality, a discount of 100 percent could probably be justified.

There is no clear indication of the correct amount of discount to be applied, although common sense dictates that it should be high. Factoring into the determination is the size of Acme Building Maintenance, Inc. compared with the public market transactions that provided average discounts of approximately 25 percent and 35 percent for minority and lack of marketability, respectively.

Since these discounts are multiplicative rather than additive, the discount must be at least 53 percent. The size and inability of Acme Building Maintenance, Inc. to guarantee a return to an investor would increase these discounts to approximately 70 percent.

The final section of this report is intended to substitute what we feel is a more realistic value of Acme Building Maintenance, Inc. than what was calculated by Smith. The janitorial services industry has developed valuation methodologies that are used to consummate transactions. These should be given more weight than any other methodology, since they are industry specific.

In the *Business Brokers Handbook*, published by Business Brokerage Press, experienced business brokers compiled the methodologies used to sell these types of businesses. Sales are generally made based on a multiple of monthly recurring revenue. The range of the multiple has varied from 1 to 4. The result represents the value of the intangibles.

This is our opportunity to use a rule of thumb as a reasonableness check and, at the same time, use a published source in order to be authoritative. Would we use this as a method of valuation by itself? No.

As of December 31, 1992, Acme Building Maintenance, Inc. had monthly recurring revenues of $85,776. Based on the high concentration of income from few customers, we believe that the highest multiple should not be used. However, since most of Acme Building Maintenance Inc.'s customer contracts have a thirty-day termination clause, the "willing buyer" would have one month guaranteed. In addition, the customer would probably pay for at least one more month, representing the initial month. This would justify a multiple of at least two months. Since many of the customers are banks and they are known to be slow in reacting to certain situations, another month could go by, justifying a multiple of three.

The value of the enterprise would therefore be calculated as follows:

Monthly recurring revenue	$ 85,776
Multiple	× 3
Value of intangibles	$ 257,328

EXHIBIT 12.3 *(Continued)*

Value of tangibles	118,010
Value of Acme Building Maintenance, Inc.	$ 375,338
Rounded	$ 375,000

The value of Mr. Jones's one third interest would therefore be calculated as follows:

Value of Acme Building Maintenance, Inc.	$ 375,000
Mr. Jones's interest (33.3%)	× 33.3%
Value before discounts	$ 125,000
Discount percentage	× 70%
Amount of discount	$ 87,500
Value of Mr. Jones's interest	$ 37,500

Whether the valuation of Mr. Jones's minority interest is performed using the industry methodology for the enterprise, discounted appropriately, or discounted on the basis of dividend-paying capacity, the value of the interest is approximately $40,000.

Besides making plenty of errors, the other side's expert never took into consideration the fact that the valuation was of a minority interest. In this instance, when the other side realized that they were in trouble, the case settled before getting to court.

In the final example, included as exhibit 12.4, the valuation was performed for a divorce litigation. The husband, our client, was a psychologist. The wife, a psychiatrist, was divorcing our client. (These were the two nuttiest people I have ever dealt with!) The wife's expert claimed that our client was underreporting his income by about $80,000 annually and that he probably built up a cash hoard of several hundred thousand dollars. Exhibit 12.4 includes the section of our report that addresses the critique of the other side's report.

EXHIBIT 12.4
***Responding to the Other Side's Report—Part 4*[1]**
Critique of Smith, Traqcor & Company Report

As part of this engagement, Trugman Valuation Associates Inc. was asked to review and critique the report submitted by Smith, Traqcor & Company (hereafter referred to as "Smith") with respect to the valuation of Dr. Louis's psychology practice. For the convenience of the reader, page references pertain to the Smith report.

***Page 2*: Smith provides incorrect background information about Louis Associates for Psychotherapy. This partnership *was not* founded by Dr. Susan Louis but was a joint venture among four doctors. It was never *jointly* owned by Drs. Susan and Jerome Louis. All income tax returns included separate professional practices for each of them, with no evidence of a two-person partnership.**

Regarding the many problems that supposedly existed for Smith, the same records were made available to Trugman Valuation Associates and they were more than adequate for the purpose of this assignment. Dr. Louis is not a bookkeeper and as such, "pretty" accounting records do not exist, but all necessary documentation was available to both of our firms. Canceled checks were grouped by type of expense, patient charts were summarized indicating cash receipts and billing, and any information requested was supplied by Dr. Louis with a minimal amount of effort.

[1] Sections in boldface are author's annotations.

(Continued)

EXHIBIT 12.4 *(Continued)*

Obviously, the other side was complaining about the condition of the records. This was not done intentionally by the client; rather he kept his records in such a manner that he was probably the only one who could easily figure them out.

Most of the "problems" listed in their report are typical for this type of engagement and in this instance, answers were available to questions if Smith asked.

Page 3: Smith discusses bank deposits and indicates that "there were no indications of cash being deposited." They continue by stating:

> Inasmuch as Dr. Louis allegedly discards all deposit slips upon verification of bank statements and credits, it was not possible for us to review any deposit slips. Therefore, it was not possible for us to ascertain whether or not Dr. Louis (as per his advice to us) customarily settled for only the insurance proceeds and virtually never pressed patients for the difference (and as to whether or not any cash was deposited).

All Smith had to do was ask Dr. Louis about the cash, and they would have found that he never deposits cash in the checkbook. He uses cash received from patients as his pocket money, but he enters the cash received in his patient files, and it is from these records that he summarizes his income tax information.

The discarding of deposit slips is something that has taken place for many years and was not a new practice for this divorce proceeding. As a matter of fact, there were many instances in which Dr. Louis threw away a paid bill because he felt that the canceled check would suffice.

Smith alludes to their disbelief that Dr. Louis's practice accepted insurance payments from patients. This appraiser checked with other psychologists, professional practice consultants, and professional practice brokers and discovered that this is a fairly common practice.

The mysterious credit on January 22, 1988, of $57,111.50 in the New York National Bank were loans from three separate individuals. A copy of the canceled checks is an exhibit at the end of this report.

Smith discusses their reconstruction of Dr. Louis's fee income based on his appointment books and insurance records, which they indicate proves substantial unreported income. Smith's reconstruction is seriously flawed, full of speculation, and totally unfounded. *If they attempted to do their job objectively, they would have found that there is no unreported income indicated from this analysis.* This will be discussed in much greater detail later in this report.

Page 4: Although different approaches were used for the reconstruction of book value, Smith's figures are reasonable. Since we performed a more detailed analysis, it appears that our figures are more accurate.

Page 5: Smith states that "it is our belief and understanding, based on the nature of the operations of this practice and its modest expense structure, that there are typically no accounts payable." Once again, they intentionally did not ask questions, because they were acting as advocates rather than objective professionals. A simple review of the checkbook, as well as one or two questions, revealed accounts payable of approximately $4,500 as of the appraisal date.

Page 6: Under "Manner of Valuing Goodwill," Smith quotes from the *Dugan* case: "Earnings exceed that which would have been earned as an employee by a person with similar qualifications of education, experience, and capability."

Although they quoted this section, they referred to the compensation for psychiatrists listed in *Medical Economics*, a national average that does not compensate for the qualitative characteristics quoted, namely, "similar qualifications of education, experience, and capability."

Page 7: When discussing the other valuation approaches they used, Smith presents information without foundation. In "Multiple of Gross Income," they state that "it is not unusual for various types of medical practices (including psychotherapy practices), service businesses and accounting practices, with a recurring service base of clients, to generally sell for multiples of between .5 and 1.5 times the most recent gross." They then continue by applying a range of "1.00 to 1.25" times gross revenues as being appropriate.

I have already demonstrated the problematic nature of the .5 to 1.5 range, and I have difficulty understanding how Smith can support their ranges. My research, much of which has been discussed in the first part of this report does not indicate any validity to Smith's ranges. Data has been presented based on actual sales and from the following sources:

EXHIBIT 12.4 *(Continued)*

1. The Institute of Business Appraisers, Inc.
2. *Valuing Professional Practices and Licenses*
3. *Valuing Small Businesses and Professional Practices*
4. *Goodwill Registry*

The average goodwill factor was probably 30 to 35 percent of sales, yet Smith considered 100 to 125 percent to be valid. This may be true for accounting practices, but there is a sufficient amount of proof to argue that medical practices are different from accounting practices.

In *Valuing Professional Practices*, published by Commerce Clearing House, James L. Horvath, C.A., C.B.V., A.S.A., of Deloitte and Touche states:

> Probably the two most frequently mentioned rules-of-thumb for the valuation of professional practices are: *(a)* 100 percent of annual gross revenue for the total net operating assets including goodwill; and *(b)* net tangible asset value plus a goodwill value equal to 100 percent of gross revenue. For more than 9 out of 10 professional practices, *the 100 percent myth results in a material overstatement of market value*. Further, *because many owners set their operations and the asking prices for their practices on the basis of these rules-of-thumb, over 70 percent of professional practices put up for sale do not sell during the initial offer period* [emphasis added].

Page 9: The Revenue Ruling 68-609 approach (*Dugan*) was used to calculate value. To begin with, the revenue ruling and the *Dugan* opinion suggest five years be used. As a matter of fact, Justice Schreiber found that "the attorney's net income before federal and state income taxes for a period of years, *preferably five*, should be determined and averaged."

Not only did Smith use only three years, they also ignored 1990 in its entirety. Their report does not give an appraisal date other than the date of the report, which was September 1991. An appraisal is a value estimate at a particular point in time. Values change from day to day and are based on many factors.

The date of the filing of the divorce complaint was October 29, 1990. Since this date covers ten months of the year, it is wrong to ignore it. Although the tax return had not yet been prepared, the information was readily available. Much of this information was presented in Smith's report in the schedule called, "Jerome Louis 1990 Income and Living Expense as Submitted by Dr. Jerome Louis Approximately April, 1991."

In addition to the above, a capitalization rate of 33 percent or a multiple of 3 was used to calculate goodwill. This rate is inappropriate as explained below.

Page 11: Smith states that "capitalization rates can vary significantly from a range between 2 or 3 percent (a multiple of price earnings factor of 50 or 33) to as high as 50 percent or even 100 percent (a multiple factor or price earnings ratio of 2 or 1)." They then state that "Revenue Ruling 68-609 suggests a capitalization rate of between 15 and 20 percent as typically appropriate—that is a multiple ranging from 6 to 5 times earnings." After all of this, they chose a multiple of 3.

By their own admission, capitalization rates could be as high as 100 percent. Then they try to use an example stated in the revenue ruling as if it was gospel. The full quote, which appears on page 17 of this report, shows rates of 15 to 20 percent, but consideration must be given to several factors.

Revenue Ruling 68-609 was published in 1968, when interest rates were different from what they are today. The figures stated in this ruling were not intended to be used without consideration of all the factors that have been discussed in this report.

Smith either has tried to deceive the reader of its report or does not understand capitalization theory. In *Valuing Professional Practices and Licenses*, Klein discussed valuing medical practices for divorce and states the following:

> Some appraisers contend that a highly specialized practice, for which there is no real market, should be valued using the formula approach. If this method is used, the capitalization rate should be no more than *one times* excess earnings to reflect the lack of marketability and/or transferability [emphasis added].

(Continued)

EXHIBIT 12.4 *(Continued)*

This is further substantiated in a summary of case developments appearing in the September 1991 issue of *Fair$hare*, published by Prentice-Hall. In this case, the Connecticut Supreme Court found that a capitalization rate of 1.5 and 2 was appropriate for a radiology practice (although they called it a capitalization rate, they actually meant a multiple).

Page 12: The multiple of gross approach used here has many problems. The multiple is unsupported. The unreported income does not exist and will be discussed later. The gross revenues, even without the unreported revenue, is an incorrect base to be used for this computation.

Smith starts with gross revenues from the tax returns. These figures include rental income and fee sharing, which cannot be considered, since it has no salable value. The proper application of this method is based on the fee income generated by the practice. Rental income may not be transferred, especially when there is no lease. A willing buyer would not buy rental income in the same manner as he or she would buy potential patient revenues (if at all).

To make matters worse, Smith multiplies the fee-sharing revenues, which may also not be transferred, but totally ignores the fact that 50 percent of these receipts were paid to other health practitioners. As a result of the above, their entire analysis is flawed.

Page 13: Once again, the net income figures are incorrectly adjusted and the multiple is unsupported. This is not an appropriate method for a solo psychology practice.

Page 14: Information taken from the tax returns is presented on this schedule. In 1987 "Other Income" has an asterisk, with a footnote that states, "Unknown—assumed to be zero." If Smith asked Dr. Louis about this, Smith would have ultimately concluded that the tax return preparer made a mistake by omitting $56,796 of income taken in from Dr. Brown's patients, which explains $28,398 being paid to Dr. Brown in this year ($56,796 x 50%).

Page 15: The adjustments made by Smith are incorrect. There is no unreported income. I agree with the automobile adjustment except that an allowance should have been included for 1989. Canceled checks showed that much of this category included loan payments for the automobiles. Dr. Louis uses cash from his pocket to pay for normal expenses, and if he had $100 per month allowed in 1987 and 1988, it is only right to assume a consistent level of spending in other years, where no expense was shown at all.

Legal and professional fees should have been adjusted, but these monies were practice related. These were payments to other health practitioners under the fee-sharing arrangements that should have been removed as nonoperating expenses.

Utilities and telephone were adjusted without investigation. Although there were personal calls in these bills, the statement that "in 1989, an answering service was engaged" is incorrect. The answering service has been in use for many years, but in 1989 a catch up was made for delinquent bills, which increased the expense. Once again, they just had to ask!

Page 20: The reconstruction of income for Dr. Louis's practice has numerous errors. Smith claims to have "counted patient names entered on various days of the appointment book and determined an average number of patient visits per day." They continue by stating that "our analysis indicated Dr. Louis typically has 12 to 15 patients per week day and 6 to 7 Saturdays. We used 12 and 6, respectively, for conservatism."

Smith, while being conservative, totally ignored accuracy. A detailed analysis was performed by this appraiser. The results are presented in a table beginning on the next page.

Page 21: Smith indicates that Dr. Louis is seeing a group for therapy, and states that they were conservative in their analysis. Dr. Louis charges an hourly rate regardless of whether family members are included in a session. Dr. Louis does not render group therapy services.

Dr. Jerome Louis
Appointment Book Analysis

Date		*No. of Appts.*	*Date*		*No. of Appts.*	*Date*		*No. of Appts.*	*Date*		*No. of Appts.*
January 1987			*January 1988*			*January 1989*			*January 1990*		
1	Thurs.	0	1	Fri.	0	1	Sun.	0	1	Mon.	0
2	Fri.	0	2	Sat.	3	2	Mon.	6	2	Tues.	10
3	Sat.	0	3	Sun.	0	3	Tues.	4	3	Wed.	7

EXHIBIT 12.4 *(Continued)*

This table goes on for every day of every year in this analysis. The middle has been left out.

January 1987			*January 1988*			*January 1989*			*January 1990*		
27	Sun.	0	27	Tues.	7	27	Wed.	8	27	Thurs.	13
28	Mon.	7	28	Wed.	4	28	Thurs.	8	28	Fri.	12
29	Tues.	6	29	Thurs.	7	29	Fri.	6	29	Sat.	0
30	Wed.	5	30	Fri.	4	30	Sat.	6	30	Sun.	0
31	Thurs.	5	31	Sat.	4	31	Sun.	0	31	Mon.	5
		1,514			1,688			1,937			2,145

A minor discrepancy is known to have taken place in our analysis, since we subsequently found that Dr. Louis puts personal appointments (i.e., haircuts, attorneys, and social engagements) in his book, and these were probably counted in error. However, the number of incorrectly counted appointments is expected to be minimal.

Beginning in November 1989, Dr. Louis, in addition to using his appointment book, kept a sheet in the front of his appointment book listing standing appointments. The problem is that Dr. Louis did not specify how often these patients would come in. Some were seen every three weeks, others were seen more often. Sometimes the patients were also listed in the appointment book, so duplication is highly probable.

Next, we performed a 100 percent test of the patient charts to count how many visits each patient made. This was only done for 1989 and 1990, since it is a time-consuming process, but it provided us with a high degree of confidence in the records examined. In addition to the patient charts, a notebook was kept in 1989 and 1990 for those patients seen by Dr. Louis for which no chart was set up.

The following summarizes our findings:

	No. of Visits			*No. of Visits*			*No. of Visits*	
Patient	*1989*	*1990*	*Patient*	*1989*	*1990*	*Patient*	*1989*	*1990*
Azz	34	24	Gel	52	42	Sta	0	21
Con	0	25	Gol	31	46	Sin	0	26
Bac	28	80	Gra	27	0	Sal	0	23
Bac	48	21	Gre	22	33	Mue	0	26
Ber	20	16	Har	37	27	Kin	0	24
Ber	42	45	Hen	38	0	Pie	50	46
Bla	49	49	Hen	32	0	Pul	22	20
Bro	22	3	Hou	12	0	Rip	9	12
Bro	48	52	Low	29	0	Slo	28	25
Car	9	0	Ire	10	3	Pol	65	12
D'A	3	0	Joh	8	0	Spo	15	0
Don	31	48	Kap	0	71	Tam	27	28
DeL	32	35	Kor	6	11	Tor	9	0
Des	12	8	Kot	35	18	Tot	11	7
DiF	53	38	Laq	25	0	Val	53	120
DiG	50	47	Mea	21	17	Viv	5	0
Dit	19	0	McK	49	47	Wei	46	17
FaL	40	42	McP	47	38	Wet	62	41
For	29	44	Mun	23	0	You	4	3
Fur	23	0	Nie	12	0	Whi	43	26
Gai	11	40	Pas	18	52	San	0	21
Han	0	27	Lan	0	53	Kau	0	64

(Continued)

EXHIBIT 12.4 *(Continued)*

Patient	No. of Visits 1989	No. of Visits 1990	Patient	No. of Visits 1989	No. of Visits 1990	Patient	No. of Visits 1989	No. of Visits 1990
Ioc	0	73	Sch	0	8	Ski	0	57
Grc	0	22	Don	0	30	Dan	0	57
DeL	0	47	Dut	0	43	DiC	0	58
All	0	32	Cul	0	21	Chi	0	21
Tri	0	29	Col	0	30	And	0	55
Cha	0	16	Mas	0	14	Dai	0	5
Coo	0	10	Wil	0	36	Por	0	5
Cra	0	20	Spe	0	22	O'D	0	16
Fle	0	10	Val	0	4	Rus	0	12
Bej	0	17						
Total Visits							**1586**	**2473**

The number of visits of the additional 1989 patients without charts is as follows:

Total collected	$ 27,393
Average fee	85
Number of visits	322

1989 reconciliation is as follows:

Visits per patient charts	1,586
Visits for patients without charts	322
Total	1,908
Appointments from diary	1,937
Difference	29

A similar analysis could not be performed for 1990 because of the number of patients that were not in the appointment book, but rather on the separate sheet of paper in the front of the book. To test these results, a different method was used.

The 1990 income that was determined by this appraiser from the patient charts and notebooks was $201,858. Dr. Louis's records indicate that he saw 2,473 patients in 1990. Recognizing the fact that collections in 1990 include insurance claims from late 1989 through the third quarter of 1990 (October through December 1990, submitted in January 1991), the receipts would be attributable to slightly fewer patients than 2,473, since Dr. Louis saw more patients in 1990 than in 1989. If we use 2,400 visits billed and collected in 1990, Dr. Louis's records show that he realized an hourly rate computed as follows:

$201,858 / 2,400 = $84 per hour

This is very much in line with the previous discussion about Dr. Louis's insurance policy and hourly rates. This analysis indicates that the appointment books and patient charts appear to be in order. In many cases, the appointment book had the word "open" next to a time slot where no patient was scheduled. I can only assume that Smith counted these as part of their analysis.

Furthermore, although Dr. Louis states that he works sixty-five to seventy hours per week, he does not see patients all of this time. He answers telephones, forwards messages, prepares insurance claims, writes reports, misses appointments, and occupies himself with a variety of other things. He does, however, spend extraordinarily long hours at the office, since he sees patients from 10 a.m. to 11 p.m.

The presumption of approximately $80,000 annually of unreported income for a psychology practice is unreasonable. I polled other psychologists and professionals regarding the percentage of cash in the amounts that were collected annually in their practices, and the general consensus was less than 5 percent. If the $80,000 were accurate, Dr. Louis would be collecting about 31 percent of his income in cash. This is highly unlikely.

Since our analysis was based on a 100 percent test and not just a tainted sampling, I feel that unreported income *is not* an issue to be considered in this appraisal.

The unfortunate part of the analysis included in exhibit 12.4 is that thousands of dollars in fees had to be incurred by our client to defend the allegations by the other expert. Sometimes it becomes necessary to include a long and somewhat boring analysis in the report, so that the judge can see how much work you have done. Although you may have the opportunity to testify about your analysis and you may use charts and trial exhibits, it is not the same as allowing the reader of your report the time to peruse your analysis at his or her own leisure.

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 an appraiser includes a discussion about weaknesses in his or her report, or if the appraiser 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 an appraiser to use information that is potentially flawed can help demonstrate the level of knowledge of the business appraiser, 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 appraiser expects to be subject to an attack upon cross-examination. If the appraiser addresses those areas that he or she knows will be attacked, the appraiser will not allow the opposing attorney 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 appraiser admits that there are shortcomings with the report, there is little surprise and it becomes no big deal. For example, if the appraiser uses industry composite data from *RMA Annual Statement Studies* and the appraisal subject is not a "great" match for that Standard Industrial Classification code, the appraiser can acknowledge that the information should be used with caution.

Any experienced business appraiser 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 appraiser 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 appraiser 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 appraiser proves that the answer makes sense. I frequently testify that I am not hired 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.

Appraiser, Protect Yourself!

When preparing any type of business valuation report, the appraiser 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 an *opinion* of value. A disclaimer on page 1 of the report will not get the appraiser 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 opinion that I am about to give."

The appraiser must pay careful attention to each assignment. If I am a CPA-appraiser, 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.

Since valuation is a prophecy of the future, forecasts and projections are frequently included in our reports. Appraisers 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 this:

> 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, since they may be misled by the incomplete contents of this report.

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

In any assignment, the appraiser may be called upon to defend the business valuation report. For litigation engagements, this may take place at depositions or in the court-

room. At depositions, the usual rules apply. Do not volunteer anything. The appraiser 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 appraiser 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 formal valuation report, there is little left to the imagination. Other than wanting to review our underlying documentation and possibly question us on 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 that fact.

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. Since 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 appraiser'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 that have applied to be certified business appraisers by the Institute of Business Appraisers, I have compiled a list of what not to do in an appraisal report. These are the most common errors that I have seen (not necessarily in any special order).

1. *Definition of value.* Frequently, appraisal reports refer to a particular standard of value (i.e., 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 appraiser 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 acts 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 appraisers. 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?

3. *Market data.* A major flaw in many appraisals occurs when the appraiser 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 appraiser uses guideline companies that are so much larger than the appraisal subject that a true comparison cannot be made. As I mentioned in chapter 5, imagine comparing a paint manufacturer, with sales of $30 million, to Sherwin-Williams, with $3 billion in sales.

Another problem with the selection process occurs when the appraiser 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 problems 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 appraiser's conclusion of the appropriate rates.

   Another problem is applying a rate for a particular benefits stream to another benefits stream (e.g., applying a discount rate for cash flow to earnings, or applying a pretax rate to an aftertax stream).

   A frequent error is the use of the 15 percent to 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-discussed analysis of the factors that affect premiums and discounts.

8. *Typographical errors*. There is nothing worse than seeing an appraiser 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 appraiser 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 an appraiser expect anyone to believe in the estimate of value, if he or she does not?

Conclusion

At this point, you now have more of an idea about the appraisal report. Chapter 13 contains two sample valuation 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 by the reader. With all of that in mind, I'll see you in court!

13 *Sample Appraisal Reports*

Chapter Goals

In this chapter, I have provided you with the following:

1. An informal valuation report

2. A formal valuation report

Introduction

Throughout this book, I have provided you with various elements of actual appraisal reports. Now, I am including some complete samples. If you try hard enough, you can find fault with them. I certainly can! However, that is not why I am including them. The purpose is to give you something you can use as an example. Look at the big picture and do not get caught up in trying to see if you agree with my conclusions. The first report is an informal report, and the second report is a formal report. If you ask what is the difference between them, I would say the fee!

Report 1 — An Informal Report

November 21, 1995

Shoreline Products Co., Inc.
123 Main Avenue
Smithville, KS 34678
Attn: Messrs. Barry Williams and Guisseppe Scotto

Dear Messrs. Williams and Scotto:

Trugman Valuation Associates Inc. was retained by Shoreline Products Co., Inc. (hereafter referred to as "Shoreline") to determine the fair market value of the 20.125 percent common stock interest owned by Guisseppe Scotto as of December 31, 1994. This appraisal is being performed for the purpose of determining the value of Mr. Scotto's interest so the corporation or Mr. Williams can purchase this stock. This stock sale is voluntary on the part of Mr. Scotto, and we have been informed that Shoreline, Mr. Williams, or both will purchase this minority stock interest at its fair market value.

In an attempt to minimize fees and expedite a report, we have foregone a formal report and are sending you our findings in letter format. If either of you require a more in-depth report, please let us know.

The most commonly used definition of fair market value is located in Revenue Ruling 59-60. This revenue ruling defines fair market value 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.

This definition of fair market value is the most widely used in valuation practice. Also implied in this definition is that the value is to be stated in cash or cash equivalents and that the property would have been exposed on the open market for a period long enough to allow the market forces to interact to establish the value.

Shoreline will be valued on a going concern basis, which assumes that the company will continue in business, and looks to the enterprise's earnings power and cash generation capabilities as indicators of its fair market value. There are many acceptable methods used in business valuation today. The foundation for business valuation arises from what has been used in valuing real estate for many years. The three basic approaches that should be considered by the appraiser are (*1*) the asset based approach, (*2*) the market approach, and (*3*) the income approach.

Within each of these approaches are many acceptable valuation methods available for the appraiser's use. A good appraiser will test as many methods as may be applicable to the facts and circumstances of the property being appraised. It is then up to the appraiser's informed judgment how he or she will reconcile these various values in deriving a final estimate of value.

The asset based approach is asset oriented rather than market oriented. Each component of a business is valued separately and then summed up to produce the total value of the enterprise. In general, the tangible assets of the business are valued using this approach. However, it cannot be used alone, because many businesses have intangible value as well, to which this approach cannot be applied. In this instance, we believe that the market and income approaches will reflect a more reasonable estimate of value; therefore, we have not performed an asset based approach.

The market and income approaches require an estimate to be made of economic earnings. These earnings reflect what the "willing buyer" would expect the business to generate.

Because we have been asked to assign a value to a minority interest (20.125 percent of the common stock), the only adjustments that have been made are those that will more accurately reflect the earnings stream of the business on a minority basis, such as adjusting for nonrecurring income and expenses. The starting point in the normalization process is net income, per the financial statements that were prepared by Shoreline's outside accountant, Barry King, C.P.A. The adjustments made are shown in table 1.

TABLE 1
Normalization of Income

	1991	*1992*	*1993*	*1994*
Historic Net Income	$ 930	$ (97,644)	$ 102,264	$ (247,468)
Adjustments				
Revenues[1]	—	—	(100,000)	—
Cost of Sales[2]	—	—	—	243,000

(Continued)

TABLE 1 *(Continued)*

	1991	*1992*	*1993*	*1994*
Bad Debt Expense[2]	—	—	—	400,000
Royalties[3]	233,415	359,277	—	31,888
Directors Fees[4]	800	800	—	975
Consulting Fees[5]	—	—	—	3,000
Officers' Salaries[6]	270,491	140,104	746,808	595,000
Officer's Salary[7]	(120,575)	(132,500)	(195,000)	(250,000
Interest Income[8]	(866)	—	—	—
Dividend Income[8]	(6,591)	(1,430)	—	—
Other Income[8]	—	(30,093)	—	(2,570)
Penalty Charges[8]	—	—	(104,438)	—
Loss on Sale of Assets[9]	—	—	17,000	8,637
Income Taxes[10]	25	25	983	(135,000)
Adjusted Pre-tax Income	$ 377,629	$ 238,539	$ 467,617	$ 647,462
Income Taxes[11]	(151,052)	(95,416)	(187,047)	(258,985)
Adjusted Net Income	$ 226,577	$ 143,123	$ 280,570	$ 388,477

1. In 1993, Shoreline received $100,000 for the loss of the B-Mart Ultra business. This is nonrecurring revenue and has been deducted to reflect a more normal operating level.
2. A bad debt of $643,000 was written off in 1994. An inventory of supplies was deducted from inventory (cost of sales), and accounts receivable were reduced by $400,000. It appears that this was an extraordinary occurrence, as Shoreline generally does not have large write-offs such as this. Therefore, the entire amount has been added back to reflect earnings for the year more accurately.
3. Royalties were paid to Newton in 1991 and 1992 as part of the purchase of the business. These monies represent the purchase price of the business and should be considered nonrecurring expenses. Therefore, they are being added back in their entirety.

   In 1993, Shoreline purchased a customer list from The Soap Corp., which required royalties to be paid. Some of these royalties were paid in 1994 and have been added back in their entirety, because they also are considered nonrecurring.
4. Although the board of directors has several members, only one has received sporadic directors' fees. Therefore, the fees have been added back to reflect normalized income.
5. Consultant fees paid to Mr. Scotto's sons have been added back, because they represent additional income paid to Mr Scotto, not valid operating expenses of the business.
6. Based on a schedule provided by Shoreline, a portion of the salaries paid to the officers and stockholders of the corporation are bonuses paid based on the profitability of the business. These were paid in lieu of dividends. The amounts are as follows:

	1991	*1992*	*1993*	*1994*
J. Williams	$242,397	$120,000	$455,486	$495,00
A.M. Williams	—	—	40,000	—
P. Williams	—	—	40,000	50,000
K. Williams	—	—	40,000	50,000
V. Scotto	28,094	20,104	171,322	—
Total	$270,491	$140,104	$746,808	$595,000

These bonuses have been added back in their entirety to more accurately reflect earnings available to the stockholders.

TABLE 1 *(Continued)*

7. Mr. Williams is chairman of the board and chief executive officer of Shoreline and, as such, is entitled to receive a salary for his efforts. In the past, his earnings from Shoreline have consisted of year-end bonuses based on profits only; he has received no annual salary.

   To determine a reasonable compensation level for Mr. Williams, we reviewed the *Executive Compensation* survey for 1993 and 1995, published by the National Institute of Business Management.

   According to the information in these surveys, base salaries for chief executive officers in SIC 28 (chemical and allied products) were as follows:

	1991	*1992*	*1993*	*1994*
Median	$ 99,190	$109,000	$120,003	$153,850
25% earned more than	120,575	132,500	195,000	250,000

   Additional information provided was that median sales volumes in this industry were $11.2 million in 1992 and $12.5 million in 1994.

   Another source of officers' compensation information is Robert Morris Associates' *Annual Statement Studies 1995*. This information is compiled from financial statements submitted to banks that then submit this information to Robert Morris Associates (RMA). According to this study, median officers' compensation for SIC code 2841 (manufacturers of soap and other detergents, except specialty cleaners) was 4 percent of sales. This was compiled from ten companies whose fiscal years ended between April 1, 1993, and March 30, 1994. For fiscal years ended one year earlier, median officers' compensation was 3.1 percent of sales.

   The difficulty with using RMA's data is that there is no way to tell what this figure comprises, such as number of officers and base salary versus total compensation. Therefore, attempting to derive a base salary for one officer from this data is problematic.

   As mentioned above, the *Executive Compensation* survey included information about median sales volume in the industry. Comparing this information with the sales volume of Shoreline indicates that Shoreline's sales volume is higher than the industry median. Therefore, it is not unrealistic to expect that Mr. Williams should receive a salary that is higher than the median industry. Also, profitable companies tend to pay bonuses to management based on performance. Therefore, the base salary paid to the highest 25 percent in the survey was selected to represent Mr. Williams's salary.

8. Other income, consisting of interest, dividends, and penalty charges, is considered to be nonoperating and therefore has been deducted in its entirety.
9. The loss on the sale of assets is considered to be nonoperating and has been added back in its entirety.
10. This adjustment for income taxes adds back the deduction reflected in Shoreline's financial statements.
11. A provision for income taxes was estimated based on an effective tax rate of 40 percent.

A valuation is a "prophecy of the future." Even though a willing buyer looks at the historical results of a business, he or she will be using them to attempt to determine what the business prospects are in the future.

To attempt to forecast the future, it is important to analyze the past, to see where the company has been. This is done in the form of common-size financial statements. Tables 2 and 3 are the common-size balance sheet and income statement of Shoreline before any normalization adjustments were made.

TABLE 2
Common-Size Balance Sheet*

	1991 (%)	*1992* (%)	*1993* (%)	*1994* (%)
Current assets				
Cash	0.45	–1.30	–5.99	–9.06
Accounts receivable	38.28	52.36	57.85	55.47
Inventory	39.11	32.32	29.96	32.22
Total current assets	77.84	83.38	81.82	78.63
Fixed assets				
Leasehold improvements	2.01	2.44	2.07	2.26
Office equipment	0.22	0.19	0.17	0.23
Machinery and equipment	17.43	17.85	23.06	26.03
Subtotal	19.65	20.48	25.31	28.52
Accumulated depreciation	–2.72	–7.21	–10.58	–15.64
Net fixed assets	16.93	13.26	14.73	12.88
Other assets				
Security deposits	1.48	1.26	1.08	1.17
Loan fees unamortized	0.54	0.02	0.00	0.00
Organizational costs unamortized	3.22	2.07	1.17	0.64
Deferred taxes	0.00	0.00	0.00	4.38
Prepaid expenses	0.00	0.00	1.20	2.31
Total other assets	5.23	3.35	3.45	8.50
Total Assets	100.00	100.00	100.00	100.00
Current liabilities				
Notes payable	8.61	9.89	11.31	12.96
Accounts payable	54.41	56.67	56.01	69.15
Accrued expenses	4.64	5.62	5.61	12.71
Payroll taxes payable	0.00	0.17	0.18	0.08
Total current liabilities	67.66	72.35	73.10	94.90
Long-term liabilities				
Notes payable	0.47	10.07	13.41	0.00
Long-term debt	15.52	7.00	0.00	0.00
Loan officer	0.00	0.00	1.44	0.00
Total long-term liabilities	16.00	17.06	14.86	0.00
Total liabilities	83.66	89.42	87.96	94.90
Stockholders' equity				
Common stock	16.34	13.99	11.90	12.96
Retained earnings	0.00	–3.41	0.14	–7.87
Total stockholders' equity	16.34	10.58	12.04	5.10
Total Liabilities and Stockholders' Equity	100.00	100.00	100.00	100.00

*Figures may not add up to the totals given due to rounding.

TABLE 3
Common-Size Income Statement*

	1991 (%)	1992 (%)	1993 (%)	1994 (%)
Revenues				
Sales	100.00	100.00	100.00	100.00
Cost of sales				
Inventory beginning	9.95	6.98	7.41	7.09
Purchases	56.88	59.85	55.05	57.47
Labor	11.93	12.67	12.71	12.66
Manufacturing overhead	12.19	13.70	13.96	13.65
Subtotal	90.95	93.20	89.13	90.87
Inventory ending	9.41	6.73	8.07	7.00
Total Cost of Sales	81.54	86.47	81.06	83.87
Gross Profit	18.46	13.53	18.94	16.13
Operating expenses				
Salaries and wages	4.99	3.58	9.63	7.90
Bad debts	0.00	0.03	0.91	2.82
Rents	2.13	1.58	1.74	1.74
Taxes and licenses	0.36	0.34	0.50	0.49
Interest	0.92	0.59	0.56	0.29
Depreciation	0.66	1.02	1.20	0.96
Advertising	0.01	0.00	0.00	0.00
Pension plans	0.01	0.00	0.00	0.00
Bank charges	0.05	0.02	0.00	0.05
Dues and subscriptions	0.03	0.02	0.04	0.03
Office expense	0.19	0.13	0.13	0.18
Professional fees	0.58	0.25	0.16	0.29
Travel	0.23	0.15	0.17	0.16
Telephone	0.15	0.08	0.09	0.10
Laboratory expenses	0.11	0.10	0.06	0.06
Commissions	5.10	3.37	3.27	3.54
Consulting and directors fees	0.15	0.04	0.04	0.20
Security and common area expenses	0.21	0.20	0.30	0.18
Royalties	2.29	2.62	0.00	0.22
Employee medical expenses	0.04	0.03	0.01	0.02
Equipment lease	0.02	0.03	0.03	0.03
Miscellaneous expenses	0.04	0.08	0.06	0.02
Data processing	0.00	0.00	0.06	0.06
Directors fees	0.01	0.01	0.00	0.01
Total operating expenses	18.27	14.26	18.97	19.34
Operating income (loss)	0.18	–0.72	–0.02	–3.21

*Figures may not add up to the totals given due to rounding.

(Continued)

TABLE 3 *(Continued)*

	1991 (%)	*1992 (%)*	*1993 (%)*	*1994 (%)*
Other income				
Interest income	0.01	0.00	0.00	0.00
Dividend income	0.06	0.01	0.00	0.00
Bad debt recovery	0.00	0.00	0.01	0.00
Wage reimbursement	0.00	0.00	0.31	0.70
Commission income	0.02	0.00	0.00	0.00
Other	0.00	0.22	0.00	0.02
Penalty charges	0.00	0.00	0.84	0.00
Total other income	0.10	0.23	1.15	0.71
Other expenses				
Loss on sale of assets	0.00	0.00	0.14	0.06
Amortization	0.27	0.22	0.16	0.14
Total other expenses	0.27	0.22	0.30	0.20
Other income (expenses)	–0.17	0.01	0.85	0.52
Income before taxes	0.01	–0.71	0.83	–2.69
Income taxes	0.00	0.00	0.01	–0.95
Net Income	0.01	–0.71	0.82	–1.74

*Figures may not add up to the totals given due to rounding.

A review of the balance sheet indicates that Shoreline appears to have an increasing cash-deficiency problem. Although the company has also decreased its long-term debt over the same period, accounts payable have increased from 54 percent of total assets to almost 70 percent of total assets. This could be terribly risky, as creditors may not continue to allow Shoreline's credit to grow indefinitely.

In addition, Shoreline has continued to add fixed assets (machinery and equipment) to its plant. This is a positive sign, as such additions will allow the company to keep up with changing requirements in the industry and will help avoid plant downtime.

The income statement indicates increasing sales volume over the past four years, with a fairly consistent gross profit. All years except 1992 have been profitable (see the discussion of normalization adjustments regarding 1994). This appears to be due in part to problems with attempting to increase production from two shifts to three shifts. A look at the figures for 1993 and 1994 indicates that the problems were temporary, and they appear to have been eliminated.

Another way of assessing Shoreline's performance is to compare it with that of the industry. This has been done in tables 4 and 5, which compare the most recent year's balance sheet (on a historic basis) and income statement (on an adjusted basis) with industry statistics from Robert Morris Associates' *Annual Statement Studies* and Dunn & Bradstreet's *Norms & Key Business Ratios.*

TABLE 4
Balance Sheet
Comparison With Industry Composite Data*

	Shoreline	*Industry*	
	1994	*RMA*	*D&B*
	(%)	*(%)*	*(%)*
Current assets			
Cash	–9.06	5.00	8.50
Notes receivable	0.00	0.00	0.60
Accounts receivable	55.47	28.70	27.90
Inventory	32.22	29.20	26.30
Other	0.00	1.60	2.80
Total current assets	78.63	64.50	66.10
Fixed assets			
Leasehold improvements	2.26	0.00	0.00
Office equipment	0.23	0.00	0.00
Machinery and equipment	26.03	0.00	0.00
Subtotal	28.52	0.00	0.00
Accumulated depreciation	–15.64	0.00	0.00
Net fixed assets	12.88	28.20	19.00
Other assets			
Security deposits	1.17	0.00	0.00
Organizational costs unamortized	0.64	0.00	0.00
Deferred taxes	4.38	0.00	0.00
Prepaid expenses	2.31	0.00	0.00
Other	0.00	7.30	14.90
Total other assets	8.50	7.30	14.90
Total Assets	100.00	100.00	100.00
Current liabilities			
Long-term debt (current)	0.00	2.50	0.30
Notes payable	12.96	10.90	2.40
Accounts payable	69.15	17.60	15.40
Accrued expenses	12.71	0.00	0.00
Payroll taxes payable	0.08	0.00	0.00
Taxes payable	0.00	0.90	0.00
Other	0.00	8.40	11.90
Total current liabilities	94.90	40.30	30.00
Long-term liabilities			
Long-term debt	0.00	12.50	17.80
Other	0.00	4.50	0.60
Total long-term liabilities	0.00	17.00	18.40
Total liabilities	94.90	57.30	48.40

(Continued)

TABLE 4 *(Continued)*

	Shoreline	*Industry*	
	1994 (%)	*RMA (%)*	*D&B (%)*
Stockholders' equity			
Common stock	12.96	0.00	0.00
Retained earnings	–7.87	0.00	0.00
Total stockholders' equity	5.10	42.70	51.60
Total Liabilities & Stockholders' Equity	100.00	100.00	100.00

*Figures may not add up to the totals given due to rounding.

TABLE 5
Income Statement
Comparison With Industry Composite Data*

	Shoreline	*Industry*	
	1994 (%)	*RMA (%)*	*D&B (%)*
Total revenues	100.00	100.00	100.00
Total cost of sales	82.16	68.50	60.50
Gross profit	17.84	31.50	39.50
Total operating expenses	13.84	26.40	36.60
Operating income (loss)	4.00	5.10	2.90
Other income (expenses)	0.56	–0.80	0.00
Income before taxes	4.56	4.30	2.90
Income taxes	2.53	n/a	n/a
Net Income	2.03	n/a	n/a

*Figures may not add up to the totals given due to rounding.

A comparison of Shoreline's balance sheet with the composite data indicates a much riskier balance sheet. In addition to the serious shortage of cash, Shoreline's accounts receivable as a percentage of total assets are much higher than the industry's (55.5 percent as compared with 29 percent and 26 percent). In addition, a review of the aged accounts receivable as of December 31, 1994, indicates that almost 27 percent of these receivables are older than sixty days.

This situation is reflected in a comparison of accounts payable percentages. For Shoreline, accounts payable is 69 percent of total assets, whereas it is approximately 18 percent and 15 percent for the industry. This situation clearly exhibits a risky situation for Shoreline.

A comparison of Shoreline's income statement with the industry indicates that although Shoreline's gross profit is substantially lower than the industry's, it is slightly more profitable than the industry's. This could be as a result of differing methods of clas-

sification of expenses, but because of the wide variations in the figures, these statistics are not used to make any determinations regarding Shoreline.

Another method of analyzing Shoreline is with a ratio analysis; this involves not only a look at Shoreline's trends but also a comparison with industry ratios. These are shown in table 6.

TABLE 6
Financial Ratios

	1991	*1992*	*1993*	*1994*	*RMA*
Liquidity Ratios					
Current Ratio	1.15	1.15	1.12	0.83	1.80
The current ratio is calculated as current assets divided by current liabilities. This ratio indicates the amount of liquid assets available to liquidate current debt or the company's ability to meet its current obligations. The higher the ratio, the greater the firm's liquidity. Shoreline's ratio has always been low and has been decreasing over the years. At this point, its current assets cannot be used to liquidate its current liabilities totally.					
Quick Ratio	0.57	0.71	0.71	0.49	0.90
The quick ratio is calculated as the quick assets (those that can be converted quickly to cash) divided by current liabilities. This is generally considered to be a more conservative estimate of the company's liquidity. Here also, Shoreline is very weak.					
Activity Ratios					
Sales-to-Receivables Ratio	10.86	9.17	6.36	8.30	8.30
The sales-to-receivables ratio is calculated by dividing net sales by accounts receivable. This ratio shows the analyst how much of a company's sales are reflected in accounts receivable. Shoreline's ratio of sales to receivables has been declining over the years but appears to be in line with the industry's.					
Age of Receivables	34.00	40.00	57.00	44.00	44.00
This is calculated as the accounts receivable divided by daily sales. This estimates the average collection period for credit sales. Although Shoreline takes longer to collect its receivables than before, the period is consistent with the industry's.					
Cost of Sales to Inventory	8.67	12.85	10.04	11.74	5.30
Calculated by dividing cost of sales by inventory, this is an indication of how often the company is turning over its inventory. The company's ratio of cost of sales to inventory reflects the fact that Shoreline is turning its inventory faster than the industry.					
Days of Inventory	42.11	28.42	36.35	31.08	69.00
This ratio is calculated by dividing the inventory by daily sales. It generally provides an analyst with an indication of how much inventory is being carried by the company. Consistent with the cost of sales to inventory ratio, Shoreline is carrying considerably less inventory than the industry.					
Cost of Sales to Payables	6.23	7.32	5.37	5.47	9.40
This ratio is calculated by dividing the cost of sales by accounts payable. It is used to measure the frequency with which the company is turning over its accounts payable. Shoreline's ratio of cost of sales to payables indicates that the company is paying its bills slower than the industry, and it has gotten slower over the years.					
Days of Payables	58.59	49.83	67.95	66.71	39.00
This ratio is calculated by dividing the accounts payable by the average daily cost of sales. This ratio shows how long it takes the company to pay its bills. Consistent with the cost of sales to payables ratio, Shoreline is carrying more days of payables than the industry. That number has been growing over the years and at the end of 1994 was almost twice that of the industry.					

(Continued)

TABLE 6 *(Continued)*

	1991	*1992*	*1993*	*1994*	*RMA*
Activity Ratios (Continued)					
Sales to Working Capital	40.82	43.52	42.56	–28.29	7.00

This ratio is calculated as net sales divided by working capital (current assets minus current liabilities). It indicates the efficiency of the current-asset use. Muralo's ratio of sales to working capital indicates that the company is not using its working capital efficiently to create sales. This ratio declined significantly from 1993 to 1994 and is considerably weaker than the industry.

Operating Ratios

	1991	*1992*	*1993*	*1994*	*RMA*
Pretax Earnings to Total Assets	0.94%	0.79%	1.16%	4.12%	0.07%

This ratio is calculated by dividing pretax earnings by total assets. It indicates how productively the company is using its assets to produce pretax profits. This ratio can also be used to examine trends in efficiency. The use of total assets minimizes the effects of different financing methods on the ratio. Shoreline is weak in this area, but the industry is weaker.

	1991	*1992*	*1993*	*1994*	*RMA*
Pretax Earnings to Total Equity	0.15%	0.08%	0.14%	0.07%	0.16%

This ratio is calculated by dividing pretax earnings by stockholders' equity. This ratio indicates the pretax return on stockholders' equity. Here, Shoreline appears to be weaker than the industry.

	1991	*1992*	*1993*	*1994*	*RMA*
Sales to Net Fixed Assets	24.56	36.19	24.99	35.76	7.40

This ratio is calculated as net sales divided by net fixed assets. It indicates how efficiently net fixed assets are producing sales. Again, Shoreline appears to be using its fixed assets well and is considerably stronger than the industry.

	1991	*1992*	*1993*	*1994*	*RMA*
Total Asset Turnover	4.16	4.80	3.68	4.60	2.30

This ratio is calculated by dividing net sales by total assets. It is an indication of how efficiently total assets are producing sales. The company is using its assets more efficiently than the industry, as it is turning its assets more quickly than the industry.

Leverage Ratios

	1991	*1992*	*1993*	*1994*	*RMA*
Total Debt to Equity	5.12	8.45	7.30	18.62	1.40

Calculated as total debt divided by stockholder's equity, this ratio determines the extent of nonequity capital used to finance the company's assets. Shoreline's debt to equity ratio is higher than the industry, because of the debt used to finance the company.

	1991	*1992*	*1993*	*1994*	*RMA*
Times Interest Earned	5.06	3.97	7.68	16.77	3.70

This ratio is calculated by dividing earnings before interest and taxes by interest expense. It indicates the company's ability to cover interest expense. The company's debt coverage ratio is stronger than the industry's indicating the company's ability to service its debt.

In some areas, primarily in working capital (current assets less current liabilities), Shoreline is substantially weaker than the industry and has been getting weaker over the years. This could create financial difficulties for the company, resulting in an inability to perform certain operational moves that could affect sales volume, net income, or both. On the other hand, despite these working capital problems, the company appears to be operationally strong in comparison with the industry, and in its trends.

One last item that must be addressed is the risk to the company owing to its reliance on PDQ Detergents, Inc. for much of its business. The composition of Shoreline's major customers over the last three years is as follows:

	1992		1993		1994	
Customer	*Sales*	*%*	*Sales*	*%*	*Sales*	*%*
Prescott Inc.	$ 4,391,838	32.01	$ 912,056	7.31	$ —	0.00
Reckless & Coles	2,891,437	21.07	2,146,046	17.20	1,939,192	13.65
The Soap Corp.	1,603,419	11.69	1,116,983	8.95	1,581,867	11.13
Diver Fabrics	423,555	3.09	465,697	3.73	537,543	3.78
Sunshine Prod	395,690	2.88	—	—	—	—
PDQ Detergents, Inc.	—	0.00	3,959,167	31.74	5,334,268	37.54
Brite International	—	—	—	—	356,502	2.51
Other customers	4,014,583	29.26	3,874,050	31.06	4,459,346	31.38
Total Sales	$13,720,522	100.00	$12,473,999	100.00	$14,208,718	100.00

As was previously mentioned, in 1993 Shoreline lost Prescott's (B-Mart Ultra) business. This resulted in a net sales decrease of $1.2 million from 1992 to 1993. This loss of 32 percent of its business was compensated for by picking up PDQ Detergents, Inc. as a customer.

As of the end of 1994, PDQ Detergents, Inc. made up 38 percent of Shoreline's sales; the next two customers made up another 25 percent. A reliance on three customers for 63 percent of its business is a very risky situation for Shoreline. The loss of any of these customers (which is highly unlikely, according to management) could create major problems for Shoreline.

To proceed with a market or income approach, we need to determine a level of income that represents sustainable income into the future. This level of income will be used in the market and income approaches to determine the value of Shoreline.

A review of the adjusted income statement of Shoreline from 1991 to 1994 reveals sales volume increasing at a compound growth rate of 11.77 percent, whereas net income has grown at a compound rate of 17.39 percent.

1994 sales had been forecast to be $14 million, a goal that was slightly exceeded. For 1995, sales are forecasted to be approximately $15,342,000, which is an annual increase of approximately 8 percent. This is less than the growth experienced in the past.

Although the company forecasts sales, it does not prepare forecasts of anticipated costs or profits. A review of historical results indicates that other than in 1992, the company has been able to maintain a gross profit of approximately 18 percent. In addition, other than in 1992, operating income (before other income, other expenses, and income taxes) has averaged 3.3 percent. Operating income seems to be increasing as a percentage of sales over the years, because the company is gaining experience and is operating more efficiently. Therefore, it is anticipated that operating income will approximate 4 percent of sales in the future.

As a result, 1995 income is forecast as follows:

Sales	$15,342,000
Cost of sales	(12,580,440)
Gross profit	$ 2,761,560
Operating expenses	(2,147,880)
Operating income	$ 613,680
Income taxes	(245,472)
Net income	$ 368,208

As a result of the stability that the company appears to be maintaining in its operating results, it is assumed that the company's earnings results in the future are reflected in the 1995 results. Although management has informed us that some actions can be taken to increase throughput, which might result in additional profits, nothing concrete had been decided at the end of 1994; therefore, attempting to forecast these changes would be highly speculative and has not been attempted.

The market approach is the most direct approach for establishing the market value of a business. Using this approach, the appraiser tries to locate guideline businesses to make a comparison of value.

To apply the market approach, we performed a computerized database search for guideline companies that could be considered comparable to Shoreline. Comparability is generally difficult to achieve in business valuations, because privately owned businesses tend to adapt to company management. Smaller companies often take on the personality of the individual owner, and only when the company is considerably larger is it managed by a team of professional managers who are responsible to multiple owners rather than to just one or two.

A computerized search was conducted of the Disclosure database looking for guideline companies with the following characteristics:

1. The company's primary Standard Industrial Classification (SIC) code had to be 2841, which is manufacturers of soap and other detergents, except specialty cleaners.
2. The company had to be located in the United States.
3. The company's sales had to be no greater than $150 million dollars, which is approximately 10 to 11 times Shoreline's sales volume.

This search turned up two companies. One, PDQ Detergents, Inc. was not a publicly traded company until August 1995. Because there was no active market for this stock on the valuation date, it could not be used in this analysis.

The second company, DeSoto, Inc. was described as follows:

> Company makes various detergent products, including private label powdered and liquid laundry detergents, fabric softeners, liquid and powder automatic dishwashing detergents, and liquid handwashing detergents.

According to the latest 10-K of DeSoto, Inc. the company has closed several plants in the last few years to eliminate excess operating capacity. In addition, it is mentioned that it has three customers that each accounts for more than 10 percent of company revenues. "The loss of any of these customers would have a material adverse effect on the company."

Because one company is not a large enough number from which to draw conclusions, we expanded our search to include companies in SIC code 2842, which is manufacturers of specialty cleaning, polishing, and sanitation preparations; and SIC code 2844, which manufactures perfumes, cosmetics, and other toilet preparations. Although these are not the SIC codes for Shoreline, the valuation theory requires the appraiser to search for guideline companies (that is, those that are similar to the valuation subject, not identical to it).

Our search under SIC code 2842 turned up fourteen companies. Of these, ten were eliminated. The reasons for elimination varied but can be categorized as one of the following:

1. It was a development stage company.
2. It was thinly traded, not traded on a United States exchange, or no pricing data was available.
3. It was primarily a research and development company.
4. The products that were manufactured were then used in another manufacturing process; they were not sold as a finished good to a retailer or wholesaler.

The four remaining companies are described in the following paragraphs:

1. *Scott's Liquid Gold, Inc.* According to the company's Form 10-K, Scott's Liquid Gold "manufactures and markets household chemical products, skin care products, and cigarette filters." The company is traded on the New York Stock Exchange under the ticker symbol SGD and has 1,500 shareholders and 181 employees.
2. *Detrex Corp.* Detrex Corporation's products include "specialty chemicals, industrial cleaners, process equipment, coatings, lubricant additives, chlorinated solvents, hydrochloric acid, PVC plastic pipe, industrial finishing materials and paints, industrial furnaces, degreasing equipment, and environmental and analytical laboratory services." The stock is traded on NASDAQ under the ticker symbol DTRX. As of December 31, 1994, the company had 544 shareholders and 367 employees.
3. *H.E.R.C. Products Inc.* This company is in the business of manufacturing and marketing "products incorporating its proprietary chemical technology, Eliminate, which clean and control scaling, corrosion, and biological growth on surfaces and containers which are exposed to water." A review of Form 10-K caused the appraiser to eliminate this company as a guideline company for Shoreline. In 1994, H.E.R.C. formed a joint venture with Conair Corp. a result of

this venture is that much of its income is no longer reported by H.E.R.C., causing sales volume to decrease from $2,071,586 in 1993 to $408,723 in 1994. Because the 1993 statements were not restated, they cannot be used, as the figures for the two years are totally inconsistent. In addition, H.E.R.C. first went public in 1994, so the 10-K shows only two years of information. This is generally not enough history to show any trends.

4. *Harvey Universal Inc.* Harvey Universal "develops, manufactures and markets environmental safe bio-technology, cleaning, descaling, derusting, and coating products." The following statement appears in the auditor's report:

   > As discussed in note 1 to the financial statements, the company's 1994 net loss and cash used by operating activities raises substantial doubt about the entity's ability to continue as a going concern.

   As a result, Harvey Universal was not used as a guideline company for this appraisal.

A search of SIC code 2844 resulted in 21 companies. As with our earlier search, a more careful review revealed that fourteen of them could not be used as guideline companies for reasons as already described.

The seven remaining companies are described in the following paragraphs:

1. *The Stephan Co.* Primarily in the business of manufacturing, selling, and distributing hair care and personal care products, The Stephan Co.'s stock is traded on the American Stock Exchange under the ticker symbol TSC. At the valuation date, it had 500 shareholders and 150 employees. Like Shoreline, The Stephan Co. is highly reliant on two customers, one that accounts for 15 percent of sales and one that accounts for 21 percent of sales. According to Form 10-K, "the loss of either customer would have a material adverse effect."

2. *Parlux Fragrances, Inc.* Parlux is "engaged in the creation, design, manufacture, distribution, and sale of prestige fragrances and beauty-related products marketed primarily through specialty stores and national department stores." A further review of Form 10-K indicates that most of Parlux' manufacturing is performed by a wholly owned subsidiary in France. Because costs of doing business in France are different from doing business in the United States, it was determined that this company could not be used as a guideline to value Shoreline.

3. *BeautiControl Cosmetics, Inc.* BeautiControl manufactures and sells skin care, cosmetics, nail care, toiletries, and related products for women. Its products are sold by independent sales people who are not employees of the company. These sales people buy the company's products and sell them directly to the consumer. Because of its direct sales and distribution system, BeautiControl has been eliminated as a guideline company for Shoreline.

4. *Jean Philippe Fragrances, Inc.* According to Form 10-K, "the company is a manufacturer and distributor of fragrances and cosmetics, domestic and international brand name and licensed fragrances, alternative designer fragrances, and mass-market cosmetics." A further review of Form 10-K finds the following statement: "Although the company does not own a factory or production plant, it acts as a general contractor and supervises each stage of production from the creation of the fragrance, design, and creation of the bottle, dispenser, or container; filling of same; and packing and shipping, all as performed by various subcontractors." Because Jean Philippe Fragrances is not a manufacturer, it could not be used as a guideline company for Shoreline.

5. *Aloette Cosmetics, Inc.* Aloette is in the business of manufacturing and distributing skin care products, cosmetics, and other personal care products. A review of the Form 10-K uncovered the following statement: "Products marketed under the Aloette name are not sold in retail stores and are primarily available through Aloette's domestic and foreign franchises, who recruit and train Beauty Consultants to utilize sales techniques developed by the company." Because of its use of franchises and the lack of retail exposure for its products, it was determined that Aloette could not be used as a guideline company.

6. *Nutramax Products, Inc.* Nutramax Products "manufactures and markets private label health and personal care products, including feminine hygiene products, sterile medical and laboratory solutions, and disposable baby bottle liners." According to the president's letter in Form 10-K, Nutramax "is a new company. Over the past two years it has evolved into a first-class pharmaceutical manufacturer with depth in its product lines and a growing group of customers." The pharmaceutical industry has its own dymanics, which are strongly influenced by the medical industry. These influences are substantially different from those affecting the household products industry; therefore, Nutramax is not considered a guideline company for Shoreline.

7. *Dep Corp.* Dep Corp. "develops, manufactures, distributes, and markets hair, skin, oral, and other personal care products which are primarily sold by drug, food, and mass-merchandise stores." At the company's year end, it had 311 shareholders and 404 employees. Dep currently trades on NASDAQ under the ticker symbol DEPC B.

After analyzing the various Form 10-Ks and Form 10-Qs for these companies, five companies remained as potential guideline companies. Financial data regarding these companies appears in tables GC-1 through GC-5.

An analysis of these guideline companies has been performed to compare Shoreline's financial results with those of its public counterparts. Selected financial ratios appear in table GC-6. These ratios have been used to make qualitative assessments of the similarities and dissimilarities among the companies.

TABLE GC-1
DeSoto, Inc.

	Fiscal years ending December 31,—		
	1992 *($ Thousands)*	*1993* *($ Thousands)*	*1994* *($ Thousands)*
Income Statement Data			
Revenues	59,799	101,175	87,182
Cost of goods sold	55,493	96,309	84,800
Gross profit	4,306	4,866	2,382
Other operating expenses	10,268	19,966	5,394
Operating income	(5,962)	(15,100)	(3,012)
Interest expense	526	642	575
Other income (expense), net	2,946	2,420	1,303
Loss before income taxes	(3,542)	(13,322)	(2,284)
Benefit for income taxes	(1,386)	(5,232)	(649)
Loss before cumulative effect of accounting change	(2,156)	(8,090)	(1,635)
Cumulative change less tax benefit	(162)	—	—
Net loss	(2,318)	(8,090)	(1,635)
Preferred stock dividends	(69)	(302)	(319)
Net loss available to common	(2,387)	(8,392)	(1,954)
Earnings per share	(0.58)	(1.83)	(0.42)
Balance Sheet Data			
Cash and equivalents		602	2,470
Accounts receivable		11,442	11,848
Inventories		10,446	8,513
Other current assets		12,153	3,510
Total current assets		34,643	26,341
Net fixed assets		15,590	7,968
Intangible assets		—	—
Other assets		41,724	48,803
Total assets		91,957	83,112
Current liabilities		35,060	33,473
Long-term debt		5,000	—
Other long-term liabilities		25,704	24,821
Stockholders' equity		26,193	24,818
Total liabilities and equity		91,957	83,112
Common shares outstanding at end of year (000)		4,598	4,657

TABLE GC-2
Scott's Liquid Gold Inc.

	Fiscal years ending December 31,—		
	1992 ($ Thousands)	*1993 ($ Thousands)*	*1994 ($ Thousands)*
Income Statement Data			
Revenues	29,545	37,671	53,408
Cost of goods sold	10,557	11,658	13,691
Gross profit	18,988	26,013	39,718
Other operating expenses	18,376	20,844	29,650
Operating income	612	5,169	10,067
Interest expense	505	403	652
Other income (expense), net	73	118	237
Income before income taxes	180	4,884	9,652
Income taxes	63	1,955	3,801
Net income before extraordinary items	117	2,929	5,851
Extraordinary items	257	—	—
Net income available to common	374	2,929	5,851
Earnings per share	0.04	0.30	0.57
Balance Sheet Data			
Cash and equivalents		2,829	3,755
Accounts receivable		2,669	4,747
Inventories		3,570	4,793
Other current assets		883	1,022
Total current assets		9,951	14,317
Net fixed assets		7,345	10,861
Intangible assets		—	—
Other assets		14	6,953
Total assets		17,311	32,131
Current liabilities		5,275	5,816
Long-term debt		2,631	11,467
Other long-term liabilities		433	511
Stockholders' equity		8,972	14,337
Total liabilities and equity		17,311	32,131
Common shares outstanding at end of year (000)		9,309	9,756

TABLE GC-3
Detrex Corp.

	Fiscal years ending December 31,—		
	1992 ($ Thousands)	*1993 ($ Thousands)*	*1994 ($ Thousands)*
Income Statement Data			
Revenues	96,754	105,578	100,096
Cost of goods sold	73,813	80,462	77,640
Gross profit	22,941	25,116	22,456
Other operating expenses	25,053	26,866	21,810
Operating income	(2,112)	(1,750)	646
Interest expense	1,285	980	682
Other income (expense), net	(654)	616	(8,268)
Loss before income taxes	(4,051)	(2,114)	(8,304)
Income taxes	(1,070)	(545)	(2,665)
Loss before cumulative effect of accounting change	(2,981)	(1,570)	(5,639)
Cumulative effect of accounting change	(1,813)	—	—
Net loss to common	(4,794)	(1,570)	(5,639)
Loss per share	(3.03)	(0.99)	(3.56)
Balance Sheet Data			
Cash and equivalents		2,852	2,016
Accounts receivable		16,730	18,059
Inventories		7,468	8,977
Other current assets		4,352	2,781
Total current assets		31,402	31,833
Net fixed assets		22,953	22,453
Intangible assets		—	—
Other assets		4,697	7,489
Total assets		59,052	61,755
Current liabilities		20,682	24,865
Long-term debt		3,030	702
Other long-term liabilities		10,967	17,445
Stockholders' equity		24,373	18,763
Total liabilities and equity		59,052	61,755
Common shares outstanding at end of year (000)		1,586	1,584

TABLE GC-4
The Stephan Co.

	Fiscal years ending December 31,—		
	1992 *($ Thousands)*	*1993* *($ Thousands)*	*1994* *($ Thousands)*
Income Statement Data			
Revenues	14,683	16,719	24,341
Cost of goods sold	7,206	8,997	10,708
Gross profit	7,477	7,722	13,633
Other operating expenses	3,774	3,388	7,678
Operating income	3,703	4,334	5,955
Interest expense	106	97	98
Other income (expense), net	76	114	343
Income before income taxes	3,673	4,350	6,200
Income taxes	1,299	1,575	2,123
Net income available to common	2,374	2,776	4,076
Earnings per share	0.75	0.84	1.00
Balance Sheet Data			
Cash and equivalents		4,004	6,293
Accounts receivable		3,538	4,311
Inventories		4,090	5,651
Other current assets		626	1,087
Total current assets		12,258	17,342
Net fixed assets		1,031	1,878
Intangible assets		6,317	9,748
Other assets		—	106
Total assets		19,606	29,074
Current liabilities		2,687	3,525
Long-term debt		950	811
Other long-term liabilities		18	85
Stockholders' equity		15,951	24,653
Total liabilities and equity		19,606	29,074
Common shares outstanding at end of year (000)		3,675	4,103

TABLE GC-5
Dep Corp.

	Fiscal years ending July 31,—		
	1992 ($ Thousands)	*1993 ($ Thousands)*	*1994 ($ Thousands)*
Income Statement Data			
Revenues	120,273	123,713	138,331
Cost of goods sold	43,403	45,047	50,685
Gross profit	76,870	78,666	87,646
Other operating expenses	64,613	74,388	88,525
Operating income	12,257	4,278	(879)
Interest expense	1,722	1,268	4,578
Other income (expense), net	(462)	(1,441)	84
Income before income taxes	10,073	1,569	(5,373)
Income taxes	4,110	399	(1,790)
Net income available to common	5,963	1,170	(3,583)
Earnings per share	0.95	0.18	(0.57)
Balance Sheet Data			
Cash and equivalents		1,062	947
Accounts receivable		17,201	16,769
Inventories		14,469	13,956
Other current assets		4,618	7,326
Total current assets		37,350	38,997
Net fixed assets		16,673	17,211
Intangible assets		23,569	62,015
Other assets		38,387	3,872
Total assets		78,629	122,095
Current liabilities		13,763	18,581
Long-term debt		19,557	60,974
Other long-term liabilities		3,669	4,385
Stockholders' equity		41,640	38,155
Total liabilities and equity		78,629	122,095
Common shares outstanding at end of year (000)		6,454	6,347

TABLE GC-6
Financial Ratios (1994)

	DeSoto	Scott's	Detrex	Stephan	Dep	Shoreline (Adjusted)
Quick ratio	0.43	1.46	0.81	3.13	0.95	0.49
Current ratio	0.79	2.46	1.28	4.92	2.10	0.83
Net sales/cash	35.30	14.22	49.65	3.63	146.07	–50.83
SG and A expense/cash	0.14	0.56	0.18	0.32	0.64	–7.04
Receivables turnover	7.36	11.25	5.54	5.65	8.25	8.30
Receivables day sales	48.92	31.99	64.95	63.76	43.64	43.90
Inventory turnover	10.24	11.14	11.15	4.31	9.91	11.74
Inventory day sales	35.15	32.31	32.29	83.58	36.32	31.08
Net sales/working capital	–12.22	6.28	14.37	1.76	6.78	–28.29
Net sales/net fixed assets	10.94	4.92	4.46	12.96	8.04	35.76
Net sales/current assets	3.31	3.73	3.14	1.40	3.55	5.86
Net sales/total assets	1.05	1.66	1.62	0.84	1.13	4.60
Total liabilities/total assets	0.70	0.55	0.67	0.15	0.69	0.95
Total liabilities/invested capital	2.35	0.69	2.13	0.17	0.85	5.25
Total liabilities/common equity	2.74	1.24	2.41	0.18	2.20	18.62
Times interest earned	–2.97	15.81	–11.18	64.14	–0.17	16.77
Current debt/equity	—	0.07	0.10	0.01	0.10	2.54
Long-term debt/equity	—	0.80	0.04	0.03	1.60	0.00
Total debt/equity	—	0.87	0.14	0.04	1.70	18.62
Total assets/equity	3.35	2.24	3.29	1.18	3.20	19.62
Pretax income/net sales	–0.03	0.18	–0.08	0.25	–0.04	0.05
Pretax income/total assets	–0.03	0.30	–0.13	0.21	–0.04	0.21
Pretax income/invested capital	–0.09	0.37	–0.43	0.24	–0.05	0.81
Pretax income/common equity	–0.11	0.67	–0.48	0.25	–0.14	4.12
Net income/net sales	–0.02	0.11	–0.06	0.17	–0.03	0.02
Net income/total assets	–0.02	0.18	–0.09	0.14	–0.03	0.09
Net income/invested capital	–0.07	0.23	–0.29	0.16	–0.04	0.36
Net income/common equity	–0.08	0.41	–0.33	0.17	–0.09	0.72
Three-year compound growth rate—EPS	NM	277.49	NM	15.47	NM	78.91
Three-year compound growth rate—revenues	20.74	34.45	1.71	28.75	7.24	1.76
Size of Revenues ($000)	87,182	53,408	100,096	24,341	138,331	14,209

NM—Not meaningful, because of negative earnings per share

An analysis of the financial ratios shows several facts. From a revenue growth standpoint, Shoreline is weaker than all the guideline companies except Detrex. Even DeSoto, which is a competitor of Shoreline, has a revenue growth of 11 to 12 times that of Shoreline's.

In comparing Shoreline with the guideline companies, it appears that Shoreline is somewhat stronger than DeSoto, Detrex, and Dep from an earnings standpoint. Clearly, Shoreline has been profitable, whereas these three companies have not been. On the other hand, Shoreline does not have the same earnings strength as Scott's does, even though it appears stronger than Stephan.

The balance sheet shows that Shoreline's liquidity ratios, such as the current and quick ratio, are much weaker than the guideline companies. This was indicated when comparing Shoreline's ratios with industry ratios and is reiterated here. Clearly, the lack of cash is having a serious effect on Shoreline's balance sheet composition.

In other areas, though, Shoreline appears in line with or stronger than the guideline companies. Its accounts receivable and inventory turnovers are in line with or stronger than the industry, and its use of all asset categories to generate sales is also stronger. On the other hand, Shoreline is considerably weaker on the liability side of the balance sheet; all ratios reflecting liabilities indicate a company that has too much short-term debt (payables) on its balance sheet.

In the final analysis, Shoreline is smaller, somewhat weaker, and much riskier than the guideline companies, due to its balance sheet composition. Although Shoreline does not have much long-term debt, the guideline companies do not have much, either. As a result of the lack of working capital, Shoreline is a considerably more risky investment.

The next step in the appraisal process is to examine market multiples of the guideline companies. Many multiples can be used as a starting point in this portion of an appraisal. Table GC-7 reflects selected market multiples. Some of the guideline companies' figures have been adjusted to make them more comparable to Shoreline's normalized income figures. Such items as other income and nonrecurring items have been removed to reflect income on the same basis as Shoreline's normalized income.

As already shown, five potential guideline companies that could be applicable to this appraisal were located. Market multiples displayed in table GC-7 reflect the investing public's perception of the value of the stock of these public companies. The market price of a publicly traded stock reflects a marketable minority interest, because public companies generally consist of many owners, all of whom are deemed to be minority owners because of the lack of control over the corporate entity.

These shares are considered marketable because one has only to contact his or her stockbroker to turn this investment into cash within a three-day period.

TABLE GC-7
Market Multiples

Company	*Three-year Average Earnings* (per share)*	*Latest Year's Earnings* (per share)*	*Earnings Before Interest and Taxes* (per share)*	*Earnings Before Depreciation Interest and Taxes* (per share)*	*Latest Year Tangible Book Value (per share)*	*Dec. 31, 1994 Market Price (per share)*
DeSoto	neg	neg	neg	$ 0.23	$ 4.56	$ 3.25
Scott's Liquid Gold	$ 0.49	$ 0.98	$ 1.72	$ 1.82	$ 2.45	$ 5.875
Detrex	neg	neg	$ 0.41	$ 2.56	$ 11.85	$ 10.25
Stephan	$ 0.72	$ 0.94	$ 1.45	$ 1.48	$ 3.63	$ 12.75
Dep	$ 1.91	neg	neg	$ 0.17	neg	$ 2.875

	Market price to:					
Company	*Three-year Average Earnings (times)*	*Latest Year's Earnings (times)*	*Earnings Before Interest and Taxes (times)*	*Earnings Before Depreciation Interest and Taxes (times)*	*Latest Year Tangible Book Value (times)*	*After-tax Return on Equity (%)*
DeSoto	n/a	n/a	n/a	14.13	0.71	–8
Scott's Liquid Gold	11.99	5.99	3.42	3.23	2.40	41
Detrex	n/a	n/a	25	2.56	0.86	–33
Stephan	17.67	13.56	8.79	8.61	3.51	17
Dep	0.66	n/a	n/a	16.91	n/a	9

*All multiples have been adjusted to take out nonoperating income and expenses.

The guideline company method attempts to use these market multiples to determine the value of the appraisal subject. Once the appraiser analyzes the differences between the subject company and the guideline companies, appropriate adjustments are made to the market multiples for the public companies to reflect the difference in risk between the entities, as it would relate to the willing buyer.

In this instance, we found several guideline companies that appear even weaker than Shoreline in earnings power. DeSoto, Detrex, and Dep were not profitable in their most recent fiscal year, whereas DeSoto and Detrex have not had positive profitability over the last three years. It is not until we looked at earnings before depreciation, interest, and taxes (EBDIT) that all five of the guideline companies have positive earnings.

Comparing the guideline companies with Shoreline indicates that The Stephan Co. is closest in size to Shoreline, with sales that are 1.7 times larger than Shoreline. Dep and DeSoto, on the other hand, are approximately 6 and 10 times the size of Shoreline. Size differential is another factor that affects risk. The smaller the company, the riskier it is, especially when there is strong reliance on one or two customers.

A look at the market multiples for EBDIT shows the following:

Company	Multiple
DeSoto	14.13
Scott's Liquid Gold	3.23
Detrex	2.56
The Stephan Co.	8.61
Dep	16.91
Average	9.09
Median	8.61

DeSoto's and Dep's multiples appear to be substantially higher than the other multiples. This is because of their lack of profitability. Even adding back noncash expenses results in an extremely low earnings stream. Therefore, because of what appears to be a lack of earnings ability, these companies have been eliminated from this portion of our analysis.

This leaves the following multiples:

Company	Multiple
Scott's Liquid Gold	3.23
Detrex	2.56
The Stephan Co.	8.61
Average	4.80
Median	3.23

Statistically, the median is a better indicator than the mean, because it eliminates any extreme high or low values in the sample. These multiples are of companies traded on public stock markets, however, and they have to be adjusted for the riskiness of an investment in Shoreline.

Shoreline is still somewhat smaller that Scott's, Detrex, and Stephan, and its revenue growth is smaller than Scott's and Detrex. Overall, Shoreline appears to be weaker than Scott's and Stephen, but appears stronger than Detrex. On the other hand, Detrex is 7 times the size of Shoreline. Therefore, a market multiple of 2 seems appropriate.

Earlier in this letter, sustainable net income was calculated for Shoreline. To apply the multiple, sustainable earnings before depreciation, interest, and taxes must be calculated. This calculation is as follows:

Net income	$368,208
Depreciation[1]	184,104
Interest[2]	76,710
Taxes[3]	245,472
EBDIT	$874,494

[1] Depreciation and amortization have approximated 1.2 percent of sales from 1991 to 1994.

[2] Interest has approximated .5 percent of sales from 1991 to 1994.

[3] Taxes were calculated as part of the net income calculation performed previously.

As a result, the value estimate of 100 percent of Shoreline before discounts and premiums is as follows:

EBDIT	$ 874,494
Multiple	× 2
Value estimate	$1,748,988
Rounded	$1,750,000

Another multiple that can be used to determine the value of Shoreline is a multiple of book value. The following multiples were calculated for the guideline companies based on tangible book value (without intangible assets):

Company	Multiple
DeSoto	0.71
Scott's Liquid Gold	2.40
Detrex	0.86
The Stephan Co.	3.51
Average	1.87
Median	3.26

As previously discussed, Shoreline's balance sheet composition is extremely risky, as it has no cash and a negative working capital of approximately $500,000. This makes it considerably weaker than all the guideline companies except DeSoto, which also has negative working capital. Therefore, a multiple of 1 appears appropriate.

Using this multiple to calculate the value of Shoreline results in the following value before premiums and discounts:

Stockholder's equity	$157,262
Multiple	× 1
Value estimate	$157,262
Rounded	$157,000

Under the income approach to valuation, the capitalization of earnings method has been chosen to value Shoreline, because this method assumes that earnings will be stable into the future.

To capitalize net income, a capitalization rate must be determined. Section 6 of Revenue Ruling 59-60 states:

> 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. Using the build up method of determining these rates results in the following:

	%
"Safe" rate	7.96[1]
Equity risk premium	7.00[2]
Small-company risk premium	4.00[3]
Specific-company risk premium	6.00[4]
Discount rate	24.46
Less: long-term sustainable growth	2.50
Capitalization rate for net income	22.96
Rounded	22.00

[1] Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, 20-Year Treasury Bonds for the week ended December 30, 1994.

[2] Ibbotson Associates, *Stocks, Bonds, Bills and Inflation 1994 Yearbook*, difference between large company stock total returns minus long-term government bond returns from 1926 to 1993.

[3] Ibbotson Associates, *Stocks, Bonds, Bills and Inflation 1994 Yearbook*, expected micro-capitalization equity size premium for companies with capitalization below $149 million from 1926 to 1993.

[4] Appraiser's judgment based on the analysis discussed throughout this report. This adjustment is also intended to adjust the capitalization rate to be used to capitalize net income.

A capitalization rate has been derived from a discount rate, which has been calculated in the previous table. 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.

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 because the investor considers equity securities to be more risky, a higher rate of return has been required over the period indicated in the calculation of this premium.

The third component of the discount rate is a small-company risk premium, which is measured in the public marketplace for companies whose capitalization is below $149 million, indicating that smaller companies require a larger return because of the risk associated with size.

For this reason, a fourth component, known as a specific-company risk premium, has been added to determine an appropriate discount rate. This specific-company risk premium takes into consideration the detailed analysis that the appraiser performs, including the company's performance, management structure, size, and ability to raise capital as well as the many other factors that must be considered in assessing the risk relating to an investment in Shoreline.

Summing all these items results in a discount rate. The mathematical formula to distinguish between a discount rate and a capitalization rate is the subtraction of long-term sustainable growth from the discount rate. A review of the 1991 through 1994 *U.S. Industrial Outlook*, published by the U.S. Department of Commerce, revealed that the growth rate in the industry has been 2 percent to 4 percent over the last four years and

is anticipated to grow 2 percent to 3 percent per year over the next five years. Therefore, long-term sustainable growth is anticipated to average 2.5 percent.

Capitalizing net income results in a value as follows:

Net income	$ 368,208
Capitalization rate	÷ 22%
Value estimate	$1,673,672
Rounded	$1,670,000

In summary, the values derived for 100 percent of the common stock of Shoreline on a minority, marketable basis are as follows:

Market approach	
Price to EBDIT	$1,750,000
Price to book	157,000
Income approach	
Capitalization of earnings	1,670,000

Clearly, the price-to-book method does not correlate with the other values. It appears from the transactions in which Shoreline and some of the guideline companies took part that these types of businesses are bought and sold for their product lines, and the purchase price is often paid through royalties based on product made in the future. Therefore, this value is not being considered in deriving the final value.

The derivation of the other values also have their strengths and weaknesses. In both instances, the capitalization rates (market multiples) used are derived from the market, which is a strength. In the market approach, the guideline companies are only a guideline. None of them is identical to the subject company; therefore, adjustments must be made to the market multiples based on qualitative assessments made by the appraiser.

A similar weakness appears in the capitalization rate derived for use in the income approach. This rate is derived from returns in the entire marketplace, most of which are so much larger than Shoreline that there is little if any comparison that can be made between them. As a result, the adjustments that must be made to the capitalization rate require more assessment because of attempting to compare market rates of return to a company that has a total capitalization of $400,000. Therefore, the value of 100 percent of the common stock of Shoreline on a minority, marketable basis is considered to be $1,700,000.

To determine if the enterprise value of $1,700,000 is reasonable, we have 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. To perform this test, we assumed that the hypothetical buyer would put down 30 percent of the purchase price and finance the balance at 10 percent over five years. The calculation follows.

Purchase price	$ 1,700,000
Down payment (30%)	510,000
Amount financed (70%)	$ 1,190,000
Monthly payments at 10% interest, 5-year term	$ 25,284
Annual payments (x 12)	$ 303,408
Interest	110,309
Principal	$ 193,099
Cash flow	
Income pretax	$ 613,680
Interest expense	110,309
Taxable income	$ 503,371
Tax (40%)	201,348
Net income	$ 302,023
Principal payments	193,099
Cash flow	$ 108,924
Return on down payment	21%

The justification for purchase test indicates that a buyer could purchase the business for $1.7 million and receive a return on that investment (down payment) of approximately 21 percent. Therefore, an enterprise value of $1,700,000 appears reasonable.

The $1,700,000 value of the stock of Shoreline takes into consideration the pure value of the entity, assuming the ability to immediately consummate a sale. Closely held businesses, however, rarely have the ability to be sold this quickly.

In general, a minority interest in a closely held company is even more difficult to sell, but in this instance, Mr. Williams has stated that either he or the corporation will be purchasing the stock interest of Mr. Scotto. Even so, valuation discounts should be considered. The problem with this potential purchase is Shoreline's serious lack of liquidity. This is one factor that must be considered when looking at valuation discounts.

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 the shares have either legal or contractual restrictions placed on them (for example, restricted stock, buy-sell agreements, and bank loan restrictions). Even when a 100 percent interest of the subject is being valued, a DLOM may be appropriate if the owner cannot change the restrictions on the stock.

A control value may reflect a DLOM, although it probably would be smaller than a DLOM attributable to minority shares. Because 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*, studies by Maher, Moroney, Gelman, and others. Table 7 summarizes the findings in many of the more frequently referenced studies.

TABLE 7
Summary of Restricted Stock Studies

Study	*Years Covered in Study*	*Average Discount (%)*
SEC Overall Average[a]	1966–1969	25.8
SEC Non-reporting OTC Companies[a]	1966–1969	32.6
Gelman[b]	1968–1970	33.0
Trout[c]	1968–1972	33.5[i]
Moroney[d]	[h]	35.6
Maher[e]	1969–1973	35.4
Standard Research Consultants[f]	1978–1982	45.0[i]
Willamette Management Associates[g]	1981–1984	31.2[i]

a. "Discounts Involved in Purchases of Common Stock (1966–1969)," in *Institutional Investor Study Report of the Securities and Exchange Commission*, H.R. Doc. No. 64, pt. 5, 92d Cong., 1st Sess. 1971, 2444–2456.

b. Milton Gelman, "An Economist–Financial Analyst's Approach to Valuing Stock of a Closely Held Company," *Journal of Taxation* (June 1972): 353–354.

c. Robert R. Trout, "Estimation of the Discount Associated with the Transfer of Restricted Securities," *Taxes* (June 1977): 381–385.

d. Robert E. Moroney, "Most Courts Overvalue Closely Held Stocks," *Taxes* (March 1973): 144–154.

e. J. Michael Maher, "Discounts for Lack of Marketability for Closely-Held Business Interests," *Taxes* (September 1976): 562–571.

f. "Revenue Ruling 77-287 Revisited," *SRC Quarterly Reports* (Spring 1983): 1–3.

g. The Willamette Management Associates study is unpublished but is discussed in Shannon P. Pratt, *Valuing a Business*, 2nd ed. (Burr Ridge, Ill: Irwin Professional Publishing, 1996), 341.

h. Although the years covered in this study are likely to be 1969–1972, no specific years were given in the published account.

i. Median discounts.

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Based on these studies, the average DLOM ranges between 25 and 45 percent. There is also justification for larger discounts, and more courts are recognizing the fact that a closely held business is rarely marketable.

A minority interest in a closely held company is generally worth very little. This is particularly true when the company does not have a history of paying dividends. Logically, why would anyone buy a minority interest when dividends are not being paid and there is little hope of a sale of the assets of the business? Where would the return on investment come from?

Large discounts can be justified in these types of cases. This was pointed out by Robert E. Moroney in "Why 25% Discount for Nonmarketability in One Valuation, 100% in Another?" in the May 1997 issue of *Taxes*. Moroney raises 11 points about marketability. These are as follows:

1. *Exceptionally High Dividend Yield.* In this instance, bonuses are sometimes paid to stockholders who are also working in the business. Because Mr. Scotto has worked for Shoreline, he has received bonuses. This does not mean that a willing buyer would receive these payments, because they are not pro rata dividends; they are productivity bonuses. This is a negative factor.

2. *Exceptionally Bright Growth Prospects.* Shoreline appears to be growing, and all indications are that they will continue to grow, although not as fast as they have during their first several years. This appears to be a positive factor.

3. *Degree of Control, Swing Value.* The interest being valued is clearly a minority. Mr. Scotto owned 20.125 percent of the outstanding voting stock, but 60 percent of the remaining stock is owned by one person. Therefore, no swing value is afforded to this block. This is a negative factor.

4. *Restrictions on Transfer.* There are no restrictions on the transfer of the block being valued. This is a positive factor.

5. *Buy-Sell Agreements.* There are no buy-sell agreements between the stockholders. This is a disadvantage because there is no market created for the stock. This is a neutral factor in this case, because there does appear to be a market for the stock, although there is nothing in writing to guarantee this market.

6. *The Stock's Quality Grade.* Shoreline cannot be easily compared with a public company for many reasons. The quality of the company becomes more of a personal feeling for an investor. This is a neutral factor.

7. *The Controlling Stockholder's Honesty.* This is a positive factor, because the controlling stockholder appears honest and has the best interests of the company in mind.

8. *The Controlling Stockholder's Friendliness.* In this instance, the controlling stockholder has made it clear that an outside stockholder is not wanted. Therefore, if Mr. Scotto chooses to sell his stock to someone other than Mr. Williams or Shoreline, this new stockholder would not be involved in any way with running the company

and would be informed only of issues that were absolutely necessary at a stockholder meeting. This is a negative factor.

9. *Prospects for the Corporation.* It is expected that the corporation will do business as usual without Mr. Scotto. This is a positive factor.

10. *Prospects for the Industry.* Prospects for the industry appear to be slow but steady growth. The detergent industry is somewhat flat, because growth comes from population growth, not new product growth. As new products are brought into the marketplace, they tend to replace old products. This is a neutral factor.

11. *The Prevailing Mood of the Investing Public.* Economic prospects for 1995 and beyond were excellent, following on the positive trend of 1994. At December 31, 1994, the mood of the public appears favorable. This is a positive factor.

Overall, there are positive and negative factors affecting the marketability of the appraisal subject. The appraisal subject is a minority block of stock with no dividends being paid and no significant growth prospects. This would certainly hinder the marketability of this stock. Without a buy-sell agreement, not even the corporation has to repurchase this stock, although it has stated that it will.

Therefore, after considering the facts and circumstances of this appraisal, it is our opinion that a discount for lack of marketability of 25 percent is justified.

Therefore, the value of Mr. Scotto's 20.125 percent common stock interest in Shoreline Products Co., Inc. is as follows:

Enterprise value	$1,700,000
Discount for lack of marketability (25%)	(425,000)
Subtotal	$1,275,000
Mr. Scotto's interest	× 20.125%
Value estimate	$ 256,594
Rounded	$ 257,000

If we can be of further assistance to you in this matter, or if there are any questions regarding this letter, please do not hesitate to contact us. Our assumptions and limiting conditions are attached as an integral part of our report.

Very truly yours,

TRUGMAN VALUATION ASSOCIATES INC.

Linda B. Trugman, C.P.A., C.B.A., A.S.A.

Gary R. Trugman, C.P.A., C.B.A., A.S.A., M.V.S.

LBT/GRT/sbt

Attachments

Contingent and Limiting Conditions

This appraisal is subject to the following contingent and limiting conditions:

1. Information, estimates, and opinions contained in this report are obtained from sources considered reliable; however, TRUGMAN VALUATION ASSOCIATES INC. has not independently verified such information, and no liability for such sources is assumed by this appraiser.
2. 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.
3. 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 an officer of TRUGMAN VALUATION ASSOCIATES INC. Unsigned copies, or copies not signed in blue ink, should be considered to be incomplete.
4. None of the contents of this valuation report shall be conveyed to any third party or to the public through any means without the express written consent of TRUGMAN VALUATION ASSOCIATES INC.
5. No investigation of titles to property or of any claims on ownership of the property by any individuals or company has been undertaken. Unless otherwise stated in our report, title is assumed to be clear and free of encumbrances and as provided to the appraiser.
6. 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 and/or conclusions 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.
7. The various estimates of value presented in this report apply to this appraisal only and may not be used out of the context presented herein. Any other use of this report may lead the user to an incorrect conclusion for which TRUGMAN VALUATION ASSOCIATES INC. assumes no responsibility.
8. The appraisal estimate of fair market value reached in this report is necessarily based on the definition of fair market value as stated in the Introduction. An actual transaction in the shares may be concluded at a higher value or lower value, depending on the circumstances surrounding the company, the appraised business interest, and the motivations and knowledge of both the buyers and sellers at that time. TRUGMAN VALUATION ASSOCIATES INC. makes no guarantees about what values individual buyers and sellers may reach in an actual transaction.

9. It should be specifically noted that the valuation assumes the business will be competently managed and maintained by financially sound owners, throughout the expected period of ownership. This appraisal engagement does not entail an evaluation of management's effectiveness, nor are we responsible for future marketing efforts and other management or ownership actions upon which actual results will depend.
10. 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.
11. It is assumed that there are no regulations of any government entity to control or restrict the use of the underlying assets, unless specifically referred to in the report, and that the underlying assets will not operate in violation of any applicable government regulations, codes, ordinances, or statutes.
12. Valuation reports may contain prospective financial information, estimates, or opinions that represent the view of the appraiser about reasonable expectations at a particular point in time, but such information, estimates, or opinions are not offered as predictions or as assurances that a particular level of income or profit will be achieved or that specific events will occur.
13. We assume that there are no hidden or unexpected conditions of the business that would adversely affect value, other than as indicated in this report.
14. Hazardous substances, if present, can introduce an actual or potential liability that will adversely affect the marketability and value of a business. Such a liability may be in the form of immediate recognition of existing hazardous conditions or future liability that could stem from the release of currently nonhazardous contaminants. In the development of the opinion of value, no consideration was given to such liability or its impact on value. We have not taken into account any and all future environmental considerations and potential liability.

Appraisers' Certification

We certify that, to the best of our knowledge and belief

- The statements of fact contained in this report are true and correct, subject to the assumptions and conditions stated.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, unbiased, and professional analyses, opinions, and conclusions.
- We have no present or prospective interest in the property that is the subject of this report, and we have no personal interest or bias with respect to the parties involved.

- Our compensation is not contingent on an action or event resulting from the analyses, opinions, or conclusions in, or the use of, this report.
- No one provided significant professional assistance other than the appraisers whose signatures appear below.
- Our analyses, appraisal, opinions, and conclusions were developed and this report has been prepared in accordance with the Uniform Standards of Professional Appraisal Practice, the business valuation standards of The Institute of Business Appraisers, Inc. and the American Society of Appraisers. However, our report is an abbreviated report that should not be used by uninformed readers.

Appraisers' Qualifications

We would also include at the back of the report a statement of professional qualifications for each lead appraiser on the assignment (see report 2).

REPORT 2 — A FORMAL REPORT

February 5, 1996

Mr. Robert W. Brown
123 Main Street
Anytown, NJ 00012

Re: Valuation of 50 percent stock interest in Woodco & Co., Inc.

Dear Mr. Brown:

In accordance with your request and for the purpose of estimating the fair market value of your 50 percent stock interest in Woodco & Co., Inc. to be used for gift tax purposes, we have personally inspected this business, examining the component parts, and have made a careful and thorough investigation and analysis of matters pertinent to the estimation of its value.

Based on the facts presented in the attached report, which must be signed in blue ink by the appraiser to be authentic, and other matters considered during our analysis and investigation, it is our opinion that as of July 5, 1995, the fair market value of the subject interest was:

NINE HUNDRED SEVENTY-FIVE THOUSAND DOLLARS ($975,000)

As indicated above, our report and conclusions are attached hereto and must be attached to this cover letter as an integral part of it.

Respectfully submitted,

TRUGMAN VALUATION ASSOCIATES INC.

Linda B. Trugman, C.P.A., C.B.A., A.S.A.

LBT/sbt
Attachment

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Introduction

Description of the Assignment

Trugman Valuation Associates Inc. was retained by Robert W. Brown to appraise 231 common shares of Woodco & Co., Inc. a New Jersey corporation. These shares represent 50 percent of the issued and outstanding common stock of the corporation. The purpose of this appraisal is to determine the fair market value of the stock as the basis for gift tax determination. The effective date of this appraisal is July 5, 1995, the date of the gift.

Definition of Fair Market Value

The most commonly used definition of fair market value is located in Revenue Ruling 59-60. This revenue ruling defines fair market value 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.

This definition of fair market value is the most widely used in valuation practice. Also implied in this definition is that the value is to be stated in cash or cash equivalents and that the property would have been exposed on the open market for a period long enough to allow the market forces to interact to establish the value.

Valuation Methodologies

A company may be valued on two fundamental bases: (*1*) as a going concern, and (*2*) as if in liquidation. The value of a company is deemed to be the higher of the two values determined under a going concern or a liquidation valuation. This approach is consistent with the appraisal concept of highest and best use, which requires an appraiser to consider the optimal use of the assets being appraised under current market conditions. If a business will command a higher price as a going concern, it should be valued as such. Conversely, if a business will command a higher price if it is liquidated, it should be valued as if in orderly liquidation.

Going Concern Valuation. Going concern value assumes that the company will continue in business and looks to the enterprise's earnings power and cash-generation capabilities as indicators of its fair market value. Many acceptable methods are used in business valuation today. The foundation for business valuation arises from what has been used in valuing real estate for many years. The three basic approaches that must be considered by the appraiser are (*1*) the market approach, (*2*) the asset based approach, and (*3*) the income approach.

Within each of these approaches are many acceptable valuation methods available for use by the appraiser. An appraiser should test as many methods as may be applica-

ble to the facts and circumstances of the property being appraised. It is then up to the appraiser's informed judgment as to how he or she may reconcile these various values in deriving a final estimate of value.

The Market Approach. The market approach is the most direct approach for establishing the market value of a business. Using this approach, the appraiser tries to locate guideline businesses that have actually been sold to make a comparison of value. This approach is similar to what is used in appraising residential real estate.

Generally, this approach is difficult to use for small, closely held businesses, because guideline companies are scarce and reliable financial information is difficult to obtain. However, this approach can be used to a limited degree.

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 summed up to derive the total value of the enterprise.

Using this approach, the appraiser estimates value 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. It cannot be used alone, however, because many businesses have intangible value as well, to which this approach cannot be applied.

The Income Approach. The income approach, sometimes referred to as the investment-value approach, is an income oriented rather than an asset or market oriented approach. This approach assumes that an investor could invest in a property with similar investment characteristics, although not necessarily the same business.

The computations using the income approach generally determine that the value of the business is equal to the expected future income of the business divided by a rate of return. This involves the principle of capitalization. In general, capitalization is merely the process of dividing the estimate of future income by the rate of return.

Because estimating the future income of a business is considered to be speculative, historical data is generally used as a starting point in several of the acceptable methods, under the premise that history will repeat itself. The future cannot be ignored, however, because valuation is a prophecy of the future.

Liquidation Valuation. Liquidation value assumes that a business has greater value if its individual assets are sold to the highest bidder and the company ceases to be a going concern.

According to Shannon Pratt, author of *Valuing a Business*, and a well known authority in business appraisal,

> liquidation value is, in essence, the antithesis of going-concern value. Liquidation value means the net amount the owner can realize if the business is terminated and the assets sold off in piecemeal.

Pratt states that

> it is essential to recognize all costs associated with the enterprise's liquidation. These costs normally include commissions, the administrative cost of keeping the company alive until the liquidation is completed, taxes, and legal and accounting costs. Also, in computing the present value of a business on a liquidation basis, it is necessary to discount the estimated net proceeds at a rate reflecting the risk involved, from the time the net proceeds are expected to be received, back to the valuation date.

Pratt states: "For these reasons, the liquidation value of the business as a whole normally is less than the sum of the liquidation proceeds of the underlying assets."

Revenue Ruling 59-60: Valuation of Closely Held Stocks. This appraiser considered, among other factors, all elements listed in Internal Revenue Service Ruling 59-60, which provides guidelines for the valuation of closely held stocks. Revenue Ruling 59-60 states that all relevant factors should be taken into consideration, including the following:

1. The nature of the business and the history of the enterprise from its inception.
2. The economic outlook in general and the condition and outlook of the specific industry in particular.
3. The book value of the stock and financial condition of the business.
4. The earning capacity of the company.
5. The dividend-paying capacity of the company.
6. Whether or not the enterprise has goodwill or other intangible value.
7. Sales of the stock and the size of the block of stock to be valued.
8. 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.

In addition to the application of Revenue Ruling 59-60, the "formula approach," as promulgated in Revenue Ruling 68-609, has been used in the application of these factors, because it is a technique for valuing intangibles when no better method exists. This means that the valuation relies on the fair market value of net tangible assets plus a capitalization of excess earnings.

Because determining the fair market value of a business is the question in fact, one must understand the circumstances of each individual case. There is no set formula to the approach to be used that will be applicable to the different valuation issues that arise.

Often, an appraiser will find wide differences of opinion as to the fair market value of a particular business or business interest. In resolving such differences, one should

recognize that valuation is not an exact science. Revenue Ruling 59-60 states that "a sound valuation will be based on 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."

The fair market value of specific shares of stock in an unlisted corporation will vary as general economic conditions change. Uncertainty as to the stability or continuity of the future income from the business decreases its value by increasing the risk of loss in the future. The valuation of shares of stock of a company with uncertain future prospects is a highly speculative procedure. The judgment must be related to all the factors affecting the value.

There is no single formula acceptable for determining the fair market value of a closely held business; therefore, the appraiser must look to all relevant factors to establish the true business fair market value as of a given date. To establish a uniform system for valuing businesses, the Internal Revenue Service issued Revenue Ruling 59-60, which lists the factors to consider.

The Nature of the Business and the History of the Enterprise From Its Inception

Woodco & Co., Inc. (hereafter referred to as "Woodco") was formed as a New York corporation in 1926 between Charles Woodco and James F. Banner. They originally located the company on John Street in New York City; when it outgrew these premises, Woodco moved to Canal Street. The purpose of the business was to manufacture tools to be used in the woodworking industry.

James J. Banner, Mr. Banner's son, graduated from high school and joined the business in 1941. Robert W. Brown, the stepson of Charles Woodco, graduated from Polytech Institute with a degree in civil engineering and joined the company in 1948. Both men began as machinists; they also estimated the cost of jobs.

In 1955, Mr. Woodco passed away and Robert W. Brown inherited his shares. James F. Banner passed away in the early 1970s and James J. Banner inherited his father's shares.

The New Jersey corporation of Woodco & Co., Inc. was formed on September 24, 1965, with Messrs. Brown and Banner (father) as 50/50 partners. It was originally set up as a subsidiary of the New York corporation, but eventually they merged the New York corporation into the New Jersey corporation, leaving it as the only business.

At that time, Messrs. Brown and Banner (father and son) constructed a 10,000 square foot building at 689 Johnson Avenue, Burlington, N.J. The reason for the move was a lack of space at the New York City location. The business continues to be at this location today, as the partners designed it specifically for their business needs.

Even though it still meets their requirements, however, the office area is becoming inadequate.

Before the move to New Jersey, the corporation performed only manufacturing jobs. They generated all new business through advertisements and referrals.

After moving to New Jersey, management made some changes to the business. First, Robert Brown began traveling to see customers and began attending trade shows; in effect, he began to solicit new business. Due to Mr. Brown's engineering training, he was able to assist customers in determining their specific needs. In addition, Mr. Banner (son) moved out of the shop and began to manage the office; he also helped to design and produce cutters for specific applications.

Besides the change in advertising methods, Woodco also began to resell products that others manufactured. Often, the company purchased goods from their major overseas competitors. The major reason for the shift in business was due to the high costs of manufacturing. Woodco's equipment was very old, and new manufacturing equipment was very expensive. They decided to shift part of the business to distribution, as gross profits on these products are approximately 40 percent to 60 percent, which is higher than the gross profits on manufactured goods.

At the current time, the business performs four functions, which it categorizes as follows:

1. *Service.* Resharpening of tools.
2. *Stock.* Reselling of products that are purchased from Jackson Tool, Wyoming, as well as many other manufacturers.
3. *Outside.* Purchase of steel bars from Montana Knife Works, a competitor, and cutting them down to various sizes to make special shaped knives.
4. *Special.* Custom orders.

The breakdown of revenues over the last five years is as follows:

	1990 (%)	*1991 (%)*	*1992 (%)*	*1993 (%)*	*1994 (%)*
Service	4.63	5.26	5.10	5.26	5.29
Stock	33.39	27.92	29.78	28.92	29.39
Special	19.73	21.85	18.66	19.03	17.69
Outside	61.18	65.44	65.38	63.04	61.95

In 1975, Thomas Brown, Robert W. Brown's son, joined the business. His role is general manager of the company; his extensive shop and technical experience in all phases of cutter manufacturing aid him in giving prompt, customer-oriented service. Because of Thomas's familiarity with computer technology, he has brought in more up-to-date technology for both the office and the manufacturing plant, allowing the company to keep up with changing times. This has been difficult though, because manage-

ment has disagreed over the monies that needed to be spent on the equipment necessary to manufacture products more quickly and efficiently.

Woodco currently employs twenty-one people. Seven of them work in the office as order takers, advisors, and clerical help. This includes Thomas Brown and James Banner. In addition, it includes the sales manager, Stephen Smith, who has been with the business since 1984. Fifteen people work in the manufacturing end of the business, including four people who deal specifically with manufacturing custom orders. Another employee, who joined the company in June, is a draftsperson, who is responsible for all the product drawings that need to be done. This is an attempt at restructuring the business. It replaces in part the work that Mr. Brown did and frees up other order takers to spend more time taking orders and servicing customers.

The business employs one outside sales person who calls on customers in the Northeast. Dick Zachary has twenty years of experience in the woodworking industry, which allows him to recommend the proper tool to each customer.

According to Woodco's catalog, the company prides itself on its experienced "team of problem solvers. . . . The people you talk to are experienced pros in the custom woodworking tool industry who can put their training and knowledge to work for you."

Mr. Brown retired on December 31, 1994. Mr. Banner is currently in his seventies and wishes to retire. Disagreement over the terms of a potential buyout has kept him involved in the business. A draftsperson was hired to help pick up some of Mr. Brown's function. Thomas Brown believes that he would need to hire at least one more person to take orders when Mr. Banner retires.

In 1975, Messrs. Brown and Banner executed a buy-sell agreement. Relevant portions of this agreement are as follows:

1. Neither stockholder can transfer his stock without the consent of the other stockholder, but the other stockholder must object to this sale or transfer within fifteen days of notification about the proposed transaction.

2. Upon the death or the termination of active employment of a shareholder, the corporation has the right of first refusal for a ninety-day period. If the corporation does not purchase the stock, the deceased or terminated shareholder's representative can sell or transfer his shares free of any restrictions or force the other shareholder to vote for liquidation of the company.

3. Upon the termination of employment of a shareholder, he is free to dispose of his stock, free of any restrictions of this agreement.

According to Mr. Brown's attorney, Clarance Jones, Esq., the stockholder agreement is written so it effectively prohibits lifetime transfers of the stock, unless permission is granted by the other stockholder. The exception to this is upon the retirement of active employment. Although there is a question as to the legal validity of this, at the

time of the gift, this restriction was in the agreement, and any person taking title to the stock would be subject to this provision.

This agreement did not specify how the value of the stock was to be determined, but the agreement was to be modified in April and October of each year with a new value. If Messrs. Brown and Banner did not amend the agreement, they agreed that the last value contained in the agreement would be binding. The agreement deemed that the initial value was $1,212 per share. In 1978, the price was amended to $1,500 per share, and in 1981, it was deemed to be $1,850.

On April 11, 1990, an amendment to the shareholder's agreement was executed. The purpose of the agreement was to revise the method of determining the value of the stock. According to the new agreement,

> The price to be paid by the Corporation for all the shares of stock it elects to purchase hereunder, as well as the terms of the payment and closing of said purchase, shall be determined by the mutual consent and agreement of the Shareholders, their successors, heirs, estates, legal representatives, or assigns, at the time the corporation must elect to exercise its option to purchase the said shares. If the Shareholders cannot agree upon the price and other terms of said purchase within the ninety (90) days so provided for the Corporation to exercise its option, then it shall be deemed that the Corporation did not elect to exercise its option and the parties shall proceed under Article SECOND, Subparagraphs (a) and (b) of the Shareholder's Agreement. Any exercise of the Corporation's option to purchase the shares as set forth herein shall not be valid unless the entire number of outstanding shares issued to the deceased or withdrawing Shareholder are to be purchased by the Corporation hereunder. Nothing contained herein shall limit or restrict the rights of the Shareholders or the Corporation to solicit and obtain independent appraisals of the value of the Corporation, for use in determining the purchase price to be paid for the shares of the Corporation, and the Shareholders agree to cooperate fully with each other in order to permit the preparation of such independent appraisals of value of the Corporation.

The shop is non-union, and the business has maintained good relations with its employees over the years; many of them have worked for the business for many years. The business operates one eight-hour shift per day, five days a week, and a half shift on Saturdays.

The result of this quality, consistent help has allowed Woodco to make the following claims in its catalog:

> It all adds up. Top quality products. In-depth service and experience. Technical innovation. It's what makes Woodco a leader in the industry. It's what makes the Woodco difference.
>
> The finest expression of Woodco quality is the high performance of Woodco tools.
>
> When it comes to experience, we're in a class by ourselves.
>
> We know woodworking tools inside out—and that sets our service apart. Woodco stands at the leading edge of innovation and high performance.

There are many competitors in this business; some of Woodco's competitors are also their customers, and vice versa. Many companies in this industry sell similar but different products. Much of the business is very sensitive to price, and often a customer will shop around for the best price. Due to Woodco's service-oriented manner, their ability to deliver fast, often same-day service, and the depth of their product line, Woodco's revenues have increased as the economy has improved.

Woodco's customers consist of small to medium-size woodworking companies that purchase the tools that Woodco both manufactures and distributes. The products sold by Woodco are tools, such as cutters and knives, which are attached to larger machines for use in manufacturing all wood products, from cradles and caskets to kitchen and bathroom cabinets. The customer base is diverse, with no one customer accounting for a significant portion of revenues. In 1994, the five largest customers represented 7 percent of sales.

In addition, supply sources are numerous; Woodco has no difficulty purchasing either finished goods for resale or raw materials.

One item that could have a significant impact on the business is a potential wrongful death suit. In April 1995, a man in South Carolina who worked for a woodworking company was killed while using a rosette cutter that Woodco sells. Woodco and their insurance carrier do not believe that the company has exposure, because it appears that the cutter was being used incorrectly. At the valuation date, the estate had not sued, so Woodco cannot determine the extent of the potential liability, should Woodco lose. The company has $5,000,000 of product liability and umbrella coverage, but it cannot be determined if this would be sufficient coverage in this case.

Another item that could affect Woodco in the future deals with environmental issues. Management does not believe that they have created any environmental hazards, but no impact study has been done. In the past, a nearby manufacturer dumped trichloroethane, which crept over onto Woodco's property. Because of this dumping, the state installed four wells on Woodco's property to monitor the ground water. At this time, there does not appear to be any contamination of Woodco's ground water.

Economy and Industry Information

The economic outlook must be considered when performing a business appraisal. Because the appraisal process is a "prophecy of the future," it is imperative that the appraiser review the economic outlook as it would affect the appraisal subject.

The economic expansion was vigorous at the close of 1994, with real gross domestic product (GDP) growing at an annual rate of 5 percent during the fourth quarter of 1994. During the first and second quarters of 1995, growth in real GDP decelerated to an annual pace of 2.75 percent and 1.3 percent, respectively. The nation's economy experi-

enced a slowdown during the first half of 1995; the total index of industrial production fell, as did the index for durable goods, including lumber, products, furniture, and fixtures. There was a slight growth in employment, with the unemployment rate at 6.0 percent, 5.6 percent, 5.5 percent, and 5.7 percent for the third and fourth quarters of 1994, and the first and second quarters of 1995, respectively. The Federal Reserve was active during 1994, raising short-term interest rates a total of 2 ½ percentage points.

Both disposable personal income and personal savings grew over the four quarters of 1994. The Consumer Price Index (CPI), a measure of price changes over time, grew at a 3.25 percent annual rate in the first half of 1995, increasing from a growth rate of 2.75 percent for 1994. The producer price index, which shows the changes in the prices that are charged by the producers of finished goods for intermediate materials other than food and energy, grew at an annualized rate of 7.5 percent over the second half of 1994. In addition, consumer confidence remained relatively high through the first six months of 1995.

Consumer spending declined during the first half of 1995, after an annualized increase of 4 percent during the second half of 1994. Consumer demand for motor vehicles declined, while real spending on goods other than motor vehicles increased at a pace slower during the first quarter of 1995 than in the second half of 1994. According to the August 1995 issue of the *Federal Reserve Bulletin*, the deceleration in spending on other consumer durables may have been a reflection of the weakness in home sales, because new furnishings and appliances are generally purchased by families when they change houses.

In regard to residential construction, the August 1995 *Federal Reserve Bulletin* states:

> Early this year, residential construction activity weakened significantly, and single-family housing starts in the first quarter were 14 percent (not an annual rate) below their fourth-quarter average. Sales of new and existing homes also fell in the first quarter, although not quite so steeply. Single-family starts edged up in April but more than reversed this gain in May; however, building permits, a more reliable indicator, moved up in May. New-home sales jumped 20 percent in May, to the highest level since late 1993. Although reported new-home sales are volatile and the initial readings are often revised substantially, other indicators of housing activity also point in a favorable direction: Applications for mortgages to purchase homes rose sharply in May and remained elevated in June, and attitudes of households and builders toward the housing market became more positive in the second quarter.

According to the August 1995 issue of *Real Estate Outlook*, existing-home sales hit its highest level thus far in 1995: rising 6.5 percent to 3.78 million units in June. Housing starts in June did not experience a significant change from April or May; however, the number of housing permits issued grew by the largest amount so far in 1995.

According to the *Federal Reserve Bulletin*, the members of the board of governors and the Reserve Bank presidents anticipate the economy to experience moderate growth in the second half of 1995 and in 1996. They also expect the unemployment rate

in the second half of 1995 to move up somewhat from its relatively low level. Also forecasted are lower interest rates, which are expected to stimulate spending on housing, motor vehicles, consumer durables, and business investment. The CPI is expected to be at 3.25 percent over the four quarters of 1995, while inflation in 1996 is projected to decline to about 3 percent.

The *Real Estate Outlook* forecasts economic growth through the end of 1996 at a rate of 2.2 percent, and action by the Federal Reserve is not expected until the second quarter of 1996. Mortgage rates for 30-year fixed mortgages are predicted to fall below 7.3 percent by the end of the year, giving a lift to homebuilding, and both single-family and multifamily housing starts are expected to rise in both 1995 and 1996.

The woodworking tools manufacturing industry is somewhat reflective of the housing, construction, furniture, and home furnishings industries. Also a factor in the success of companies in this industry is the ability to keep up with the pace of new technology and to adapt to the effects of the recent environmental laws regarding wood.

In an article in the January 1995 issue of *Wood Digest* entitled "Challenges, Opportunities on the Horizon," by Lisa Harbatkin, industry leaders and those associated with woodworking associations are quoted as giving their opinions and views on the industry. The article states:

> Overall, the economic outlook is "very positive," says Kenneth R. Hutton, executive vice president, Wood Machinery Manufactures of America (WMMA), Philadelphia. "Despite mortgage increases, people are still buying new homes, and are using their money to make improvements to existing homes. . . ."
>
> Last year's International Woodworking Machinery & Furniture Supply Fair (IWF) drew 44,000 attendees and exhibitors, up 9,000 over 1992. There were more than 1,000 exhibitor booths. . . .
>
> "A lot of people came with lists of things to buy," says IWF executive director John Zinn. "It's an indication that business is getting much better."
>
> John Derda, president of Wood Machinery Importers Association (WMIA), made the following comments: "Business is good but margins are down because of production efficiencies and because of fierce competition. . . ."
>
> Show activity reflects both the strong economy and the need to keep up with changes in machines, materials, and markets. "People are getting the message that they have to keep up with the technology, and they have to go to shows to do that," Zinn says. . . . Overdue renovations in hotel and office sectors will fuel architectural woodwork over the next few years, says Yves Des Marais, president of the Architectural Woodwork Institute (AWI), Centerville, Va., and president of Hollywood Woodwork in Hollywood, Fla. "The store fixture market has been booming," he says. . . .
>
> "The mood around the country is very positive," Des Marais says of AWI members. "People have a backlog again. They're making money again." The 80s aren't coming back, but he remarks, "People are happy. They're seeing a good, slow growth in the next several years. . . ."

The October 1, 1994, issue of *Wood & Wood Products* featured an article entitled "Economic Outlook is Good Despite Obstacles," by Larry Adams. This article has the following observations:

> Strong economic times lie ahead for wood manufacturers and their suppliers, but obstacles do remain. . . .
>
> Speaking at a press briefing during the International Woodworking Machinery and Furniture Supply Fair (August 25–28), leaders of associations ranging from furniture and cabinetry to machinery manufacturers and material suppliers, said that 1994 through 1996 should see increased sales, if not increased profits. . . .
>
> Doug Bracket, executive director of the American Furniture Manufacturers Association, said the recovery will continue but will be slowed by a declining housing market in 1995. He predicted 10 percent growth in 1994 and 5 percent in 1995, when household furniture shipments are projected to hit $20.8 billion. . . .
>
> Machinery manufacturers, too, are predicting good times. As secondary wood products manufacturers continue to sell product, they are continuing to buy equipment. "My members have an upbeat mood for the last quarter of 1994," said Frank Brown, director of the Woodworking Machinery Distributors Association. "They are optimistic for both the short and the long term." . . . Brown said WMDA members have seen sales jump 20.9 percent in 1993 and 12.7 percent for the first half of 1994. . . .
>
> Other hurdles that both secondary manufacturers and their vendors will have to clear in order to sustain this growth include: "ergonomic regulations, the Clean Air Act, the Americans With Disabilities Act, cross training by OSHA and EPA inspectors and the wood industry's terrible image problem," according to Al Bibeau, executive director of the Wood Products Manufacturers Association. . . .

In an article entitled "Furniture Outlook Bright as US Economy Is Slowed by Tax Increases," by David A. Pease, in the July 1, 1994, issue of *Wood Technology*, the wood furniture industry is discussed. According to the article, the outlook is good.

> Although general economic growth will be slowed by federal tax increases, near-term markets for office and residential furniture should be strong. So said a pair of economists who addressed the third annual Wood Industry Conference, April 27-May 1 in Tucson, Arizona. . . .
>
> Demand cycles for residential furniture differ from other housing-related items, Epperson said [Jerry Epperson of Mann, Armistead & Epperson, Richmond, Va.] The industry currently is benefiting from strong housing construction and refinancing, thanks to low interest rates in 1991 and 1992. . . . Fundamental demand for home furnishings should remain good at least through 1996, even if mortgage rates continue to increase, he said.

In an editorial by Rich Christianson in the January 1, 1995, issue of *Wood and Wood Products*, the following statements were made:

> As far as I'm concerned, 1994 could have lasted longer. In relative terms, it was a very good year for the wood products industry—easily the best of this decade. . . so far. . . .

Three major wood products manufacturing associations—the American Furniture Manufacturers Assn., the Business & Institutional Furniture Manufacturers Assn., and the Kitchen Cabinet Manufacturers Assn—all have revised their start-of-the-year projections to reflect greater sales activity than originally predicted.

Overall, it appears that the various markets that affect Woodco's sales are doing well and are anticipating continued growth over the next year and a half. Management at Woodco is also optimistic about the future, although they are unable to forecast their potential growth. Until there is another recession, such as the one in the early 1990s, which seriously affected Woodco's business, growth is not anticipated to slow down substantially.

Book Value of the Stock and Financial Condition of the Business

An analysis of Woodco was performed by the appraiser as of July 5, 1995, the effective date of this appraisal. The most recent financial statements of the company as of June 30, 1995, were used. According to the financial statements, Woodco reflected a book value of $1,232,001 at June 30, 1995.

A review of the balance sheet components revealed adjustments that were required to reflect the balance sheet at fair market value on a going concern basis. In addition, there are several nonoperating assets that must be classified out of the operating balance sheet for a meaningful analysis to take place. Nonoperating assets are items that are not necessary for the main operation of the company. These assets could be sold off without having an effect on the business operations.

Table 1 shows the adjustments necessary to reflect the balance sheet at its fair market value as of July 5, 1995.

TABLE 1
Adjusted Book Value

	June 30, 1995	*Adjustments*	*Fair Market Value July 5, 1995*
Current assets			
Cash	$ 126,018	$ —	$ 126,018
Investments[1]	101,844	600	102,444
Accounts receivable[2]	229,209	13,701	242,910
Inventory	493,701	—	493,701
Deferred interest	27,075	—	27,075
Loans to employees	450	—	450
Total current assets	$ 978,297	$ 14,301	$ 992,598
Net fixed assets[3]	$ 35,258	$ 337,882	$ 373,140

TABLE 1 *(Continued)*

	June 30, 1995	*Adjustments*	*Fair Market Value July 5, 1995*
Other assets			
Total equipment under capital leases (Net)[4]	$ 131,757	$(131,757)	$ —
Officer's life insurance[5]	445,455	—	445,455
Total other assets	$ 577,212	$(131,757)	$ 445,455
Total Assets	$ 1,590,767	$ 220,426	$ 1,811,193
Current liabilities			
Long-term debt (current)	$ 54,169	$ —	$ 54,169
Accounts payable[6]	155,345	11,619	166,964
Payroll taxes payable	11,429	—	11,429
Sales tax payable	2,411	—	2,411
Taxes payable	5,689	—	5,689
Profit sharing contribution	10,000	—	10,000
Total current liabilities	$ 239,043	$ 11,619	$ 250,662
Long-term liabilities			
Long-term debt	119,723	—	119,723
Total liabilities	$ 358,766	$ 11,619	$ 370,385
Stockholders' equity			
Common stock	$ 52,800	$ —	$ 52,800
Treasury stock	(6,600)	—	(6,600)
Retained earnings[7]	1,185,801	208,807	1,394,608
Total stockholders' equity	$ 1,232,001	$ 208,807	$ 1,440,808
Total Liabilities and Stockholders' Equity	$ 1,590,767	$ 220,426	$ 1,811,193

1. Investments include the following:

Keystone Liquid Trust	$ 53,736
Smith Barney Money Funds	7,158
1,200 Shares GTE Corp. Common Stock	41,550
Total	$ 102,444

The $600 adjustment reflected in table 1 is the difference in price of the GTE stock between June 30 and July 5.

A review of the historical balance sheets indicates that Woodco has maintained these investments at a fairly consistent level over the last five years, indicating that these investments are not needed in the day-to-day operations of the business. Therefore, these assets are being considered as nonoperating assets.

2. Accounts receivable has been adjusted to reflect additional sales and cash receipts for the first five days of July.

3. Net fixed assets consist of machinery and equipment, office equipment and furnishings, and vehicles. Because of the quantity of equipment that the company owns and the importance of it to the business, Mr. Brown had an equipment appraisal performed by Equipco Appraisal Associates, Inc.

(Continued)

TABLE 1 ***(Continued)***

Equipco Appraisal determined that the equipment fell into three categories: (1) equipment required, (2) equipment used minimally, and (3) equipment no longer used. For each asset, they-computed two fair market values; in place, in continued use and in exchange. These value concepts are defined in Equipco's report, as follows:

> *Fair market value: "in place, in continued use."* The amount, expressed in terms of money that may reasonably be expected from the sale of property between a willing buyer and a willing seller with equity to both, neither under compulsion to act and both fully aware of all relevant facts. This value accounts for items such as freight, installation, foundations, rebuilding costs and any other engineering or start-up costs associated with putting the machinery and equipment into use, and it presumes that the business earnings support the value.
>
> The "in place, in continued use" concept considers that all of the machinery and equipment is necessary in toto for the facility to operate.
>
> *Fair market value: "in exchange."* The amount, expressed in terms of money that may reasonably be expected from the sale of property (individual items) between a willing buyer and a willing seller with equity to both, neither under compulsion to act and both fully aware of all relevant facts.
>
> The "in exchange" concept considers the value of the items individually exclusive of freight, installation, foundations, rebuilding costs and any other engineering or start-up costs.
>
> The "in exchange" concept considers that the property is competently marketed and there is no compulsion to sell. The concept is not to be considered as a liquidation or auction concept which implies a compulsion to sell.

Based on these definitions, the following values were determined to be appropriate for the appraisal of Woodco:

Equipment required	$ 303,980
Equipment used minimally	9,550
Equipment no longer used	2,400
Total equipment value	$ 315,930

Of these assets, the equipment no longer used is considered to be non-operating.

In addition to the machinery, Woodco owns office equipment, furnishings, and vehicles with a book value of $57,210. A review of the company's fixed asset register reveals that most of these assets have been purchased recently. A review of the depreciation methods and useful lives indicates that the company appears to be writing these assets off over a reasonable period of time. Therefore, this appraiser has concluded that book value approximates fair market value in this instance.

4. The value of the equipment under capital leases is included in the machinery appraisal. To avoid including the value of these assets twice, their net book value was deducted.
5. Officers' life insurance is considered to be a nonoperating asset, because it is not needed in the daily operations of the business.
6. Accounts payable has been adjusted to reflect additional purchases and payments made during the first five days of July.
7. This increase reflects the net changes made to book value to reflect the fair market value of Woodco's assets and liabilities.

As a result of this analysis, adjusted book value (without intangible assets) is $1,440,808 or $1,441,000, rounded. Included in this figure is $550,299 or $550,000, rounded, of nonoperating assets, resulting in $891,000 of operating assets.

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 the historical results to determine what the business prospects are in the future. The appraiser uses various analytical tools to assist in this task. One such tool is the use of common-size financial statements. These statements can also be used to compare the subject company (Woodco) to other companies in the same or similar industry.

Woodco is classified in Standard Industrial Classification (SIC) Code 3553, which is the manufacturing of special industry machinery, in particular, woodworking machinery. Although this appraiser could not locate specific companies to compare to Woodco, composite data of companies in the same industry was found and can be used.

RMA Annual Statement Studies, published by Robert Morris Associates, included 93 companies whose sales ranged from $1 million to $3 million dollars per year. *Industry Norms and Key Business Ratios*, published by Dun & Bradstreet Information Services, included data compiled from 48 businesses classified in SIC Code 3553.

Tables 2 and 3 reflect the common-size balance sheet and income statement.

TABLE 2
Common Size Balance Sheet as of December 31,—*

	1990 (%)	*1991 (%)*	*1992 (%)*	*1993 (%)*	*1994 (%)*	*RMA (%)*	*D&B (%)*
Current assets							
Cash	12.72	10.34	3.91	6.37	8.50	8.8	15.3
Investments	7.69	7.47	7.69	7.39	6.29	—	—
Accounts receivable	14.25	15.29	15.02	12.28	13.34	26.9	24.3
Inventory	34.71	30.87	38.73	32.69	28.48	29.2	30.9
Prepaid expenses	0.55	0.00	0.00	0.00	0.00	—	—
Deferred interest	0.32	0.12	0.03	1.64	2.26	—	—
Loans to employees	0.07	0.04	0.08	0.02	0.00	—	—
Total current assets	70.30	64.13	65.47	60.39	58.87	68.3	74.2
Fixed assets							
Leasehold improvements	2.02	2.32	2.20	2.03	1.75	—	—
Office equipment	0.66	1.77	1.68	1.56	1.68	—	—
Machinery and equipment	32.15	36.81	34.98	32.33	28.30	—	—
Furniture and fixtures	4.51	5.16	4.91	4.53	4.40	—	—
Vehicles	4.13	4.73	4.50	4.16	3.59	—	—
Subtotal	43.47	50.79	48.26	44.62	39.72	—	—
Accumulated depreciation	–41.30	–48.12	–46.48	–43.66	–38.10	—	—
Net fixed assets	2.17	2.67	1.79	0.96	1.62	24.6	17.8
Other assets							
Total equipment under capital leases	1.90	1.39	0.75	7.24	9.94	—	—

(Continued)

TABLE 2 *(Continued)*

	1990 (%)	*1991 (%)*	*1992 (%)*	*1993 (%)*	*1994 (%)*	*RMA (%)*	*D&B (%)*
Officer's life insurance	25.63	31.81	32.00	31.42	29.56	—	—
Total other assets	27.53	33.20	32.75	38.66	39.50	5.6	8.0
Total Assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Current liabilities							
Long-term debt (current)	2.62	2.68	1.02	2.73	3.59	14.2	4.4
Accounts payable	6.19	7.26	7.87	6.70	9.76	15.1	14.6
Payroll taxes payable	0.30	0.21	0.31	0.28	0.51	—	—
Sales tax payable	0.06	0.05	0.19	0.15	0.13	—	—
Taxes payable	0.15	–0.88	0.21	0.14	0.50	0.4	—
Profit sharing contribution	2.14	1.75	1.66	1.54	1.33	—	—
Total current liabilities	11.45	11.07	11.26	11.17	15.81	42.7	34.2
Long-term liabilities							
Long-term debt	3.56	1.07	0.00	6.94	9.69	13.7	10.3
Total liabilities	15.02	12.14	11.26	18.12	25.50	60.5	44.5
Stockholders' equity							
Common stock	4.04	4.62	4.39	4.06	3.50	—	—
Treasury stock	–0.50	–0.58	–0.55	–0.51	–0.44	—	—
Retained earnings	81.45	83.82	84.89	78.33	71.43	—	—
Total stockholders' equity	84.98	87.86	88.74	81.89	74.50	39.50	55.50
Total Liabilities and Stockholders' Equity	100.00	100.00	100.00	100.00	100.00	100.00	100.00

*Due to rounding, figures may not add up to the totals given.

TABLE 3
Common Size Income Statement for the Years Ended December 31,—*

	1990 (%)	*1991 (%)*	*1992 (%)*	*1993 (%)*	*1994 (%)*	*RMA (%)*	*D&B (%)*
Revenues							
Service	4.63	5.26	5.10	5.26	5.29	—	—
Stock	33.39	27.92	29.78	28.92	29.39	—	—
Special	19.73	21.85	18.66	19.03	17.69	—	—
Outside	61.18	65.44	65.38	63.04	61.95	—	—
Less discounts and allowances	–18.93	–20.46	–18.92	–16.25	–14.33	—	—
Total revenues	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Cost of sales							
Inventory-beginning	15.94	19.92	14.81	19.41	14.86	—	—

TABLE 3 *(Continued)*

	1990 (%)	*1991 (%)*	*1992 (%)*	*1993 (%)*	*1994 (%)*	*RMA (%)*	*D&B (%)*
Purchases	37.13	32.70	42.07	36.67	39.12	—	—
Freight in	0.50	0.14	0.24	0.50	0.00	—	—
Outside services	0.13	0.00	0.00	0.00	0.01	—	—
Shop wages	12.66	14.31	13.05	13.35	12.11	—	—
Production supplies	2.33	2.43	0.96	1.29	1.08	—	—
Tooling costs	0.18	0.19	0.39	0.25	0.34	—	—
Discounts earned	–0.26	–0.16	–0.19	–0.16	–0.12	—	—
Subtotal	68.61	69.54	71.32	71.30	67.39	—	—
Inventory-ending	16.26	15.46	19.55	17.71	15.01	—	—
Total cost of sales	52.36	54.07	51.77	53.59	52.38	—	—
Gross Profit	47.64	45.93	48.23	46.41	47.62	32.8	36.8
Operating expenses							
Officers' compensation	7.45	9.13	8.91	8.82	7.27	—	—
Salaries and wages	9.63	10.89	11.12	11.53	10.56	—	—
Bad debts	0.19	0.51	0.85	0.14	0.34	—	—
Rents	3.39	4.20	4.00	4.04	3.40	—	—
Taxes and licenses	3.43	3.08	3.30	3.31	3.09	—	—
Interest	0.42	0.21	0.12	0.29	0.30	—	—
Depreciation	0.98	0.81	0.67	1.62	1.91	—	—
Advertising	1.04	1.12	0.87	0.80	0.58	—	—
Pension plans	1.00	0.88	0.84	0.83	0.70	—	—
Automobile	0.26	0.37	0.41	0.23	0.27	—	—
Dues and subscriptions	0.03	0.03	0.01	0.03	0.03	—	—
Entertainment	0.36	0.37	0.39	0.35	0.38	—	—
Maintenance	0.76	2.18	1.31	1.01	1.15	—	—
Insurance-general	0.74	1.60	1.32	1.39	1.22	—	—
Insurance-group	2.68	2.74	2.21	2.09	1.69	—	—
Office expense	0.73	0.62	0.62	0.58	0.42	—	—
Postage	0.26	0.45	0.75	0.40	0.42	—	—
Professional fees	0.34	0.42	0.34	0.33	0.28	—	—
Telephone	1.18	1.27	1.40	1.30	1.05	—	—
Utilities	0.87	0.99	0.87	0.88	0.83	—	—
Factory expense	0.45	0.33	0.18	0.47	0.20	—	—
Shipping supplies	0.35	0.39	0.39	0.50	0.48	—	—
Commissions	0.23	0.28	0.46	0.33	0.34	—	—
Sales expense	0.06	0.05	0.05	0.06	0.05	—	—
Catalog costs	0.47	0.64	1.16	0.12	0.44	—	—
Medical reimbursements	0.07	0.00	0.00	0.00	0.00	—	—
Collection expense	0.20	0.02	0.00	0.06	0.01	—	—
Show expense	0.13	0.17	0.25	0.23	0.27	—	—
Miscellaneous fees	0.10	0.15	0.31	0.34	0.29	—	—

(Continued)

TABLE 3 *(Continued)*

	1990 (%)	*1991 (%)*	*1992 (%)*	*1993 (%)*	*1994 (%)*	*RMA (%)*	*D&B (%)*
Total Operating Expenses	37.80%	43.87%	43.11%	42.07%	37.98%	29.5%	—
Operating income (loss)	9.85	2.06	5.13	4.34	9.64	3.3	—
Other income							
Interest income	0.46	0.35	0.36	0.38	0.08	—	—
Gain on sale of assets	0.13	0.00	0.00	0.00	0.00	—	—
Officers' life insurance	0.04	–0.12	–0.40	–0.29	0.22	—	—
Total other income	0.62	0.23	–0.04	0.09	0.30	.8	—
Net Income	10.47	2.28	5.08	4.43	9.94	2.5	3.7

*Due to rounding, figures may not add up to the totals given.

A review of table 2 indicates that Woodco has maintained a relatively consistent balance sheet over the years. Although its cash position is weaker than the industry's, it has liquid investments, which makes it comparable to or stronger than the industry. Overall, Woodco's current assets appear to be lower than the industry, but so are its current liabilities, indicating that liquidity has not been a problem. However, current assets as a percentage of total assets is decreasing, while current liabilities are increasing, indicating that there could be a problem in the future.

Net fixed assets are substantially lower on Woodco's books than in the industry composite data. This indicates that the age of Woodco's assets is old. This could result in future problems, as a lot of money may need to be spent to keep this equipment in working order. This could put a drain on current assets, as they could be needed for these repairs or for purchasing new equipment.

The composite of the liability and equity side of the balance sheet indicates that Woodco has very few payables, either short or long term. As a result, stockholders' equity is much stronger than the industry, indicating that Woodco has probably been more profitable than its counterparts in the industry.

A review of table 3 indicates that Woodco has been able to maintain a fairly consistent gross profit during the last five years, which is considerably higher than the industry's. This could be because of the large level of resale that it does, which generally has a higher gross profit than manufacturing. On the other hand, Woodco's operating expenses, although fairly consistent, are considerably higher than the industry's. Overall, Woodco's net income is stronger than the industry. It has averaged 6.44 percent over the last five years, versus approximately 3 percent for the industry.

Woodco's comparative statement of income is presented in Schedule 2, located at the back of this report. The historical results for the company indicate profits over the

last five years, with the best years being 1990 and 1994. The economy was in a recession in the early 1990s, which is clearly indicated in Woodco's financial figures. 1990's sales were almost $2.8 million, and it was not until 1994 that sales reached this level again. As a result, 1990 is not being used in the remainder of this analysis, because it distorts the operating results over a five-year period.

As with most closely held companies, Woodco's financial results are capable of wide swings, depending on company management's policies. To remove those items that do not contribute to the economic net income of the company, this appraiser has "normalized" the company's net income. The process of normalization is performed to bring the company's stated results to an economic basis that a willing buyer would be purchasing, rather than the purely historical results which include items that would not be repeated. The results of this analysis are shown in table 4.

TABLE 4
Normalization of Income

	1991	*1992*	*1993*	*1994*
Net income	$ 52,034	$ 121,040	$ 106,158	$ 284,165
Officers' compensation[1]	208,000	212,000	211,600	208,000
Officers' benefits[2]	14,834	16,440	11,442	8,954
Depreciation[3]	—	—	15,000	15,000
Repairs and maintenance[4]	20,302	—	—	—
Catalog expenses[5]	—	(12,453)	12,453	—
Officers' compensation[6]	(212,337)	(221,184)	(230,400)	(240,000)
Interest income[7]	(7,930)	(8,601)	(9,143)	(2,286)
Officers' life insurance[8]	2,782	9,572	6,979	(6,151)
Income taxes[9]	(16,191)	(28,632)	(31,980)	(80,225)
Adjusted Net Income	$ 61,494	$ 88,182	$ 92,109	$ 187,457

1. Officers' compensation has been added back in its entirety as reasonable compensation for the officers and will be deducted below.
2. Medical insurance and profit sharing contributions for the officers have been added back as an allowance for these expenses and will be included in the reasonable compensation figures.
3. In 1993 and 1994, Woodco purchased new equipment and used an aggressive tax method to depreciate it. This adjustment allows for a more appropriate write-off based on the anticipated useful life of the equipment.
4. Repairs and maintenance were exceptionally higher in 1991 than in the other years due to major repairs that were done to the roof and parking lot of the building. The average of the repairs in 1992 through 1994 was $29,439. The adjustment brings the 1991 figure in line with the average of the other years.
5. Catalog expenses for 1992 and 1993 were paid in 1992. This adjustment separates the expenses into two years to more appropriately reflect the proper expense for each year.
6. During the years 1991 to 1994, both Richard Brown and James Banner worked for Woodco on a full-time basis. Richard Brown worked with customers to make sure their needs were met, by

(Continued)

TABLE 4 *(Continued)*

designing the necessary tools. In addition, he was responsible for attending trade shows and traveling to customers. James Banner worked in the office, taking orders from customers and overseeing the finances. In addition, he designed tools for customers. As a result, both men were entitled to receive a salary.

According to RMA Annual Statement Studies, the median salaries earned by officers of companies in the same SIC code as Woodco was 5.9 percent of sales. Companies in the highest quartile were paid 10.2 percent of sales. This puts officers' compensation in the range of $168,727 to $291,697. The problem with this data is that it is impossible to tell how many officers' salaries are included in this percentage or whether benefits are included in these figures.

Another source located was Financial Statement Studies of the Small Business published by Financial Research Associates. This study includes 60 companies in the category of Manufacturers—Machine Tools and Equipment. These companies are smaller than Woodco, with an average asset size of $544,000 and average sales of $1,315,000. Based on the 1994 data, officers' salaries as a percentage of sales averaged 8 percent, or $228,782. As with RMA, this survey does not indicate the number of officers or what is included in this percentage.

A third source of data concerning reasonable compensation is the 1995 Executive Compensation Survey, published by the National Institute of Business Management. Included in this survey is a breakdown of salaries paid to the executives of manufacturing companies in the non-electrical machinery business. Only 8 companies were included in this category and they were primarily located in the Pacific region.Median compensation in this industry was as follows:

Chief executive	139,000
Marketing	110,000
Finance	80,100
General sales	105,150

As previously mentioned, Mr. Brown and Mr. Banner performed a number of different functions, including all of the above. The average of these four salaries is $108,538, but most of these companies were located in the Pacific region of the United States. According to the survey, compensation is higher in the Northeast than the Pacific, so it is reasonable to expect that Messrs. Brown and Banner would be paid more than the average. Therefore, reasonable compensation for the two officers is deemed to be $240,000 for 1994.

This amount equals approximately 8 percent of revenues, which falls in the range suggested by the data from Robert Morris Associates and Financial Research Associates.

Prior year's salaries are deflated by 4 percent to reflect cost-of-living changes.

7. Interest income has been added back, because it is considered to be nonoperating income.
8. Officers' life insurance premiums have been added back, because they are discretionary expenses that the willing buyer does not need to incur to operate the business.
9. The adjustment for income taxes reflects state taxes on the adjustments, as well as Federal taxes on the normalized income.

Another component of a financial statement analysis is a business ratio analysis, which is used to help the appraiser determine trends that have taken place in the business' financial performance. It is also another way to compare the subject company with other companies in the industry.

Table 5 depicts Woodco's ratios as well as selected ratios located in *RMA Annual Statement Studies*, *Industry Norms & Key Business Ratios*, and *Financial Statement Studies of the Small Business.*

A review of the financial ratios of Woodco indicates that overall, Woodco appears to be stronger than the industry.

TABLE 5
Financial Ratios

	1991	1992	1993	1994	Industry RMA	Industry D&B	Industry FSS
Liquidity ratios							
Current ratio	5.79	5.81	5.40	3.72	1.70	2.30	2.60
Quick ratio	2.99	2.36	2.33	1.78	0.80	1.20	1.60
Activity ratios							
Sales to receivables	13.05	13.18	15.03	14.22	8.70	10.52	7.90
Cost of sales to inventory	3.50	2.65	3.03	3.49	5.50	—	—
Days of inventory	104.39	137.88	120.65	104.58	66.36	—	—
Cost of sales to payables	14.87	13.02	14.76	10.19	—	—	—
Days of payables	24.55	28.03	24.72	35.82	—	—	—
Sales to working capital	3.76	3.65	3.75	4.41	8.90	8.30	—
Operating ratios							
Pretax profit to net worth	5.19	11.35	9.97	23.84	15.20	17.60	18.40
Pretax profit to total assets	4.56	10.07	8.17	17.76	5.80	10.50	9.80
Sales to net fixed assets	74.83	110.87	193.12	116.80	12.30	—	—
Sales to gross fixed assets	3.93	4.10	4.14	4.78	2.40	—	—
Sales to total assets	2.00	1.98	1.85	1.90	—	2.70	2.50
Coverage ratio							
EBIT to interest	12.03	44.92	16.37	31.76	3.30	—	—
Leverage ratios							
Net fixed assets to net worth	0.03	0.02	0.01	0.02	0.50	30.10	—
Total debt to net worth	0.14	0.13	0.22	0.34	1.60	62.10	111.80

The company's current and quick ratios indicate the company's ability to pay its current payables. Overall, Woodco appears to be stronger than the industry in this area, although the ratios have declined over the years. This appears to be as a result of decreasing inventory amounts. This is a positive sign because Woodco was carrying very old inventory, and reducing this amount will reduce the costs of carrying it.

Woodco's activity ratios appear to be fairly consistent from year to year. On average, it is collecting its receivables in less than thirty days, while the industry averages thirty-five to forty-five days. On the other hand, its inventory turnover, although improving, is much slower than the industry's. In addition, it appears that it is taking Woodco longer to make payments on its accounts payable than in the past. This could be as a result of the large increase in revenues in 1994, over 1993, and the additional debt taken on over the last two years for the purchase of new equipment. Finally, sales to working capital has been stronger than the industry, although it is also declining as working capital declines.

Overall, Woodco's operating ratios are also stronger than the industry's, as Woodco has been profitable over the last four years at an increasing amount. Overall, Woodco appears to be operating efficiently and making good use of its assets.

Woodco has much less debt than its counterparts in the industry. As a result, its coverage ratios are higher, and leverage ratios are considerably lower. This has been good for the business, as it has allowed them to weather the ups and downs in the economy without the pressures of debt financing.

Overall, looking at Woodco's own trends and comparing them to the industry's, it appears that Woodco is a strong company, overall stronger than its industry counterparts. The only potential weakness appears to be in its decreasing working capital, but growth requires working capital, so this is not unusual.

The Earning Capacity of the Company

Woodco's comparative statement of income is presented in Schedule 2, located at the back of this report. The historical reports were previously normalized in table 4. As indicated in that analysis, Woodco reflected economic net income for the years ended December 31, 1991 through 1994 of $61,494 to $187,457.

As previously mentioned, the gift of Woodco's stock was made on July 5, 1995. To determine the value of this stock, it is necessary to determine what the earning capacity of the company will be in the future. To start this process, this appraiser calculated what earnings were for the twelve months before the valuation; the period July 1, 1994, to June 30, 1995, using Woodco's June 30, 1994, December 31, 1994, and June 30, 1995, financial statements.

Based on these financial statements, Woodco's income for the year ended June 30, 1995, appears as follows:

Revenues	$3,184,689
Cost of sales	1,651,083
Gross profit	$1,533,606
Operating expenses	1,084,325
Net Income	$ 449,281

This income must then be normalized to reflect those items that will change in the future. If a new owner purchases the business, the salaries of the old owners will no longer be needed, but additional help will be necessary. In addition, the new owner may take over the role of general manager. According to current management, approximately two additional people will be needed: (*1*) a draftsperson, who would earn approximately $23,000 per year, and (*2*) an order taker earning approximately $25,000 per year. In addition, if the general manager is replaced by new ownership, it is assumed that at least one more order taker will be needed. Therefore, salaries for the period July 1, 1994, through June 30, 1995, would be adjusted as follows:

Current officer(s)	$ 160,000
Current general manager	86,055
New owner/manager	(120,000)
Draftsperson and order takers	(73,000)
Adjustment to Salaries	$ 53,055

As a result, a normalized level of income for the year ended, June 30, 1995 is as follows:

Pretax income	$ 449,281
Salary adjustment	53,055
Taxes	(166,421)
Normalized Net Income	$ 335,915

This income must then be projected into the future, because valuation is a prophecy of the future.

To begin this forecast, it is necessary to look at the past to see what the company's historic growth has been. Sales for the six months ended June 30, 1994, were $1,413,626; for the six months ended June 30, 1995, sales were $1,738,536. This is a 22.98 percent growth. The question is, can growth continue at this rate? A look at historical sales figures indicates the following:

Year	*Sales*	*Growth*
1985	$ 1,829,772	—
1986	2,055,574	+ 12.3%
1987	2,278,461	+ 10.8%
1988	2,576,939	+ 13.1%
1989	2,816,679	+ 9.3%
1990	2,792,499	– 0.8%
1991	2,279,168	– 18.4%
1992	2,380,389	+ 4.9%
1993	2,398,711	+ 0.8%
1994	2,859,779	+ 19.2%
1995*	3,477,072	+ 21.6%

*This estimate is based on two times June 1995 sales.

Computing average and compound growth rates for this period results in the following:

Average growth rate (1985–1994)	5.6%
Compound growth rate (1985–1994)	5.1%
Average growth rate (1985–1995)	7.2%
Compound growth rate (1985–1995)	6.6%
Average growth rate (1992–1994)	8.1%
Compound growth rate (1992–1994)	9.6%
Average growth rate (1992–1995)	11.5%
Compound growth rate (1992–1995)	13.5%

Other than two years in the last ten years, the company has experienced positive growth, averaging approximately 11 percent in the earlier years. Woodco is strongly influenced by the housing market, a fact that becomes obvious when the figures for 1990 through 1993 are reviewed. Although the company will experience good years such as 1994 and 1995, they will also experience negative and flat growth. Based on this, it is believed that sales growth in the near future will average 11.5 percent.

Computing earnings for the period July 1, 1995, to June 30, 1996 results in the following:

Sales (7/1/95–12/31/95)	$1,738,536[1]
(1/1/96–6/30/96)	1,838,502[2]
Total sales	$ 3,577,038
Gross profit percentage	× 48%[3]
Gross profit	$ 1,716,978
Operating expenses	(1,036,045)[4]
Pretax income	$ 680,933
Income taxes	(239,378)[5]
Forecasted net income	$ 441,555
Rounded	$ 442,000

1. This reflects earnings for the second half of 1995, assuming that they will be the same as the first half of the year.
2. This increases 1995 income by anticipated annual growth rate of 11.5 percent, or 5.75 percent for one-half of the year.
3. Gross profit percentage is based on the average gross profit percentage over the past five years.
4. Operating expenses have remained consistent from year to year and are expected to remain so.
5. This reflects federal and state income taxes on the projected pretax income.

After considering the past performance of Woodco, along with what is anticipated to occur in the future, it appears that the earning capacity of Woodco is $442,000.

The Dividend Paying Capacity of the Company

As with any privately owned company, there is no requirement to pay dividends to the stockholders. A publicly traded company generally disburses dividends as a means to entice investors to invest in the company. With the exception of S Corporation distributions, no dividends have been paid previously. The question raised in Revenue Ruling 59-60 is, does the company have the capacity to pay dividends?

The capacity to pay dividends is a very subjective consideration based on the goals of the company as well as its cash flow. Woodco has made distributions over the last several years as follows:

Year	*Earnings*	*Distributions*
1989	$ 306,490	$ 208,000
1990	292,360	222,000
1991	52,034	160,000
1992	121,040	58,000
1993	106,158	108,000
1994	284,165	226,000
1995*	636,602	418,000

*This estimate is two times earnings and distributions at June 30, 1995.

Whereas Woodco has continued to make distributions over both the good years and bad ones, it is reasonable to assume that these distributions will continue into the future. Other than 1992, the distribution amounts have been a substantial percentage of the net income. Using a weighted average of the distributions, except 1992, results in the following forecast of future distributions:

Year	*Distribution*		*Weight*		*Weighted Amount*
1989	$ 208,000	×	1	=	$ 208,000
1990	222,000	×	2	=	444,000
1991	160,000	×	3	=	480,000
1993	108,000	×	4	=	432,000
1994	226,000	×	5	=	1,130,000
1995	418,000	×	6	=	2,508,000
			21		$ 5,202,000

$$\text{Estimated future dividends} = \frac{\$\,5{,}202{,}000}{21} = \$\,247{,}714$$

Therefore, estimated distributions are expected to be approximately $248,000.

Whether the Enterprise Has Goodwill or Other Intangible Value

In addition to determining the value of the physical assets of Woodco, it is necessary to determine whether any goodwill or other intangible assets exist and if so, what value to place on that goodwill or intangible assets.

Revenue Ruling 59-60, the Internal Revenue Service (IRS) training manual, and Revenue Ruling 68-609, which the IRS has been using 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) immedi-

ately 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. The average annual earnings of Woodco should be reduced by a reasonable return on the physical assets of the business, 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 business.

These sources indicate that the formula approach should be used only if no other valuation approach can be determined. Caution must be exercised when this approach is used. 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.

It has previously been determined that the projected earnings of Woodco are $442,000. The excess-earnings computation must be prospectively applied, as a willing buyer would most likely look forward rather than back. History is important, but one must recognize that changes in the business environment, including competition and risk, will have an effect on earnings. Therefore, the projected earnings amount will be used as the starting point for the excess earnings computation.

In accordance with Revenue Ruling 68-609, a reasonable return on the net tangible assets should be subtracted from these earnings to derive excess earnings.

The adjusted book value of the company has previously been calculated as $1,441,000. Included in this figure are approximately $550,000 of nonoperating assets. The return on net tangible assets is generally calculated on the operating assets of the company, because the purpose of this calculation is to determine the intangible component of the earnings stream. The operating assets of the business are approximately $891,000.

Therefore, excess earnings are calculated as follows:

Projected normalized earnings		$ 442,000
Net operating assets	$ 891,000	
Rate of return[1]	× 16.86%	150,223
Excess earnings		$ 291,777

[1] Based on a build up approach, which is calculated as a ratio of the company's estimated borrowing capacity applied to the required rate of return on debt capital (a rate calculated based on the prime rate) and the required rate of return on equity capital (see the section of this report entitled Discount and Capitalization Rates).

The excess earnings of $291,777 should then be capitalized by a rate that takes into consideration the risk associated with goodwill and intangible assets for the appraisal subject. In this case, the rate is 22.8 percent (see the section of this report entitled Capitalization Rates).

Capitalizing $291,777 by 22.8 percent results in an intangible value of $1,279,724, or $1.3 million rounded.

Sales of the Stock and the Size of the Block of Stock to Be Valued

Revenue Ruling 59-60 suggests that appraisers consider whether there have been any previous sales of the stock and the size of the block being valued. In this instance, Woodco has had one previous sale of its stock in approximately 1966 or 1967, and an offer was made for 50 percent of the stock in December 1994.

The first transaction was a company buyback of approximately 5 percent of the shares of the company. Woodco had an employee, William Townsend, who had worked for the company almost from its inception. At some point, Mr. Woodco gave him some shares of stock, equivalent to approximately 5 percent. When Mr. Townsend retired, the company purchased his shares for $6,600. This transaction is not being considered as indicative of the current value of Woodco because it occurred almost 30 years ago, and the company has undergone major changes since then.

In December 1994, Mr. Brown made an offer for Mr. Banner's 50 percent stock interest in the amount of $1,000,000. This offer was never accepted and no transaction ever took place. Mr. Brown wanted to buy this stock to gift the shares to his son, Thomas Brown, and to leave the management of the company to him. Because this was a motivated offer, not an arm's-length transaction, it is not being considered as an indication of value of 50 percent of the common stock of Woodco.

The Market Price of Stocks of Corporations Actively Traded in the Public Market

The final factor of the eight attributes listed in Revenue Ruling 59-60 is a market comparison between the appraisal subject and other companies that are traded on public stock exchanges. This is the basis for the market approach to valuation.

To apply the market approach, this appraiser performed a computerized database search for guideline companies that could be considered "comparable" to Woodco. Comparability is generally difficult to achieve in business valuations, because privately owned businesses tend to adapt to the management of the company. Smaller companies often take on the personality of the individual owner, and not until the company is con-

siderably larger is it managed by a team of professional managers who are responsible to multiple owners, rather than just one or two.

As previously discussed, Woodco is classified in SIC code 3553, which is the manufacturing of woodworking machinery. To diversify our search, we also considered companies in SIC code 3423, which is the manufacturing of hand and edge tools, except machine tools and handsaws. Although companies in this second SIC code would not be an exact match with Woodco, they might be similar enough to make comparisons for valuation purposes.

We first searched two databases, Disclosure and Standard & Poor's Corporate Descriptions Plus News. Our search criteria were as follow:

1. Company in SIC code 3423 or 3553
2. Company located in the United States
3. Company's sales volume less than or equal to $30 million

This search revealed only one company.

An alternative to using pricing information for publicly traded stock is the use of transactions regarding entire entities from the public marketplace. Private transactions are also usable, but this type of information is generally difficult to obtain.

The first search was performed using Securities Data Company's database. We searched this database for transactions that occurred from January 1, 1993, through July 5, 1995, in the United States. In addition, the target company (the company, purchased or acquired) had to be classified in SIC code 3423 or 3553. The final criterion was that the value of the merger or acquisition could not exceed $30 million. Only one transaction was located that met this criterion.

Another search was performed in a proprietary database maintained by The Institute of Business Appraisers, Inc. a professional association of business appraisers. This search turned up only one transaction in SIC code 3423.

Therefore, we could not use the market price of actively traded stocks in this appraisal.

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

Because relevant data could not be located to make a meaningful application of the market approach, we have not used this approach in this valuation.

The Asset Based Approach

Adjusted Book Value Method. As previously discussed, the adjusted book value of the company without intangible assets has been determined to be $1,440,808, or $1.4 million, rounded. Subtracting the value of the nonoperating assets from this total results in the value of the operating assets of the company of $890,509, or $ 891,000, rounded.

The Income Approach

Three methods have been deemed applicable under the income approach: (*1*) the capitalization of income method, (*2*) the capitalization of distributions method, and (*3*) the excess earnings method.

The Capitalization of Income Method. The capitalization of income method computes value based on the following formula:

$$Value = Income \div Rate$$

Where

Income	=	Normalized projected income
Rate	=	Capitalization rate based on the rate of return required by an investor given the amount of risk associated with the income being capitalized

The normalized projected income for Woodco has previously been determined to be $442,000. Capitalizing this amount by a 17.8 percent capitalization rate yields an indicated value of $2,483,146, or $2.5 million, rounded for the operating entity (see the section of this report entitled Capitalization Rates for derivation of the rate). Adding the nonoperating assets of $550,000 results in an estimate of value of $3.05 million before discounts or premiums.

The Capitalization of Distributions Method. The capitalization of distributions method also computes the value based on the formula:

$$Value = Income \div Rate$$

The projected distribution level for Woodco has previously been determined to be $248,000. Capitalizing this by a 9.5 percent capitalization rate yields an indicated value of $2,610,526, or $2.6 million, rounded for the operating entity (see the section of this report entitled Capitalization Rates for derivation of the rate). Adding the nonoperating assets of $550,000 results in an estimate of value of $3.15 million before discounts or premiums.

The Excess Earnings Method. The excess earnings method has previously been discussed. The intangible assets, or goodwill, was valued at 1.3 million. Adding the adjusted book value of the company of $1.4 million results in an indicated value of Woodco of $2.7 million, based on this method, before discounts or premiums.

Reconciliation of Values

During the appraisal, several methods were used to determine the value of the operating entity of Woodco on a total enterprise basis before discounts and premiums. The values derived in this appraisal were as follows:

The asset based approach	
Adjusted book value method	$1.4 million
The income approach	
The capitalization of income method	$3.05 million
The capitalization of distribution method	$3.15 million
The excess earnings method	$2.7 million

The market approach is normally afforded the greatest amount of weight for a going concern, because value is determined by the market. In this instance, we were unable to use the market approach due to insufficient relevant guideline company or merger and acquisition data.

The asset based approach does not consider intangible value and therefore is considered to be only a minimum value, because Woodco has intangible value as a going concern. This intangible value is captured under the income approach.

The income approach methods are more appropriate for a going concern, because they are based on the projected performance of the company. The disadvantage of this approach is the results determined under these methods are subject to errors in the forecast or the development of capitalization rates used.

After considering the advantages and disadvantages of the various methods employed in this appraisal, it is our opinion that the enterprise value of Woodco & Co., Inc. before discounts or premiums, is $3 million.

Control Premiums

A control premium is the opposite of a minority discount and is used to determine the control value of a subject whose freely traded minority value is known. This is generally true when the appraiser uses information from the public stock market as the starting point of the valuation. A control premium may be appropriate for reflecting control that is less than 100 percent. In this case, the size of the premium will depend on various factors relating to the amount of control available to the controlling interest.

The appraiser needs to be careful to avoid double counting. Certain methods of valuing a closely held company may already include a process for reflecting the subject's control value. The value derived may be a control value, depending on the adjustments made to determine the income stream to be capitalized.

All the methods employed in this appraisal result in a control value. Therefore, a control premium will not be added.

Minority Discounts

A minority discount is a reduction in the control value of the subject to reflect the fact that a minority stockholder cannot control the daily activities or policy decisions of an enterprise. The size of the discount will depend on the size of the interest, the amount of control, the stockholder's ability to liquidate the company, and other factors.

A minority discount is the opposite of a premium for control. This type of discount is used to obtain the value of a noncontrolling interest in the subject being valued when a control value is its reference point. Conversely, a control premium is used to determine the control value when the freely traded minority is the reference point.

According to the Certificate of Incorporation of Woodco, a majority vote is required to carry out the management of the business affairs and property of the corporation. In addition, two-thirds of the stockholder interests are required for the Board of Directors to sell or exchange all or substantially all of its property and assets.

In this instance, a 50 percent interest could not perform any of these actions without the agreement of the other stockholder. Although this is not a minority interest, and no minority discount is applicable, Mr. Brown's stock interest clearly lacks control. This lack of control will decrease the marketability of these shares.

Discounts for Lack of Marketability

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 the shares have either legal or contractual restrictions placed upon them (for example, restricted stock, buy-sell agreements, and bank loan restrictions). Even when 100 percent of the subject is being valued, a DLOM may be appropriate if the owner cannot change the restrictions on the stock.

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*, studies by Maher, Moroney, Gelman, and others. Table 6 summarizes the findings in many of the more frequently referenced studies.

TABLE 6
Summary of Restricted Stock Studies

Study	*Years Covered in Study*	*Average Discount (%)*
SEC overall average[a]	1966–1969	25.8
SEC nonreporting OTC companies[a]	1966–1969	32.6
Gelman[b]	1968–1970	33.0
Trout[c]	1968–1972	33.5[i]
Moroney[d]	h	35.6
Maher[e]	1969–1973	35.4
Standard Research Consultants[f]	1978–1982	45.0[i]
Willamette Management Associates[g]	1981–1984	31.2[i]

Notes:

a. From "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.

b. From Milton Gelman, "An Economist-Financial Analyst's Approach to Valuing Stock of a Closely Held Company," *Journal of Taxation* (June 1972): 353–354.

c. From Robert R. Trout, "Estimation of the Discount Associated With the Transfer of Restricted Securities," *Taxes* (June 1977): 381–385.

d. From Robert E. Moroney, "Most Courts Overvalue Closely Held Stocks," *Taxes* (March 1973): 144–154.

e. From J. Michael Maher, "Discounts for Lack of Marketability for Closely-Held Business Interests," *Taxes* (Sept. 1976): 562–571.

f. From Standard Research Consultants, "Revenue Ruling 77-287 Revisited," *SRC Quarterly Reports* (Spring 1983): 1–3.

g. From an unpublished Willamette Management Associates study (covering the years from January 1, 1981, through May 31, 1984).

h. Although the years covered in this study are likely to be 1969–1972, no specific years were given in the published account.

i. Median discounts.

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The average DLOM ranges between 25 percent and 45 percent, based on the studies discussed. There is also justification for larger discounts and more courts are recognizing the fact that a closely held business is rarely marketable.

Another manner in which the business appraisal community and users of its services determines discounts for lack of marketability is with 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.

Robert W. Baird & Co., a regional investment banking firm, has conducted six studies over time periods ranging from 1980 through April 1993 comparing the prices in closely held stock transactions, when no public market existed, with the prices of subsequent IPOs in the same stocks. The results of these studies are in table 7.

TABLE 7
The Value of Marketability as Illustrated in Initial Public Offerings of Common Stock

Study	*Number of IPO Prospectuses Reviewed*	*Number of Qualifying Transactions*	*Discount*	
			Mean %	*Median %*
1991–1993	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
		173 (Total)	47% (Mean)	46% (Median)

SOURCE: John O. Emory, "The Value of Marketability as Illustrated in Initial Public Offerings of Common Stock," *Business Valuation Review* (March 1994).

A similar private, unpublished study has been performed by Willamette Management Associates, a well-known valuation firm. The results were published in *Valuing a Business*, third edition, and are included in table 8.

TABLE 8
Summary of Discounts for Private Transaction P/E Ratios Compared to Public Offering P/E Ratios Adjusted for Changes in Industry P/E Ratios

Time Period	*Number of Companies Analyzed*	*Number of Transactions Analyzed*	*Median Discount (%)*
1975–1978	17	31	54.7
1979	9	17	62.9
1980–1982	58	113	55.5
1984	20	33	74.4
1985	18	25	43.2
1986	47	74	47.5
1987	25	40	43.8
1988	13	19	51.8
1989	9	19	50.4
1990	17	23	48.5
1991	27	34	31.8
1992	36	75	52.4

SOURCE: Willamette Management Associates, Shannon P. Pratt, Robert F. Reilly, and Robert P. Schweihs, *Valuing a Business*, 3rd ed. (Burr Ridge, Ill: Irwin Professional Publishing, 1996), 348. This material is reproduced with permission of the McGraw-Hill Companies.

Another consideration in determining a DLOM is the cost of flotation. These costs are generally significant and will frequently include payments to attorneys, accountants, and investment banker. 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 IRS 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 this data to assist in quantifying discounts for lack of marketability.

It appears that DLOM determined by courts have increased somewhat in recent years compared to earlier years, due at least in part to the availability of the empirical data discussed. Cases in which the evidence discussed in these paragraphs was presented and the DLOM determined by the court was clearly distinguished from any other discount, include *Estate of Mark Gallo v. Commissioner*, 50 T.C.M. 470 (1985), 36 percent; *Estate of Martha B. Watts*, 87-2 U.S.T.C. para. 13726 (11th Cir., 1987), 51 T.C.M. 60 (1985), 35 percent; and *Estate of Joyce V. Hall v. United States* (89 T.C. 19), 36 percent. District court decisions have recognized higher DLOMs.

Large discounts can be justified in these types of cases. This was pointed out by Robert E. Moroney, author of "Why 25% Discount for Nonmarketability in One Valuation, 100% in Another?" in *Taxes*, May 1977. Moroney raises 11 points to consider with regards to marketability. These are discussed below.

1. *Exceptionally high dividend yield*. In this instance, subchapter S distributions have been made on an annual basis. This is a positive factor.

2. *Exceptionally bright growth prospects*. Woodco's business prospects are good; they have maintained growth except during downturns in the economy. This is a positive factor.

3. *Degree of control, swing value*. A 50 percent interest has no degree of control, nor does it have any swing value, because the two shareholders must agree before any corporate action can be undertaken. This is a negative factor.

4. *Restrictions on transfer*. If there are no restrictions on the transfer of the block being valued, this is a positive factor. However, any restrictions that reduce the ability to sell the gifted stock would have a negative impact on that value. According to the current agreement, there are definite restrictions on the transfer of the stock.

5. *Buy-sell agreements*. If there were a buy-sell agreement between the stockholders, there might be a market created for the stock. Absent of such an agreement, a stockholder would be at a disadvantage since there is no market created for the stock. In this case, there is no buy-sell agreement.

6. *Stock's quality grade.* Woodco cannot easily be compared with a public company for many reasons. The quality of the company becomes more of a personal feeling for an investor. This is not necessarily a negative factor, however, because the business has been in existence for a long time, despite the economic cycles that have affected it.
7. *Controlling stockholder's honesty.* Although there is no controlling shareholder, the remaining shareholder, James Banner, has been involved with the business for many years. This appraiser has not been given any indication that he is not honest in his business dealings. This is a positive factor.
8. *Controlling stockholder's friendliness.* As mentioned in point number 7, there is no controlling shareholder, nor would the willing buyer become a controlling shareholder. If Mr. Banner and the willing buyer do not agree on management policies, the corporation could become deadlocked, leading to litigation. The willing buyer could consider this a very negative factor because he or she could have a very unfriendly business partner, which could result in serious problems for Woodco. Relations between Messrs. Brown and Banner have been somewhat distant over the last few years. Friendliness is a negative factor.
9. *Prospects for the corporation.* It is expected that the corporation will do business as usual. This is a positive factor.
10. *Prospects for the industry.* The industry prospects appear to be positive. This is a positive factor.
11. *Prevailing mood of the investing public.* As the economy recovers, the mood of the public appears favorable. This is a positive factor.

Overall, positive and negative factors are affecting the marketability of the appraisal subject. Woodco has done well in the past, maintaining profitability and stockholder distributions, even when the economy was distressed. A willing buyer looking at this situation would see very positive factors.

On the other hand, the appraisal subject is a 50 percent interest in a closely held business. Although there is a stockholder agreement, it appears to be very restrictive. In addition, there is neither a buy-sell agreement nor a specified price for the stock, so there is not necessarily a ready market. A willing buyer would have no control in the business and could possibly find him or herself in a corporate deadlock.

A DLOM appears to be justified in this situation. Some of the more salient points about the DLOM studies mentioned earlier are as follows: The restricted stock studies discussed previously indicate an average discount of about 35 percent for the lack of marketability. Restricted stock 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. The main reasons corporations issue restricted

stock, rather than tradable stock, are to avoid dilution of their stock price with an excessive number of shares available for sale at any one time and 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 allow "small" corporations 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 code 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.[2] The exemptions for these securities are granted under Rule 144:

> Rule 144 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.[3]

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 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.[4]

The overall effect of these regulations on restricted stock is that when 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.

A key element to consider is that the restricted stock is the stock of a publicly traded entity for which there will be a market at the end of the restriction period. This is not necessarily the situation with a closely held security.

The IPO studies indicated discounts in the high 40 percent range. Some were higher and some were lower, but generally, the discounts were greater than the restricted-stock studies.

When considering the factors cited in the Moroney article,[5] an average discount seems reasonable, because despite the negative factors involved, the company's prospects

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[2] Kasim L. Alli and Donald J. Thompson, "The Value of the Resale Limitation on Restricted Stock: An Option Theory Approach," *Valuation* (March 1991): 22–23 (published by The American Society of Appraisers).

[3] Ibid.

[4] Richard A. Brealey and Stewart C. Myers, "How Corporations Issue Securities," chap. 4 of Richard A. Brealey and Stewart C. Myers *Principles of Corporate Finance*, 4th ed., (New York: McGraw-Hill, Inc. 1991) 354–356.

appear positive, and as long as distributions continue to be made, a willing buyer will start to see a return on his or her investment fairly quickly. After considering the facts and circumstances of this appraisal, it is our opinion that a DLOM of 35 percent is justified for the common stock.

The Final Value

The final value of the 50 percent stock interest of Robert W. Brown in Woodco & Co., Inc. is as follows:

Total enterprise value	$ 3,000,000
Less: DLOM (35%)	(1,050,000)
Enterprise value	$ 1,950,000
Pro rata share	× 50%
Value of Mr. Brown's stock	$ 975,000

Capitalization Rates

Section 6 of Revenue Ruling 59-60 states:

> 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 59-60, capitalization rates of 15 percent to 20 percent were mentioned as an example. Many appraisers 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	6.60[1]
Equity risk premium	7.00[2]
Small company risk premium	5.20[3]
Specific company risk premium	5.00[4]
Discount rate	23.80
Less: Long-term growth	6.00
Capitalization rate	17.80
Plus: Excess earnings premium	5.00
Capitalization Rate for Excess Earnings	22.80

[5] Robert E. Moroney, "Most Courts Overvalue Closely Held Stocks," *Taxes* (March 19973): 144-154.

1. *Federal Reserve Bulletin*—20-year Treasury bonds, week ended June 30, 1995.
2. Ibbotson Associates *Stocks, Bonds, Bills and Inflation 1995 Yearbook*—difference between total returns on common stocks and long-term government bonds from 1926 to 1994.
3. Ibbotson Associates *Stocks, Bonds, Bills and Inflation 1995 Yearbook*—difference between total returns on small company stocks and common stocks from 1926 to 1994.
4. Appraiser's judgment based on the analysis discussed throughout this report.

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.

Added to the safe rate is an equity risk premium, which represents the premium that common stockholders required in the public market place 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 decile, indicating that smaller companies require a larger return due to the risk associated with size. The ninth and tenth decile of the public market place has been measured by companies that are capitalized at an average capitalization of $70 million, which is considerably larger than the appraisal subject.

For this reason, a fourth component, known as a specific company risk premium, has been added to determine an appropriate discount rate. This specific company risk premium takes into consideration the detailed analysis performed by the appraiser, 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 Woodco.

Summing 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 long-term growth from the discount rate. Long-term growth has been included at a rate of 6 percent. As previously discussed, compound growth over the last ten to eleven years has been between 5.1 percent and 6.6 percent, while average growth has been between 5.6 percent and 7.2 percent. There is no reason to believe that this growth will not remain consistent in the future.

The derived capitalization rate of 17.80 percent is used in this appraisal for the capitalization of income, with the assumption that both income and cash flow will approximate the same amount.

An additional 5 percent premium has been added to this capitalization rate, to determine the capitalization rate for excess earnings. This is based on the appraiser's

estimate of the amount of risk associated with the intangible assets of the business. Since intangible assets by their nature are considerably more risky than the entire business enterprise, which consists of tangible and intangible assets, a higher capitalization rate must be considered in the calculation of intangible value.

To determine a capitalization rate for distributions, this appraiser looked to the market for rates of return on other investments. According to the *Federal Reserve Bulletin*, rates for the week ended June 30, 1995, were as follows:

20-year Treasury bond	6.60%
Corporate bonds (seasoned issues, all industries)	7.54%
Dividend-price ratio	2.53%
Corporate bonds (Baa)	7.91%

Based on this information, rates in the marketplace on corporate bonds are between 7.5 percent and 8 percent. Although Woodco has made distributions to the stockholders over the years, these amounts have been inconsistent, which makes an investment in Woodco's stock more risky. Therefore, a capitalization rate of 9.5 percent appears reasonable.

SCHEDULE 1
Woodco & Co., Inc. Balance Sheet as of December 31,—

	1990	*1991*	*1992*	*1993*	*1994*
Current assets					
Cash	$ 166,279	$ 118,076	$ 46,969	$ 82,863	$ 128,050
Investments	100,568	85,302	92,414	96,107	94,719
Accounts receivable	186,296	174,649	180,559	159,603	201,078
Inventory	453,942	352,471	465,479	424,925	429,220
Prepaid expenses	7,181	—	—	—	—
Deferred interest	4,158	1,375	307	21,368	34,118
Loans to employees	880	475	1,020	204	—
Total current assets	$ 919,304	$ 732,348	$ 786,748	$ 785,070	$ 887,185
Fixed assets					
Leasehold improvements	$ 26,439	$ 26,439	$ 26,439	$ 26,439	$ 26,439
Office equipment	8,670	20,222	20,222	20,222	25,337
Machinery and equipment	420,366	420,366	420,366	420,366	426,496
Furniture and fixtures	58,946	58,946	58,946	58,946	66,322
Vehicles	54,045	54,045	54,045	54,045	54,045
Subtotal	$ 568,466	$ 580,018	$ 580,018	$ 580,018	$ 598,639
Accumulated Depreciation	(540,062)	(549,562)	(558,548)	(567,597)	(574,154)
Net fixed assets	$ 28,404	$ 30,456	$ 21,470	$ 12,421	$ 24,485
Other assets					
Total equipment under capital leases	$ 24,809	$ 15,890	$ 8,979	$ 94,105	$ 149,851
Cash surrender value—Life Insurance	335,181	363,264	384,556	408,441	445,456
Total other assets	$ 359,990	$ 379,154	$ 393,535	$ 502,546	$ 595,307
Total Assets	$ 1,307,698	$1,141,958	$1,201,753	$1,300,037	$ 1,506,977
Current liabilities					
Long term debt (current)	$ 34,243	$ 30,607	$ 12,218	$ 30,812	$ 54,169
Accounts payable	80,912	82,880	94,613	87,063	147,019
Payroll taxes payable	3,905	2,354	3,737	3,619	7,675
Sales tax payable	725	560	2,308	1,913	1,914
Taxes payable	2,000	(10,000)	2,500	1,852	7,500
Profit sharing contribution	28,000	20,000	20,000	20,000	20,000
Total current liabilities	$ 149,785	$ 126,401	$ 135,376	$ 145,259	$ 238,277
Long-term liabilities					
Long-term debt	46,610	12,220	—	90,243	146,000
Total liabilities	$ 196,395	$ 138,621	$ 135,376	$ 235,502	$ 384,277
Stockholders' equity					
Common stock	$ 52,800	$ 52,800	$ 52,800	$ 52,800	$ 52,800
Treasury stock	(6,600)	(6,600)	(6,600)	(6,600)	(6,600)

SCHEDULE 1 *(Continued)*

	1990	*1991*	*1992*	*1993*	*1994*
Retained earnings	1,065,103	957,137	1,020,177	1,018,335	1,076,500
Total stockholders' equity	$ 1,111,303	$ 1,003,337	$ 1,066,377	$ 1,064,535	$ 1,122,700
Total Liabilities and Stockholders' Equity	$ 1,307,698	$ 1,141,958	$ 1,201,753	$ 1,300,037	$ 1,506,977

NOTE: To be used only in conjunction with valuation report dated July 5, 1995.

SCHEDULE 2
Woodco & Co., Inc. Income Statement for the Years Ended December 31,—

	1990	*1991*	*1992*	*1993*	*1994*
Revenues					
Service	$ 129,182	$ 119,833	$ 121,360	$ 126,068	$ 151,297
Stock	932,357	636,238	708,894	693,771	840,482
Special	550,924	497,939	444,164	456,554	505,970
Outside	1,708,576	1,491,408	1,556,411	1,512,114	1,771,769
Discounts and allowances	(528,540)	(466,250)	(450,440)	(389,796)	(409,739)
Total revenues	$ 2,792,499	$ 2,279,168	$ 2,380,389	$ 2,398,711	$ 2,859,779
Cost of sales					
Inventory-beginning	$ 445,239	$ 453,942	$ 352,471	$ 465,479	$ 424,925
Purchases	1,036,767	745,266	1,001,426	879,645	1,118,680
Freight in	13,974	3,279	5,806	12,107	(80)
Outside services	3,629	—	—	—	150
Shop wages	353,466	326,221	310,598	320,114	346,402
Production supplies	65,130	55,474	22,732	30,987	30,933
Tooling costs	5,048	4,336	9,318	5,989	9,683
Discounts earned	(7,183)	(3,677)	(4,635)	(3,925)	(3,483)
Subtotal	$ 1,916,070	$ 1,584,841	$ 1,697,716	$ 1,710,396	$ 1,927,210
Inventory-ending	$ 453,942	$ 352,471	$ 465,479	$ 424,925	$ 429,220
Total cost of sales	$ 1,462,128	$ 1,232,370	$ 1,232,237	$ 1,285,471	$ 1,497,990
Gross profit	$ 1,330,371	$ 1,046,798	$ 1,148,152	$ 1,113,240	$ 1,361,789
Operating expenses					
Officers' compensation	$ 208,000	$ 208,000	$ 212,000	$ 211,600	$ 208,000
Salaries and wages	268,922	248,131	264,657	276,689	301,980
Bad debts	5,418	11,685	20,262	3,388	9,856
Rents	94,541	95,643	95,135	96,844	97,234
Taxes and licenses	95,906	70,088	78,549	79,388	88,451
Interest	11,766	4,719	2,756	6,907	8,703
Depreciation	27,312	18,420	15,897	38,826	54,710
Advertising	29,144	25,523	20,726	19,186	16,497

(Continued)

SCHEDULE 2 *(Continued)*

	1990	*1991*	*1992*	*1993*	*1994*
Pension plans	28,000	20,000	20,000	20,000	20,000
Automobile	7,306	8,371	9,874	5,409	7,659
Dues and subscriptions	771	783	320	775	795
Entertainment	10,183	8,478	9,298	8,296	10,990
Maintenance	21,159	49,741	31,110	24,198	33,009
Insurance general	20,765	36,479	31,426	33,281	34,962
Insurance group	74,881	62,357	52,671	50,090	48,411
Office expense	20,332	14,059	14,868	13,902	12,058
Postage	7,236	10,172	17,908	9,665	11,958
Professional fees	9,463	9,500	8,000	8,000	8,000
Telephone	33,004	29,056	33,313	31,255	29,911
Utilities	24,214	22,497	20,630	21,140	23,696
Factory expense	12,489	7,464	4,265	11,250	5,724
Shipping supplies	9,645	8,869	9,221	11,912	13,668
Commissions	6,298	6,434	11,026	7,930	9,682
Sales expense	1,566	1,063	1,220	1,428	1,293
Catalog costs	13,226	14,601	27,721	2,815	12,622
Medical reimbursements	1,839	—	—	—	—
Collection expense	5,673	498	25	1,360	325
Show expense	3,562	3,904	5,936	5,576	7,669
Miscellaneous fees	2,810	3,377	7,327	8,136	8,198
Total operating expenses	$ 1,055,431	$ 999,912	$ 1,026,141	$ 1,009,246	$ 1,086,061
Operating income	$ 274,940	$ 46,886	$ 122,011	$ 103,994	$ 275,728
Other income (expenses)					
Interest income	$ 12,764	$ 7,930	$ 8,601	$ 9,143	$ 2,286
Gain on sale of assets	3,500	—	—	—	—
Officers' life insurance	1,156	(2,782)	(9,572)	(6,979)	6,151
Total other income (expense)	$ 17,420	$ 5,148	$(971)	$ 2,164	$ 8,437
Net Income	$ 292,360	$ 52,034	$ 121,040	$ 106,158	$ 284,165

NOTE: To be used only in conjunction with valuation report dated July 5, 1995.

SCHEDULE 3
Woodco & Co., Inc. Balance Sheet as of June 30, 1995

Current assets	
Cash	$ 126,018
Investments	101,844
Accounts receivable	229,209
Inventory	493,701

SCHEDULE 3 *(Continued)*

Deferred interest	27,075
Loans to employees	450
Total current assets	$ 978,297
Fixed assets	
Leasehold improvements	$ 26,439
Office equipment	25,337
Machinery and equipment	444,045
Furniture and fixtures	66,323
Vehicles	54,045
Subtotal	$ 616,189
Accumulated depreciation	(580,931)
Net fixed assets	$ 35,258
Other assets	
Total equipment under capital leases (net)	$ 131,757
Officer's life insurance	445,455
Total other assets	$ 577,212
Total Assets	$ 1,590,767
Current liabilities	
Long-term debt (current)	$ 54,169
Accounts payable	155,345
Payroll taxes payable	11,429
Sales tax payable	2,411
Taxes payable	5,689
Profit-sharing contribution	10,000
Total current liabilities	$ 239,043
Long-term liabilities	
Long-term debt	119,723
Total liabilities	$ 358,766
Stockholders' equity	
Common stock	$ 52,800
Treasury stock	(6,600)
Retained earnings	1,185,801
Total stockholders' equity	$ 1,232,001
Total Liabilities and Stockholders' Equity	$ 1,590,767

NOTE: To be used only in conjunction with valuation report dated July 5, 1995.

SCHEDULE 4
Woodco & Co., Inc. Income Statement for the Six Months Ended June 30, 1995

Revenues	
Service	$ 81,430
Stock	496,320
Special	318,739
Outside	1,086,363
Discounts and allowances	(244,316)
Total revenues	$ 1,738,536
Cost of sales	
Inventory-beginning	$ 429,220
Purchases	748,534
Freight in	1,104
Outside services	—
Shop wages	200,918
Production supplies	19,904
Tooling costs	5,336
Discounts earned	(670)
Subtotal	$ 1,404,346
Inventory-ending	493,701
Total cost of sales	$ 910,645
Gross profit	$ 827,891
Operating expenses	
Officers' compensation	$ 52,000
Salaries and wages	158,702
Bad debts	4,984
Rents	48,616
Taxes and licenses	46,517
Interest	4,570
Depreciation	24,871
Advertising	10,142
Pension plans	10,000
Automobile	3,419
Dues and subscriptions	550
Entertainment	4,720
Maintenance	10,932
Insurance-general	16,676
Insurance-group	29,404
Office expense	7,432
Postage	5,078
Professional fees	4,000
Telephone	17,011
Utilities	11,974

SCHEDULE 4 *(Continued)*

Factory expense	3,149
Shipping supplies	9,229
Commissions	6,257
Sales expense	856
Show expense	5,530
Miscellaneous fees	5,240
Total operating expenses	$ 501,859
Operating income (expense)	$ 326,032
Other income	
Interest income	$ 7,701
Gain on sale of assets	—
Officers' life insurance	(15,432)
Total other income (expense)	$(7,731)
Net Income	$ 318,301

NOTE: To be used only in conjunction with valuation report dated July 5, 1995.

Appendix 1: Sources of Information

Several sources of information were used to complete this appraisal. They were as follows:

1. Financial statements for the years ended December 31, 1990, through December 31, 1994, prepared by Lloyd E. Johnson, C.P.A., the company's outside accountant
2. Financial statements for the six months ended June 30, 1995, and June 30, 1994, prepared by Lloyd E. Johnson, C.P.A.
3. Gift documentation between Robert W. Brown and Thomas Brown
4. Stockholder's Agreement dated December 24, 1975
5. Amendment to Stockholder's Agreement dated April 11, 1990
6. Bylaws of Woodco & Co., Inc.
7. Various letters from Clarance Jones, Esq., regarding the gift, Stockholder's Agreements, and Certificate of Incorporation
8. 1994 Form 1120S, U.S. Income Tax Return for an S corporation
9. Correspondence from Lloyd E. Johnson, C.P.A., clarifying items on the financial statements
10. Company catalogs
11. Machinery and equipment appraisal performed by Equipco Appraisal Associates, Inc.
12. Rental analysis of the business premises prepared by Realty Appraisal Associates, Inc.
13. Miscellaneous other documents supplied by Woodco & Co., Inc.
14. Other references discussed throughout the report

In addition to the written documentation, an interview with Robert W. Brown was conducted. Numerous telephone conversations took place with Thomas Brown and Clarance Jones, Esq., as well. Information gathered during this interview and telephone conversations became an integral part of this report.

Appendix 2: Contingent and Limiting Conditions

This appraisal is subject to the following contingent and limiting conditions:

1. Information, estimates, and opinions contained in this report are obtained from sources considered reliable; however, TRUGMAN VALUATION ASSOCIATES INC. has not independently verified such information, and no liability for such sources is assumed by this appraiser.

2. 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.

3. 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 an officer of TRUGMAN VALUATION ASSOCIATES INC. Unsigned copies, or copies not signed in blue ink, should be considered to be incomplete.

4. None of the contents of this valuation report shall be conveyed to any third party or to the public through any means without the express written consent of TRUGMAN VALUATION ASSOCIATES INC.

5. No investigation of titles to property or of any claims on ownership of the property by any individuals or company has been undertaken. Unless otherwise stated in our report, title is assumed to be clear and free of encumbrances and as provided to the appraiser.

6. 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 and conclusions 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.

7. The various estimates of value presented in this report apply to this appraisal only and may not be used out of the context presented herein. Any other use of this report may lead the user to an incorrect conclusion for which TRUGMAN VALUATION ASSOCIATES INC. assumes no responsibility.

8. The appraisal estimate of fair market value reached in this report is necessarily based on the definition of fair market value as stated in the Introduction. An actual transaction in the shares may be concluded at a higher value or lower value, depending on the circumstances surrounding the company, the appraised business interest, and the motivations and knowledge of both the buyers and sellers at that

time. TRUGMAN VALUATION ASSOCIATES INC. makes no guarantees about what values individual buyers and sellers may reach in an actual transaction.

9. It should be specifically noted that the valuation assumes the business will be competently managed and maintained by financially sound owners, throughout the expected period of ownership. This appraisal engagement does not entail an evaluation of management's effectiveness, nor are we responsible for future marketing efforts and other management or ownership actions upon which actual results will depend.

10. 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.

11. It is assumed that there are no regulations of any government entity to control or restrict the use of the underlying assets, unless specifically referred to in the report, and that the underlying assets will not operate in violation of any applicable government regulations, codes, ordinances, or statutes.

12. Valuation reports may contain prospective financial information, estimates, or opinions that represent the view of the appraiser about reasonable expectations at a particular point in time, but such information, estimates, or opinions are not offered as predictions or as assurances that a particular level of income or profit will be achieved or that specific events will occur.

13. We assume that there are no hidden or unexpected conditions of the business that would adversely affect value, other than as indicated in this report.

14. Hazardous substances, if present, can introduce an actual or potential liability that will adversely affect the marketability and value of a business. Such a liability may be in the form of immediate recognition of existing hazardous conditions or future liability that could stem from the release of currently nonhazardous contaminants. In the development of the opinion of value, no consideration was given to such liability or its impact on value. We have not taken into account any and all future environmental considerations and potential liability.

15. TRUGMAN VALUATION ASSOCIATES INC. was not permitted to interview James J. Banner with respect to this appraisal. Had this interview been permitted, information obtained might have affected the assumptions made and the value determined.

Appendix 3: Appraisers' Certification

Appraisal of the 50 percent stock interest of Robert W. Brown in Woodco & Co., Inc.

We certify that, to the best of our knowledge and belief—

- The statements of fact contained in this report are true and correct, subject to the assumptions and conditions stated.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are our personal, unbiased, and professional analyses, opinions, and conclusions.
- We have no present or prospective interest in the property that is the subject of this report, and we have no personal interest or bias with respect to the parties involved.
- Our compensation is not contingent on an action or event resulting from the analyses, opinions, or conclusions in, or the use of, this report.
- No one provided significant professional assistance other than the appraisers whose signatures appear below.
- Our analyses, appraisal, opinions, and conclusions were developed and this report has been prepared in accordance with the Uniform Standards of Professional Appraisal Practice, the business valuation standards of The Institute of Business Appraisers, Inc. and the American Society of Appraisers.

Appendix 4: Professional Qualifications of Appraisers

Linda B. Trugman, C.P.A., M.B.A., C.B.A., A.S.A.

Experience

Ms. Trugman is partner in charge of the accounting and tax services of the firm Trugman & Company CPAs and vice-president of Trugman Valuation Associates Inc. Since 1984, she has been actively engaged in accounting services, including audit and tax, as well as advisory services. Previously, Ms. Trugman was president of L.B. Computers, Inc. and Campaign Financial Systems, Inc.

Ms. Trugman's appraisal experience includes the review of numerous appraisal reports with a strong emphasis on closely held businesses and professional practices. Industries include security, automotive, funeral homes, book publishers, card and gift stores, hair salons, opticians, printing establishments, hardware, pharmacy, sporting goods, computer software, swim club and recreation, video stores, architects, doctors, attorneys, dentists, accountants, as well as other retail, manufacturing, and professional business establishments.

Appraisals have been performed for equitable distribution, buy-sell agreements, stockholder litigations, estate and gift tax purposes, purchasing and selling businesses, and other types of litigations.

Professional Designations

- C.P.A. Licensed in New Jersey in 1987
- C.B.A. Designated a Certified Business Appraiser by the Institute of Business Appraisers Inc. in 1995.
- A.S.A. Designated an Accredited Senior Appraiser by the American Society of Appraisers in 1997.

Education

Masters in Business Administration—Fairleigh Dickinson University (1986)

Bachelor of Science—The University of North Carolina (1978)

Appraisal Education

- *The 1997 Business Valuation Conference.* New Brunswick, N.J., the New Jersey Society of CPAs, 1997
- *The National Conference on Appraising Closely Held Businesses.* San Diego, Calif., the Institute of Business Appraisers, 1997

- *The AICPA National Business Conference.* Phoenix, Ariz., the American Institute of CPAs, 1996
- *The Fifteenth Annual Business Valuation Conference.* Memphis, Tenn., the American Society of Appraisers, 1996
- *The 1996 Business Valuation Conference.* Holmdel, N.J., the New Jersey Society of CPAs, 1996
- *The National Conference on Appraising Closely Held Businesses.* Orlando, Fla., the Institute of Business Appraisers, 1996
- *The 1995 National Business Valuation Conference.* New Orleans, La., 1995
- *The 1995 Advanced Business Valuation Conference.* Boston, Mass., the American Society of Appraisers, 1995
- *The ASA International Appraisal Conference.* Denver, Colo., the American Society of Appraisers, 1995
- *The National Conference on Business Valuation.* San Diego, Calif., 1995
- *The First Annual Business Valuation Conference.* Holmdel, N.J., the New Jersey Society of CPAs, 1995
- *The Institute of Business Appraisers, Inc.'s National Conference.* Las Vegas, Nev., the Institute of Business Appraisers, 1995
- *Business Valuation in a Changing International Environment.* San Diego, Calif., the American Society of Appraisers, 1994
- *The 1994 International Conference.* Chicago, Ill., the American Society of Appraisers, 1994
- *The Principles of Valuation: Business Valuation, Selected Advanced Topics.* Los Angeles, Calif., the American Society of Appraisers, 1994
- *The Principles of Valuation—Business Valuation: The Appraisal of Small Business and Professional Practices.* Atlanta, Ga., the American Society of Appraisers, 1994
- *The National Conference of Appraising Closely Held Businesses.* Orlando, Fla., the Institute of Business Appraisers, Inc. 1994
- *The Principles of Valuation: A Business Valuation Case Study.* Washington, D.C., the American Society of Appraisers, 1993
- *The ASA 1993 International Conference.* Seattle, Wa., the American Society of Appraisers, 1993

- *The Uniform Standards of Professional Appraisal Practice and Professional Appraisal Ethics.* Seattle, Wa., the American Society of Appraisers, 1993
- *The Principles of Valuation: Business Valuation Methodology.* Washington, D.C., the American Society of Appraisers, 1993
- *National Conference.* San Diego, Calif., the Institute of Business Appraisers, Inc. 1993
- *Developing Your Business Valuation Skills: An Engagement Approach.* Iselin, N.J., the New Jersey Society of CPAs, 1992
- *Advanced Business Valuation Seminar.* San Francisco, Calif., the Institute of Business Appraisers, Inc. 1992
- *The Principles of Valuation: Introduction to Business Valuation.* Washington, D.C., the American Society of Appraisers, 1992
- *Business Valuation for Accountants.* Newark, N.J., the Institute of Business Appraisers, Inc. 1992

Ms. Trugman has also extensively read about and researched business valuations and business-valuation-related topics.

Organizations

- The Institute of Business Appraisers Inc.
- The American Society of Appraisers
- The American Institute of CPAs
- The New Jersey Society of CPAs

Committees

Qualifications Review Committee—The Institute of Business Appraisers, Inc.

Professional Achievements

Ms. Trugman was the winner of the J. H. Cohn Award for outstanding performance on the CPA licensing examination.

Gary R. Trugman, C.P.A., C.B.A., A.S.A., C.F.E., M.V.S.

Experience

Mr. Trugman is managing partner in the firm Trugman & Company CPAs and president of Trugman Valuation Associates Inc. He has been actively engaged in valuation of closely held companies since 1983 and, since 1974, has practiced accounting, including audit, tax, and other advisory services.

Mr. Trugman's appraisal experience includes a wide variety of assignments with a strong emphasis on closely held businesses and professional practices. Industries include security, automotive, funeral homes, book publishers, card and gift stores, hair salons, opticians, printing establishments, hardware, pharmacy, sporting goods, computer software, swim club and recreation, video stores, accountants, architects, doctors, attorneys, securities brokerage firms, banks, as well as other retail, manufacturing, service, and professional business establishments.

He has performed appraisals for equitable distribution, business damages, lender liability litigation, buy-sell agreements, stockholder litigations, estate and gift tax purposes, purchasing and selling businesses, and other types of litigations.

He has rendered litigation support services in wrongful-death cases, age-discrimination cases, sexual-discrimination cases, and various business-damages cases, including lost profit analysis and business valuation issues.

Court Testimony. Mr. Trugman has been qualified as an expert witness in state courts of New Jersey, New York, and Florida, and in the Federal District Court in Newark, New Jersey. He has also performed extensive services relating to court testimony. He has provided testimony in arbitration cases before the National Association of Securities Dealers and in other forms of arbitration.

Court Appearances. Mr. Trugman has appeared in the following courts:

- Florida
  - Palm Beach
- New Jersey
  - Morris
  - Sussex
  - Bergen
  - Passaic
  - Mercer
  - Middlesex
  - Monmouth
  - Essex

  — Hunterdon
  — Union

- New York
  — Bronx

Court Appointments. Mr. Trugman has been court appointed in Morris, Sussex, Essex, Union, Hunterdon, Somerset, Monmouth and Bergen counties by numerous judges.

Mutual Expert. Mr. Trugman has served in the capacity of a mutually agreed-upon expert numerous times.

Early Settlement Panel. Mr. Trugman has served on the Blue Ribbon Early Settlement Panel in Sussex County.

Professional Designations

- C.P.A. Licensed in Florida in 1996, New Jersey in 1978, and New York in 1977
- C.B.A. Designated a Certified Business Appraiser by the Institute of Business Appraisers, Inc. in 1987
- A.S.A. Designated an Accredited Senior Appraiser by the American Society of Appraisers in 1991
- C.F.E. Certified Fraud Examiner in 1995

Education

Masters in Valuation Sciences—Lindenwood College (1990). Thesis: "The Equitable Distribution Value of Closely Held Businesses and Professional Practices."

B.B.A. in Accountancy—Bernard M. Baruch College (1977).

Other Appraisal and Related Education

- *Introduction to Machinery and Equipment Valuation.* Chicago, Ill., the American Society of Appraisers, 1997
- *The National Conference on Appraising Closely Held Businesses.* San Diego, Calif., the Institute of Business Appraisers, 1997
- *The AICPA National Business Conference.* Phoenix, Ariz., the American Institute of CPAs, 1996
- *The Fifteenth Annual Business Valuation Conference.* Memphis, Tenn., the American Society of Appraisers, 1996

- *The 1996 Business Valuation Conference.* Holmdel, N.J., the New Jersey Society of CPAs, 1996
- *The National Conference on Appraising Closely Held Businesses.* Orlando, Fla., the Institute of Business Appraisers, 1996
- *The Business Valuation Conference.* New Orleans, La., the American Institute of Certified Public Accountants, 1995
- *The 1995 Advanced Business Valuation Conference.* Boston, Mass., the American Society of Appraisers, 1995
- *The 1995 Matrimonial Conference.* Holmdel, N.J., the New Jersey Society of CPAs, 1995
- *The Joint Business Valuation Conference.* San Diego, Calif., the American Institute of Certified Public Accountants and the Institute of Business Appraisers, 1995
- *The 1995 Business Valuation Conference.* Holmdel, N.J., the New Jersey Society of CPAs, 1995
- *The National Conference on Appraising Closely Held Businesses.* Las Vegas, Nev., the Institute of Business Appraisers Inc. 1995
- *The 1994 International Conference.* Chicago, Ill., the American Society of Appraisers, 1994
- *The National Conference on Appraising Closely Held Businesses.* Orlando, Fla., the Institute of Business Appraisers Inc. 1994
- *The 1993 International Conference.* Seattle, Wash., the American Society of Appraisers, 1993
- *The Uniform Standards of Professional Appraisal Practice and Professional Appraisal Ethics.* Seattle, WA., the American Society of Appraisers, 1993
- *The Eleventh Annual Business Valuation Conference.* Atlanta, Ga., the American Society of Appraisers, 1992
- *The 1992 International Conference.* New Orleans, La., the American Society of Appraisers, 1992
- *The National Conference on Appraising Closely Held Businesses.* Orlando, Fla., the Institute of Business Appraisers Inc. 1992
- *The Tenth Annual Business Valuation Conference.* Scotsdale, Ariz., the American Society of Appraisers, 1991

- *The 1991 International Conference.* Philadelphia, Pa., the American Society of Appraisers, 1991
- *Appraising Closely Held Businesses.* Orlando, Fla., the Institute of Business Appraisers Inc. 1991
- *The Principles of Valuation—Business Valuation Case Study.* New Orleans, La., the American Society of Appraisers 1989
- *The Principles of Valuation–Business Valuation Methodology.* New Orleans, La., the American Society of Appraisers 1988
- *Divorce Tax Planning.* The American Institute of Certified Public Accountants, 1988
- *Valuation of Closely Held Business.* Total Tape Inc. 1987
- *Business Valuation for Accountants.* Paramus, N.J., the Institute of Business Appraisers Inc. 1986
- *Valuation of Closely Held Business.* The American Institute of Certified Public Accountants, 1986

Mr. Trugman has also extensively read about and researched business valuations and business-valuation-related topics.

Lecturer

- *Valuing Accounting Practices for Sale or Merger.* New Orleans, La., the American Institute of Certified Public Accountants Practitioners Symposium, 1997
- *The Value of a Deal.* New York, N.Y., the Practicing Law Institute 1997
- *Revenue Ruling 59-60 Revisited.* San Diego, Calif., the Institute of Business Appraisers, 1997
- *Capitalization Rates.* Greensboro, N.C., the National Association of Certified Valuation Analysts, 1996
- *Valuation Discounts and Premiums.* the National Association of Certified Valuation Analysts, 1996
- *Equitable Distribution Value of Small Closely Held Businesses and Professional Practices.* Greensboro, N.C., the North Carolina Association of CPAs, 1996
- *Does the Market Transaction Method Really Work?* Phoenix, Ariz., the National Business Valuation Conference, 1996
- *Valuation Issues Affecting Transfers of Family Businesses.* Princeton, N.J., the New Jersey Society of CPAs Financial Planning Conference

- *Basic Matrimonial and Tax Concepts Seminar on Being an Expert Witness.* West Orange, N.J., the New Jersey Society of CPAs, 1996
- *The Business Valuation Conference, "Crossfire: Why You Should Not Use the Excess Earnings Method."* New Orleans, La., the American Institute of Certified Public Accountants, 1995
- *Practice Aid 93-3, What Did We Do?* Tampa, Fla., the Florida Institute of CPAs, 1995
- *Revenue Ruling 59-60, What Does It Really Say?* East Brunswick, N.J., the New Jersey Society of CPAs, 1995
- *Preparing and Defending a Business Valuation Report in Litigation.* Holmdel, N.J.,the New Jersey Society of CPAs, 1995
- *The Joint Conference on Using the Market Approach to Value Small and Medium Sized Businesses.* San Diego, Calif. (1995) and Orlando, Fla. (1996), the American Institute of CPAs and the Institute of Business Appraisers
- *The CPA's Role in Divorce Litigation.* Holmdel, N.J., the New Jersey Society of CPAs, 1995
- *Business Valuation and Litigation.* Reno and Las Vegas, Nev., the Nevada Society of CPAs, 1994
- *The National Industry Conference on Business Valuation* (with an emphasis on employee stock-ownership plans, mergers and acquisitions, and initial public offerings). Phoenix, Ariz., the American Institute of Certified Public Accountants Phoenix, 1994
- *Business Valuation—There's a Right Way and a Wrong Way to Do It.* Dallas, Tex., the Dallas Estate Planning Council, 1994
- *The CPA's Role in Divorce Litigation.* Louisville, Ky., Kentucky Society of CPAs, 1993
- *The Small and Medium Firm Conference on Valuation of Accounting and Other Professional Practices.* West Orange, N.J., the New Jersey Society of CPAs ,1993
- *The National Conference on Information-Gathering Strategies for Business Appraisal.* San Diego, Calif., the Institute of Business Appraisers Inc. 1993
- *The Matrimonial Subcommittee Conference on Capitalization Rates.* Edison, N.J., the New Jersey Society of CPAs, 1993
- *The National Conference on Measure of Value in Theory and Reality for Marital Dissolutions.* Orlando, Fla., the Institute of Business Appraisers Inc. 1992
- *The National Conference on Equitable Distribution Value of Closely Held*

Companies and Professional Practices. San Diego, Calif., the Institute of Business Appraisers Inc. 1992

- *The Tax Aspects of Divorce.* New Jersey, the Institute of Continuing Legal Education,1989-1990, 1992
- *The National Conference on Appraising Closely Held Businesses: Expert Testimony.* Orlando, Fla., the Institute of Business Appraisers Inc. 1990
- *Business Valuation for Accountants.* New Jersey, the Institute of Business Appraisers Inc. 1988, 1989, 1990
- *Using Forecasts and Projections in Business Valuation.* Orlando, Fla., the Valuation Study Group, 1989
- *What You Need to Know About Valuation and Litigation Support Services.* East Hanover, N.J., the CPA Club, 1989
- *Valuing Professional Practices.* San Diego, Calif., the National Conference on Appraising Closely Held Businesses, 1989
- *What Is Your Business Worth?* Wayne, N.J., Dean Witter Reynolds, 1988
- *Understanding Business Valuation for the Practice of Law.* New Jersey, the Institute of Continuing Legal Education, 1987
- *Real Estate Tax Shelters.* New Jersey, IDS/American Express, 1981-1984

Mr. Trugman has participted in various other seminars on tax, investment, and financial planning matters.

Instructor

- *How to Value Mid-Size and Smaller Businesses and Using Transaction Data to Value Closely Held Businesses.* Atlanta, Ga.; Chicago, Ill., 1996
- *Conducting a Valuation of a Closely Held Business.* The Institute of Business Appraisers, 1996
- *How to Value Mid-Size and Smaller Businesses.* The Institute of Business Appraisers Inc. 1995
- *Valuation of Small Business and Professional Practices.* The American Society of Appraisers, 1995
- *Uniform Standards of Professional Appraisal Practice.* The American Society of Appraisers, 1995
- *Advanced Topics in Business Valuation.* The New Jersey Society of CPAs, 1995 and 1996

- *Business Valuation Theory.* New Jersey, 1994, 1995, 1996 and 1997
- *Business Valuation Approaches and Methods.* New Jersey, 1994, 1995, 1996 and 1997; North Carolina, 1997; Louisiana, 1997
- *Business Valuation Discount Rates, Capitalization Rates, Valuation Premiums and DIscounts.* North Carolina, 1997; Louisiana, 1997
- *The American Institute of CPAs National Tax School on "Business Valuation."* 1994, 1995, and 1996
- *Business Valuation Methodology.* The American Society of Appraisers, 1992, 1993, 1995, and 1996
- *Principles of Valuation: A Case Study.* The American Society of Appraisers, 1993
- *Developing Your Business Valuation Skills: An Engagement Approach* . The New Jersey Society of CPAs, 1992 and 1993
- *Selected Advanced Topics (in Business Valuation).* The American Society of Appraisers, 1992, 1994, 1995, and 1996
- *Advanced Business Valuation Seminar.* The Institute of Business Appraisers Inc. 1991 and 1992
- *The Institute of Business Appraisers Inc.'s Ten-Day Workshop on Appraising Closely Held Businesses.* 1991
- *Financial Statement Analysis.* The Valuation Sciences Program at Lindenwood College, 1989 and 1990
- *Investment Theory and Business Valuation.* 1993
- *Federal Income Taxation and Intermediate Accounting.* Former adjunct instructor at Centenary College, Hackettstown, N.J., 1982-1987

Organizations

- The Institute of Business Appraisers, Inc.
- The American Society of Appraisers
- The American Institute of CPAs
- The New Jersey Society of CPAs
- The New York State Society of CPAs
- The Association of Certified Fraud Examiners.

Awards

Mr. Trugman was presented with the Fellow Award by the Institute of Business Appraisers In January 1996, for contributions made to the profession.

Professional Appointments

- *The Institute of Business Appraisers, Inc.* Former regional governor for the Mid-Atlantic Region, consisting of Delaware, Kentucky, Maryland, New Jersey, Ohio, Pennsylvania, Virginia, and West Virginia
- *The American Society of Appraisers Chapter 73.* Treasurer, 1996–1997

Committees

- The International Board of Examiners, the American Society of Appraisers
- The Qualifications Review Committee, the Institute of Business Appraisers, Inc. (since 1987)
- Chairman of Disciplinary and Ethics Committee, the Institute of Business Appraisers, Inc. (The committee was established in 1989)
- Executive Committee, the AICPA Management Consulting Services Division (1995–1997)
- Former Chairman of the Valuation Standards Subcommittee, the New Jersey Society of CPAs Litigation Services Committee
- Matrimonial Subcommittee, the New Jersey Society of CPAs Litigation Services Committee
- Co-Chair of Courses and Seminars for CPAs Subcommittee, the New Jersey Society of CPAs
- The Education Committee, the Institute of Business Appraisers Inc.
- The Education Sub Committee, the American Society of Appraisers
- The Former Chairman of Education Committee, the North Jersey Chapter of American Society of Appraisers, Formerly AICPA Subcommittee on Business Valuation and Appraisal.

Editor

- Editorial Advisor for *CPA Expert*, the American Institute of Certified Public Accountants
- Editorial Advisor for *The Journal of Accountancy*, the American Institute of Certified Public Accountants

- Former Editorial Board of *CPA Litigation Service Counselor*, Harcourt Brace, San Diego, Calif.
- Former Editorial Board of *Business Valuation Review*, the American Society of Appraisers, Herndon, Va.

Author

- "Understanding Business Valuations," for the Institute of Continuing Legal Education (1997)
- Six-Day Business Valuation Series, consisting of "Business Valuation Theory," "Valuation Approaches and Methods," and "Advanced Topics in Business Valuation" (1994 and 1995)
- "Advocacy vs. Objectivity," *CPA Litigation Service Counselor* (San Diego: Harcourt Brace, 1993)
- "Valuation of a Closely-Held Business," Practice Aid for the American Institute of Certified Public Accountants (1993)
- Co-author of "Guide to Divorce Engagements" (Fort Worth, Tex.: Practitioners Publishing Company 1992)
- "A Threat to Business Valuation Practices", *Journal of Accountancy* (December 1991)
- Course entitled "Advanced One-Day Seminar," for the Institute of Business Appraisers (1991)
- Course entitled "Understanding Business Valuation for the Practice of Law," for the Institute of Continuing Legal Education, in New Jersey. "An Appraiser's Approach to Business Valuation" *Fair$hare*, Prentice Hall Law & Business (July and August 1991)
- "What is Fair Market Value? Back to Basics," *Fair$hare*, Prentice Hall Law & Business (June 1990)

Appendix 1 *AICPA Statement on Consulting Services Standards 1*

Consulting Services: Definitions and Standards

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 asserter. 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 SSCSs 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.[1] Consulting Services may include one or more of the following:

a. *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.

b. *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.

c. *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.

[1] The definition of Consulting Services excludes the following:

a. 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.)

b. Engagements specifically to perform tax return preparation, tax planning/advice, tax representation, personal financial planning or bookkeeping 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.

c. Recommendations and comments prepared during the same engagement as a direct result of observations made while performing the excluded services.

d. *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.

e. *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.

f. *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

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.

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 perfor-

mance 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.[2]

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],[3] *(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.[4] However, members and their firms performing attest services for a client should comply with applicable independence standards, rules and regulations

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[2] 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."

[3] 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 to prohibit the performance of the professional service..."

[4] AICPA independence standards relate only to the performance of attestation services; objectivity standards apply to all services. See footnote 2.

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.

Appendix 2 *IBA Standards*

Business Appraisal Standards

As Promulgated by
The Institute of Business Appraisers, Inc.
July 1, 1993
Publication P-311a

NOTICE

This publication supersedes and replaces the following IBA publications:
P-243 Standards of Business Appraisal Practice
P-244 Standards for Business Appraisal Reports

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

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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 v. 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 v. 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 1.21(b). 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 know-

able, 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.

(a) *Automatic Amendment.* It is the intent of the Business Appraisal Standards Committee (BASC) of The Institute of Business Appraisers (IBA) that these standards not conflict with standards nine and ten of the Uniform Standards of Professional Appraisal Practice as promulgated by The Appraisal Foundation. In the event of such a conflict, these standards will be amended as necessary. Pending said amendment, the conflicting portion of these standards will be temporarily suspended. However, nothing contained herein is intended to imply that these Business Appraisal Standards, promulgated by the IBA cannot restrict or require standards in excess of the restrictions or requirements of The Appraisal Foundation.

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 Record Keeping. 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 over-emphasize 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 Record Keeping. 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 Record Keeping. 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 bring 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.

(k) 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 Record Keeping. 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 v. Written. All preliminary reports whether oral or written are subject to Standard Six.

6.7 Record Keeping. 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

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.

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BVS-I General Requirements for Developing a Business Valuation

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 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

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 nonoperating 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

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-I, 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

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 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 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 convened 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

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

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:

1. 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.
2. 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.
3. 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:

1. 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.
2. 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.
3. 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.
4. 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	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. 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.
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	1. The conversion of income into value. 2. The capital structure of a business enterprise. 3. The recognition of an expenditure as a capital asset rather than a period expense.
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 and/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	1. The value of an enterprise, or an interest therein, as a going concern. 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.
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	— Ownership position greater than 50% of the voting interest in an enterprise. — The degree of control provided by a majority position.
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*

Introduction

All members of the National Association of Certified Valuation Analysts, an association of Certified Public Accountants and other business valuation professionals who perform valuation services, are bound by the standards and definitions of the AICPA's Code of Professional Conduct and Statement on Standards for Consulting Services (SSCS). Under the statement on Standards for Consulting Services, litigation support and valuation services are considered "transaction" consulting services when the practitioner's function is to provide services related to a specific client transaction, generally in conjunction with a third party. NACVA members will be bound by the business valuation standards as promulgated by the AICPA and NACVA. NACVA will adopt changes and interpretations of the standards when necessary to avoid conflicts and ambiguities between the Standards of Practice issued by the AICPA and NACVA.

General Standards

The following general standards are extracted from the AICPA's Code of Professional Conduct as minimum general standards governing a NACVA member's performance of either litigation support or valuation services. They are:

- *Professional Competence:* A member of NACVA shall: "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:* A member of NACVA shall: "exercise due professional care in the performance of professional services";
- *Planning and Supervision:* A member of NACVA shall: "adequately plan and supervise the performance of professional services";
- *Sufficient Relevant Data:* A member of NACVA shall: "obtain sufficient relevant data to afford a reasonable basis for conclusions or recommendations in relation to any professional services performed";

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- *Independence:* A member of NACVA shall not express an opinion on value unless the member and the member's firm are independent with respect to such valuation.

Report Writing Standards

Overview:

The final stage in the valuation process is the communication of the results of the valuation to the client or other user of the report. Reports may differ in nature, but in all cases they must inform the parties of the degree of correspondence between quantifiable information and established criteria. Reports may also differ in form and can vary from highly technical, fully documented extensive reports to less technical, less extensive oral reports. The form and content of any particular report will depend on the nature of the engagement, its purpose, its findings, and the needs of the decision-makers that receive and rely upon it.

The business valuation profession has categorized the communication of the results into four modes or formats of reporting. They are:

- Full Written Reports,
- Short-Form Written Reports,
- Oral (Verbal) Reports, and
- Limited Scope Reports.

NACVA has adopted the following standards for each method of reporting. The purpose of these standards is to establish minimum reporting criteria pertaining to each form of communication. The objective of these standards is to ensure consistency and quality of valuation reports issued by members of the Association. The following standards will not only benefit the member by giving him or her direction on issuing reports, but they will also benefit the client and those individuals or institutions that use and rely upon valuation reports in various decision-making situations.

The intent of these standards is not to establish or attempt to define valuation engagement procedures. For purposes of these standards, the valuation analyst is the individual ultimately responsible for the valuation engagement.

Standards for Full Written Reports

General:

NACVA has established the following minimum reporting requirements pertaining specifically to full written reports.

A full written report must be organized, well written, communicate the results, and identify the information relied upon in the valuation process. The wording used in the report should not be overly technical and complicated, but should effectively communicate important thoughts, methods, and reasoning and identify the supporting documentation in a simple and concise manner.

Often, circumstances arise where the analyst is confronted with issues requiring him/her to depart from certain criteria established by this standard. If this is the case, the analyst must fully document and explain the effect the departure may have on the estimate of value conclusion.

Content:

The general content of full written reports is:

- Identification/Cover Page
- Table of Contents
- Opinion Letter
- Statement of Limiting Conditions
- Body of Report
- Appendix

Identification/Cover Page: The identification/cover page must indicate the following:

- Identification or name of the enterprise that is the subject of the report;
- Effective date of the valuation conclusion;
- Identification of the analyst and/or his or her firm;
- Date the report is issued.

Table of Contents: Due to the extensive amount of material typically included in a full written report, a table of contents must be included. Any item having a material effect on the valuation report must be included in the table of contents.

Opinion Letter: For the purposes of this standard, an opinion letter must be presented setting forth minimum information concerning the valuation engagement and its results. The opinion letter must include:

- Identification of the entity being valued;
- Effective date of the valuation and date of issuance;
- Purpose of the valuation;
- Identification of the standard and premise of value;

- Description of the interest being valued;
- Conclusion as to valuation results;
- Limitation on use of report;
- Signature of the valuation analyst.

Statement of Limiting Conditions: Each valuation engagement will require the valuation analyst to identify any material qualifying matters regarding the analyst's estimate of value. Since all valuation cases will vary as to their specific limiting conditions, the following examples are provided to assist the analyst's recognition of limiting conditions that are often encountered:

- We have no present or contemplated financial interest in the (subject company). Our fees for this valuation are based upon our normal hourly billing rates, and in no way are contingent upon the results of our findings. We have no responsibility to update this report for events and circumstances occurring subsequent to the date of this report.
- This report has been prepared for the specific purpose of valuing the (subject company's) (describe interest) as of (effective date of valuation) for (describe purpose of the valuation) and is intended for no other purpose. This report is not to be copied or made available to any persons without the express written consent of (your company).
- Our report is based on historical and prospective financial information provided to us by management and other third parties. Had we audited or reviewed the underlying data, matters may have come to our attention which would have resulted in our using amounts different from those provided; accordingly, we take no responsibility for the underlying data presented or relied upon in this report. (Alternative language would be appropriate where the analyst or the analyst's firm performed an audit or review of the financial statements.)
- We have relied upon 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 if all assets of the business are free and clear of liens and encumbrances, or that the company has good title to all assets.
- The estimate of value included in this report assumes the existing company will maintain the character and integrity of the company through any sale, reorganization or reduction of any owner's/manager's participation in the existing activities of the company.

- (Your company) does not purport to be a guarantor of value. Valuation of closely held companies is an imprecise science, with value being a question of fact, and reasonable people can differ in their estimates of value. (Your company) has, however, used conceptually sound and commonly accepted methods and procedures of valuation in determining the estimate of value included in this report.
- The valuation analyst, by reason of performing this valuation and preparing this report, is not to be required to give expert testimony nor to be in attendance in court or at any government hearing with reference to the matters contained herein, unless prior arrangements have been made with (your company) regarding such additional engagement.

Body of Report: In addition to the opinion letter's minimum reporting requirements, a full written report must also include sufficient information clearly communicating the thoughts, reasoning, methods and information or data used and relied upon to reach the estimate of value conclusion. The following items of information are necessary to clearly communicate the determination of value reached and the description of information used and relied upon to support the value conclusion:

- *Purpose of Valuation:* The purpose of the valuation is a critical aspect of the engagement. Although the purpose is stated in the opinion letter of the report, it must be restated in the body of the report. The purpose of the valuation must be clearly communicated in a manner that will not lead to any confusion on the part of the user of the report.
- *Discussion of Valuation Process:* A discussion describing the valuator's general or overall process in performing the valuation must be included. For example:

> "The standard of value used in arriving at our valuation conclusion is fair market value (or investment value, intrinsic value, etc.). Fair market value is defined as the amount at which property would change hands between a hypothetical willing seller and a hypothetical willing buyer when neither is acting under compulsion and when both have reasonable knowledge of the relevant facts. In arriving at our valuation conclusion, we considered the three commonly accepted approaches to value: the Cost Approach, the Market Approach, and the Income Approach.
>
> Under the Cost Approach, we considered the adjusted book value method. Under the Market Approach we considered the comparable sales method and the guideline companies method. Under the Income Approach, we considered the capitalized earnings method and the discounted future cash flows method. (Other appropriate methods could be considered under each approach.) Descriptions of the methods considered are included within our report.
>
> Both internal and external factors influencing the value of (subject company) have been reviewed, analyzed, and interpreted. Internal factors include the Company's financial position, results of operations, and the size and marketability

of the interest being valued. External factors include, among other things, the status of the industry and the position of the Company relative to the industry. The condition of the economy, international, national, and local, can also have an impact on the value of the Company."

(Note: Identification of information used and the degree of reliance on such information should be disclosed.)

- *Enterprise Background and Description:* Individuals and institutions relying on valuation reports are often not intimately or even generally informed about the business organization or its structure, background, products and markets. Therefore, it is necessary to adequately describe the enterprise in order to assist user(s) of the report. Users of the report are those users stated in the purpose of the report.

  The following are examples of items that should be included, if applicable, to adequately describe the enterprise:

  — Nature of the enterprise;

  — Type of enterprise (i.e., wholesaler, distribution, retailer, etc.);

  — History of the enterprise;

  — Organization form (i.e., corporation, partnership, etc.);

  — Description of service or products;

  — Competition;

  — Location of operations;

  — Markets;

  — Discussion of management's ability and depth, when appropriate;

  — Identification of sources of information utilized and degree of reliance on such information;

  — Other items of information the analyst believes necessary to adequately describe the enterprise, the industry and the economic climate in which the enterprise operates.

- *Ownership Size, Nature, Restrictions and Agreements:* The size and nature of ownership interests and binding agreements between the owners of the entity being valued can impact the estimate of value conclusion, and should, if relevant, be described in the report. Any restrictions on the transferability of the subject interest should, if relevant, be fully described. Issues involving control, marketability, minority interest and restrictions (if any) should, if relevant, also be adequately communicated.

- *Financial Analysis:* A financial analysis of the subject company's financial history is an essential procedure in the valuation process. Therefore, results of the finan-

cial analysis must be included in the report. The financial analysis must include an adequate description of the financial data included in the analysis, the period it covers, and the degree to which the analyst has relied on such data. The financial analysis must also include discussion of key factors that lead the analyst to his or her conclusions regarding management performance, financial position and results of operations. The source of the financial data must be disclosed along with discussion as to whether or not the data was adjusted by the analyst. If the analyst has made adjustments to the data, the adjustment and reasoning for the adjustment must be adequately disclosed.

- If the analyst has performed a comparative analysis between the subject company's data and data of comparative public or private companies, or if he or she has based the comparison on industry averages, the source of the data and the results of the comparative analysis must be adequately communicated.
- *Valuation Methodology:* A discussion of the valuation methodology must be included in the report. The method(s) of valuation must be identified and adequately explained. The reasoning for selecting certain methods must be provided. The source, method and/or basis for determining key variables utilized in the valuation method must be clearly described.
- The progression of the valuation methodology should flow in a logical manner and should result in the valuation conclusion. If third party appraisers of tangible assets were involved, their identity and conclusions should be incorporated in the report.
- All methods or sources of determining tangible asset values, estimated projected earnings, capitalization/discount rates, discounts or premiums or any other material factors utilized in the valuation methodology must be fully described.

Appendix: Certain items of financial or other information should be included in the appendix, if not in the body of the report.

The following items must be included, if not included elsewhere in report:

- Historical financial statement summaries
- Adjustments to historical financial statements
- Adjusted financial statement summaries
- Projected and/or forecasted financial statements, if utilized, including the underlying assumptions

The following items (but not limited thereto) may be included:

- Common size analysis summaries

- Ratio analysis summaries
- Comparative analysis data
- Independent appraisals on tangible assets

Standards for Short-Form Reports

Overview:

NACVA has established the following reporting requirements that pertain specifically to short-form written reports. A valuation analyst may be engaged to perform a valuation and issue a short-form report where the analyst has performed the necessary valuation procedures enabling him or her to issue a full written report.

A Short-Form Report Shall Include:

- An opinion letter with a report limitation statement, and
- The body of a short-form report.

Opinion Letter: The opinion letter of a short-form report should contain, at a minimum, the following information:

- Identification of the entity being valued;
- Effective date of the valuation and date of report;
- Purpose of the valuation;
- Identification of the standard and premise of value;
- Description of the interest being valued;
- Report limitation statement;
- Conclusion as to valuation results;
- Limitation on use of report;
- Signature of the valuation analyst.

Report Limitation Statement: An example of a report limitation statement would be: "The valuation report is limited in its discussion regarding information utilized in the valuation process. We were engaged to perform a valuation of (subject company) where the scope of the valuation procedures was not limited. However, we were limited in the

amount of discussion made in this report. The discussion omitted includes (identify discussions omitted). If the omitted discussions were included in this report, they might influence the user's level of understanding regarding the estimate of value contained in this report. Accordingly, this report is not designed for those who are not informed about such matters."

Body of Short-Form Report/Appendix: In addition to the stated requirements of the opinion letter of the short-form written report, other minimum information must also be included in the body of the short-form written report. Items that must be included in the body of a short-form written report, if not included elsewhere, are:

- Purpose of the valuation;
- Description of Valuation Process;
- Statement of limiting conditions (in addition to scope or report limitations);
- Business description (including form of organization, brief history of subject company, products or services described, description of sources of information used and level of reliance on such information);
- Ownership size, nature, restrictions, and/or agreements;
- Valuation methodology.

Standards for Oral Reports

Overview:

Valuation analysts are often requested to report their valuation conclusion or estimate of value on a particular business by means of an oral presentation. For such purposes, the analyst must have performed the necessary valuation procedures enabling him or her to issue a full written report.

An oral report must be carefully worded, particularly as it leaves no written documentation and may result in insufficient comprehension of the estimate of value being communicated.

A written outline of the analyst's oral presentation is required. This will help ensure adequate communication occurs.

Adequate Communication:

It is recommended that an oral report adequately communicate the following:

- Identification of entity being valued;
- Effective date of the valuation;

- Purpose of the valuation;
- Identification of the standard and premise of value;
- Description of the interest being valued;
- Conclusion as to estimate of value results;
- Limitation on use of the oral report;
- Description of any limiting conditions, including any scope limitations.

Standards for Limited Scope Reports

Overview:

NACVA has established the following reporting requirements pertaining specifically to limited scope reports. A valuation analyst may be engaged to perform a valuation and issue a limited scope report where the scope of his or her procedures has been limited, and where limited procedures and consequently a limited report is adequate for the purpose of the valuation.

A limited scope report must follow the format for either a full written report, a short-form report, or an oral report, and include a scope limitation statement.

Scope Limitation Statement:

> "The scope of this valuation engagement and valuation report was limited. We were engaged to perform a valuation for (subject company) with the intent of ascertaining an approximate estimate of value. If (your company) was engaged to perform a more detailed analysis, matters may have come to our attention that could have a material impact on the estimate of value contained in this report."

Other Guidelines

Besides NACVA professional standards, valuation analysts may also find it necessary to consider guidelines and standards established by others, such as:

- Department of Labor (DOL)
- Internal Revenue Service (IRS)
- State laws
- USPAP

DOL: DOL regulations apply to business valuations for ESOPs. In 1988, the DOL proposed a regulation prescribing procedures and reporting rules for valuations relating to

ESOPs. Although the proposed regulation is not yet final, many valuation analysts have conformed their reports to the proposed new rules.

IRS: The IRS has guidelines regarding business valuations. Revenue Ruling 59-60 identifies certain factors that should be considered in valuing a business for gift and estate tax purposes. Accordingly, a report for a tax-related valuation should discuss how it meets applicable IRS guidelines. If the report relates to a valuation of donated stock, the valuation analyst may also need to consult Revenue Procedure 66-49, which provides general report guidelines for those types of valuations.

State Laws: The analyst must be aware of state and other local legal requirements.

Uniform Standards of Professional Appraisal Practice (USPAP): The Appraisal Foundation, a quasi-governmental organization, has issued standards (USPAP) for appraisals. These standards are required for certain "federal related transactions" such as appraisals supporting mortgage loans granted by banks. Certain of the USPAP standards relate to performance of business valuations.

Appendix 5 *Revenue Ruling 59-60*

Rev. Rul. 59-60, 1959-1 CB 237—IRC Sec. 2031

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: 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:
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 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 cor-

porations 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 struc-

ture; 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 nonoperating 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 esti-

mating 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:

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.

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 can-

not 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 bonafide 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 6 *Revenue Ruling 65-192*

Rev. Rul. 65-192

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:
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 formula 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), acquiescence, 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), acquiescence, C.B. 1948-1, 3, affirmed 173 Fed. (2d) 747 (1949); USHCO MANUFACTURING CO., INC. v. COMMISSIONER, Tax Court Memorandum Opinion entered March 10, 1945, affirmed 175 Fed. (2d) 821 (1945); and WHITE & WELLS CO. v. COMMISSIONER, 19 B.T.A. 416, nonacquiescence C.B. IX-2, 87 (1930), reversed 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 good will, trade-marks, 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 good will or trade-marks, the burden of proof is primarily upon the taxpayer to show the value of such good will or trade-marks on March 1, 1913. Of course, if good will or trade-marks 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 good will or trade-marks 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 good will 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 per cent, the value of the brand is fairly well established.

Another method is to compare the volume of business done under the trade-mark or brand under consideration and profits made, or by the business whose good will is under consideration, with the similar volume of business and profit made in other cases where good will or trade-marks 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 good will, 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 per cent 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 per cent 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 good will of a business which consists of the manufacture or sale of standard articles of every-day 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 per cent, and that the percentage for capitalization of the return upon intangibles might be reduced from 20 to 15 per cent.

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 good will of a going business the percentage rate of capitalization of earnings applicable to good will shown by the amount actually paid for the business should be used as a check against the determination of good will value as of March 1, 1913, and if the good will 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 per cent 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 good will, and held that in determining such value, income over an average period in excess of an amount sufficient to return 10 per cent upon tangible assets should be capitalized at 20 per cent. Manifestly, since the effort is to determine the value of the good will, and therefore the true net worth of the taxpayer as of March 1, 1913, the 10 per cent 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 per cent 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 per cent.

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 7 *Revenue Ruling 65-193*

Rev. Rul. 65-193, 1965-2 CB 370—IRC Sec. 2031

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:

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 8 *Revenue Procedure 66-49*

Rev. Proc. 66-49

Section 170

Headnote:

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:
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 noncash 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 a 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:

1. A summary of the appraiser's qualifications.
2. A statement of the value and the appraiser's definition of the value he has obtained.
3. The bases upon which the appraisal was made, including any restrictions, understandings, or covenants limiting the use or disposition of the property.
4. The date as of which the property was valued.
5. 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:

1. 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.
2. The cost, date, and manner of acquisition.
3. A history of the item including proof of authenticity such as a certificate of authentication if such exists.
4. A photograph of a size and quality fully identifying the subject matter, preferably a 10" 12" or larger print.
5. A statement of the factors upon which the appraisal was based, such as:
    a. Sales of other works by the same artist particularly on or around the valuation date.
    b. Quoted prices in dealers' catalogs of the artist's works or of other artists of comparable statute.
    c. The economic state of the art market at or around the time of valuation, particularly with respect to the specific property.
    d. A record of any exhibitions at which the particular art object had been displayed.

e. 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 9 *Revenue Ruling 68-609*

Rev. Rul. 68-609, 1968-2 CB 327—IRC Sec. 1001

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: 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:

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 therefor 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 10 *Revenue Procedure 77-12*

Rev. Proc. 77-12, 1977-1 CB 569

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:
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 fin-

ished 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 11 *Revenue Ruling 77-287*

Rev. Rul. 77-287, 1977-2 CB 319 IRC Sec. 2031

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:

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:
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."

a. 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."

b. 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.

c. 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.

d. 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.

e. 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.

f. 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.

g. 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.

a. 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.

b. 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.

c. 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.

d. 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:

a. A copy of any declaration of trust, trust agreement, and any other agreements relating to the shares of restricted stock;

b. A copy of any document showing any offers to buy or sell or indications of interest in buying or selling the restricted shares;

c. The latest prospectus of the company;

d. Annual reports of the company for 3 to 5 years preceding the valuation date;

e. 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);

f. 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

g. 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 companies, value is more closely linked to past, present, and future earnings while in the latter type of companies, 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 "piggyback" 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 12 *Revenue Ruling 81-253*

Author's Note: This revenue ruling is presented for information purposes only. It has been superseded by Revenue Ruling 93-12 (see appendix 15).

Rev. Rul. 81-253, 1981-2 CB 187 IRC Sec. 2512

Sec. 2512 VALUATION OF GIFTS

26 CFR 25.2512-1: Valuation of property; in general.

Headnote:

Valuation; stock; intra family transfers; minority discounts. Simultaneous gifts of one-third of the stock of a family controlled corporation to each of the donor's three children are not valued as minority interests for purposes of section 2512 of the Code.

Text:
Issue:

Whether minority discounts should be allowed in valuing for federal gift tax purposes three simultaneous transfers of all of the stock in a closely held family corporation to the donor's three children.

Facts

The donor, A, owned all of the 90 outstanding shares of stock in corporation X, the sole asset of which is a parcel of real estate. On December 30, 1978, A made simultaneous gifts of one-third (30 shares) of the stock in X to each of A's three children. On that date, the established fair market value of each share of X stock, if all the stock were sold together, was $100x per share.

At the time the gifts were made, there were no corporate bylaws or other instruments restricting the voting or disposition of corporate shares by any shareholder, and there were no negotiations underway for the disposition of the corporation's assets or the disposition of the shares in question before or subsequent to the date of the gifts. In

addition there is no evidence of the kind of family discord or other factor that would indicate that the family would not act as a unit in controlling the corporation. The corporation still owns the parcel of real estate and A's children still own the corporate shares.

Law and Analysis

Section 2501(a)(1) of the Internal Revenue Code provides that a tax is imposed for each calendar quarter on the transfer of property by gift during such calendar quarter. 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 defines the value of property as the price at which such property would change hands between a willing buyer and willing seller, neither being under compulsion to buy or sell, and both having reasonable knowledge of relevant facts. The regulations provide that the value of a particular kind of property is not the price that a forced sale of the property would produce, and that all relevant facts and elements of value as of the time of the gift shall be considered.

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 and asked prices. See also Rev. Rul. 59-60, sections 4.01(g), 4.02(g), 1959-1 C.B. 237.

The fair market value of a piece of property depends on the facts and circumstances. Section 3.01, Rev. Rul. 59-60, 1959-1 C.B. 237, Messing v. Commissioner, 48 T.C. 505, 512 (1967), acq. 1968-1 C.B. 2. Thus questions of valuation cannot be resolved by mechanical application of formulae and cases involving valuation can often be distinguished. Nonetheless, certain overriding legal principles to which each set of facts is applied govern valuation. Powers v. Commissioner, 312 U.S. 259 (1941); Maytag v. Commissioner, 187 F.2d 962 (10th Cir. 1951).

Judicial authority is inconsistent regarding the correct legal principle governing the availability of a minority discount in the instant case. Therefore, this ruling is intended to state the Service's position.

Several cases have held or implied that no minority discount is available when the transferred stock is part of a family controlling interest. Driver v. United States, No. 73C 260 (W.D. Wis., Sept. 13, 1976); Blanchard v. United States, 291 F. Supp. 248 (S.D. Iowa, 1968); Richardson v. Commissioner, No. 95770 (T.C.M. 1943), aff'd, 151 F. 2d 102 (2d Cir. 1945), cert. denied, 326 U.S. 796 (1946); Hamm v. Commissioner, T.C.M. 1961- 347, aff'd, 325 F.2d 934 (8th Cir. 1963), cert. denied, 377 U.S. 993 (1964). The Service will follow these decisions. Other cases have allowed a minority discount on similar facts. Whittemore v. Fitzpatrick, 127 F. Supp. 710 (D. Conn. 1954); Obermer v. United States, 238 F. Supp. 29, 34 (D. Hawaii, 1964); Estate of Piper v. Commissioner, 72 T.C. 1062 (1979); Clark v. United

States, Civil Nos. 1308, 1309 (E.D.N.C., May 16, 1975); Bartram v. Graham, 157 F. Supp. 757 (D. Conn. 1957); Estate of Lee v. Commissioner, 69 T.C. 860 (1978), nonacq. 1980-2 C.B. 2; Estate of Bright v. United States, No. 78-2221 (5th Cir., Oct. 1, 1981). The Service will not follow these and similar cases.

It is the position of the Service that ordinarily no minority discount will be allowed with respect to transfers of shares of stock among family members where, at the time of the transfer, control (either majority voting control or de facto control) of the corporation exists in the family, Dattel v. United States, No. D.C. 73-107-S, (N.D. Miss., Oct. 29, 1975), Cutbirth v. United States, Civil No. CA-6-75-1 (N.D. Tex., June 16, 1976). However, when there is evidence of family discord or other factors indicating that the family would not act as a unit in controlling the corporation, a minority discount may be allowed. Although courts have recognized that where a shareholder is unrelated to other shareholders a minority discount may be available because of absence of control, Estate of Schroeder v. Commissioner, 13 T.C. 259 (1949), acq. 1949-2 C.B. 3, where a controlling interest in stock is owned by family members, there is a unity of ownership and interest, and the shares owned by family members should be valued as part of that controlling interest. This conclusion is based on an evaluation of the facts and circumstances that would affect the price received for the shares in a hypothetical sale. It is unlikely that under circumstances such as exist in the instant case, shares that are part of a controlling interest would be sold other than as a unit except to a family member in whose hands the shares would retain their control value because of the family relationship. Thus, where a controlling interest in stock is owned by a family, the value per share of stock owned by one family member is the same as stock owned by any other family member and is the same value that would exist if all the stock were held by one person.

Holding

No minority discount is allowable and the value of each share of stock for federal gift tax purposes is $100x.

Appendix 13 *Revenue Ruling 83-120*

Rev. Rul. 83-120, 1983-2 CB 170 IRC Sec. 2512

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:

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:
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 10,500x. In a recapitalization described in section 368(a)(1)(E), A receives preferred stock with a par value of 10,000x 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 10,500x. A transfers this stock to a new corporation X in exchange for preferred stock of X corporation with a par value of 10,000x 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 10,000x. A's common stock had a fair market value of 10,000x.

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 pre-tax and pre-interest earnings to the sum of the total interest to be paid and the pre-tax 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 pro-

tection 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, at 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 14 *Revenue Ruling 85-75*

Rev. Rul. 85-75, 1985-1 CB 376 IRC Sec. 6659

Sec. 6659 ADDITION TO TAX IN THE CASE OF VALUATION OVERSTATEMENTS FOR PURPOSES OF THE INCOME TAX

Headnote:

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:
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 2,000x dollars. The executor filed Form 706, United States Estate Tax Return, valuing the property at 3,500x 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 3,500x 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 2,000x 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 15 *Revenue Ruling 93-12*

Rev. Rul. 93-12, 1993-7 I.R.B. 13, 1/26/93

January 26, 1993
Section 2512 VALUATION OF GIFTS

Family's Degree of Control Not Considered in Valuing Stock Transferred to Family Members.

Headnote:

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:

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 cor-

poration. 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 on (202) 622-3090 (not a toll-free call).

Appendix 16 *Technical Advice Memorandum 94-36005*

Full Text:

Date: May 26, 1994

Issue

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

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

	Donor	*Child 1*	*Child 2*	*Child 3*	*Spouse*
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

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, TCM 1989-232 [¶89,232 PH Memo TC], 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 cor-

poration. 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 TC]. 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:

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 17 *Private Letter Ruling 91-50001*

Full Text

UIL Number(s) 2031.00-00
Date: August 20, 1991
Control No.: TR-32-41-91

Issue

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

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

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 which 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.[1]

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 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.[2] 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

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.

Footnotes

1. 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.

2. 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.

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34	66-49
68	77-12

Revenue Rulings	*Internal Revenue Code (IRC) Sections*
59-60	338
65-192	341
65-193	1060
68-609	2031
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81-253	2501
83-120	2701
85-75	2702
93-12	2703
	2704
	6659
	6660

Technical Advice Memorandums	*Private Letter Rulings*
94-36005	91-50001

Organizations

American Institute of Certified Public Accountants, Harborside Financial Center, 201 Plaza III, Jersey City, N.J. 07311; (800) 862-4272.

American Society of Appraisers, P.O. Box 17265, Washington, DC 20041; (703) 478-2228.

The Appraisal Foundation, 1029 Vermont Avenue, NW, Suite 900, Washington, DC 20005; (202) 347-7722.

Association for Investment Management and Research, 5 Boar's Head Lane, P.O. Box 3668, Charlottesville, VA 22903; (804) 977-6600.

Institute of Business Appraisers, P.O. Box 1447, Boynton Beach, FL 33425; (561) 732-3202.

National Association of Certified Valuation Analysts, 1245 East Brickyard Road, Suite 110, Salt Lake City, UT 84106; (800) 677-2009.

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American Institute of Certified Public Accountants NAARS, 1211 Avenue of the Americas, New York, NY 10036-8775; (800) 862-4272.

Appraisal Profession Online, P.O. Box 17265, Washington, DC 20041; (703) 478-5500.

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CCH Inc. 4025 West Peterson Ave., Chicago, IL 60646; (800) TELL-CCH.

CompuServe Information Service, Dept. L-742, Columbus, OH 43260-0742; (800) 848-8990.

Datatimes, 14000 Quail Springs Pkwy., Oklahoma City, OK 73134; (405) 751-6400.

Disclosure, Inc. 888 Seventh Avenue, 44th Floor, New York, NY 10106; (800) 846-0365.

Dow Jones New Retrieval, Dow Jones Business Information Services, P.O. Box 300, Princeton, NJ 08543-0300; (609) 452-1511.

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Knight-Ridder Information Dialog, 343 Sansome St., Suite 825, San Francisco, CA 94140; (800) 3DIALOG.

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Lotus OneSource, 150 Cambridge Park Drive, Cambridge, MA 02140; (800) 554-5501.

Mercer Capital Management National Economic Review, 5860 Ridgeway Center Pkwy., Suite 410, Memphis, TN 38120; (901) 685-2120.

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Gary R. Trugman is a certified public accountant licensed in the states of New Jersey, New York, and Florida. He is accredited in business valuation by the American Institute of CPAs. He is a certified business appraiser, as designated by the Institute of Business Appraisers, Inc. He is also an accredited senior appraiser in business valuation, as designated by the American Society of Appraisers, as well as a certified fraud examiner, as designated by the Association of Certified Fraud Examiners and a diplomat of the American Board of Forensic Accountants. He is regularly court appointed and has served as an expert witness in federal and state courts in several jurisdictions, testifying on business valuation, matrimonial matters, business and economic damages, and other types of litigation matters.

Gary is a past member of the Executive Committee of the Management Consulting Services Division of the AICPA, the Litigation Services Committee of the New Jersey Society of CPAs, the Business Valuation Subcommittee (past chairman) of the New Jersey Society of CPAs, the Matrimonial Committee of the New Jersey Society of CPAs, and the Business Valuation and Appraisal Subcommittee of the AICPA.

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Gary lectures nationally on business valuation topics. He has developed, written, and presented numerous business valuation educational courses including a seminar entitled "Understanding Business Valuation for the Practice of Law" for the Institute of Continuing Legal Education. Gary also serves as an editorial advisor for the *Journal of Accountancy* and the *CPA Expert* and formerly served as editorial advisor to the *CPA Litigation Service Counselor*. He has lectured in front of numerous groups and has been published in the *Journal of Accountancy*, *FairShare*, and the *CPA Litigation Service Counselor*.

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 master's degree in valuation sciences from Lindenwood College. His master's 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 AICPA, and others. He has taught federal income taxation at Centenary College, financial statement analysis in the master's degree program at Lindenwood College, and several topics at the AICPA National Tax School in Champaign, Ill. He works hard and his mother likes him!

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— Be a member of AICPA in good standing—Hold a valid CPA certificate or license

— Provide evidence of 10 business valuation engagements that demonstrate substantial experience and competence in business valuation

— Agree to comply with all requirements for reaccreditation every three years

— Pass the written ABV examination

For more information about the ABV program . . .

Write to:

AICPA ABV Accreditation Program
1211 Avenue of the Americas
New York, NY 10036-8775

Fax to: 212-596-6268

Or Call: ABV HELPline at 212-596-6254

Business Valuation Certificate of Educational Achievement Course (NBV CEA)

The Business Valuation Certificate of Educational Achievement (NBV CEA) Program gives you a solid background in Business Valuation, enough for the head start you need to make it in this field. You'll share productive classroom time with your peers, who also have a real stake in this growing practice area. What's more, you'll get a total of 64 CPE hours, as a result of eight days of fully integrated course work. Once you've successfully completed the CEA program, having attended all courses and passed the in-class exams, you will be awarded a Certificate of Educational Achievement. Which means you'll be recognized for obtaining the practical, specialized skills that your clients are looking for.

From basic theory and practice through special issues and case studies to intermediate level report writing, you can't get a more thorough overview of the business valuation field than the NBV CEA. Developed by top valuation experts to meet the real needs of practicing CPAs, everything is strictly hands-on, the practical work that builds knowledge. And all your classroom study is backed up with concise, thorough material packed with reference sources.

Please contact your state society for availability of this program.

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