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Conducting a valuation of a closely held business; Consulting services practice aid, 93-3

Gary R. Trugman

American Institute of Certified Public Accountants. Management Consulting Services Division

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AICPA

**CONSULTING SERVICES
PRACTICE AID 93-3**

Small Business Consulting

***Conducting a
Valuation of a
Closely Held
Business***

Management Consulting Services Division

AMERICAN

INSTITUTE OF

CERTIFIED

PUBLIC

ACCOUNTANTS

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This practice aid is designed as educational and reference material for Institute members and others who provide *consulting services* as defined in the Statement on Standards for Consulting Services issued by the AICPA. It does not establish standards or preferred practices.

Consulting Services Practice Aids continue the series of MAS Practice Aids. The change in the numbering system of these series reflects the change of the division name from Management Advisory Services (MAS) to Management Consulting Services (MCS), rather than the discontinuing of any publications in a series.

The principal author of this practice aid is Gary R. Trugman, CPA, CBA, ASA, MVS, of Trugman & Co., Morris Plains, New Jersey. Mr. Trugman would like to acknowledge and thank Jay Fishman, ASA, who provided a technical review of this practice aid. In addition, the MCS Division wishes to thank the members of the Business Valuations and Appraisals subcommittee who suggested revisions to this document.

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Small Business Consulting

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Gary R. Trugman, CPA

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PREFACE

This practice aid is one in a series intended to assist practitioners in applying their knowledge of organizational functions and technical disciplines in the course of providing consulting services. Although these practice aids often deal with aspects of consulting services knowledge in the context of a consulting engagement, they are also intended to be useful to practitioners who provide advice on the same subject in the form of a consultation. Consulting services engagements and consultations are defined in the Statement on Standards for Consulting Services (SSCS), *Consulting Services: Definitions and Standards*, issued by the AICPA.

This series of technical consulting practice aids should be particularly helpful to practitioners who use the expertise of others while remaining responsible for the work performed. It may also prove useful to members in industry and government in providing advice and assistance to management.

Technical consulting practice aids do not purport to include everything a practitioner needs to know or do to undertake a specific type of service. Furthermore, engagement circumstances differ, and therefore the practitioner's professional judgment may cause him or her to conclude that an approach described in a particular practice aid is inappropriate.

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13/100 CONDUCTING A VALUATION OF A CLOSELY HELD BUSINESS**13/105 INTRODUCTION**

.01 Up until the 1920s, a business's selling price was strictly a matter of negotiation between the buyer and the seller and depended primarily on their horsetrading sense. The buyer usually based forecasted profits and cash flow on an eyeball appraisal of the seller's standard of living and status in the community. Since the 1920s, however, the valuation of closely held businesses has become increasingly complex. Business valuation began changing during Prohibition when breweries and distilleries faced substantial losses in the intangible value of their businesses. In response, the Internal Revenue Service (IRS) issued Appeals and Review Memorandum (ARM) 34. ARM 34 suggested using formulas to determine the intangible value of businesses, as well as to value goodwill for estate and gift tax purposes. Practitioners applied ARM 34 by adding the value of the goodwill and other intangibles to the tangible assets in determining a business's total value.

.02 In 1959, the IRS issued Revenue Ruling 59-60, which is regarded as one of the most important rulings concerning valuation. Although Revenue Ruling 59-60 was intended for estate and gift tax purposes only, Revenue Ruling 65-192 expanded its applicability by stating that the methods employed in 59-60 also apply to income and other taxes.

.03 In 1968, the IRS issued Revenue Ruling 68-609, which many practitioners refer to as *the formula approach* or *the excess earnings method*. The intent of 68-609 was to assist in the valuation of intangibles. However, the revenue ruling suggests that "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*" (italics added for emphasis).

.04 By the late 1970s and early 1980s, the demand for business valuation services was substantial. Many accounting firms were either setting up valuation departments or acquiring entire appraisal firms. This period also saw the emergence and growth of professional appraisal organizations, such as the Institute of Business Appraisers, Inc. and the American Society of Appraisers.

.05 Significant changes in the appraisal field occurred again in the late 1980s and early 1990s. One of these changes, due to a downward slide in the real estate market, resulted in the creation of the Appraisal Foundation, which promulgated the Uniform Standards of Professional Appraisal Practice (USPAP). Also, as a result of economic problems suffered by banks and thrifts, the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA) was enacted. FIRREA mandates the licensing or certification of real estate appraisers. Although intended to affect only real estate appraisals, this legislation has had an impact on accounting firms by restricting services to be rendered in certain situations. Several states have

expanded FIRREA's applicability to cover business valuations and personal property appraisals.¹

.06 USPAP, which are broad standards, must be adhered to when an appraisal is performed for a federally related transaction. The Preamble and Standards 9 and 10 of USPAP provide specific guidelines for developing and reporting business valuations. Professional valuers recommend that USPAP be followed for all types of engagements, whether federally related or not.

.07 USPAP do not significantly change the manner in which closely held businesses are valued. The basic guidelines provided for business valuers are in Revenue Ruling 59-60, which lists the following eight factors to be considered in the valuation of closely held businesses:

- 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. The enterprise's goodwill and other intangible values
- 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 business and trading stocks in a free and open market, either on an exchange or over the counter

.08 Revenue Ruling 59-60 discusses each of these factors and the practitioner's consideration of them is a minimum requirement in all business valuations. A good business valuer will also consider other factors, depending on the purpose of the engagement. Frequently, the practitioner will perform additional analyses and procedures to provide the client with a well informed, supportable estimate of value.

.09 The practitioner should be aware that valuation is both an art and a science and, therefore, absolute precision will never be achieved. During the valuation process certain information will be readily available and unquestionable. Other information will require the valuer to use informed judgment and common sense. The conclusions drawn from this

¹ For more information, see Gary R. Trugman, "A Threat to Business Valuation Practices," *Journal of Accountancy* (December, 1991).

information may be considerably subjective, and therefore the practitioner's workpapers and documentation may be questioned, particularly if the appraisal is for a litigation. The practitioner should remain sensitive to the appearance of bias and should be objective in arriving at the final value. The practitioner is advised to consult rule 101 of the AICPA Code of Professional Conduct if the service is provided to an attest client.

13/110 SCOPE OF THIS PRACTICE AID

.01 This practice aid provides practitioners with an overview of the valuation process. It is not intended to be authoritative, nor should it be relied upon solely in rendering an opinion of the value of a closely held business. Instead, it is designed to help the practitioner to understand the valuation process, its applicability to certain types of engagements, and the various methods of valuation, and to find answers to the many questions that arise during business valuation engagements.

.02 In performing business valuation engagements, the practitioner is advised to review appropriate professional literature to determine the accountant's reporting requirements if the report contains financial statements intended for third parties. Particular care should be taken by the practitioner to review the appropriate professional literature to understand prospective financial reporting requirements as they relate to forecasts and projections because valuation is a prophecy of the future. The business valuer must use forecasts and projections in the normal course of the business valuation engagement and cannot rely solely on historical financial statements.

13/115 BUSINESS VALUATION EDUCATION

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

.02 In order for the practitioner to obtain the competency required to accept a business valuation engagement, appropriate education is required. Courses sponsored by the AICPA, the American Society of Appraisers (ASA), and The Institute of Business Appraisers, Inc. (IBA) will provide practitioners with the minimum education necessary to perform these types of engagements. Self-study courses may help reinforce a level of knowledge; however, they are usually insufficient as the sole method of education.

.03 To foster competency in business valuation, the AICPA, the ASA, and the IBA sponsor accreditation programs in this specialty.

13/120 WHAT WILL BE VALUED?

.01 One of the most important considerations in the valuation process is the determination of what will be valued by the practitioner. In engagements, practitioners sometimes refer to the valuation subject as *the company*, but fail to precisely define what the term encompasses. Generally, the valuation assignment will be to estimate the value of either the equity of the company, components of the equity, or specific assets, and possibly liabilities.

.02 Most small businesses are generally sold as asset sales as compared with stock sales. Frequently, specific assets and liabilities are excluded from the sale and, therefore, the valuation must be clearly defined.

.03 For purposes of this practice aid, the company's equity will be considered the valuation subject. This means that all assets and liabilities will be included in the final estimate of value.

13/125 ENGAGEMENT CONSIDERATIONS

.01 As with any engagement, the practitioner needs to consider several factors before accepting a business valuation assignment. These factors include—

- The purpose and function of the valuation assignment.
- The practitioner's competency to perform the assignment.
- The amount of time required to perform the assignment.
- The scope of the assignment including the possibility of giving expert testimony.
- The type of report required.
- The possibility of a conflict of interest or the appearance of a conflict of interest.

Engagement Letters

.02 As with any assignment, an engagement letter is recommended for business valuation engagements in order to avoid any potential misunderstanding about the assignment. A good engagement letter includes, at a minimum, the following:

- a. A description of the scope of the valuation assignment, including a definition of the subject of the valuation
- b. The standard of value that will be used, including a definition of the standard

- c. The effective date of the valuation
 - d. The type of report that will be submitted to the client, whether a formal report, a letter report, or an oral report
 - e. A list of limiting conditions and restrictions on the use of the report by the party or parties that it is intended for
 - f. An outline of what will be expected of the client in the engagement, such as providing the valuer with a forecast, or signing a representation letter at the end of the engagement, if applicable
 - g. The method of determining fees and the terms of payment
- .03** Examples of an engagement letter, representation letter, and the valuation report cover letter are presented in appendix 13/A.²

13/130 PURPOSE AND FUNCTION OF THE BUSINESS VALUATION

.01 The most important elements of a business valuation engagement are the purpose and function of the assignment. The valuation methods employed by the business valuer will be determined by the reason for the engagement. This does not mean that the value will be based on who the client is, but that certain concepts, approaches, and standards of value may be required for certain types of engagements.

.02 For example, if the business valuation is to be done for a decedent's estate, the Internal Revenue Code requires the purpose to be to derive the fair market value, while the function of the valuation will be to include it in the estate tax returns. In this instance, the valuer must use the standard of fair market value, while following the guidance of revenue rulings. However, if the valuation is being done because the practitioner represents a prospective purchaser of the business, the standard of value known as investment value may be used rather than fair market value. In this case, the purpose of the valuation is to determine the investment value, and the function is to value a prospective purchase. The purpose and function of the assignment are critical to determining the standard of value.

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

- Mergers, acquisitions, and spinoffs
- Allocation of purchase price

² The practitioner can also find illustrative engagement acceptance forms, engagement letters, work programs, and other helpful information for business valuation assignments in the *Guide to Business Valuations* (Fort Worth: Practitioner's Publishing Co., 1991).

- 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 offering
- Damages litigation
- Insurance claims
- Charitable contributions
- Eminent domain actions

Mergers and Acquisitions

.04 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 both companies to be valued while an acquisition may only require 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

.05 Internal Revenue Code 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 its own value 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 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.

Estate and Gift Taxes

.06 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. Practitioners are urged to consult the appropriate Internal Revenue Code (IRC) sections for specifics on the unified estate and gift tax credit.

.07 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 Internal Revenue Code and Regulations include strict provisions for compliance. Practitioners therefore should familiarize themselves with Chapter 14.

.08 In addition, the Internal Revenue Code contains special privileges 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. Practitioners need to be aware of the alternatives under IRC Section 303.

Marital Dissolution

.09 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 would be valued (minority interest) in a large business. Usually, the business is not divided between the spouses. Instead, one spouse keeps the family business and the other receives different assets of equal value as distribution. Since marital dissolution laws vary significantly from state to state, the practitioner must be aware of the rules of the state in which the divorce will take place.

Employee Stock Ownership Plans

.10 An employee stock ownership plan (ESOP) is an incentive ownership arrangement funded by the employer. Generally, 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 valuer must value the employer's securities at least annually and determine the price per share to support transactions with participants, plan contributions, and allocations within the ESOP. Practitioners are urged to become familiar with the rules promulgated by the Department of Labor before beginning an ESOP engagement.

Liquidation or Reorganization of a Business

.11 Closely held companies with two or more definable divisions may be split up or spun off into separate corporations. Reasons for doing this can include estate tax considerations, family conflict, or sale of only part of the total business. Valuations are 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 valuer's allocation of the assets distributed to the stockholders may be required to substantiate subsequent depreciation and other deductions claimed.

Buy-sell Agreements

.12 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 amount or a formula to determine the price that the remaining owners of the entity will pay to acquire the interest. The amount or the formula need to be updated periodically. Payment terms and conditions of sale are also generally provided. A client may ask a practitioner to assist in determining which valuation method is appropriate in such an agreement.

.13 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 in a buy-sell agreement.

.14 In working with the client, the practitioner should caution the client about 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 valuer.

Stockholder Disputes

.15 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 feel 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.

.16 In such cases, the value of the stockholder's interest is what it was immediately before the change and does not reflect the effect of the proposed change on the value of the corporation. In these instances, value is generally determined according to the standard of fair value based on case law within the state of incorporation. When a valuer accepts an engagement relating to a stockholder action, it is advisable to request the client's legal counsel

to clarify the value definition used in the particular state. The valuer cannot address such issues as control premiums and minority discounts without adequate legal information about the value definition to be used.

Financing

.17 A valuation of the business may provide a lender 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 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 GAAP.

Ad Valorem Taxes

.18 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 frequently must 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 practitioner needs to consult the client's lawyer.

Incentive Stock Option Considerations

.19 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 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 selling 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 Offering

.20 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.

.21 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. Factors such as prior years' earnings, potential earnings, general stock market conditions, and stock prices of comparable or guideline companies need to be considered to determine the final offering price. The client may ask the practitioner to support the offering price by performing a valuation.

Damages Litigation

.22 Many court cases involve damages. Some seek compensation for patent infringements, illegal price fixing, breach of contract, lost profits, or lost business opportunities, while others relate to lender liability, discrimination, and wrongful death actions. The practitioner 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 valuer 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

.23 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. Loss of income would be determined on documentable lost profits. The value of individual business assets such as inventory and equipment would be based on the replacement cost of the assets.

Charitable Contributions

.24 Owners of closely held businesses may wish to give all or a 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 for owners, and the practitioner must be aware of the rules about 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

.25 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.

.26 As part of the business valuation, the practitioner should become familiar with the demographics of the area and should assess the impact of the change in location. In assessing the impact, the practitioner needs to remember that many valuers have said that the key to a business's success is "Location, location, location." Projections may be required in order 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.

13/135 TAX CONSIDERATIONS

.01 Income and capital gains taxes generally do not have a direct impact on the value of a closely held business. However, to the extent that tax obligations represent a liability, the practitioner considers them in determining the overall value of a closely held business. Some aspects to evaluate include the form of the business, potential tax deficiencies, and IRS guidelines. Depending on the purpose and function of the valuation, IRS guidelines must be considered. Internal Revenue Code Section 1060 requires that purchase price allocations be reasonable and consistent. The buyer and seller in a business acquisition transaction must consider the tax aspects of the form of the acquisition (stock vs. assets), non-compete agreements, goodwill, and similar items. These considerations are beyond the scope of this practice aid.

Form of the Business

.02 A valuer must consider the legal form of the business in analyzing the financial and other information that affects the value of the company. If the business is a proprietorship, a partnership, or an S corporation, certain tax attributes pass through to the individual owners. However, if the business is a C corporation, the entity accrues and pays income taxes. The practitioner should be aware of the tax implications of each business type and be satisfied that all tax liabilities have been considered.

.03 It is especially important that the practitioner understand the tax implications when comparing guideline company or industry information with the subject of the valuation. The practitioner needs to be certain that the information being used for comparison purposes is consistent throughout the valuation. Guideline company information, particularly from the public marketplace, is reported on an after-tax basis. Furthermore, returns on investments in the marketplace and ratios derived from the marketplace are also generally reported on an after-tax basis. Consistency is essential for the proper development of a discount rate, a capitalization rate, or a methodology derived from guideline company ratios.

Potential Tax Deficiencies

.04 The business valuer should determine whether the subject company has any potential tax deficiencies. Generally, this information is available from the company's accountant or tax preparer. If a tax provision falls into a gray area, the valuer should identify in a valuation report any contingent liabilities that may affect the entity's value, even though the liability cannot be quantified. Furthermore, the valuer must be aware that penalties for underpayment of taxes may result if the IRS disallows deductions whether they are based on the actions of the taxpayer or the tax preparer or on the valuation. To avoid penalties for willfully understating a tax liability the valuer is careful to fully document and support any position taken in a business valuation.

Internal Revenue Service Guidelines

.05 Practitioners need to review and consider each of the following IRS guidelines in valuing a closely held business:

- a. ARMs 34 and 68, which discuss the formula method for valuing goodwill, have been superseded.
- b. Revenue Ruling 59-60 is the most important treatise on factors to consider, at a minimum, to perform a competent valuation.
- c. 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.
- d. Revenue Ruling 65-193 approves only those valuation methods with which tangibles and intangibles can be separately determined.
- e. Revenue Procedure 66-49 deals with how the IRS arrives at valuations. It also provides additional insight into how a practitioner might report information to a client in a valuation report.
- f. Revenue Ruling 68-609 discusses the return on tangible assets and capitalization rates for intangibles when a formula approach can be used. This ruling clarifies and expands ARM 34. (Practitioners should 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.)
- g. Revenue Procedure 77-12 describes acceptable methods for allocating a lump-sum purchase price to inventories.
- h. Revenue Ruling 77-287 was intended "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 security laws." This revenue ruling covers marketability discounts related to restricted stock.

- i. Revenue Ruling 81-253, which describes the Internal Revenue Service's position on the allowance of minority discounts in valuing stock of a closely held family corporation transferred to the donor's children for Federal gift tax purposes, has been superseded by Revenue Ruling 93-12.
- j. Revenue Ruling 83-120 amplifies Revenue Ruling 59-60 by specifying additional factors to be considered in valuing common and preferred stock of a closely held corporation for gift tax and recapitalization purposes.
- k. 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.
- l. Revenue Ruling 93-12, which replaces Revenue Ruling 81-253, allows appropriate minority discounts to be applied when valuing minority interests of family members in the closely held corporation. Formerly, the IRS looked to family attribution rules as a means to disallow these minority discounts.
- m. In the publication entitled *IRS Valuation Guide For Income, Estate and Gift Taxes — The IRS Appeals Officer Valuation Training Program* (Chicago: Commerce Clearing House, 1987), there is also a detailed review of IRS positions on valuations.

13/140 VALUATION CONCEPTS

.01 Time has proven that expert valuation of closely held businesses combines both art and science. The business valuer finds that the valuation results will vary according to the methods used, and frequently the most difficult part of an engagement is to reconcile the various values derived through different acceptable valuation techniques.

.02 The complexity of the valuation process can cause the inexperienced practitioner to make mistakes. Often overlooked are two of the fundamental principles in valuation theory, the principle of substitution and the principle of future benefits.

.03 The principle of substitution states that "the value of a thing tends to be determined by the cost of acquiring an equally desirable substitute,"³ while the principle of future benefits

³ Miles, Raymond C., *Basic Business Appraisal* (New York: John Wiley & Sons, 1984), p.22.

states that "economic value reflects anticipated future benefits."⁴ These two valuation principles are as important to the valuation process as the laws of supply and demand are to economics. Valuation theory is driven by these very important principles.

Standard of Value

.04 The standard of value to be used in a valuation will depend upon the purpose of the business valuation engagement, rather than the client of the appraiser. Basing the choice of a standard of value on which party the practitioner represents is considered inappropriate advocacy and, therefore, should be avoided.

.05 Many standards of value are widely accepted. In some instances, they are included in statutes or in case law, but usually they vary from jurisdiction to jurisdiction. Some of the more frequently used standards of value are fair market value, fair value, investment value, and intrinsic value.

.06 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.

.07 This definition implies that the value is the most probable price in cash or cash equivalent that would be paid if the property was 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 that which appears in the "Market Value" section of the Uniform Standards of Professional Appraisal Practice. The other standards of value discussed in this section have evolved over time through literature and case law.

.08 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 stockholder actions. The practitioner should obtain the definition of value from the client's legal counsel based on the case law in the jurisdiction in which the litigation will take place.

.09 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. The investor may 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 any indebtedness resulting from the

⁴ *Ibid.*, p. 27.

purchase from operating cash flow over a period of no longer than five years. This value is specific to the individual rather than to all prospective purchasers on the open market, whose standard would be fair market value.

.10 Intrinsic Value. Intrinsic value is usually used to value stock by a financial analyst. The intrinsic value of a stock is generally considered to be the value based on all the facts and circumstances of the business or the investment. Financial analysts in a brokerage firm often ignore the fluctuations of the stock market in determining the intrinsic value of a specific stock.

Choosing the Appropriate Standard of Value

.11 As mentioned earlier, the appropriate standard of value and valuation methods depend upon the purpose and function of the engagement. For example, if the engagement is for estate and gift tax purposes, the standard of value will be fair market value and the emphasis will be on methods suggested in Revenue Ruling 59-60, which will use data from the marketplace, particularly from guideline companies.⁵

.12 In a dissenting stockholder lawsuit, the standard of fair value, which varies by state law, would generally be used. Potential acquisitions would be based on either investment value or fair market value with an emphasis on discounted cash flow methods of valuation. Marital dissolutions frequently rely on fair market value, although the definition of this standard of value varies from state to state. The valuation methods will depend on case law in the jurisdiction of the divorce, as well as the standard of value selected for the proceedings.

13/145 BASES OF VALUATION

.01 Two fundamental bases on which a company may be valued are (a) as a going concern and (b) as if in liquidation. The value of a company is deemed to be the higher of the two values determined under either a going-concern valuation or a liquidation valuation. This approach is consistent with the real estate appraisal concept of highest and best use, which requires an appraiser to consider the optimum use of the property being appraised under current market conditions.

.02 Generally, a business's highest and best use is considered to be the same line of business as is currently being conducted. If a business will command a higher price as a going concern, then it should be valued as such. Conversely, if a business will command a higher price if it is liquidated, then it should be valued as if in orderly liquidation. However, in all

⁵ Revenue Ruling 59-60 discusses comparative companies, but the term promulgated by the American Society of Appraisers is *guideline companies*. This term implies that no two companies are truly comparable, but information about companies similar to the one being valued can provide guidance in the valuation process.

business valuation assignments, the purpose of the engagement will play an important role in determining the appropriate methods to be used.

Approaches to Value

.03 Going concern value is based upon the company's earnings power and cash generation capability as it continues in business. The foundation for business valuation methodology is similar to that which has been used in valuing real property for many years. The three basic approaches to determine value as a going concern that should be considered by the appraiser are:

- a. The market comparison approach
- b. The asset-based approach
- c. The income approach

.04 Within each of these approaches, there are many acceptable valuation methods. Professional appraisal organizations, as well as USPAP, require the valuer to consider as many methods as may be applicable to the facts and circumstances of the property being valued. It is then up to the valuer's informed judgment to reconcile the results of these various methods and arrive at a final value.

.05 **The Market Comparison Approach.** The market comparison approach is the most direct approach for establishing the market value of a business. The methods included in this approach are the comparable sales method, the public comparables method, and various industry methods or rules of thumb. These methods are used to determine the value of the entire business enterprise rather than only components thereof. Each of these methods has distinct advantages and disadvantages.

.06 *Comparable sales method.* To use the comparable sales method, the valuer locates similar companies that have been bought or sold and compares them with the subject of the valuation. For example, if the valuation subject were a hardware store, the valuer could search for the sale prices of ten hardware stores that were similar to the valuation subject. If each of the ten hardware stores sold for \$200,000, the logical conclusion would be that the valuation subject would also be worth \$200,000.

.07 Unfortunately, in practice, reliable data on sales of similar companies is insufficient. Nevertheless, the valuer has an obligation to attempt to discover transactions that have taken place in the market. Sources of this information include business brokers, trade organizations, and the market data file available to members of the Institute of Business Appraisers, Inc. Appendix 13/B includes a sample printout from the market data file of the IBA.

.08 The advantage of the comparable sales method is that it uses actual market data to determine market values. Also, it is easily understood by lay persons, and as such, is a popular method to be used before jurors if the valuation will be used in expert testimony. Even

if entire businesses cannot be valued using this method, many of the components of a business can be. For example, automobiles, inventory, and other assets can be valued directly from the marketplace. This methodology is discussed in more detail in section 13/145.21, "The Asset-based Approach."

.09 The disadvantage of the comparable sales method is that it requires a reasonably active market for the type of business being valued. Information is more readily available for larger companies because stocks are traded publicly on a daily basis. Smaller closely held businesses, however, are not traded as frequently, and, therefore, information about such transfers is generally very difficult to obtain.

.10 *Public comparables method.* As mentioned earlier, the term *comparable companies* has generally been replaced with the term *guideline companies*. Some valuation methods apply ratios that are derived from a group of guideline companies in the public marketplace that are considered comparable to the valuation subject. The most widely known procedure is the application of a price earnings ratio to the valuation subject in order to estimate its value.

.11 Although this method is common, other ratios may be used as well. Some of the commonly used ratios are:

- Price/net earnings
- Price/pre-tax earnings
- Price/cash flow
- Price/revenues
- Price/dividend capacity or dividend yield
- Price/operating income
- Price/gross profit
- Price/book value

.12 In using these ratios, the practitioner should be aware that earnings and cash flow are defined in various ways. Some appraisers will use gross cash flow while others will use net cash flow. A discussion of cash flow is beyond the scope of this practice aid. However, the practitioner is advised to consult valuation literature on the subject in order to obtain a sufficient understanding of these methods.

.13 Once the ratios are derived from the marketplace, they must be adjusted to the differences between the valuation subject and the guideline companies. Generally, risk and other characteristics play an important part in the process of adjusting the ratios. To make adjustments, the practitioner considers at least the following factors:

- a. Local, regional, national, and international economic risk.

- b. Growth expectations of the valuation subject compared with the guideline companies and the stability of the business.
- c. The operating risks of the business, particularly the fixed and variable cost structure as compared with the guideline companies.
- d. The financial structure of the subject company as compared with the guideline companies. In particular, if the capital structure is such that the debt to equity relationship deviates from that of the guideline companies, the valuer may decide to use earnings before interest and taxes (EBIT) or earnings before depreciation, interest, and taxes (EBDIT), rather than net earnings or cash flow.

.14 The ratios derived from the guideline companies have to be adjusted to reflect the valuation subject in order to ensure consistency in the analysis. The adjustments allow a meaningful comparison.

.15 The advantage of using the ratios of comparable publicly traded companies is that the prices in the stock market are set by many transactions between actual buyers and sellers. A disadvantage of using this methodology is that it is difficult to find companies similar enough to the valuation subject and therefore such comparisons are frequently suspect. Another disadvantage is that trading on the public stock market consists of minority stock transactions. It is difficult to compare a marketable minority interest to a non-marketable controlling interest, which is frequently the task at hand.

.16 A third disadvantage is that information is frequently calculated differently depending on the source of data, and incorrect conclusions can result if the valuer is not careful to ensure consistency in the application of the methodologies. For example, price earnings ratios can be based on the last twelve months' earnings, the last fiscal year's earnings, or the next fiscal year's forecasted earnings. Each of these produces a different ratio. Therefore the practitioner needs to be careful. In appendix 13/A, schedule 13A-4.10 illustrates valuations based on guideline company information.

.17 *Industry methods (rules of thumb).* Many industries and professions use rule of thumb formulas to determine value. However, if these formulas are the only methods used, an inappropriate valuation may result. Nevertheless, the valuer should not ignore what is being done in the industry. Frequently, an industry rule of thumb provides a representation of the perception that people have in the marketplace and should be one of the methods used in valuing the closely held business.

.18 Relying on an uninformed rule of thumb can be dangerous. For example, the rule of thumb for the valuation of an accounting practice is that it is typically valued at between 50 and 150 percent of gross fees. Therefore, an accounting firm with gross billings of \$500,000 per year would be between \$250,000 and \$750,000. This wide range should indicate the potential danger of applying an uninformed rule of thumb. In reality, after an investigation of the quality of the practice, the nature of the clients (whether they are audit, accounting, tax, or consulting clients), the collection history of the clients, and many other qualitative factors, the practitioner may determine that the value should be based on gross fees, but that it will be narrowed down

with informed judgment. The practitioner avoids pulling a percentage out of thin air and, if possible, quantifies any factors used in the valuation process.

.19 For those industries that have a considerable amount of merger and acquisition activity, a valuer can often telephone the treasurers or chief financial officers of closely held companies to find out the valuation methodologies they use. After calling several of these people, the practitioner may have a better understanding of what rules of thumb are being used in the industry. The practitioner must be careful, however, because the terms of each merger or acquisition transaction may have an impact on the value. The advantage of a rule of thumb is it provides a reality check on the other valuation methods used by the valuer.

.20 Several publications provide rules of thumb and describe what is occurring in the marketplace. However, these publications may not provide the same rules of thumb for an industry.⁶

.21 The Asset-based Approach. The asset-based approach to valuation is also referred to as the *cost approach* or the *replacement cost approach*. With this approach, each component of a business (including the liabilities) is valued separately. The values are totalled and the liabilities are subtracted to derive the total value of the enterprise. The valuer estimates value as the cost of replacing the individual assets and liabilities of the business. This approach cannot be used alone because it cannot be applied easily to intangible assets. Included in this approach are the adjusted book value method and the liquidation value method.

.22 Adjusted book value method. The most commonly used method in the asset-based approach is the adjusted book value method. In this method, all of the subject's assets and liabilities are valued at fair market value as of a certain valuation date. The practitioner needs to be careful to avoid a frequent error in applying this method. The error is to reduce the value of the assets and liabilities to provide for capital gains taxes in the event these assets are sold.

.23 The adjusted book value method is often used to appraise not-for-profit organizations and such asset intensive businesses as holding companies, manufacturing companies, and some distribution companies. It is generally not used to value service businesses and distribution businesses that have few assets. Nor is it usually used to appraise intangible assets or minority interests of stockholders who have no control over the sale of the assets. An illustration of this method is provided appendix 13/A, schedule 13A-4.6.

.24 Liquidation value method. Another method under the asset-based approach is the liquidation value method. Liquidation value assumes that a business has a 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, an authority in business valuation, "Liquidation value is, in essence, the antithesis of going concern value. Liquidation value means the net amount the

⁶ Industry information is provided in Glenn M. Desmond's and John A. Marcello's *Handbook of Small Business Valuation Formulas* (Los Angeles: Valuation Press, 1993), Thomas L. West's *Business Broker's Reference Guide* (Concord, Mass.: Business Brokerage Press, 1993), and Thomas L. West's and Jeffrey D. Jones' *Handbook of Business Valuation* (New York: John Wiley & Sons, Inc., 1992).

owner can realize if the business is terminated and the assets sold off in piecemeal."⁷ Pratt further states that—

. . . it is essential to recognize all costs associated with the enterprise's liquidation. These costs normally include commissions, the administrative costs of keeping the company alive until the liquidation is completed, taxes, and legal and accounting costs. Also, in computing the present value of the 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.⁸

Therefore, the liquidation value of the business is usually less than the liquidation value of its assets. In appendix 13/A, schedule 13A-4.6 provides an illustration of this method.

.25 The Income Approach. The income approach to valuation is based on the assumption that an investor would invest in a property with similar investment characteristics, but not necessarily the same business. The computations used with the income approach generally determine the value of the business to be equal to the expected future benefits divided by a rate of return. This approach involves capitalization, which is the process of converting a benefit stream into value. The value derived is the value of the operating assets and liabilities of the entity. The nonoperating or investment assets are then added to the value as determined to obtain the value of the enterprise.

.26 Some of the valuation methods included in the income approach are:

- a. Capitalization of benefits method
- b. Discounted future benefits method
- c. Excess earnings method

.27 The capitalization of benefits method places a value on a single benefit stream that is forecast to be consistent in the future. If a company has a stable track record and its future operating results are forecast to be at a consistent level, the capitalization of benefits method is usually appropriate. The discounted future benefits method requires a year-by-year estimate of benefits with the results being discounted to present value. The discounted future benefits method would be applicable when the subject company is expected to have cyclical results and, therefore, a fluctuating benefit stream.

⁷ Pratt, *Valuing A Business* (Homewood, Ill.: Dow Jones-Irwin, 1989), p. 29.

⁸ *Ibid.*

.28 To use the income approach, the valuer must select the appropriate benefits stream to be capitalized or discounted. The benefits may include after-tax income, pre-tax earnings, cash flow, dividends, excess earnings, earnings before interest and taxes (EBIT), earnings before depreciation, interest, and taxes (EBDIT), or any other elements considered to be appropriate under the circumstances. The capitalization rate or discount rate to be used will vary according to the benefits stream being capitalized or discounted. A common error is to apply the same rate to different benefits streams. The reasons for using different rates are discussed under "Discount and Capitalization Rates" (section 13/150).

.29 The excess earnings method is a hybrid of the asset-based and income approaches.

.30 *Capitalization of benefits method.* The capitalization of benefits method can be expressed in the following formula:

$$\text{Value} = \text{Benefits} \div \text{Rate}$$

where

Benefits = after-tax earnings
pre-tax earnings
gross cash flow
net cash flow
dividends
EBIT
EBDIT
other appropriate elements

Rate = required rate of return applicable
to the benefits stream capitalized

.31 The benefits stream to be capitalized can vary. Some valuers prefer to use cash flow rather than earnings, but there is no single approach. Each valuation will depend on the availability of data. Cash flow may be more appropriate if it is known that capital expenditures, debt repayment, or working capital are necessary to finance future growth.

.32 The starting point in this method of valuation is to obtain or prepare historical financial statements for an appropriate period, usually 5 years. These statements are then normalized if the valuer is estimating the value of a controlling interest in the enterprise. Since minority interests, in many cases, have a lack of control over the items being adjusted, the normalization process may not be appropriate for an interest that does not possess the ability to control these items. This normalization process involves adjusting items in the financial statements that are not considered to be normal operating expenses for the subject business. The result should be economic financial statements rather than those that are GAAP or tax oriented. Some of the items commonly adjusted in the financial statements are:

- Owner's compensation
- Owner's perquisites

- Entertainment expenses
- Automobile expenses
- Compensation to family members
- Rent expenses (if not an arm's-length lease)
- Interest expenses
- Nonoperating expenses
- Depreciation or amortization

In appendix 13/A, schedule 13A-4.13 provides an illustration of the normalization process.

.33 Once the financial statements have been normalized, the valuer 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 practitioner should not average the historical figures unless the outcome reflects the anticipated financial results of the subject business. Schedule 13A-4.8 in appendix 13/A provides an illustration of the capitalization of benefits method.

.34 *Discounted future benefits method.* The discounted future benefits method is used when the earnings or cash flow of the valuation subject is expected to differ substantially from current operating results. This method requires that a forecast be made for an appropriate number of years. The forecasted results are then discounted to present value based upon a rate of return that reflects the risk associated with the benefits stream.

.35 Although there is no consensus among valuers about the number of years to be forecast, good valuation practice indicates that the period to be used includes the year after a stabilized benefits stream is achieved. Here also, the practitioner should avoid a common error of resorting to a five- or ten-year period, which may not always be appropriate.

.36 The formula used to estimate value under this method is illustrated in table 13-1 on the next page.

.37 *Excess earnings method.* 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.

.38 The excess earnings method involves valuing the subject's tangible assets and liabilities at fair market value and adding an amount that represents its intangible value. The net tangible assets are valued according to the adjusted book value method, which was described earlier in ¶13/145.22. The capitalization of excess earnings is used to value the intangibles.

Table 13-1

Application of Discounted Future Benefits Formula

The formula for the discounted future benefits method is as follows:

$$\text{Present Value} = \sum \frac{I_n}{(1 + i)^n} + \frac{TV_t}{(1 + i)^t}$$

where

- I = Forecasted income (cash flow)
- n = Year in which the income is achieved
- i = Required rate of return
- TV = Terminal value, which is the estimated income stream during the stabilized period
- t = Year of stabilization

The following illustrates the application of the formula:

<u>Year</u>	<u>Forecasted Net Income</u>	x	<u>26% Present Value Factors</u>	=	<u>Present Value Future Income</u>
1	\$ 47,900	x	.79365	=	\$ 38,016
2	53,100	x	.62988	=	33,447
3	59,700	x	.49991	=	29,845
4	62,800	x	.39675	=	24,916
5	65,700	x	.31488	=	20,688
TVx5	328,500 ⁹	x	.31488 ¹⁰	=	<u>103,438</u>
					<u>\$ 250,350</u>

In appendix 13/A, schedule 13A-4.13 provides an illustration of this method.

⁹ TVx5 calculated as follows: $\$65,700 \times 1.05$ (assumed growth) = \$68,985
 Discount Rate minus Growth (.26 - .05) = .21
 Capitalizing \$68,985 @ 21% = \$328,500

¹⁰ The terminal value is usually discounted at the same rate as the final year of the forecast.

.39 Excess earnings are derived by forecasting normalized annual net income for the entity, as is done in 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. Schedule 13A-4.9 in appendix 13/A provides an illustration of this method.

.40 The practitioner needs to understand the theoretical basis of this method to avoid making many of the common errors that can occur. The following are important guidelines for using this method:

- a. Since valuation is a "prophecy of the future," the valuer should estimate the normalized annual future income. A common error is to calculate a weighted average net income for the five prior years. The revenue rulings make clear that using a weighted average is incorrect unless it reasonably reflects future expectations.
- b. The reasonable return on the net tangible assets should be based on the level of risk associated with these assets, as well as 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 on investment 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 U.S. Treasury Bonds and receive an 8-percent return, the return on accounts receivable, furniture, machinery, and so forth, should be higher to reflect the amount of risk related to the investment in these assets.

A common error to avoid is considering the example return of 8 to 10 percent given in Revenue Ruling 68-609 as gospel. The rate must reflect risk and can differ from the example, depending on the valuation date, composition of the assets, and other factors.

- c. The capitalization rate chosen must reflect the appropriate amount of risk relating to intangible assets. The example of 15 to 20 percent in 68-609 may be inappropriate. Generally, the capitalization rate for intangible assets will be higher than 20 percent (see the discussion on capitalization rates).
- d. The excess earnings method should be used only if no better method is available to determine the value of the intangibles. Frequently, the enterprise can be valued with a different method, possibly from an income approach that calculates the tangible and intangible value.

13/150 DISCOUNT AND CAPITALIZATION RATES

.01 One of the most difficult tasks the business valuer faces is selecting an appropriate discount or capitalization rate. Before making a selection, however, the valuer must understand

the distinction between these two rates. Although the terms *discount rate* and *capitalization rate* are often used interchangeably, the rates are, in fact, different.

.02 The discount rate represents the rate of return that an investor requires to justify investing in an asset because of 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 return. The discount rate is used to derive the present value factors, which are used to discount a stream of future benefits to their present value.

.03 Depending upon the information available from the market, a valuer will use either a pre-tax or after-tax discount or capitalization rate. This will primarily depend upon how the typical buyers and sellers are motivated in consummating transactions. The resulting value will be the same regardless of whether a pre-tax or an after-tax rate is used. This can be illustrated by the following example.

.04 Assume that the value of XYZ, Inc. is being determined using a capitalization of income method. XYZ, Inc. has a forecasted pre-tax income of \$100,000 and an after-tax income of \$65,000 (assumes a 35% tax rate). If the valuer has determined that the appropriate capitalization rate based on pre-tax information in the market was 20 percent, the valuation result would be as follows:

	<u>Pre-Tax</u>	<u>After-Tax</u>
Forecasted Income	\$100,000	\$ 65,000
Capitalization Rate	20%	13% ²
Estimated Value	\$500,000 ¹	\$500,000 ³

¹ \$100,000 ÷ .20 = \$500,000

² 20% x (1 - .35) = 13%

³ \$65,000 ÷ .13 = \$500,000

.05 A capitalization rate is generally derived from the subject's discount rate. It is used primarily as a divisor to determine value. The basis of the relationship between the discount and capitalization is the assumption that the business has a perpetual life and its annual growth will be constant. The relationship is expressed as follows:

$$\text{Discount Rate} - \text{Growth Rate} = \text{Capitalization Rate}$$

.06 The valuer needs to use informed judgment in selecting the growth rate. The company's historical growth, the projected growth of the industry, and many other factors (including but not limited to management goals, ability to achieve desired growth, borrowing

power) should be considered in the determination of the growth rate. The rate should reflect long-term growth rather than only that which is projected for the following year. The practitioner needs to apply good judgment because an exceptionally high growth rate may not be achievable by the company. Experts in finance generally expect the long-term growth of a company to average from 3 to 5 percent. However, the valuer needs to support the growth rate selected.

.07 The discount and capitalization rates used will depend on what is being discounted or capitalized. The possibilities include:

- Net earnings (after tax)
- Net income (pre-tax)
- Gross cash flow¹¹
- Net cash flow¹²
- Excess earnings
- Dividends/dividend-paying capacity
- EBIT
- EBDIT

.08 The determination of what will be discounted or capitalized will depend on various factors, including availability and reliability of data. The amount of risk associated with the valuation subject should be the major consideration in determining an appropriate rate. (The assessment of this risk is of great importance throughout the valuation process.) The valuer also considers the alternative rates of return on comparable investments available to the "willing buyer." This is the principle of substitution at work.

¹¹ Normalized Net Income
+ Normalized Non-Cash Charges
 Gross Cash Flow

Both gross cash flow and net cash flow (see footnote 12) as used in the valuation context differ from the traditional accounting definitions as described in FASB 95. The valuer is recommended to consult authoritative literature in performing these types of engagements.

¹² Gross Cash Flow
- Anticipated Capital Expenditures
-(or +) Working Capital necessary to support growth (or generated due to negative growth)
-(or +) Debt balance due to borrowings forecasted to fund growth net of principal repayments
 Net Cash Flow

.09 Revenue Ruling 59-60 lists eight factors to consider in valuing a closely held stock. The factors include "the economic outlook in general and the condition and outlook of the specific industry in particular." Many practitioners include an analysis of the economy and the industry in their valuation reports. This analysis assists in determining appropriate discount or capitalization rates.

.10 The three primary reasons for performing this analysis are—

- a. To assess the valuation subject's performance compared with the company's industry given the general economic conditions.
- b. To forecast financial results for the company based on the outlook for both the economy and the industry.
- c. To determine how much risk the entity is subject to due to economic and industry conditions and what effect this risk will have on the required rate of return.

.11 The benefit of this economic analysis is illustrated in the case of the fictional XYZ Furniture Store. During the economic analysis phase of the engagement, the practitioner finds that the number of building permits issued and housing starts in the local area have decreased considerably and is not expected to increase in the near future. This information is important to the valuation because, as the practitioner learned through research, the retail furniture industry generally lags six months behind the real estate market. If people do not buy houses, they do not buy new furniture.

.12 The impact of this information on the valuation may be twofold: First, the forecast may need to be adjusted if the expected results can be determined, or second, the discount or capitalization rate may need to be adjusted to reflect the risk in purchasing a furniture store when a weak real estate market is predicted.

.13 There are two primary methods of determining discount rates: the build-up method and the capital asset pricing model (CAPM). These two methods use the same components but apply them differently. These components are the safe rate, the general risk premium, and the specific company risk premium.

The Build-up Method

.14 There are several methods of building up to determine discount and capitalization rates. The method used by the valuer will depend on the information available. Using the build-up method to determine these rates involves adding rates of return and return premiums based on a qualitative risk analysis of the appraisal subject. The components of the rates are discussed below.

.15 **Safe Rate.** The safe rate is generally considered to be a risk-free rate available in the marketplace. Although not completely without risk, the yield to maturity of long-term Treasury bonds as of the effective date of the valuation is frequently used to determine this rate. This

information is readily available in newspapers, the *Federal Reserve Bulletin*, and other financial publications in most local libraries.

.16 General Risk Premium. The general risk premium, also referred to as an *equity risk premium*, represents the excess of the return earned by an equity investor over that earned by an investor in long-term Treasury securities. This information is available in various sources. The source most widely used by business valuers is *Stocks, Bonds, Bills and Inflation*,¹³ published annually by Ibbotson Associates. Although this publication is a valuable tool, it has limitations in that the information it provides is about returns of public companies that may be considerably larger than the subject of the valuation. Nevertheless, some valuers believe that this information is the only data that should be used. Other valuers, however, also consult other reference sources that have been published by such experts in valuation as A.S. Dewing¹⁴ and James Schilt.¹⁵ In their works, businesses are categorized according to size, management structure, industry, competition, and so forth, and the authors offer opinions on the related risk premium and suggested capitalization rates for businesses in different categories.

.17 Specific Company Risk Premium. The specific company risk premium is the component of risk that is attributable to the valuation subject. The determination of this portion of the overall discount or capitalization rate should be based on a detailed analysis of the valuation subject. The valuer uses ratio analyses and common size financial statements to compare the company's current performance with past performance as well as with industry and guideline company data. The valuer also considers risks other than financial, such as those associated with the subject's industry, management, operations, environmental laws and regulations, and so forth.

.18 The build-up method summarizes the various risk components to derive the discount or capitalization rate. The source of the information used by the valuer will determine whether a discount rate or a capitalization rate has been derived. For example, a price earnings ratio will allow the valuer to derive a capitalization rate directly whereas Ibbotson data will derive a discount rate. An illustration of the build-up method to determine discount and capitalization rates is provided in exhibit 13A-4.7 in appendix 13/A.

Capital Asset Pricing Model

.19 The capital asset pricing model is also widely used, generally in the valuation of larger companies. CAPM is used to develop discount rates applicable to the equity of an enterprise

¹³ Ibbotson Associates, *Stocks, Bonds, Bills and Inflation* (Chicago, Ill.: Ibbotson Associates).

¹⁴ A.S. Dewing, *The Financial Policy of Corporations* (New York: The Ronald Press Company, 1953).

¹⁵ James H. Schilt, "A Rational Approach to Capitalization Rates for Discounting the Future Income Stream of a Closely Held Company," *Financial Planner*, January 1982.

as compared with the total invested capital (debt and equity) of that enterprise. Valuing total invested capital would require a weighted average cost of capital (WACC) rate to be used by the valuer. The WACC is not discussed in this practice aid but the valuer should be aware of its applicability. This model derives a discount rate according to the following formula:

$$R_f + [(R_m - R_f) \times b]$$

where

R_f = risk-free rate

R_m = rate of return in the total market to equity investors

b = *beta*, which is a measure of volatility in the stock market representing risk

.20 Beta is determined through comparisons with guideline companies that are publicly traded. One readily available source of betas is the weekly publication *Value Line*.¹⁶

.21 In using the CAPM, some valuers add a specific company risk premium, which is referred to as an alpha. CAPM is based on portfolio management theory, which is beyond the scope of this practice aid. Although practitioners will probably use the build-up method most of the time, particularly for small companies and professional practices, they are advised to be familiar with CAPM. Practitioners are also advised to review additional valuation literature to obtain further understanding of the theory supporting discount and capitalization rates.

13/155 DISCOUNTS AND PREMIUMS

.01 The final value of a valuation subject may be less or more than the value calculated with the methods described in this practice aid. Discounts or premiums may be appropriate in calculating the final value of the subject. An experienced practitioner often considers using a minority discount when the ownership interest is less than 50 percent or a control premium when the ownership interest exceeds 50 percent. However, the practitioner needs to exercise caution because a discount or premium is not always appropriate. For example, a practitioner who uses public guideline companies to value a subject needs to be aware that the prices of the shares listed on a stock exchange already reflect a minority value. Generally, public stock market prices for shares of stock represent a marketable minority interest. To use discounts and premiums appropriately the practitioner needs to understand the basis of the adjustment.

.02 Some of the common discounts and premiums are:

a. Minority discount

¹⁶ *The Value Line Investment Survey* (New York: Value Line Publishing, Inc.).

- b. Discount for lack of marketability
- c. Small company discount
- d. Discount from net asset value
- e. Control premium

Minority Discount

.03 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.

.04 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 value is the reference point. The following formula can be used to obtain the minority discount:

$$1 - \left[\frac{1}{1 + \text{control premium}} \right]$$

.05 For example, the valuer may determine that the control value of a share of stock is \$120, and research indicates that a 20 percent control premium is appropriate for that valuation. The minority discount would be calculated as follows:

$$1 - \left[\frac{1}{1 + 0.2} \right] = 16.67\% \text{ minority discount}$$

The 16.67 percent minority discount would be deducted from the control value to derive the freely traded minority value. This would be calculated as follows:

$$\begin{aligned} \$120 & \times 16.67\% & = & \$ 20 \text{ discount} \\ \$120 & - \$20 & = & \$100 \text{ freely traded minority value} \end{aligned}$$

.06 A minority discount should be taken only when appropriate, and the rationale for the discount should be well documented. The facts and circumstances of each case will vary, and therefore, the practitioner should avoid selecting a minority discount rate arbitrarily.¹⁷

¹⁷ Practitioners will find additional guidance on selecting minority discounts in control premium studies in such publications as *Mergerstat Review*, *Mergers and Acquisitions*, and the *Premium for Control Study*, published by Houlihan, Lokey, Howard & Zukin.

Discount for Lack of Marketability

.07 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. 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 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.

.08 The relationship of the DLOM to the control premium and minority discount is illustrated in figure 13-1 on the following page.

.09 The practitioner should also be aware that 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.

.10 Sources of data about the DLOM include the *SEC Institutional Investor Study*, studies by Maher, Moroney, and Solberg, John Emory's study on initial public offerings, and many unpublished proprietary studies by valuation or investment banking firms. Many books on valuation theory discuss these studies.

.11 One of the best explanations of why a DLOM varies from case to case was written in an article published by Robert E. Moroney entitled "Why 25% Discount for Nonmarketability in One Valuation, 100% in Another?" (*Taxes*, May 1977). Every business valuer should read this article.

Small Company Discount

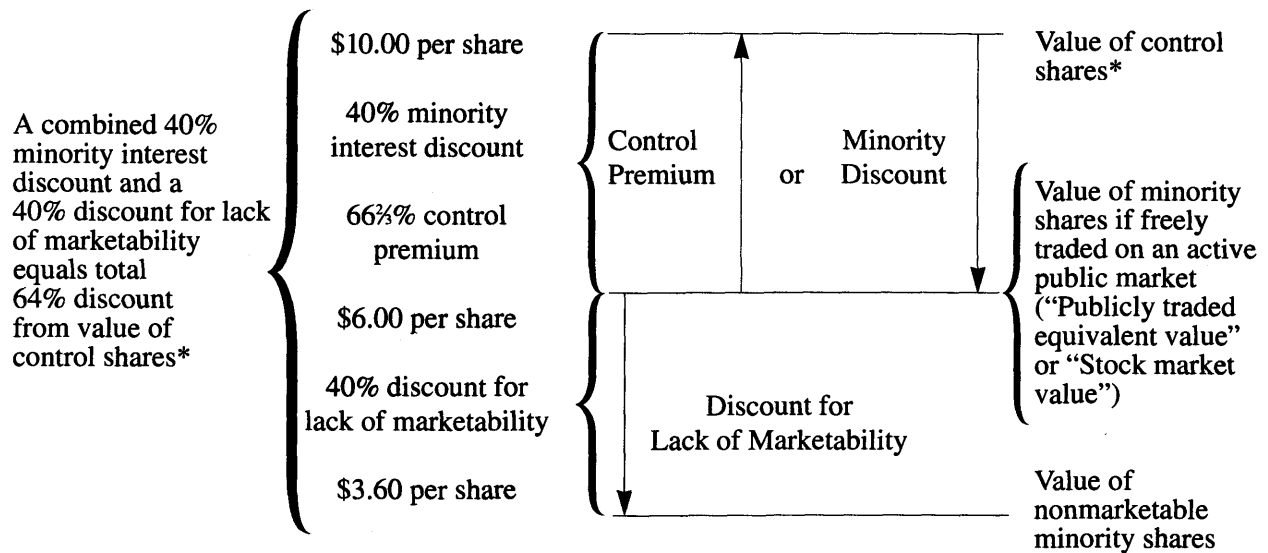
.12 The small company discount is similar to a DLOM. However, valuation professionals distinguish between these two discounts. Data in publications such as *Mergerstat Review* seem to indicate that the acquisition prices for entire private companies tend to be lower than tender offer prices for public companies. One reason for this, according to many valuation professionals, is that entire private companies tend to be smaller than many of the public companies involved in tender offers.

Discount From Net Asset Value

.13 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. The practitioner determines this discount by reviewing the prices of the shares of publicly traded guideline companies with respect to their published net asset values.

Figure 13-1

Example of Relationships Between Control Premiums, Minority Interest Discounts, And Discounts for Lack of Marketability



* **Note:** Control shares in a privately held company may also be subject to discount for lack of marketability, but usually not nearly as much as minority shares.

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Control Premium

.14 As stated earlier, the control premium is the opposite of the 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 valuer 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.

.15 The valuer needs to be careful to avoid double counting. Certain methods of valuing a small 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 benefits stream to be discounted or capitalized. The capitalization of excess earnings method, for example, is one in which the resulting value is a control value. In this instance, if the valuer adds a control premium, double counting would take place.

.16 A control premium may, however, be appropriate in valuing certain minority blocks of stock. For example, an interest of 2 percent may have a considerable value if it has the swing vote when the other two stockholders own 49 percent each.

13/160 CONCLUSION

.01 The valuation of a closely held business is an extremely complex process. The purpose of this practice aid is to provide practitioners with a better insight into the complexity of this process and with a foundation for investigating the subject further. More detailed information about valuation theory and methods is available in books and articles, such as those listed in the bibliography, as well as in continuing professional education courses sponsored by the AICPA, state societies, and other professional appraisal organizations.

APPENDIX 13/A**CASE STUDY: VALUATION OF 100 PERCENT
OF THE EQUITY OF BEST WIDGETS, INC.**

Jane Piccolo, president of Best Widgets, Inc., retained the firm of I.M.A. Valuer & Company to estimate the fair market value of 100 percent of the equity of the company for estate planning purposes. Piccolo agreed to the terms of the valuation as stated in the sample engagement letter (exhibit 13A-1). After reviewing the draft of the valuation report, Piccolo sent I.M.A. Valuer & Company a representation letter confirming the validity of the information submitted to the valuer and verifying its accuracy and completeness (see exhibit 13A-2, "Sample Representation Letter"). The sample letters can be adapted for use in a particular engagement. The practitioner is also advised to consult appropriate AICPA sources for guidance particularly as it relates to situations in which an accountant's report is required to accompany the financial statements.

The final valuation computation in this case study is presented for illustrative purposes. Many of the valuation methods illustrated may or may not be appropriate for each business valuation engagement. In an actual valuation, all methods would probably not be used.

Sample Engagement Letter

**I.M.A. Valuer & Company
Certified Public Accountants
59-60 Main Street
Anytown, USA 00000**

July 30, 19ya

**Ms. Jane Piccolo, President
Best Widgets, Inc.
68-609 Ruling Street
Anytown, USA 00000**

Dear Ms. Piccolo:

This letter will confirm the terms of our engagement and the nature of the services that we will provide.

1. We will perform a business valuation to determine the fair market value of 100 percent of the common stock of Best Widgets, Inc. as of December 31, 19xz. Fair market value is defined as the value at which a willing buyer and a willing seller, both being informed of the relevant facts about the business, would conduct a transaction, neither party acting under any compulsion to do so.
2. We will not conduct an audit as defined by the American Institute of Certified Public Accountants. Rather, we will perform the necessary tests of the accounting records for the purpose of issuing a valuation report, not a statement regarding the fairness of presentation of the financial statements of the business.
3. In our report, we will include certain values derived from reports of others and designate them as such. However, 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 valuation date. In the event sufficient records or documentation cannot be supplied to us, we will not issue a valuation report.
4. Our fees will be based upon the following rates:
 - a. \$XXX per hour for all services relating to the business valuation regardless of whether a valuation report can be issued.

- b. \$XXX per hour for all services rendered relating to depositions, trial preparation, court appearances, and testimony; a minimum fee for four hours will be charged for appearance at depositions and other court appearances.
- c. Any out-of-pocket expenses relating to this valuation.

5. The payment terms are as follows:

\$XXX is due in advance as a retainer. The balance shall be payable prior to the delivery of the report. The report will not be issued if there is a balance due. Any services rendered thereafter shall be due and payable upon presentation of an invoice.

Balances outstanding beyond 30 days will have a service charge added at the rate of 1.5% per month or part thereof. All costs relating to collection of these fees will also be the responsibility of the undersigned including, but not limited to, attorney fees and collection agency fees. Reasonable attorney fees will be considered to be up to 33 percent of the outstanding balance.

- 6. The final report is copyrighted by I.M.A. Valuer & Company. It shall remain our property, and no copies or reproductions shall be allowed without written consent until such time as any outstanding balance is paid.
- 7. I.M.A. Valuer & Company reserves the right to withdraw from this engagement at any time regardless of the reason. In the event there is an outstanding balance, we further reserve the right not to make a court appearance in this matter. All work papers created by us will remain the property of our firm. In the event of a withdrawal, we would only be liable to return those materials and documents supplied by the client and the unused portion of the retainer.
- 8. The undersigned gives I.M.A. Valuer & Company the right to discuss this matter with the client's attorney, accountant, other individuals designated by the client, and any colleagues of the valuer from whom professional information is sought. If the terms of this engagement are acceptable, please sign the acknowledgment below and return a signed copy of this letter with your check for \$X,XXX to our office.

Partner

ACKNOWLEDGMENT:

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

Signature _____

Date _____

Sample Representation Letter

Best Widgets, Inc.
68-609 Ruling Street
Anytown, USA 00000

November 19, 19ya

I.M.A. Valuer & Company
Certified Public Accountants
59-60 Main Street
Anytown, USA 00000

Gentlemen:

Concerning your valuation of Best Widgets, Inc. as of December 31, 19xz, we represent to you that to the best of our knowledge and belief—

1. We have made available to you all information requested and all information that we believe is relevant to your valuation.
2. The financial statements furnished to you for the years ended December 31, 19xv through 19xz present the financial position of Best Widgets, Inc. in conformity with generally accepted accounting principles.
3. The income tax returns furnished to you for the years 19xv through 19xz are complete and exact copies of the returns filed with the Internal Revenue Service.
4. The company has no commitments or contingent liabilities, including those arising from litigation, claims, and assessments, that are not disclosed in the financial statements identified above.
5. The company does not have any (a) employment contracts with salaried employees, (b) stock option plans, or (c) stock redemption agreements with shareholders, except to the extent indicated in written agreements furnished to you.

6. The company is not currently negotiating the acquisition of new business interests or the disposition of existing segments or products lines.
7. The forecast of future earnings presents our assumptions and the company's expected financial position, results of operations, and cash flows for the year ending after December 31, 19xz in conformity with the generally accepted accounting principles expected to be used by the company during the forecast period. These principles are consistent with the principles that Best Widgets, Inc. uses in preparing its historical financial statements. The financial forecast is based on our judgment, considering present circumstances, of the expected conditions and our expected course of action.
8. We have reviewed the preliminary draft of your valuation report, a copy of which is attached, and represent that the information about the company presented therein is accurate and complete.

Very truly yours,
Best Widgets, Inc.

Jane Piccolo, President

Sample Cover Letter

**I.M.A. Valuer & Company
Certified Public Accountants
59-60 Main Street
Anytown, USA 00000**

November 19, 19ya

**Ms. Jane Piccolo, President
Best Widgets, Inc.
68-609 Ruling Street
Anytown, USA 00000**

Dear Ms. Piccolo:

In accordance with your request and for the purpose of estimating the fair market value of 100 percent of the common stock of Best Widgets, Inc. to be used as part of an estate plan, 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 upon the facts presented in the attached report and other matters considered during our investigation and analysis, it is our opinion that as of December 31, 19xz, the fair market value of 100 percent of the common stock of Best Widgets, Inc. was **\$4,000,000**.

Our report and conclusions are attached to this cover letter as an integral part of it.

Respectfully submitted,
I.M.A. VALUER & COMPANY

Partner

Comparison of Historic Balance Sheets

During a business valuation engagement, the practitioner will usually receive either financial statements or tax returns or both and can use them to prepare a comparative balance sheet of the valuation subject. An advantage of preparing a comparative balance sheet is that it allows the valuer to compare any changes between the various years being analyzed. Although statements for five years are commonly used, the facts and circumstances of each case should be considered because more or fewer years may be appropriate in some situations.

Practitioners should remember that generally accepted accounting principles do not apply in the valuation of closely held companies. It is suggested to segregate operating assets from nonoperating assets and liabilities in the comparative balance sheet.

In the case of Best Widgets, Inc., nonoperating assets include the cash surrender value of a life insurance policy and a brokerage account that is held for investment purposes. Under an income approach, since these assets do not affect operations, the company would be valued without them and they would be added back at the end to determine the enterprise's total value, as is done in several valuation illustrations in this case study. The nonoperating liabilities should also be segregated for similar reasons. In this instance, a loan against the cash surrender value of the officer's life insurance has been segregated.

Since many small businesses have nonoperating assets and liabilities recorded on their balance sheets, the practitioner needs to pay close attention to these items. As a company grows, and as more owners have an interest in the company, the number of personal items on the balance sheet generally decreases. For instance, the chance of multiple owners each having a condominium or other personal assets on the books is less likely than if the business was a sole proprietorship.

Schedule 13A-4.1
Best Widgets, Inc.
Historic Balance Sheets
December 31,

	<u>19xv</u>	<u>19xw</u>	<u>19xx</u>	<u>19xy</u>	<u>19xz</u>
Current Assets					
Cash	\$ 56,789	\$ 65,189	\$ 69,879	\$ 74,568	\$ 88,563
Accounts Receivable:					
Trade	178,569	161,528	198,567	188,222	196,877
Employees	1,235	2,568	2,256	4,789	3,526
Other	2,356	2,145	2,568	3,546	2,973
(Bad Debt Allowance)	(1,785)	(1,615)	(1,986)	(1,882)	(1,969)
Inventory					
Finished goods	988,562	1,089,521	1,256,742	1,158,963	1,568,963
Prepaid Expenses	56,899	60,897	65,423	62,578	64,589
Current Assets	<u>\$ 1,282,625</u>	<u>\$ 1,380,233</u>	<u>\$ 1,593,449</u>	<u>\$ 1,490,784</u>	<u>\$ 1,923,522</u>
Fixed Assets					
Furniture	\$ 567,852	\$ 659,412	\$ 756,222	\$ 789,123	\$ 985,642
Machinery	369,741	379,514	401,256	410,444	465,237
Auto & Truck	97,563	105,643	125,654	178,456	198,525
(Accumulated Depreciation)	(276,894)	(419,894)	(576,894)	(745,894)	(920,894)
Net Fixed Assets	<u>\$ 758,262</u>	<u>\$ 724,675</u>	<u>\$ 706,238</u>	<u>\$ 632,129</u>	<u>\$ 728,510</u>
Other Assets					
Deferred charges	\$ 12,564	\$ 13,568	\$ 14,589	\$ 13,456	\$ 15,488
Intangibles	50,000	50,000	50,000	50,000	50,000
(Accumulated Amortization)	(20,000)	(25,000)	(30,000)	(35,000)	(40,000)
Nonoperating Assets:					
Cash value - Life Investments	6,896	8,956	10,235	15,689	21,589
	98,564	105,649	87,235	156,423	154,215
Other Assets	<u>\$ 148,024</u>	<u>\$ 153,173</u>	<u>\$ 132,059</u>	<u>\$ 200,568</u>	<u>\$ 201,292</u>
TOTAL ASSETS	<u>\$ 2,188,911</u>	<u>\$ 2,258,081</u>	<u>\$ 2,431,746</u>	<u>\$ 2,323,481</u>	<u>\$ 2,853,324</u>
Current Liabilities:					
Accounts Payable	\$ 298,564	\$ 286,159	\$ 356,729	\$ 346,789	\$ 398,524
Accrued Expenses	137,489	128,796	167,498	156,422	145,666
Notes Payable	50,000	75,000	80,000	90,000	125,000
Long-term Debt (Current)	120,000	120,000	120,000	120,000	120,000
Other Liabilities	65,897	48,956	59,852	65,412	63,588
Current Liabilities	<u>\$ 671,950</u>	<u>\$ 658,911</u>	<u>\$ 784,079</u>	<u>\$ 778,623</u>	<u>\$ 852,778</u>
Long-term Liabilities:					
Bank Loan	\$ 265,512	\$ 187,654	\$ 305,469	\$ 356,478	\$ 568,789
Total Long-term Liabilities:	<u>\$ 265,512</u>	<u>\$ 187,654</u>	<u>\$ 305,469</u>	<u>\$ 356,478</u>	<u>\$ 568,789</u>
Nonoperating Liabilities:					
Loan-CSV	3,500	4,500	5,000	7,500	10,000
Total Liabilities	<u>\$ 940,962</u>	<u>\$ 851,065</u>	<u>\$ 1,094,548</u>	<u>\$ 1,142,601</u>	<u>\$ 1,431,567</u>
Stockholders' Equity:					
Common Stock	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Retained Earnings	1,237,949	1,397,016	1,327,198	1,170,880	1,411,757
Total Stockholders' Equity	<u>\$ 1,247,949</u>	<u>\$ 1,407,016</u>	<u>\$ 1,337,198</u>	<u>\$ 1,180,880</u>	<u>\$ 1,421,757</u>
LIABILITIES & STOCKHOLDERS' EQUITY	<u>\$ 2,188,911</u>	<u>\$ 2,258,081</u>	<u>\$ 2,431,746</u>	<u>\$ 2,323,481</u>	<u>\$ 2,853,324</u>

Comparison of Summary Historic Income Statements

Upon receipt of the company's financial statements or tax returns, the business valuer should prepare a spreadsheet comparing the company's historic income statement for an appropriate number of years (usually five). The valuer will find it helpful to prepare a complete historic income statement comparison rather than one in summary form. The purpose of this comparison is to analyze the trends. This analysis will be helpful in determining which expenses need further examination, particularly for the purpose of normalizing the income statement. It will also allow the valuer to determine any trends that may be used for forecasting future operations.

Once again, the nonoperating income and expenses are segregated because the value of the enterprise should be determined based on its true business activity. Another reason to segregate these figures is to enhance the comparability of the data with the data of guideline companies and industry data.

Frequently, when small closely held companies are bought and sold, the transactions are asset sales rather than stock sales. As such, the nonoperating assets and liabilities, which generate the nonoperating income and expenses, are not part of the transaction. Valuation theory requires the valuer to treat these items separately.

Schedule 13A-4.2
Best Widgets, Inc.
Summary Historic Income Statements
For the Years Ended December 31,

	<u>19xv</u>	<u>19xw</u>	<u>19xx</u>	<u>19xy</u>	<u>19xz</u>
Total Revenue	\$ 6,458,933	\$ 7,156,892	\$ 8,546,666	\$ 9,125,463	\$ 9,957,899
Cost of Sales	<u>3,845,615</u>	<u>4,356,821</u>	<u>5,642,852</u>	<u>4,986,315</u>	<u>5,423,896</u>
Gross Profit	\$ 2,613,318	\$ 2,800,071	\$ 2,903,814	\$ 4,139,148	\$ 4,534,003
Operating Expenses	1,685,248	1,758,962	1,799,841	2,489,521	2,566,844
Officer's Salary	160,000	190,000	254,000	289,000	350,000
Depreciation	135,000	148,000	162,000	174,000	180,000
Interest Expense	<u>68,952</u>	<u>75,236</u>	<u>84,569</u>	<u>88,569</u>	<u>93,412</u>
Total Operating Expenses	<u>\$ 2,049,200</u>	<u>\$ 2,172,198</u>	<u>\$ 2,300,410</u>	<u>\$ 3,041,090</u>	<u>\$ 3,190,256</u>
Pre-Tax Net Operating Income	\$ 564,118	\$ 627,873	\$ 603,404	\$ 1,098,058	\$ 1,343,747
Nonoperating Income	19,564	21,587	14,569	17,892	16,459
Nonoperating Expenses	(3,569)	(8,852)	(9,641)	(7,863)	(10,987)
Income Taxes	<u>(201,564)</u>	<u>(245,688)</u>	<u>(239,568)</u>	<u>(412,569)</u>	<u>(425,698)</u>
Net Income	<u>\$ 378,549</u>	<u>\$ 394,920</u>	<u>\$ 368,764</u>	<u>\$ 695,518</u>	<u>\$ 923,521</u>

Exhibit 13A-4.3

Adjusted Net Income Analysis

The starting point of the adjusted net income analysis is the reported net income as reflected in schedule 13A-4.2. The adjustments in schedule 13A-4.3 are intended to normalize the reported net income and correct for those items that may need to be restated to reflect the net economic income of the business. In this instance, nonoperating income was subtracted from the reported net income because it is not attributable to business activity.

Depreciation expense was also adjusted to reflect the economic depreciation rather than the tax or GAAP depreciation. To determine the amount of this adjustment, the valuer either has an appraisal of the depreciable assets performed or uses his or her own judgment based on a similar process as if an appraisal were performed. To set the fair market value of the fixed assets, the valuer should obtain information about the useful life of the assets from either the sources that determined the value or company management. The practitioner should pay particular attention to items that have been expensed under Section 179 of the Internal Revenue Code, items that possibly have been expensed, rather than capitalized, over the years, and items that have been written off, but continue to be used in the business.

The adjustment to officer's salary is intended to reflect the reasonable compensation that would be required by a replacement. Industry salary surveys are frequently a good source of this information, and it is advisable to use the data reported in this type of source rather than base the adjustment on the percentages of sales that are widely published. The problem with using some of these publications is their lack of reliability. Usually they do not specify the number of officers earning the compensation, so the same percentage may be applied to a company with one officer and to one with three officers.

The nonoperating expenses have also been removed and added to the net income because they do not affect the enterprise's business operations. The value of net nonoperating assets is added back to the value determined for the operating assets and liabilities to derive the total value of the enterprise.

The final adjustment is to calculate the tax effect of these adjustments. The valuation profession is divided about the applicability of taxes in the valuation of closely held businesses between practitioners who prefer to value companies on a pre-tax basis and those who value on an after-tax basis. Either basis is correct as long as the applicable capitalization rates, discount rates, and guideline company information are consistent with the basis being used. When the entity being valued is a sole proprietorship, a partnership, or an S corporation, some practitioners prefer to use a corporate tax rate to avoid the effects of itemized deductions and personal exemptions on the owner's tax obligation. Others prefer to value the entity on a pre-tax basis, which accomplishes the same purpose, if the other information being used by the valuer can be converted to a pre-tax basis.

If the practitioner capitalizes or discounts a pre-tax or an after-tax benefits stream, the result should be the same. The company will only have one value (within the reasonable range of values), and the factors used in the valuation process should be applied consistently.

Schedule 13A-4.3
Best Widgets, Inc.
Adjusted Net Income
For the Years Ended December 31,

	<u>19xv</u>	<u>19xw</u>	<u>19xx</u>	<u>19xy</u>	<u>19xz</u>
Reported Net Income	\$ 378,549	\$ 394,920	\$ 368,764	\$ 695,518	\$ 923,521
Adjustments					
Nonoperating Income ¹	(19,564)	(21,587)	(14,569)	(17,892)	(16,459)
Depreciation ²	(52,791)	(57,874)	(63,349)	(68,041)	(52,770)
Officer's Salary ³	20,000	36,000	84,000	89,000	125,000
Nonoperating Expenses ⁴	<u>3,569</u>	<u>8,852</u>	<u>9,641</u>	<u>7,863</u>	<u>10,987</u>
Pre-Tax Adjustment Net Income	\$ 329,763	\$ 360,311	\$ 384,487	\$ 706,448	\$ 990,279
Net Tax Adjusted 35.58% ⁵	<u>(17,358)</u>	<u>(12,314)</u>	<u>(5,594)</u>	<u>(3,889)</u>	<u>(23,751)</u>
Adjusted Net Income	<u>\$ 347,121</u>	<u>\$ 372,625</u>	<u>\$ 378,893</u>	<u>\$ 702,559</u>	<u>\$ 966,528</u>

1. To remove the nonoperating income
2. To adjust depreciation to reflect economic depreciation rather than tax depreciation
3. To adjust officer's salary based on an industry salary survey
4. To remove nonoperating expenses
5. To adjust taxes by the effective tax rate to reflect the amount of taxes attributable to the adjusted items

Ratio Analysis

Ratio analysis is critical to the valuation process, because it allows the valuer to compare the company's current performance with that of past years and also with that of either guideline companies or the industry. Schedule 13A-4.4 reflects the calculation of ratios that can be used in the financial analysis portion of the valuation.

In this instance, Best Widgets, Inc.'s ratios were compared with composite industry ratios to determine whether the company is stronger or weaker than its industry counterparts. This comparison helps the valuer to assess the financial risk of the company, which is one of the factors used to determine a proper discount or capitalization rate. Another useful purpose of the ratio analysis is to help the valuer forecast future results of the company based on past trends.

A good valuation report includes a discussion of these ratios and explains any major variations from year to year and with the industry composite data. For example, the operating ratio of earnings before taxes to tangible worth of Best Widgets, Inc. is more than twice the industry ratio. Therefore, the valuer analyzed the company data carefully to determine the reason for the difference.

The purpose of the analysis is to assist in the valuation process, and the information presented must be relevant and meaningful to the particular engagement. The practitioner should therefore note that different industries consider different ratios appropriate for the valuation of different types of companies. For example, in the valuation of a brokerage business, the ratio of sales per employee is considered appropriate. The valuer therefore uses this ratio rather than ratios that deal with cost of goods sold or sales per square foot of retail space, which may be applicable for other types of businesses.

Schedule 13A-4.4
Best Widgets, Inc.
Ratios
For the Years Ended December 31,

<u>Description</u>	<u>19xw</u>	<u>19xx</u>	<u>19xy</u>	<u>19xz</u>	<u>Industry</u> <u>19xz</u>
Liquidity Ratio					
Current Ratio	2.00	2.06	1.97	2.09	2.65
Quick Ratio	0.35	0.35	0.35	0.34	0.36
Sales/Accounts Receivables	41.49	46.70	46.08	50.28	46.89
Days	8.80	7.82	7.92	7.26	7.78
COGS/Inventory	4.19	4.81	4.13	3.98	4.36
Days	87.05	75.88	88.42	91.79	83.72
COGS/Payables	14.90	17.55	14.18	14.55	16.56
Days	24.49	20.79	25.75	25.08	22.04
Sales/Working Capital	10.75	11.17	12.00	11.17	14.55
Coverage Ratios					
EBIT/Interest	9.51	8.19	13.51	15.44	10.54
NI+Non-Cash Expenses/ Current Long-term Debt	4.52	4.42	7.25	9.20	6.12
Leverage Ratios					
Fixed/Tangible Worth	0.57	0.53	0.54	0.53	0.48
Debt/Tangible Worth	0.69	0.72	0.90	1.00	0.88
Operating Ratios					
EBT/Tangible Worth	49.28%	45.07%	89.25%	104.69%	43.25%
EBT/Total Assets	28.81%	25.94%	46.61%	52.13%	47.55%
Rev/Fixed Assets	9.65	11.95	13.64	14.64	11.64
Rev/Total Assets	3.22	3.64	3.84	3.85	3.15

Exhibit 13A-4.5

**Comparison of Common Size Income Statements and
Common Size Balance Sheets**

Historic income statements and balance sheets presented as common size financial statements can be used to analyze the company's performance over the years and to compare it with guideline companies and composite industry information. This comparison provides an excellent way to determine whether gross profit percentages have changed over the years and whether the company is keeping pace with the industry. Presentation of these data as percentages rather than dollars makes the comparison easier.

Similar to the ratio analysis, common size financial statement analysis allows the valuer to assess trends and risks that assist in the forecasting process as well as in the determination of proper discount or capitalization rates.

The balance sheet information may show a shifting of assets or liabilities, such as cash and accounts receivable, or it may indicate trends in inventory or accounts payable. The common size financial statements can be used to determine the risk of the company by comparing its experience with that of guideline companies or with composite industry figures. The estimate of risk ultimately contributes to the determination of a proper discount or capitalization rate.

Exhibit 13A-4.6

**Analysis of the Adjusted Book Value and
Orderly Liquidation**

Schedule 13A-4.6 illustrates a computation of the adjusted book value of the assets and liabilities excluding intangible value and the calculation of the liquidation value of the same assets and liabilities. Although not illustrated in this exhibit, other engagements of this type may also include adjustments to current and long-term liabilities. Starting with the book value as shown on the most recent historic balance sheet in schedule 13A-4.1, the valuer made adjustments to bring various items to fair market value. Accounts receivable was adjusted to account for uncollectible accounts. The inventory was adjusted to reflect obsolete items being carried on the company's books. The adjustment to the fixed assets eliminated the accumulated depreciation amount and brought the fixed assets to their fair market value. The valuer may have assets valued by another appraiser who specializes in a particular type of property, such as real estate or machinery and equipment. In an engagement that does not involve material amounts of fixed assets, the valuer may make telephone calls to office furniture vendors or use blue books to value vehicles. In any event, the determination of the fair market value should be properly documented.

Some valuers perform a liquidation value analysis on either a separate schedule or in their work papers and present it only if appropriate. The liquidation percentages applied should be based on the valuer's judgment as to what percentage of the value of assets and liabilities will be realized in the event of an orderly liquidation. An orderly liquidation allows a reasonable amount of time to liquidate the assets and liabilities as compared with a forced liquidation, or fire sale.

The premise of highest and best use employed in real estate appraisals also pertains to business valuations. Generally, the business operation's highest and best use is the same operation that is currently being conducted. However, the highest and best use could be to realize the liquidation value of the assets.

Sometimes certain intangible assets may have more value in liquidation than in a going concern. For example, a fuel oil distributorship that has been losing money for many years may be worth more in liquidation than as a going concern. The reason its liquidation value is higher is that its customer list can be sold to a competitor. Companies are purchasing such lists to expand their own base while the industry shrinks because of conversions to natural gas. The customer list has less value to the company losing money than to the acquirer attempting to maximize its capacity.

In order for the analysis to be complete, the expenses of administering the liquidation and any resulting income taxes should be included. In this case, the asset composition of Best Widgets, Inc. clearly shows that liquidation value is less than the adjusted book value, so there is no need to calculate the administrative cost of liquidation. Schedule 13A-4.6 shows that after adjustments, the adjusted book value of Best Widgets, Inc. is \$1,166,647.

Schedule 13A-4.6
Best Widgets, Inc.
Adjusted Book Value and
Orderly Liquidation
December 31, 19XZ

	<u>Book Value</u>	<u>Fair Market Value Adjustment</u>	<u>Adjusted Book Value</u>	<u>Liquida- tion Percent</u>	<u>Liquidation Value</u>
Current Assets					
Cash	\$ 88,563	\$	\$ 88,563	100.00%	\$ 88,563
Accounts Receivable	201,407	(9,600)	191,807	70.00%	134,265
Inventory	1,568,963	(47,500)	1,521,463	50.00%	760,732
Prepaid Expenses	<u>64,589</u>		<u>64,589</u>	50.00%	<u>32,295</u>
Current Assets	<u>1,923,522</u>		<u>1,866,422</u>		<u>1,015,854</u>
Fixed Assets:					
Fixed Assets	1,649,404	(1,125,689)	523,715	80.00%	418,972
(Accumulated Depreciation)	<u>(920,894)</u>	920,894	<u>0</u>		<u>0</u>
Net Fixed Assets	<u>728,510</u>		<u>523,715</u>		<u>418,972</u>
Other Assets					
Other Long-term Assets	15,488	0	15,488	0.00%	0
Intangibles	50,000	(50,000)	0		0
(Accumulated Amortization)	<u>(40,000)</u>	40,000	<u>0</u>		<u>0</u>
Nonoperating Assets	175,804	16,785	192,589	95.00%	182,960
Other Assets	<u>201,292</u>		<u>208,077</u>		<u>182,960</u>
Total Assets	<u>\$ 2,853,324</u>		<u>\$ 2,598,214</u>		<u>\$ 1,617,785</u>
Current Liabilities					
Accounts Payable	398,524		398,524	100.00%	398,524
Accrued Expenses	145,666		145,666	100.00%	145,666
Notes Payable	125,000		125,000	100.00%	125,000
Long-term Debt (Current)	120,000		120,000	100.00%	120,000
Other Liabilities	<u>63,588</u>		<u>63,588</u>	100.00%	<u>63,588</u>
Current Liabilities	852,778		852,778		852,778
Long-term Liabilities					
Bank Loan	568,789		568,789	100.00%	568,789
Nonoperating Liabilities	<u>10,000</u>		<u>10,000</u>	100.00%	<u>10,000</u>
Total Liabilities	<u>\$ 1,431,567</u>		<u>\$ 1,431,567</u>	100.00%	<u>\$ 1,431,567</u>
Common Stock	10,000		10,000		10,000
Retained Earnings	<u>1,411,757</u>		<u>1,156,647</u>		<u>176,218</u>
Total Equity	<u>\$ 1,421,757</u>		<u>\$ 1,166,647</u>		<u>\$ 186,218</u>
Liabilities & Equity	<u>\$ 2,853,324</u>		<u>\$ 2,598,214</u>		<u>\$ 1,617,785</u>

Build-up Method to Determine Discount and Capitalization Rates

As mentioned earlier, the valuer can use several methods of building up to determine discount and capitalization rates, depending on the information available. In schedule 13A-4.7, for example, the valuer obtained industry information relating to the return on equity based on net earnings, and, therefore, applied a method appropriate for net earnings streams rather than cash flow.

In schedule 13A-4.7, the safe rate of 8 percent was obtained from the *Federal Reserve Bulletin* at the valuation date. The general risk premium of 12.7 percent represents the difference between the median return on equity, 20.7 percent reported by the industry and the 8-percent return available on long-term Treasury bonds. If the industry, as a whole, was returning 20.7 percent when an 8-percent return was available as a safe investment, the difference is considered to be a risk premium at that time.

The specific company risk premium of 5 percent is the valuer's judgment about the amount of risk premium necessary to compensate for Best Widgets, Inc. as compared with the rest of the industry. Although the financial results seem to indicate that Best Widgets, Inc. is strong in many areas, the valuer learned during a management interview that full control of the company rests in its owner, whose health is failing. After determining how vital the owner is to this business, the valuer concluded that the business is in jeopardy because of a lack of organizational structure and succession planning.

The discount rate of 25.7 percent will be used to calculate value with the discounted future benefits method. (In this case study, net earnings after taxes has been selected as the benefits stream.) The long-term growth rate of 4 percent has been subtracted from the discount rate to determine the capitalization rate to be used for the future earnings. Depending upon the source of the information and its application, a capitalization of earnings rate may result. To ensure that the valuer derives the correct discount or capitalization rate, consistency is critical. In order to calculate an excess earnings capitalization rate, this particular method adds an excess earnings premium to the future earnings capitalization rate of 21.7 percent. The excess earnings premium is the difference between the high industry return on equity (28.9 percent) and the median return of 20.7 percent. This calculation is based on the definition of excess earnings as the excess over the norm in the industry.

Another excellent method for building up discount and capitalization rates, but not illustrated in this practice aid, is provided in PPC's *Guide to Business Valuations*. The illustration includes worksheets, which will be more appropriate when the practitioner uses information derived from the public marketplace or from Ibbotson Associates' *Stocks, Bonds, Bills and Inflation* to determine a discount rate for cash flow with appropriate adjustments being made for earnings and capitalization rates.

The discount rate illustrated in this section relates to that which would be used in the determination of the cost of equity of a business. There will be valuations where the capital structure may include a substantial amount of debt, and in those instances, it may be desirable to value the entity on a "debt free" basis using a weighted average cost of capital (WACC) intended to help the valuer estimate the value of the total invested capital of the enterprise rather than only the equity. A discussion of the derivation of the WACC is beyond the scope of this practice aid.

There is no correct or incorrect method of building up discount and capitalization rates as long as they are developed consistently and are well supported. Practitioners need to remember that the objective of the engagement is to give an opinion of value of a business interest, and not to determine a discount rate or capitalization rate. These rates are important tools in the valuation process and practitioners should certainly understand their derivation. However, they need to remember that *ultimately the final result must make sense.*

Schedule 13A-4.7
Best Widgets, Inc.
Discount and Capitalization Rates

Rates located during valuator's research

Long-term Treasury Bonds		8.0%
Industry Return on Equity	- Median	20.7%
Industry Return on Equity	- High	28.9%
Long-term Business Growth		4.0%

Calculation of discount and capitalization rates

	Safe Rate	8.0%
	General Risk Premium	12.7%
	Specific Company Risk Premium	<u>5.0%</u>
1.	Discount Rate on Future Earnings Less Growth Differential	25.7% <u>4.0%</u>
2.	Future Earnings Capitalization Rate	21.7%
	Plus Excess Earnings Premium	<u>8.2%</u>
3.	Excess Earnings Capitalization Rate	<u>29.9%</u>

Capitalization of Benefits

Valuation is a prophecy of the future. Accordingly, the valuer estimates the future income of the valuation subject. Since the subject company is expected to grow at 4 percent, the valuer calculates the estimated future income based on a 4-percent growth rate, using the adjusted net income for 19xz (schedule 13A-4.8 shows the adjusted net income for years 19xv through 19xz). The valuer capitalizes the estimated future income at a rate of 21.7 percent to derive the indicated value from operations. The value of the net nonoperating assets is added to the indicated value to yield the total entity value, which can then be rounded off to \$4.8 million

The practitioner should realize that valuation is not an exact science. The value determined is *the most probable price* within an acceptable range of values. Rounding off the results is acceptable in practice. Furthermore, the rounding may emphasize to the reader of the valuation report that precision is not the intention. The amount of rounding will depend upon the purpose and function of the report. In rounding, the practitioner considers the objective of providing a valuation that is supportable.

Schedule 13A-4.8
Best Widgets, Inc.
Valuation Based on Capitalization of Benefits

Adjusted Net Income (19xz)	\$ 966,528
Forecasted Growth (4%)	x <u>1.04</u>
Estimated Future Income	1,005,189
Capitalization Rate	÷ <u>21.7%</u>
Indicated Value From Operations	\$ 4,632,208
+ Net Nonoperating Assets	<u>182,589</u>
Total Entity Value	<u>\$ 4,814,797</u>
Rounded	<u>\$ 4,800,000</u>

Capitalization of Excess Earnings

Schedule 13A-4.9 illustrates the application of the capitalization of excess earnings method. This method is probably the most widely used for small businesses and professional practices.

In this illustration, the same estimate of future income is used as calculated in schedule 13A-4.8. In practice, many practitioners mistakenly use a weighted average of historic adjusted earnings to perform the calculation of value. However, valuation theory is consistent in advising the use of estimated future income and a return on the net tangible assets based on their adjusted book value, not historic values. The return on net tangible assets includes only the operating assets and liabilities. The valuer based the 15-percent return rate on the risk associated with the composition of the assets and liabilities.

After subtracting the return on the net tangible assets to derive excess earnings, the valuer uses the appropriate capitalization rate to determine the intangible value of the enterprise. The adjusted book value of the net tangible assets, including net nonoperating assets, is then added to the intangible value to derive the total entity value. In this instance, the value has been rounded to \$4.0 million.

Schedule 13A-4.9
Best Widgets, Inc.
Valuation Based on Capitalization of Excess Earnings

Estimated Future Income (\$966,528 x 1.04)	\$ 1,005,189
Less Return on Net Tangible Assets (\$984,058 ¹ x 15%)	<u>147,609</u>
Excess Earnings	\$ 857,580
Capitalization Rate	<u>÷ 29.90%</u>
Intangible Value	\$ 2,868,161
+ Adjusted Book Value	<u>1,166,647</u>
Total Entity Value	<u>\$ 4,034,808</u>
Rounded	<u>\$ 4,000,000</u>

¹ Adjusted Book Value	\$ 1,166,647
Nonoperating Assets	- 192,589
Nonoperating Liabilities	<u>+ 10,000</u>
	<u>\$ 984,058</u>

Guideline Company Information

Schedule 13A-4.10 illustrates the calculation of value based on information about guideline companies. After comparing Best Widgets, Inc. to the guideline companies, the valuer selected appropriate multiples. The price-to-earnings ratios for the guideline companies are considerably higher than that which the valuer would use for Best Widgets, Inc. because of differences in size, ability to raise capital, succession of management, and the overall risk associated with the company. Applying a 4.2 price-to-earnings ratio to the adjusted after-tax net income of \$1,005,189, the valuer derives the operating entity value of \$4,221,794. The value of the net nonoperating assets is added to the operating entity value to derive the value of Best Widgets, Inc., which is rounded to \$4,400,000.

Similar analyses are done using the percent of sales and the multiple of book value. Since Best Widgets, Inc. is considerably smaller than the guideline companies and more risky, a lower multiple is appropriate. Using a 45-percent multiple in calculating the value as a percent of sales, the valuer concludes that the entity value, rounded is \$4.7 million. The multiple of book value approach yields a rounded \$4.4 million.

Schedule 13A-4.10
Best Widgets, Inc.
Valuations Based on Guideline Company Information

Guideline Company Information

<u>GUIDELINE COMPANIES</u>	<u>DATE</u>	<u>PRICE TO EARNINGS RATIO</u>	<u>PERCENT OF SALES</u>	<u>MULTIPLE OF BOOK VALUE</u>
XYZ Widget Co.	12/31/xz	8.90	53.50%	5.65
Apple Widget Co.	10/31/xz	9.50	46.25%	6.94
Target Widget Co.	12/31/xz	8.60	39.70%	5.32
ABC Widgets Co.	12/31/xz	6.50	52.65%	5.78
Widgets R Us	11/30/xz	7.90	49.80%	6.01
	Average Multiple	8.28	48.38%	5.94
	Selected Multiple	4.20	45.00%	3.00

Price to Earnings

After-Tax Adjusted Net Income	\$ 1,005,189
Price to Earnings Ratio	<u>4.20</u>
Operating Entity Value	\$ 4,221,794
Plus: Nonoperating Assets	192,589
Less: Nonoperating Liabilities	<u>10,000</u>
Total Entity Value	<u>\$ 4,404,383</u>
Rounded	<u>\$ 4,400,000</u>

Percent of Sales

Gross Sales from Operations	\$ 9,957,899
Comparable % of Sales Ratio	<u>x 45.00%</u>
Operating Entity Value	\$ 4,481,055
Plus: Nonoperating Assets	192,589
Less: Nonoperating Liabilities	<u>10,000</u>
Total Entity Value	<u>\$ 4,663,644</u>
Rounded	<u>\$ 4,700,000</u>

Multiple of Book Value

Book Value	\$ 1,421,757
Multiple of Book	<u>x 3.00%</u>
Operating Entity Value	\$ 4,265,271
Plus: Nonoperating Assets	192,589
Less: Nonoperating Liabilities	<u>10,000</u>
Total Entity Value	<u>\$ 4,447,860</u>
Rounded	<u>\$ 4,400,000</u>

Dividend Payout Ratio

Schedule 13A-4.11 illustrates calculation of the value of Best Widgets, Inc. based on its dividend payout ratio. The valuer compares the market price per share of the guideline companies with the dividends actually paid as well as their payout capacity.

In this instance, the average payout capacity of the guideline companies was 14 percent. The valuer selected 10 percent for Best Widgets, Inc. because the company is considerably smaller and requires more of its cash flow to support its operations and, therefore, has a lower payout capacity. Stockholders of Best Widgets, Inc. also would expect a slightly lower yield from their company. Accordingly, the valuer selected 2.50 percent as the expected yield. As is illustrated in the calculation in schedule 13A-4.11, the company is valued at \$4.2 million. If there were preferred stock, an adjustment would be made to reflect any dividends paid that would reduce the dividends available to the common stockholders. Since Best Widgets, Inc. had only one class of stock, this step was not necessary.

Schedule 13A-4.11
Valuation Based on Best Widgets, Inc.
Dividend Payout Ratio

Guideline Company Information

<u>Guideline Company Information</u>	<u>Market Price</u>	<u>Dividends</u>	<u>Payout Capacity</u>	<u>Yield %</u>
XYZ Widget Co.	\$12.75	.40	15%	3.14%
Apple Widget Co.	\$16.85	.65	20%	3.86%
Target Widget Co.	\$12.90	.50	15%	3.88%
ABC Widget Co.	\$15.95	.40	10%	2.51%
Widgets R Us	\$17.95	.45	<u>10%</u>	<u>2.51%</u>
		Average Selected	14%	3.18%
			10%	2.50%

Dividend Payout Conclusion

After-Tax Adjusted Net Income	\$ 1,005,189
Payout Capacity	<u>10%</u>
Dividend Payout	\$ 100,519
Selected Dividend Yield	+ <u>2.50%</u>
Common Equity Value	\$ 4,020,756
Plus Nonoperating Assets	192,589
Less Nonoperating Liabilities	<u>10,000</u>
Total Entity Value	<u>\$ 4,203,345</u>
Rounded	<u>\$ 4,200,000</u>

Financial Statement Projections

Schedules 13A-4.12a and 13A-4.12b show financial statement projections for five years based on the most recent year. The valuer either forecasts or obtains forecasts of the net income and operating cash flow of the business that will be used with the discounted future benefits method. The basis of these projections should be well documented and supported in the practitioner's workpapers and should be guided by the AICPA Statement on Standards for Accountants' Services on Prospective Financial Information, *Financial Forecasts and Projections*.

Schedule 13A-4.12a
Best Widgets, Inc.
Financial Statement Projections — Statement
of Income and Cash Flow
Fiscal Year Ending December 31,

	<u>19XZ</u>	<u>19YA</u>	<u>19YB</u>	<u>19YC</u>	<u>19YD</u>	<u>19YE</u>
Total Revenue	\$ 9,957,899	\$10,455,794	\$10,978,584	\$11,527,513	\$12,103,888	\$12,709,083
Cost of Sales	<u>5,423,896</u>	<u>5,695,091</u>	<u>5,979,845</u>	<u>6,278,838</u>	<u>6,592,779</u>	<u>6,922,418</u>
Gross Profit	\$ 4,534,003	\$ 4,760,703	\$ 4,998,738	\$ 5,248,675	\$ 5,511,109	\$ 5,786,664
Adjusted Operating Expenses	2,566,844	2,695,186	2,829,946	2,971,443	3,120,015	3,276,016
Officer's Salary	225,000	236,250	248,063	260,466	273,489	287,163
Depreciation & Amortization Expense	232,770	72,372	88,372	104,372	120,372	136,372
Interest Expense	<u>93,412</u>	<u>83,255</u>	<u>72,811</u>	<u>61,084</u>	<u>47,918</u>	<u>33,142</u>
Operating Profit	\$ 1,415,977	\$ 1,673,641	\$ 1,759,548	\$ 1,851,312	\$ 1,949,315	\$ 2,053,972
Estimated Income Tax	<u>449,449</u>	<u>668,452</u>	<u>702,763</u>	<u>739,414</u>	<u>778,557</u>	<u>820,356</u>
Net Income	\$ 966,528	\$ 1,005,189	\$ 1,056,785	\$ 1,111,898	\$ 1,170,759	\$ 1,233,615
Depreciation & Amortization Expense		\$ 72,372	\$ 88,372	\$ 104,372	\$ 120,372	\$ 136,372
Change Other Assets/Liabilities		(124,326)	(84,202)	(85,486)	(90,542)	(95,900)
Net Purchase of Fixed Assets		(100,000)	(80,000)	(80,000)	(80,000)	(80,000)
Change in Long-Term Debt & Equity		<u>28,439</u>	<u>29,861</u>	<u>31,354</u>	<u>32,922</u>	<u>34,568</u>
Operating Cash Flow	<u>\$ 881,673</u>	<u>\$ 1,010,815</u>	<u>\$ 1,082,138</u>	<u>\$ 1,153,510</u>	<u>\$ 1,228,655</u>	<u>\$ 1,228,655</u>

Schedule 13A-4.12b
Best Widgets, Inc.
Financial Statement Projections — Balance Sheet

	<u>19XZ</u>	<u>19YA</u>	<u>19YB</u>	<u>19YC</u>	<u>19YD</u>	<u>19YE</u>
Cash	\$ 88,563	\$ 970,236	\$ 1,981,051	\$ 3,063,189	\$ 4,216,700	\$ 5,445,355
Accounts Receivable	191,807	211,477	222,051	233,154	244,811	257,052
Inventory	1,521,463	1,647,411	1,729,782	1,816,271	1,907,084	2,002,439
Other Current Assets	<u>64,589</u>	<u>65,881</u>	<u>67,198</u>	<u>68,542</u>	<u>69,913</u>	<u>71,311</u>
Current Assets	<u>\$ 1,866,422</u>	<u>\$ 2,895,005</u>	<u>\$ 4,000,083</u>	<u>\$ 5,181,156</u>	<u>\$ 6,438,509</u>	<u>\$ 7,776,157</u>
Fixed Assets	523,715	623,715	703,715	783,715	863,715	943,715
(Accumulated Depreciation)	0	(72,372)	(160,743)	(265,115)	(385,486)	(521,858)
Nonoperating Assets	192,589	207,996	224,636	242,607	262,015	282,976
Other Noncurrent Assets	<u>15,488</u>	<u>16,262</u>	<u>17,076</u>	<u>17,929</u>	<u>18,826</u>	<u>19,767</u>
Total Assets	<u>\$ 2,598,214</u>	<u>\$ 3,870,807</u>	<u>\$ 4,784,766</u>	<u>\$ 5,960,293</u>	<u>\$ 7,197,579</u>	<u>\$ 8,500,758</u>
Accounts Payable	\$ 398,524	\$ 427,704	\$ 445,425	\$ 467,696	\$ 491,081	\$ 515,635
Other Current Liabilities	<u>454,254</u>	<u>463,339</u>	<u>472,606</u>	<u>482,058</u>	<u>491,699</u>	<u>501,533</u>
Current Liabilities	<u>\$ 852,778</u>	<u>\$ 891,043</u>	<u>\$ 918,031</u>	<u>\$ 949,754</u>	<u>\$ 982,780</u>	<u>\$ 1,017,168</u>
Nonoperating Liabilities	10,000	10,500	11,025	11,576	12,155	12,763
Bank Loan	<u>568,789</u>	<u>597,228</u>	<u>627,090</u>	<u>658,444</u>	<u>691,367</u>	<u>725,935</u>
Total Liabilities	<u>\$ 1,431,567</u>	<u>\$ 1,498,772</u>	<u>\$ 1,556,146</u>	<u>\$ 1,619,775</u>	<u>\$ 1,686,302</u>	<u>\$ 1,755,866</u>
Common Stock	10,000	10,000	10,000	10,000	10,000	10,000
Retained Earnings	<u>1,156,647</u>	<u>2,161,836</u>	<u>3,218,620</u>	<u>4,330,518</u>	<u>5,501,277</u>	<u>6,734,892</u>
Total Stockholders' Equity	<u>\$ 1,166,647</u>	<u>\$ 2,171,836</u>	<u>\$ 3,228,620</u>	<u>\$ 4,340,518</u>	<u>\$ 5,511,277</u>	<u>\$ 6,744,892</u>
Total Liabilities & Stockholders' Equity	<u>\$ 2,598,214</u>	<u>\$ 3,670,607</u>	<u>\$ 4,784,766</u>	<u>\$ 5,960,293</u>	<u>\$ 7,197,579</u>	<u>\$ 8,500,758</u>

Exhibit 13A-4.13

Discounted Future Benefits

Schedule 13A-4.13 illustrates the application of the discounted future benefits method. The forecasted earnings are discounted at a rate of 25.7 percent yielding the present value of the future earnings to the enterprise.

The application of this method involves discounting the forecasted benefits stream back to the valuation date using present value techniques. The period beyond the forecast period assumes stabilization of the benefit stream and is known as the *terminal period*. The value derived for the terminal period applies the capitalization of benefits method and is then discounted back to present value. This is known as the *terminal value*.

The terminal value in this example is calculated using a 4-percent growth rate and is then capitalized at a rate equal to the discount rate less the growth rate. The terminal value is then discounted using the same discount factor used in the fifth year of the projection.

Schedule 13A-4.13
Best Widgets, Inc.
Valuation Based on Discounted Future Benefits

<u>Period</u>	<u>Earnings</u>	<u>Discount Factor</u>	<u>Present Value</u>
1	\$ 1,005,189	.7955	\$ 799,673
2	1,056,785	.6329	668,830
3	1,111,898	.5035	559,834
4	1,170,759	.4006	468,950
5	1,233,615	.3187	393,100
 Terminal Value:			
5	5,912,256 ¹	.3187	1,883,982
Net Nonoperating Assets & Liabilities			<u>182,589</u>
Present Value of Net Income			<u>\$ 4,956,958</u>
 Rounded			 <u>\$ 5,000,000</u>

¹ \$1,233,615 x 1.04 = \$1,282,960
\$1,282,960 + (25.7% - 4.0%) = \$5,912,256

APPENDIX 13/B

SAMPLE MARKET COMPARISON DATA

The following is a sample printout of market data available from The Institute of Business Appraisers, Inc. The practitioner can use the price-to-sales ratio or the price-to-earnings ratio to perform reality checks on the results obtained with other methods of valuation.

This data is one of many tools available to the valuer. An understanding of its limitations is essential to assure that the practitioner uses it properly. Such limitations may include lack of information about the individual companies listed, the terms of the sale, and any possible adjustments made to the financial statements.

The Institute of Business Appraisers, Inc.
P.O. Box 1447, Boynton Beach, FL 33425 Phone: 407-732-3202

The information below is supplied in response to your request for data to be used in applying the "market data approach" to business appraisal. Because of the nature of the sources from which the information is obtained, we are not able to guarantee its accuracy. Neither do we make any representation as to applicability of the information to any specific appraisal situation.

Following is an explanation of the entries in the data table:

- "Business Type" = Principal line of business
 "SIC No." = Principal Standard Industrial Classification number applicable to business sold
 "Ann. Gr." = Reported annual sales volume of business sold
 "Ann. Earn." = Reported annual earnings before owner's compensation, interest and taxes
 "Own. Comp." = Reported owner's compensation
 "Sale Price" = Total reported consideration i.e. cash, notes, liabilities assumed, etc. excluding real estate
 A = Asset Sale; S = Stock Sale
 "Sales Price/Gross" = Ratio of total consideration to reported annual gross
 "Price/Ann. Earn." = Ratio of total consideration to reported annual earnings
 "Yr/Mo of Sale" = Month and year during which transaction was consummated

DATA FOR MARKET COMPARISON

Business Type	SIC	Ann. Gr. \$000's	Ann. Earn. \$000's	Own Comp. \$000's	Sale Price \$000's	Sale Pr. Gross	Price/Ann Earn.	Geographical Location	Yr/Mo of Sale
Printer, specialized	2752	1228	95		529 S	0.43	5.57	Canada	90/92
Commercial printing		530	45		221 A	0.42	4.91	Midwest	90/02
Printing Quick-Franchise		259	7		200 A	0.77	28.57	Arizona	90/02
Commercial printer		1600	275		750 A	0.47	2.73	New England	89/06
Printing		70	22		63	0.90	2.86	Florida	88/10
Print shop		235	114	30	86 A	0.37	0.75	California	88/08
Printing, offset		933	201		550	0.59	2.74	Mid-Atlantic	88/04
Printer		279	78		300	1.08	3.85	Mid-Atlantic	87/09
Printing		210	44		75	0.36	1.70	Texas	87/01
Printing & typesetting		181	46	25	65 A	0.36	1.41	California	86/12
Printing		50	21		27	0.54	1.29	Texas	86/06
Print shop		205	34	25	90 A	0.44	2.65	California	86/05
Printing shop		365	108		250	0.68	2.31	Texas	86/04
Print shop retail/whsle		17	8		24	1.41	3.00		86/02
Print shop		46			27	0.59		Cal/Ariz/Nev	85/09
Printing		65	2		46	0.71	23.00	Texas	86/06

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