

TITLE

BUSINESS VALUATION

CREDITS

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I. INTRODUCTION

The valuation of closely held businesses has greatly matured over the years. Valuation standards have been developed by various professional organizations and there are a multitude of individuals performing valuations for closely held businesses. The valuation report you will review will most likely have been prepared using some professional standards. The following organizations provide professional standards:

The American Institute of Certified Public Accountants (AICPA)

American Society of Appraisers (ASA)

The Institute of Business Appraisers (IBA)

The National Association of Certified Valuation Analysts (NACVA)

The Canadian Institute of Chartered Business Valuators (CICBV)

The purpose of this Statement on Management Accounting (SMA) is to familiarize the reader with the methodologies in a valuation report and to enable the reader to perform valuation calculations.

This SMA provides a detailed description of how a valuation of a closely held business is performed. The first step is to describe the various types of premises and standards (types) of value that may be appropriate in different circumstances depending on the reason for the valuation. The second step describes the initial analysis that should be undertaken before any valuation methodologies are considered. The third step is a consideration of what common valuation methodologies exist and their relevance to the purpose of the valuation. Fine tuning the valuation process is discussed next. This includes consideration of items outside normal operations that may be present. Finally a reconciliation

of results from the different methods is considered. The SMA explains what to expect in a valuation report.

The valuation process starts with an understanding of the purpose for the valuation and the standard of value to use. Then there is an analysis of the economy, the industry, and the company. At that point the various valuation methodologies are considered to determine the most appropriate approaches given the circumstances. The next step in the process is to normalize the financial data to make any adjustments to what a new owner might experience. Appropriate discount and capitalization rates are developed and the various methodologies selected are applied and a conclusion is reached. At this point discounts and premiums are considered and, finally, adjustments for excess assets, asset deficiencies, and non-operating activities are made.

II. REASONS FOR THE VALUATION AND PREMISE

Valuations of closely held businesses are conducted for a multitude of purposes. The reasons include actual mergers, acquisitions, and initial public offerings, but may also include many reasons that do not include an arm's length transaction, and consequently, the value may hinge on the persuasiveness of the valuation report. The valuations that do not result in an arm's length transaction include estate and gift tax valuations, employee stock ownership plan (ESOP) valuations, litigation—including stockholder actions—and equitable distribution actions. The purpose of the valuation will dictate the standard of value used. Typically the premise used is that the company is a going concern. If not, then a liquidating value is determined and the asset methodology is typically used.

III. STANDARDS OF VALUE

There are four standards of value that relate to valuations. They are: fair market value, fair value, intrinsic value, and investment value.

Fair Market Value

Fair market value is the standard of value that typically comes to mind in business valuations. The profession has adopted a standard glossary of valuation terms, which is provided at the end of the SMA. The definition of fair market value is the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.

Fair Value

Fair value is the standard that is used in some litigation and is defined in state laws. For example, in some states there is no lack of marketability discount for minority shareholders in an oppressed minority shareholder action. Also, in many cases the state describes the value in the hands of the owner just prior to the action. For example, a single practitioner's surgery practice may not have any fair market value without a covenant not to compete. Yet in some states, for an equitable distribution divorce action, the value may be the value in the hands of the surgeon, and therefore have significant value.

Intrinsic Value

Intrinsic value is the value that an individual investor considers to be the true value based on an evaluation of the available facts. Typically this is not used in an independent valuation.

Investment Value

Investment value is the value that is based upon the needs and situation of an individual investor. This value may come into play in a merger or acquisition where the synergistic value to a particular investor is determined. This may result in the individual investor being willing to offer more than what all others would consider the fair market value for a target company and is important to that investor. But it is not the fair market value of the target company.

IV. VALUATION ANALYSIS

The theoretical description of value can be defined as the present value of future benefits. To get a present value one must determine an income stream and a rate of return. The rate used in valuations is based upon the risk the investor takes when purchasing the business. To determine the risk, the valuator must know the impact of economic conditions in general, the impact of economic conditions of the industry, and the impact of economic conditions on the specific company.

General Economic Factors

The economic outlook for the economy in general and for the region in particular will have an impact on the valuation to varying degrees, depending on the nature of the business and its sensitivity to economic conditions.

The state of the economy can be researched through government sources such as the Census Bureau's data on its website—Factfinder and Statistical Abstract of the United States, the Economic Report of the President, Federal Reserve Bulletins, Bureau of Economic Analysis; and U.S. Department of Commerce websites. There are also commercial organizations that provide information, sometimes for a fee. These include Business Valuation

Resources, Mercer Capital Management, Moody's, and the National Association of Certified Valuation Analysts. In addition there are numerous newspapers, newsletters, and periodicals that address economic issues.

The valuator must decide what economic facts have an impact on the risk associated with the company being valued. In some cases local economic conditions are the most important, while in others the national picture is very important. The size of the business, the geographic range of its customers, the nature of its competitors, and the source of its products all play a part.

Industry Economic Factors

An assessment of the industry is important in any business valuation. This assessment can be done using one's own approach or through a more recognized structured approach. One such approach that is well recognized is Michael Porter's Five Forces.¹ This model describes an industry as being influenced by five forces: rivalry, threat of new entrants, threat of substitution, bargaining power of customers, and bargaining power of suppliers.

Rivalry

Rivalry consists of an analysis of the competition in the industry. There are several factors to consider in weighing the intensity of the rivalry in an industry. The concentration of firms within an industry is important. The Census Bureau tabulates some industry concentration data, the most recent being 2002. It tabulates the concentration in the top 4, 8, 20, and 50 firms. When there are a number of firms in an industry that is not concentrated, the competition tends to be more intense. Slow market growth also tends

¹ Michael Porter, *Competitive Strategy: Techniques for Analyzing Industries and Competitors* (Free Press, 1998).

increase rivalry. Inability to convert equipment to alternative uses may keep companies in the industry and increase competition. Typically a large number of small companies tends to increase rivalry as does low differentiation between rivals' products. When there are high fixed costs there is more of an inclination to spread these costs over more units, and this tends to increase rivalry.

Threat of new entrants

Threat of new entrants is also a factor to consider. When there are barriers to entry the rivalry is less than when higher profits attract more competitors and profit margins drop. Attributes to consider include start-up costs and the amount of capital needed for the business, patents, licenses, territorial rights or other restrictions, specialized assets with little alternative uses, brand loyalty, and access to distribution channels.

Threat of substitution

The ability of customers to switch to alternative products is also a risk to consider. Prices for the alternatives provide a competitive ceiling for prices within the industry.

Bargaining power of customers

The bargaining power of the customers to drive down the selling price, demand more services, or demand higher quality is another factor to consider. If the industry's customers have a strong bargaining power they are able to lower prices, demand higher quality, or get more services. Attributes to consider include the concentration of customer market share or concentration of portion of output, standardization of product, and the economic health of the customers.

Bargaining power of suppliers

The suppliers of the company may also have an impact on the industry. Some of the attributes to

consider include: concentration of suppliers, concentration of purchasers, cost to switch suppliers, industry's ability to integrate and produce supplies, and suppliers' ability to integrate into the industry.

Company Analysis

Regardless of whether a specific Porter's five-factor analysis is undertaken, the industry risk needs to be understood. After gaining an understanding of the economic conditions facing the industry, the valuator can now apply those factors to the target company along with specific risk factors inherent to the company. The attributes that are considered are information obtained from financial statements and financial analysis, including forecasts and ratios, along with non-quantitative information obtained through site visits to assess quality of management, quality of product, and customer satisfaction.

SWOT analysis

A SWOT analysis may be applied to focus on key areas of the company operations. A SWOT analysis is a method to evaluate the objectives of the company. It describes the Strengths, Weaknesses, Opportunities, and Threats the company faces in meeting its objectives. Thus it assists in determining the risks in investing in the company.

Historical financial analysis

Historical financial information can be useful in determining trends of the business, in addition to being a tool to compare the company with competitor information available. Analytical review procedures are often employed to compare results with prior years, forecasts, and industry statistics. The historical financial information should go back far enough to capture the business cycle in the industry. Typically at least five years of historical results are used. If there have been significant

changes in the company operations, historical information prior to the change will probably have limited use. Five years is suggested in Revenue Ruling 59-60, which is provided in Exhibit 1.²

Normalization

Historical information is only useful if it is looked at in light of future operations. A process called normalization must be executed to accomplish this. Normalization considers related party transactions, non-recurring items, and non-operating items.

RELATED PARTY TRANSACTIONS

In most closely held businesses where the owner is the manager of the business there is an attempt to minimize the tax at the corporate level. This is often accomplished by transactions that are with related parties being at a monetary amount that does not represent what would be paid in non-related party transactions. This may include compensation, benefits, rent, intercompany transactions, travel and entertainment, charitable contributions, and loan terms. The compensation of owners and related parties in a closely held business may be significantly different from what would be paid for similar work by a non-related party. Other than the need for earnings to be reinvested for the business's capital requirements, rarely are earnings retained in the company, then a tax paid on the earnings, and then a dividend issued to the owner. Conversely, if the company is an S corporation, the compensation may be minimized in an effort to reduce payroll taxes. An elderly parent may be kept on the payroll or a relative in college paid a lucrative summer position to assist the family. If the company is not doing well, the owners will probably

² Rev. Rul. 59-60, 1959-1 C.B. 237.

pay themselves less than what would be paid to a third party. Therefore, it is always important to determine what a person would be paid for the work performed if the person were not an owner or related to the owner.

Sources for determining fair compensation include industry trade associations, U.S. Government Bureau of Labor Statistics annual occupational handbook, and Internet sites that provide information, such as the Economic Resource Institute, which provides compensation data by location, SIC code, years of experience, or sales volume for most occupations.

Benefits can also be skewed for the business owners and their related parties. If a benefit only applies to a related party and not to others in similar positions, it probably is a benefit that should be eliminated in the normalization process.

Another consideration is retirement benefits. In some cases an owner of a closely held company may structure a retirement plan that favors the owners in a manner that is unlikely to survive a transition of ownership. If this is the case, the benefit should be restructured to reflect a typical plan or possibly eliminated. Data on benefit costs can be found on the U.S. Government Bureau of Labor Statistics site. Trade associations may also publish benefit data.

In many closely held corporations the real estate property occupied by the business is not owned by the operating corporation but by a separate related entity that rents the property to the business. This provides an opportunity to charge rent that is not at market rates and needs to be adjusted. An appraisal report will provide what market rents should be. If an appraisal is not available, the value of the property may be inter-

polated from property tax appraisals and equalization rates. A real estate professional can provide the going rate of return for commercial property in the area.

Travel and entertainment expenses are a common area of normalization. Frequently the owner is provided benefits in this area that would not be given to a non-owner employee in similar circumstances.

If there are loans to or from related parties, there may be a need to normalize. Frequently these loans are not at market rate and should be adjusted. They may also need to be eliminated if they are non-operating in nature or a form of investment that should be restructured into equity.

UNUSUAL TRANSACTIONS

No business is worth anything because of what it has done in the past. The past is only useful if there is an expectation that it is a predictor of future results. If there are transactions that have occurred in the past that are not expected to recur, then the consequences of the event should be eliminated. This includes extraordinary items as defined in GAAP, but may also include other events that technically do not qualify for extraordinary but are still not predictive of the future.

NON-OPERATING ACTIVITIES

It is not unusual for a closely held company to be involved in different enterprises or in non-operating activities. The business may have to be segmented into two different businesses and then the values combined. There is a famous tax case where Victor Borge had a corporation that booked his musical performances and raised Rock Cornish game hens. The business would have to be segmented to be valued. Perhaps more common is the closely held business that has non-operating assets such as a beach house that is sometimes

rented, a personal aircraft, or some other asset not essential to the operation of the business. These assets need to be separated and valued apart from operations.

ACCOUNTING APPLICATIONS

The accounting methodology may also have to be adjusted. One reason may be to use accounting methods more common in the industry so that comparisons can be made to other firms or industry averages. Sometimes GAAP, in its effort to be conservative, does not capture economic reality. The full expensing of research and development expenses is an example. Sometimes departures from GAAP may have to be adjusted. An example might be the understatement of inventory.

TAXING THE INCOME STREAM

When a normalized pre-tax operating income is determined, the next step is to consider taxes. Here there is an issue regarding pass-through entities. If the company is of such a nature that it can pass through the entire income it generates, there is an advantage in avoiding the second layer of taxes on dividends. The magnitude of the advantage is measured by the difference in total taxes between the corporate tax and the dividend tax in a C corporation and the shareholders tax in an S corporation. This comparative benefit was reduced in 2003 when the dividend and capital gain rate was reduced to 15% from ordinary income tax rates. The magnitude of the benefit depends upon the ability to distribute the earnings to the owners.

Table 1 illustrates the benefits of an S corporation assuming a corporate tax rate of 39%, a dividend tax rate of 15%, a personal tax rate of 35%, and a capitalization rate (CR) of 20%. The table illustrates that a company with \$200,000 of annual earnings has the benefit of being able

to distribute \$130,000 to shareholders, while a C corporation would only be able to distribute \$103,000. This benefit capitalized at an assumed rate of 20% has a total value of \$131,500.

V. VALUATION METHODS

AICPA Valuation Standard No. 1, along with other professional standards, states that the valuator should consider the three most common valuation approaches: an earnings capitalization method, a market-based method, and an asset-based method.

Earnings-Based Methods

The most common method of valuing a going closely held operating business is one based on earnings capitalization. There are a few methods that come under this category. They include discounted cash flow, earnings capitalization, cash flow capitalization, and excess earnings. All of these methods calculate the present value of the future benefits. Therefore, these methods require the determination of a discount rate and a capitalization rate. This may be accomplished using the buildup method or the capital asset pricing model.

Determining discount rates using the buildup method

The buildup method is frequently used in small and medium-size businesses where comparisons to publicly traded company betas are not deemed to be applicable or it is felt they should be supplemented.

The equation for this method can be written as follows:

$$R_e = R_f + ERP + R_s + R_c$$

TABLE 1. S CORPORATION BENEFIT

	C CORPORATION	S CORPORATION
Earnings before taxes	\$200,000.00	\$200,000.00
Corporate tax (39%)	<u>78,000.00</u>	<u>---</u>
Remainder	<u>\$122,000.00</u>	<u>\$200,000.00</u>
Distribution to shareholders	\$122,000.00	\$200,000.00
Shareholder tax (15%/35%)	<u>18,300.00</u>	<u>70,000.00</u>
Cash flow to shareholder	<u>\$103,700.00</u>	<u>\$130,000.00</u>
Capitalized value (NCF/CR)	<u>\$518,500.00</u>	<u>\$650,000.00</u>
S corporation benefit	<u>\$131,500.00</u>	

where

R_e = Expected rate of return of the company

R_f = Risk-free rate of return

ERP = Equity risk premium

R_s = Size premium

R_c = Specific company risk

The first component is the risk-free rate. The assumption for the valuation is that there is a going concern. Therefore, the 20-year Treasury rate at the date of the valuation is usually used as the risk-free rate.

The second component in the buildup method is the equity risk premium. The determination of this factor has been a matter of controversy lately. Historically, the equity risk premium estimated annually in the book *Stocks, Bonds, Bills and Inflation* (SBBI), currently published by Morningstar, has been used to appropriate the equity risk premium. Roger Grabowski has challenged this rate as being too high. His estimates are available through the Duff & Phelps, LLC Risk Premium Report (D&P), which is also available from Morningstar. Some valuers continue to use SBBI, while others are using D&P. The rate differential is usually less than two points.

There are some academic manuscripts that challenge the use of the equity risk premium at all,

claiming the historic rates are not evident in the marketplace. This claim has not been accepted by valuers.

The size premium recognizes the higher risk in investing in smaller cap public companies. The size premium can also be found in SBBI. Typically the premium for the ninth and tenth deciles firms is used.

In publicly traded firms there is no recognition of specific company risk, called non-systematic risk. The marketplace does not factor this risk in since a prudent investor will diversify his/her investments and the risk will be diversified away. But in closely held company investment, there is typically no opportunity to diversify. It is unusual for an owner to own 30 different closely held companies.

There is currently no empirical data that can be used to estimate the company specific risk or the unsystematic risk, so it is heavily dependent on the valuation analyst's judgment and experience. The types of items usually considered include:

- Management depth
- Management expertise
- Access to capital
- Leverage
- The five Porter threats
- Product diversification
- Geographic distribution
- Demographics
- Availability of labor
- Employee stability
- Economic factors
- Fixed asset age and condition
- Distribution system
- Location
- Technological risk
- Socio-cultural risk

- Political risk
- Global risk
- Size

Some valuers will assign numbers to each relevant item, while others will assign pluses and minuses and just give a total number.

At this point in the buildup method a discount rate can be determined. To obtain a capitalization rate the estimated growth rate is subtracted from the discount rate. Table 2 provides an example of the buildup method using 20-year Treasuries, Ibbotson risk data, numbers for each specific risk, and an assumed growth rate of 3%.

DETERMINING THE DISCOUNT RATE USING CAPM

Another way of determining the discount rate is by using the Capital Asset Pricing Model (CAPM). The CAPM method measures the company volatility compared to the overall market place (beta).

The equation for CAPM is as follows:

$$R_e = R_f + B (R_m - R_f)$$

where

R_e = Expected rate of return of the company

R_f = Risk-free rate of return

B = The company beta

R_m = Return for the market as a whole, usually represented by a market-wide index, such as S&P 500

Closely held companies do not have a public market and therefore do not have beta information. Typically an industry beta is used. A group of publicly traded companies are identified and then their beta is calculated. If the company is not large enough to have similar publicly traded companies, the method should not be used.³

USING THE RATE IN A WEIGHTED AVERAGE COST OF CAPITAL CALCULATION

In many cases the degree of leverage in a closely held company is not at optimal level. In some businesses the owner may be very aggressive and use a high degree of leverage, often backed by personal guarantees, while in other businesses the owner may be very conservative and use little or no debt financing. If either is the case, a weighted average cost of capital (WACC) should be considered in determining the value of the company.

This method estimates an appropriate percentage of the capital structure coming from debt and from equity. The formula for WACC is as follows:

$$\text{WACC} = k_e W_e + k_d [1-t] W_d$$

where

k_e = Cost of common equity (equity discount rate)

W_e = Percent of the capital structure that is common stock

k_d = Pretax cost of debt (debt interest rate)

t = Tax rate

W_d = Percent of the capital structure that is debt

If WACC is used, interest expense is eliminated and the value determined is the market value of invested capital (MVIC). It is then necessary to reduce this value by interest bearing debt to determine the value of equity.

EARNINGS CAPITALIZATION

When a perpetual income stream is used and a constant growth rate is estimated, the growth rate can be subtracted from the discount rate to obtain a capitalization rate. This is an adaptation of the Gordon model used to determine a stock value.

$$V = \frac{E}{k - g}$$

where

V = Value of the company

E = Next year's earnings

k = Required rate of return for equity investor

g = Growth rate (in perpetuity)

DISCOUNTED CASH FLOW

If forecasts are used and specific values are determined each year, the discount rate would be used since growth is already factored in to each year's forecast. Theoretically, the Discounted Cash Flow (DCF) method is the most appropriate.

The first step is to determine the net cash flow (free cash flow) for future years. Typically, five years is used.

³ Shannon Pratt, with Alina Niculita, *Valuing a Business The Analysis and Appraisal of Closely Held Companies* (New York: McGraw Hill, 2007), p. 220.

TABLE 2. BUILDUP DETERMINATION OF EARNINGS CAPITALIZATION RATE

RISKLESS RATE:		
Long term government rates		4.7
EQUITY CAPITAL PREMIUM:		
Difference large company stock & govt. bond		7.2
SMALL COMPANY PREMIUM:		
Difference large and small company stock		4.0
Total public small company		15.9
SPECIFIC RISK FACTORS:		
Lack of management depth	1.5	
Threats of new entrants	0.5	
Threat of negative legislation	0.5	
Total specific risks		2.5
Net discount rate		
Net discount rate		18.4
Less: growth		
Less: growth		-3.0
Net capitalization rate		
Net capitalization rate		15.4

$$\begin{array}{l}
 \text{Net income} \\
 + \text{ Depreciation/Amortization} \\
 +/\text{- Change in Working Capital} \\
 - \text{ Capital Expenditure} \\
 \hline
 = \text{ Net cash flow (Free Cash Flow)}
 \end{array}$$

At the end of the forecast period, the value of the future cash flows (terminal value) is calculated, similar to the capitalization of earnings, and discounted back to the current period.

The formula for DCF is:

$$\text{DCF} = \frac{fcf^1}{(1+r)^1} + \frac{fcf^2}{(1+r)^2} + \dots + \frac{fcf^n}{(1+r)^n}$$

where

DCF= Value using discounted cash flow

fcf = The free cash flow in a given year

r = The discount rate

e = The capitalization rate

n = The final terminal calculation

Table 3 provides an example of the discounted cash flow method. Five years of projected income is used and then a terminal value is calculated. A discount rate of 16.6 percent is used with a capitalization rate of 12.6 percent. There are two ways of determining the terminal value. The most common method is the capitalization of the ongoing cash flow. This is the method favored by most business valuers. A method used by investment bankers and used as a check by some valuers is the use of a market multiple. If the discounting is a return on equity,

some measure related to that, such as a P/E multiple, may be used. If the method is using overall capital, then a measure such as EBIT or EBITDA related might be used. Although this is the most theoretically sound method, it requires a sound set of forecasts. The effects of uncertainty are a component of the risk factor determined. However, in some circumstances a single number is not possible and a range of numbers may be used. The probability for each outcome is assessed and a probability distribution is used to determine the forecasted DCF. Similarly in a less precise manner a best, worse, and most likely case scenario can be used with a weighted average result. Sensitivity analysis should be considered to determine the impact of changes in the assumptions on the estimated value.

In many small closely held businesses the projections are not available and the method cannot be used.

EXCESS EARNINGS

Another earnings-based method is excess earnings. This method capitalizes the company's earnings based on two rates, one being a rate of return on tangible assets and the other based on a higher rate for earnings beyond the return on assets (goodwill). The method is often described as a hybrid method because it takes into account the company's asset values. It takes the capitalization rate and separates it into different risk assessments and rates, one for earnings backed by tangible assets and one for earnings from goodwill as illustrated in the following equation.

TABLE 3. DISCOUNTED CASH FLOW

	2009	2010	2011	2012	2013	Terminal
Projected net income	\$ 998,200	\$ 1,048,110	\$ 1,205,327	\$ 1,386,125	\$ 1,497,016	\$ 1,497,016
Depreciation	232,000	232,000	232,000	232,000	232,000	232,000
Capital needs	(175,000)	(180,000)	(180,000)	(200,000)	(220,000)	(220,000)
Working capital needs	–	–	–	(100,000)	(100,000)	(60,000)
Projected cash flow	<u>\$ 1,055,200</u>	<u>\$ 1,100,110</u>	<u>\$ 1,257,327</u>	<u>\$ 1,318,125</u>	<u>\$ 1,409,016</u>	<u>\$ 1,449,016</u>
Present Value	<u>\$ 977,205</u>	<u>\$ 873,752</u>	<u>\$ 856,449</u>	<u>\$ 770,037</u>	<u>\$ 705,947</u>	
Terminal value						
Capitalization rate						12.60%
Terminal value						11,500,123
Present value						<u>\$ 4,941,519</u>
Value (sum of present values)			\$ 9,124,909			
Less lack of marketability at 20%			<u>1,824,909</u>			
Estimated value			<u>\$ 7,300,000</u>			

$$V = \frac{E_a}{R_a} + \frac{E_g}{C_g}$$

where

V = The value of the business

E_a = The earnings attributable to a return on assets

R_a = The appropriate rate of capitalization for earnings attributable to net tangible assets

E_g = The earnings in excess of those attributable to a return on assets

C_g = The appropriate rate of capitalization for earnings attributable to goodwill

In its most common form, the value is calculated as follows:

$$V = \frac{E - AR_a}{C_g} + A$$

where

V = The value of the small business

E = The adjusted earnings of the firm

A = The net tangible assets of the firm

R_a = The appropriate rate of capitalization for earnings attributable to net tangible assets

C_g = The appropriate rate of capitalization of goodwill

An example of excess earnings is provided in Table 4. In this example a return on assets was determined to be 8.6% and a capitalization rate for goodwill of 27.4% was used. The earnings with respect to assets of \$14,595,602 was \$1,255,222. With actual earnings of \$4,431,829 this left \$3,176,607 of excess earnings to be capitalized at 27.4% to yield a goodwill number of \$11,593,456 and a total value of \$26,189,058.

Market-Based Methods

Another common approach to valuations can be classified as market-based methods. This can then be broken down into three categories: sales within the same company, sales of similar closely held companies, and, if the company is of sufficient size, publicly traded guideline companies.

SALE OF STOCK IN THE SAME COMPANY

The sale of stock in the same company sounds like a good approach; however, this may not be the case. The sale may not have been at fair market value due to a forced sale, perhaps restricted by an internal agreement, or similar reason that may distort the price. In addition, the sale may have been for a minority interest when one is trying to determine a value for the whole company or a controlling interest. The opposite might be true and one might be trying to value a minority interest when the sale was of a controlling interest. Finally, the proximity in time needs to be considered. A sale that took place in a prior period may have been made when economic conditions were different.

SALE OF SIMILAR COMPANIES

Data regarding sales of similar closely held companies may be available. There are also databases that can be obtained. When available and adequate data is provided, the information can be helpful in determining the value of a compa-

TABLE 4. EXCESS EARNINGS

Net Assets	\$	14,595,602
Return on Assets		<u>8.60%</u>
Expected Return	\$	1,255,222
Actual Earnings		<u>4,431,829</u>
Excess Earnings	\$	3,176,607
Capitalization rate		<u>27.40%</u>
Goodwill	\$	<u>11,593,456</u>
Total value	\$	<u><u>26,189,058</u></u>

ny. It is very difficult to determine whether all aspects of the transaction are disclosed. For example, there may be a consulting agreement at favorable terms that is not shown as part of the sale. In addition, the actual similarity of the company can be problematic. For example, a similar company in a different market may face different economic factors. One type of business that has a better chance at comparability is franchise operations, such as a fast food establishment. Professional practices also may have similar attributes. There are various databases for private company comparables. DoneDeals (www.donedeals.com) is a comprehensive source of unique mid-market transaction data, with approximately half of deals under \$15 million and half over \$15 million, and approximately 79% of the selling companies being privately owned. The Institute of Business Appraisers (IBA) "Market Database" (www.go-iba.org) is the largest database of guideline transactions for valuing mid-sized and smaller businesses. The database includes information on over 30,300 sales of closely held businesses in more than

725 SIC Codes. Access to the database is free to IBA members. Pratt's Stats® (www.bvmarketdata.com) contains details on approximately 11,500 private and closely held business sales from 1990 to the present, ranging in deal price from under \$1 million to \$16.6 billion.

GUIDELINE COMPANIES

Finally there may be publicly traded companies that have similar risk factors as the company being valued. The criterion in selecting companies is to try to find companies with the same pattern of operations in the past and the same risk factors in the future. Although a match with companies that are close to identical is desirable, it is not necessary. Companies in the same industry can be looked at in addition to companies in related industries that are subject to the same risks. Thus a company that manufactures parts used in the assembly of recreational vehicles may have

more similar risks to the actual manufacturing of the vehicles than a company that manufactures parts for the assembly of automobiles.

If guideline companies are used, some of the factors to consider include:

- Nature of the company
- Similarity of operations
- Geographic similarity
- Demographic similarity
- Percentage of ownership transferred

If guideline companies are used, then a decision has to be made as to what the indicators of value are. These indicators are typically various earnings figures and perhaps a couple of balance sheet numbers. Similar to the decision on whether to use WACC or not, a decision has to be made as to whether to use Market Value of Invested Capital (MVIC) or Market Value of Equity (MVE).

MVIC is defined as the entire invested capital value of the firm, including equity investment and debt investment. Because of the nature of closely held companies, there may be dissimilar leverage used between the guideline companies and the company being valued. In these cases MVIC is the better measure. The income data used is before interest expense. Some indicators used are:

- Earnings before interest and taxes (EBIT)
- Earnings before interest, taxes, amortization, and depreciation (EBITDA)
- Sales
- Cash flow excluding debt
- Book value of invested capital

Typically the factors that are most closely correlated with each other will be chosen. Some valuers will use the coefficient of variance to judge the relationship.

$$C_v = \frac{\delta}{\mu}$$

where

C_v = Coefficient of variance

δ = standard deviation

μ = mean

Thus, the variable with the lowest coefficient of variation has the least dispersion.

When a value is determined under MVIC, the company interest bearing debt must be subtracted to determine the value of the equity ownership interest.

When the debt equity structure is similar to the guideline companies, then it may be appropriate to determine the market value of equity. It is also appropriate when determining the value of a minority interest where the interest would not be able to change the company leverage. Factors to consider when using MVE are:

- Net income before tax
- Net income after tax
- Sales
- Cash flow
- Net equity book value

There are a variety of sources to find guideline companies. The SEC 10-k filings are accessible through the SEC website. Commercial sites such as Yahoo Finance can supplement the data. There are also a number of subscription sites such as Mergent Online, a fully searchable database of 15,000 U.S. public companies (active and inactive) listed on the NYSE, AMEX, and

TABLE 5. GUIDELINE DATA

Guideline Company	MVIC/Sales	MVIC/EBITDA	MVIC/Net assets
A	.29	6.26	.68
B	.90	9.72	1.94
C	1.24	11.04	4.35
D	.79	10.32	2.91
Median	.84	10.02	2.43
Standard deviation	.39	2.12	1.55
Coefficient variation	.49	.23	.63

NASDAQ exchanges, and Compustat provides data on companies that can be sorted by SIC code.

When the guideline company method is used it is still appropriate to adjust for normalization, size, and unsystematic risk. Since publicly traded stocks are minority shares, if a controlling interest is being valued a control premium should be considered.

For example:

A manufacturing company is being valued. Four guideline companies are identified. MVIC is used. The factors utilized are sales, EBITDA, and net assets. The multiples and coefficients of variance are calculated. The data results in the following calculations in Table 5.

Based upon the above, the valuator decides to base the determination 60% on EBITDA, 25% on sales, and 15% on net assets. In addition a 20% discount is decided upon based on the

increased risk of the company being valued and a 15% control premium is also used. The calculation of value is provided in Table 6.

Asset-Based Methods

The third category of valuation is based on the assets. Since asset approaches do not measure goodwill, most of the time operating companies are valued based on the earnings capitalization or market approaches. In these cases the asset approach may act as a floor or the lowest the value can be.

OPERATING ASSET VALUE

If the company is a going concern, then the operating value of the assets is used. This presumes that the company will stay in business but has no goodwill. The book value of the company is the starting point. Because GAAP provides a mixture of fair values and historical costs, adjustments are needed to bring the values to fair value. This method may also provide information needed for an excess earnings calculation, in which case non-operating assets and liabilities need to be separated. The issue of built-in gains

TABLE 6. GUIDELINE DATA

Factor	MVIC/Sales	MVIC/EBITDA	MVIC/Net assets	Total
Multiple	0.84	10.02	2.43	
Company	\$5,000,000	\$ 450,000	\$ 2,000,000	
Value	\$4,200,000	\$ 4,509,000	\$ 4,860,000	
Weight	60%	25%	15%	
Value	\$ 2,520,000	\$ 1,127,000	\$ 729,000	\$ 4,376,000
Risk Discount 20%	(504,000)	(225,000)	(146,000)	(875,000)
Net	\$ 2,016,000	\$ 902,000	\$ 583,000	\$ 3,501,000
Control Premium 15%	<u>302,000</u>	<u>135,000</u>	<u>87,000</u>	<u>524,000</u>
MVIC	\$ <u>2,318,000</u>	\$ <u>1,037,000</u>	\$ <u>670,000</u>	\$ 4,025,000
Less company debt				(725,000)
Estimated value				\$ <u>3,300,000</u>

needs to be considered when using this method. That is, when the fair value is in excess of the book value, there is a potential for a tax that will be needed or a lack of a tax deduction for the asset. For a C corporation, the built-in gain is the tax that would have to be paid if the asset was sold. This is a controversial issue, with the IRS reluctant to reduce the value while the tax courts have been more receptive for C corporations. Pass-through entities such as S corporations and partnerships complicate the issue. Typically the built-in gain is recognized in an S corporation. But since partnerships can get a stepped-up basis, if elected, they usually do not get a consideration of the built-in tax.

Minority interests are another consideration. Since they cannot cause the company to sell their assets, this method is usually not used

when valuing minority shares.

There are various adjustments to consider.

Current assets are the easiest to adjust to fair value and in most cases GAAP provides a fair value number. If another comprehensive basis of accounting is in use, there may need to be adjustments for allowance for uncollectible accounts among other items. Under GAAP, held-to-maturity securities may not be reflected at fair value and may need to be adjusted. The FIFO method of inventory usually provides the best indicator of fair value for inventory.

The value of plant, property, and equipment is typically not at fair value and will need an appraisal if the amounts are significant. If the amount is not significant an adjusted deprecia-

tion using reasonable useful lives and a non-accelerated depreciation method may result in an acceptable estimate of fair value.

Other assets may also need a separate appraisal, depending on their nature. Liabilities are usually at fair value. But loans from related parties may need to be adjusted to reflect their fair value using market interest rates.

Liquidating Value

Another asset method is liquidating value. This method is not appropriate for a going concern, but may be appropriate if there is doubt regarding the probability of the company staying in business.

VI. DISCOUNTS AND PREMIUMS

Regardless of what method was used to determine an indicator of value, discounts and premiums are usually a factor in closely held companies. Marketability and control are the most frequent issues encountered. Other factors that may be considered are discounts for the loss of a key executive, and trapped-in capital gain taxes. There is also a control premium.

Lack of Marketability Discount

There is no universally accepted method for determining the lack of marketability discount. Two methods using empirical data have been used. One is based on restricted stock studies and the other initial public offerings (IPO).

IPO studies

A series of studies known as the Emory studies was conducted from 1980 through 2000. It compared prices of stock transactions prior to an initial public offering (IPO) with the prices at which the stock was initially offered to the public (at the IPO). The median discount was 47%. Willamette Management Associates has studied IPO transactions over a period of many years and

has published the results on their website.⁴

Restricted stock studies

In 1971, the Securities and Exchange Commission published a study it made on restricted stock values from 1966 to 1969. It found a mean discount of 25.8%.⁵ Four closed-end investment companies that had significant investment in restricted security investments were examined by Milton Gelman.⁶ The mean and median in the above study was 33%. Willamette Management Associates has studied 33 transactions that took place primarily in 1983. The median discount was 31.2%.⁷

Michael Maher conducted a study of restricted securities from 1969 to 1973. He determined a median discount of 33%.⁸ Robert Trout found similar results in the same time period. He studied transactions from 1968 to 1972 and determined a mean discount of 33%.⁹

In *Business Valuation Methods* written by Alan S. Zipp, JD, and published by the American Institute of Certified Public Accountants, the author states: "As a general rule of thumb, courts have generally approved discounts for lack of

4 <http://www.willamette.com/>.

5 Security and Exchange Commission, *Discounts Involved in Purchase of Common Stock (1966 - 1969), Institutional Investor Study Report of the Security and Exchange Commission*. Government Printing Office Document No. 92-64, Part 5, pp. 2444-2456.

6 Milton Gelman, "An Economist-Financial Analyst's Approach to Valuing Stock of a Closely-Held Company," *Journal of Taxation*, June 1972, pp. 353-354.

7 Shannon Pratt, with Alina Niculita, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies* (New York: John Wiley, 2007), p. 425.

8 Michael J. Maher, "Discounts for Lack of Marketability for Closely Held Business Interests," *Taxes*, Sept. 1976, pp. 562-571.

9 Robert R. Trout, "Estimation of the Discount Associated with the Transfer of Restricted Securities," *Taxes*, June 1977, pp. 381-385.

marketability in the range of 15% to 50%, with the mean in the vicinity of 35%.” Zipp also states:

In the June 1992 edition of *Fairshare, The Matrimonial Law Monthly*. [Vol. 12, No. 6, p. 15] several studies were summarized which analyzed the average discount found between listed securities and their restricted counterparts. These restricted stocks were considered identical in all respects to freely traded stocks of public companies, except for their lack of marketability. These studies included the Congressional “Institutional Investor Study Report of the Security Exchange Commission” [H.R. Doc. No. 64, Part 5, 92nd Cong., 1st Sess. 1971. pp. 2444-2456] and several private studies. The result of these studies reported the average discount for lack of marketability ranged from 25.8% to 45%.¹⁰

The article cites two studies by Robert W. Baird & Co., which compared companies in private stock transactions to those of subsequent public offerings of stock in the same companies. The results of those studies reflected average discount from 1980 to 1981 of 60% and between 1985 and 1986 of 43%. The median discount between 1980 and 1981 was 66% and during 1985 and 1986 it was 43%.

According to the article, “There is considerable evidence, however, suggesting that the marketability discount for a closely held stock compared with a pub-

licly traded counterpart should average between 35 percent and 50 percent, in the absence of special circumstances that would tend to reduce the discount for lack of marketability.”¹¹

Controlling interest

Although the marketability discount is usually greater for a minority interest that cannot decide to sell the company, there is also a marketability discount for a controlling interest. A truly marketable stock is one where you can call your broker, sell the stock instantly, and receive cash in three days. Obviously, the sale is not possible for a controlling interest in a closely held company. Shannon Pratt states: “The three bases most often encountered from which a controlling interest discount for lack of marketability is deducted are:

1. Control buyout value
2. Publicly traded stock value
3. Net asset value.”¹²

The courts have also commented on lack of marketability discounts for controlling interest. In the *Estate of Andrews* they said:

The minority shareholder discount is designed to reflect the decreased value of shares that do not convey control of a closely held corporation. The lack of marketability discount, on the other hand, is designed to reflect the fact that there is no ready market for shares in a closely held corporation. Although there

¹⁰ Alan S. Zipp, *Business Valuation Methods* (AICPA, 1993).

¹¹ *Ibid.*

¹² Shannon Pratt, *Business Valuation Discounts and Premiums* (New York: John Wiley & Sons, 2001), pp. 168-169.

may be some overlap between these two discounts in that lack of control may reduce marketability, it should be borne in mind that even controlling shares in a nonpublic corporation suffer from lack of marketability because of the absence of a ready private placement market and the fact that flotation costs would have to be incurred if the corporation were to publicly offer its stock.¹³

In the Estate of Dougherty the court allowed a 35% discount on net asset value for a 100% interest based on a valuation using net asset value. “Discounting this figure by 35 percent for nonmarketability and operating and liquidation costs.”¹⁴

Lack of Control Discount

When the valuation is of an interest that cannot control the activities of the company, a lack of control discount is appropriate. Although a share of publicly traded stock lacks control, this issue is more serious in a closely held company where there is an interest that has control.

There are various factors to consider in determining a lack of control discount. In some states the standard of value becomes important. For example, in New York, if there is an oppressed minority shareholder action, a fair value is determined that excludes a lack of control discount. When the guideline method is used to determine

value, the calculations were done on shares that lack control. A study published by Shannon Pratt used control premium data to determine a lack of control discount resulting in discounts from 24.3% to 25%.¹⁵ A study conducted on real estate holding companies calculated a median discount of 34.8%.¹⁶

Key Person Discount

In some smaller closely held companies or those that are highly technical, there is the possibility that the company would be at a serious disadvantage if the owner, whose skills are relied upon, were not actively involved. This may be caused by exclusive technical knowledge or by the relationships between the owner and the customers. The risk associated with the absence of this individual can be accounted for in the determination of the unsystematic risks or by applying a separate key person discount. The valuator needs to consider the difficulty in replacing the individual and the backup within the company.

There have not been many studies on the quantity of this type of discount. A study that looked at stock price changes when senior management changes were announced concluded that smaller public companies had a decline of 8.65% while larger companies had a decline of 4.83%.

The courts have varied considerably on the amount of this discount. One court allowed 25% while another allowed 10%.¹⁷ Yet another court

13 Estate of Woodbury G. Andrews, Deceased, Woodbury H. Andrews, Executor, Petitioner v. Commissioner of Internal Revenue, Respondent 79 T.C. 938; 1982 U.S. Tax Ct. LEXIS 12; 79 T.C. No. 58.

14 Estate of Albert L. Dougherty, deceased, Allen L. Dougherty and Charlotte K. Dougherty, co-executors, Petitioner v. Commissioner of Internal Revenue, Respondent T.C. Memo 1990-274; 1990 Tax Ct. memo LEXIS 292; 59 T.C.M. (CCH) 772; T.C.M. (RIA) 90274.

15 Shannon Pratt, with Alina Niculita, *Valuing a Business The Analysis and Appraisal of Closely Held Companies* (New York: McGraw Hill, 2007), p. 404.

16 Peter J. Patchin “Market Discounts for Undivided Minority Interests in Real Estate,” *Real Estate Issues*, Winter 1988, pp. 14-16.

17 Estate of Milton Feldmar v. Commissioner, T.C. Memo 1988-429. Estate of Paul Mitchell v. Commissioner, T.C. Memo 1997-461.

concluded that forecasts used already factored in the issue and did not allow a discount.¹⁸

Control Premium

There is more empirical information on control premiums than on lack of control discounts. The discount can be derived from the inverse relationship between the two. The relationship is as follows:

$$M = 1 - \left(\frac{1}{1 + P} \right)$$

where

M = Minority discount

P = Control premium

The amount of the premium can be diminished by the need for super majorities that are legislated or contractual if the interest being valued does not have a sufficient percentage to carry a super majority decision. Other contractual factors can also diminish the control premium. These may include how the board of directors is appointed, shareholder agreements restricting the sale or gift of stocks, or the state's laws on oppressed minority shareholders.

The data provided previously regarding a Shannon Pratt study was actually an interpolation of his conclusions on control premiums of 16.7% to 33.3%.¹⁹

18 Estate of James J. Riener v. Commissioner, T.C. Memo 200-298.

19 Shannon Pratt, with Alina Niculita, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies* (New York: McGraw Hill, 2007), p. 392.

Trapped-in Capital Gains

Trapped-in capital gains were discussed under the net asset method of valuations. This issue also needs to be considered under other valuation methods. The fact is that a buyer is not willing to pay fair market value for assets that cannot be depreciated using the fair market value as a tax basis. The actual capital gain tax would be the appropriate adjustment if there was anticipated sale of the asset. Even if a sale is not contemplated, an alternative method might be to determine the present value of the tax benefit lost by not being able to take depreciation.

VII. VALUATION CONCLUSIONS

At this point the various results obtained from the different valuation methods utilized are summarized and the valuator will reconcile the different results. The valuator may decide that there is one method that is most persuasive and decide to use the value indicated by that method. The alternative is that the valuator decides that multiple methods will be used and decides on which methods are more persuasive than others. A weighted average of the methods used is employed. This will provide an estimate of the operating value of the company. The valuator may have to adjust this value for non-operating assets and liabilities and excess or undercapitalized operating assets.

VIII. VALUATION REPORT

Several types of valuation reports are available. The most common is the detailed report. This is full comprehensive report that has sufficient information for the reader to understand what the valuator did and how the conclusions were reached. A condensed version of this report is also possible and is called a summary report. It is also possible for a valuator to perform calculations requested by a client and use hypothetical assumptions. For litigation and government

proceedings the content of the report may vary. A discussion of the comprehensive report content, a summary report, and a calculation report based upon AICPA standards follows.

Detailed Report

Introductory section

The detailed report may start with a letter of transmittal followed by an introductory section. The introductory section includes sufficient information to enable the reader to understand the engagement and includes identifying the client; the purpose of the valuation; the date of the valuation and what is being valued; if it is a partial interest, the degree of control; marketability information; the standard of value; any scope limitations; hypothetical assumptions used; and any specialists used.

Sources of information

Sources of information are detailed in the second section, including site visits and who was interviewed. It also describes what financial information was available. If the statements were looked at by a CPA, whether it was an audit, review, or compilation will be noted. If the information came from tax returns, then who prepared the returns should be identified.

Economic analysis

The third section reports on economic conditions. An analysis of the overall economic conditions is included if it has an impact on the company. The industry analysis and the company analysis are also found in this section. The company will be described in qualitative terms, including the background and history of the company, products and services, demographic information, customers and suppliers, threat of new entrants, technological risks, environmental risks, regulatory risks, socio-cultural risks, and

global risks. The section may also have strategic plans of the company, workforce makeup, and breakdown of ownership interest. The company will also be described in quantitative terms. Typically multi-year financial statements are presented with comments on sales and profit trends, along with liquidity ratios, profitability ratios, activity ratios, and leverage ratios.

Normalization

Next, the fourth section will describe the normalization adjustments based upon the financial analysis and the ownership interest being valued. The normalization will consider related party transactions, unusual items, non-operating items, and adjustments regarding the application of the basis of accounting used.

Valuation approaches and methods considered

Valuation approaches and methods that were considered are usually discussed in the fifth section.

Valuation approaches used

The sixth section discusses which valuation methods were used. This section will have the calculated estimates of value under the various methodologies. Any applicable discounts or premiums will also be applied.

Other factors

Other adjustments are discussed in the seventh section. This may arise because the company has a deficiency in operating assets, excess operating assets, or non-operating assets or liabilities. Excess assets are treated as non-operating assets. Sometime in a sale the owner leaves with cash or other assets. If these need to be replaced for normal operations, the value is reduced by the cost to replace. Non-operating assets and liabilities were not part of the calculation of operating value, and the value

of the company as a whole will be adjusted to include these items.

Reconciliation of calculations

The report typically will include commentary on the differences on value between the methods. It will also reflect on the persuasiveness of the various methods used. It will also calculate the final opinion of value.

Representations

Either a section will be included that includes the representations and conclusions of the valuator and the signature of the person taking responsibility, or this information will be found somewhere else in the report.

Assumptions and limiting conditions

The assumptions and limiting conditions will either be in a separate section of the report or they may appear in an appendix. The assumptions and limiting conditions typically discuss the reliability of the source information, any restriction on use, the fact that the fee is independent of the conclusions, disclose the use of any specialists, and the fact that the valuator is not responsible for updates to the report.

Background of the valuator

A summary of the background and qualifications of the valuator should be provided.

Summary Report

A summary report may also be issued. It will be less comprehensive than a detailed report and may be restricted to the client. The report would include the following portions of a comprehensive report:

- Introduction
- Who the client is
- The purpose of the valuation
- What is being valued

- What time period
- Report date
- The intended users
- The degree of control
- The marketability of the interest
- The standard of value being utilized
- Scope limitations
- Specialists
- Sources of information
- Financial information
- Economic data
- Industry data
- Other empirical data
- Valuation approaches and methods used
- Income approach
- Market approach
- Asset approach
- Representations of the valuator
- Professional standards followed
- Assumptions and limiting conditions
- Restricted use solely for the purpose intended
- Conclusion of value

Calculation Report

The valuator can agree to just do requested calculations for a client. Since the valuator does not decide what procedures should be executed, the engagement does not include a conclusion of value and is restricted to the client's internal use. This is similar to an agreed upon procedure under generally accepted auditing standards. The report may include the following:

- Introduction
- Who the client is
- The nature of the calculations
- Any hypothetical conditions
- Report date
- The intended users
- Specialists
- Summary of calculated value
- Scope of work

- Representations of the valuator
- Professional standards followed
- Assumptions and limiting conditions
- Any restricted use

Oral Report

It is permissible to give an oral report, but the valuator may be reluctant to accept the engagement because of the risk of being misunderstood. The presentation should be inclusive and should go over key areas of research, analysis, valuation methods, conclusions, and assumptions and limiting conditions.

IX. INTERNATIONAL GLOSSARY OF BUSINESS VALUATION TERMS

To enhance and sustain the quality of business valuations for the benefit of the profession and its clientele, the below identified societies and organizations have adopted the definitions for the terms included in this glossary.

American Institute of Certified Public Accountants

American Society of Appraisers

Canadian Institute of Chartered Business Valuators

National Association of Certified Valuation Analysts

The Institute of Business Appraisers

The performance of business valuation services requires a high degree of skill and imposes upon the valuation professional a duty to communicate the valuation process and conclusion in a manner that is clear and not misleading. This

duty is advanced through the use of terms whose meanings are clearly established and consistently applied throughout the profession.

If, in the opinion of the business valuation professional, one or more of these terms needs to be used in a manner that materially departs from the enclosed definitions, it is recommended that the term be defined as used within that valuation engagement. This glossary has been developed to provide guidance to business valuation practitioners by further memorializing the body of knowledge that constitutes the competent and careful determination of value and, more particularly, the communication of how that value was determined. Departure from this glossary is not intended to provide a basis for civil liability and should not be presumed to create evidence that any duty has been breached.

Adjusted Book Value Method—a method within the asset approach whereby all assets and liabilities (including off-balance sheet, intangible, and contingent) are adjusted to their fair market values. {NOTE: In Canada on a going concern basis}

Adjusted Net Asset Method—see Adjusted Book Value Method.

Appraisal—see Valuation.

Appraisal Approach—see Valuation Approach.

Appraisal Date—see Valuation Date.

Appraisal Method—see Valuation Method.

Appraisal Procedure—see Valuation Procedure.

Arbitrage Pricing Theory—a multivariate model for estimating the cost of equity capital, which incorporates several systematic risk factors.

Asset (Asset-Based) Approach—a general way of determining a value indication of a business, business ownership interest, or security using one or more methods based on the value of the assets net of liabilities.

Beta—a measure of systematic risk of a stock; the tendency of a stock's price to correlate with changes in a specific index.

Blockage Discount—an amount or percentage deducted from the current market price of a publicly traded stock to reflect the decrease in the per-share value of a block of stock that is of a size that could not be sold in a reasonable period of time given normal trading volume.

Book Value—see Net Book Value.

Business—see Business Enterprise.

Business Enterprise—a commercial, industrial, service, or investment entity (or a combination thereof) pursuing an economic activity.

Business Risk—the degree of uncertainty of realizing expected future returns of the business resulting from factors other than financial leverage. See Financial Risk.

Business Valuation—the act or process of determining the value of a business enterprise or ownership interest therein.

Capital Asset Pricing Model (CAPM)—a model in which the cost of capital for any stock or portfolio of stocks equals a risk-free rate plus a risk premium that is proportionate to the systematic risk of the stock or portfolio.

Capitalization—a conversion of a single period of economic benefits into value.

Capitalization Factor—any multiple or divisor used to convert anticipated economic benefits of a single period into value.

Capitalization of Earnings Method—a method within the income approach whereby economic benefits for a representative single period are converted to value through division by a capitalization rate.

Capitalization Rate—any divisor (usually expressed as a percentage) used to convert anticipated economic benefits of a single period into value.

Capital Structure—the composition of the

invested capital of a business enterprise; the mix of debt and equity financing.

Cash Flow—cash that is generated over a period of time by an asset, group of assets, or business enterprise. It may be used in a general sense to encompass various levels of specifically defined cash flows. When the term is used, it should be supplemented by a qualifier (for example, “discretionary” or “operating”) and a specific definition in the given valuation context.

Common Size Statements—financial statements in which each line is expressed as a percentage of the total. On the balance sheet, each line item is shown as a percentage of total assets, and on the income statement, each item is expressed as a percentage of sales.

Control—the power to direct the management and policies of a business enterprise.

Control Premium—an amount or a percentage by which the pro rata value of a controlling interest exceeds the pro rata value of a non-controlling interest in a business enterprise to reflect the power of control.

Cost Approach—a general way of determining a value indication of an individual asset by quantifying the amount of money required to replace the future service capability of that asset.

Cost of Capital—the expected rate of return that the market requires in order to attract funds to a particular investment.

Debt-Free—we discourage the use of this term. See Invested Capital.

Discount for Lack of Control—an amount or percentage deducted from the pro rata share of value of 100% of an equity interest in a business to reflect the absence of some or all of the powers of control.

Discount for Lack of Marketability—an amount or percentage deducted from the value of an ownership interest to reflect the relative absence of marketability.

Discount for Lack of Voting Rights—an amount or percentage deducted from the per-share value of a minority interest voting share to reflect the absence of voting rights.

Discount Rate—a rate of return used to convert a future monetary sum into present value.

Discounted Cash Flow Method—a method within the income approach whereby the present value of future expected net cash flows is calculated using a discount rate.

Discounted Future Earnings Method—a method within the income approach whereby the present value of future expected economic benefits is calculated using a discount rate.

Economic Benefits—inflows such as revenues, net income, net cash flows, etc.

Economic Life—the period of time over which property may generate economic benefits.

Effective Date—see Valuation Date.

Enterprise—see Business Enterprise.

Equity—the owner's interest in property after deduction of all liabilities.

Equity Net Cash Flows—those cash flows available to pay out to equity holders (in the form of dividends) after funding operations of the business enterprise, making necessary capital investments, and increasing or decreasing debt financing.

Equity Risk Premium—a rate of return added to a risk-free rate to reflect the additional risk of equity instruments over risk-free instruments (a component of the cost of equity capital or equity discount rate).

Excess Earnings—that amount of anticipated economic benefits that exceeds an appropriate rate of return on the value of a selected asset base (often net tangible assets) used to generate those anticipated economic benefits.

Excess Earnings Method—a specific way of determining a value indication of a business, business ownership interest, or security determined as the sum of a) the value of the assets derived by capitalizing excess earnings and b) the value of the selected asset base. Also frequently used to value intangible assets. See Excess Earnings.

Fair Market Value—the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arms length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts. {NOTE: In Canada, the term “price” should be replaced with the term “highest price.”}

Fairness Opinion—an opinion as to whether or not the consideration in a transaction is fair from a financial point of view.

Financial Risk—the degree of uncertainty of realizing expected future returns of the business resulting from financial leverage. See Business Risk.

Forced Liquidation Value—liquidation value, at which the asset or assets are sold as quickly as possible, such as at an auction.

Free Cash Flow—we discourage the use of this term. See Net Cash Flow.

Going Concern—an ongoing operating business enterprise.

Going Concern Value—the value of a business enterprise that is expected to continue to operate into the future. The intangible elements of Going Concern Value result from factors such as having a trained work force, an operational plant, and the necessary licenses, systems, and procedures in place.

Goodwill—that intangible asset arising as a result of name, reputation, customer loyalty, location, products, and similar factors not separately identified.

Goodwill Value—the value attributable to goodwill.

Guideline Public Company Method—a method within the market approach whereby market multiples are derived from market prices of stocks of companies that are engaged in the same or similar lines of business and that are actively traded on a free and open market.

Income (Income-Based) Approach—a general way of determining a value indication of a business, business ownership interest, security, or intangible asset using one or more methods that convert anticipated economic benefits into a present single amount.

Intangible Assets—non-physical assets such as franchises, trademarks, patents, copyrights, goodwill, equities, mineral rights, securities, and contracts (as distinguished from physical assets) that grant rights and privileges and have value for the owner.

Internal Rate of Return—a discount rate at which the present value of the future cash flows of the investment equals the cost of the investment.

Intrinsic Value—the value that an investor considers, on the basis of an evaluation or available facts, to be the “true” or “real” value that will become the market value when other investors reach the same conclusion. When the term applies to options, it is the difference between the exercise price and strike price of an option and the market value of the underlying security.

Invested Capital—the sum of equity and debt in a business enterprise. Debt is typically (a) all interest-bearing debt or (b) long-term, interest-bearing debt. When the term is

used, it should be supplemented by a specific definition in the given valuation context.

Invested Capital Net Cash Flows—those cash flows available to pay out to equity holders (in the form of dividends) and debt investors (in the form of principal and interest) after funding operations of the business enterprise and making necessary capital investments.

Investment Risk—the degree of uncertainty as to the realization of expected returns.

Investment Value—the value to a particular investor based on individual investment requirements and expectations. {NOTE: in Canada, the term used is “Value to the Owner.”}

Key Person Discount—an amount or percentage deducted from the value of an ownership interest to reflect the reduction in value resulting from the actual or potential loss of a key person in a business enterprise.

Levered Beta—the beta reflecting a capital structure that includes debt.

Limited Appraisal—the act or process of determining the value of a business, business ownership interest, security, or intangible asset with limitations in analyses, procedures, or scope.

Liquidity—the ability to quickly convert property to cash or pay a liability.

Liquidation Value—the net amount that would be realized if the business is terminated and the assets are sold piecemeal. Liquidation can be either “orderly” or “forced.”

Majority Control—the degree of control provided by a majority position.

Majority Interest—an ownership interest greater than 50% of the voting interest in a business enterprise.

Market (Market-Based) Approach—a general way of determining a value indication of a business, business ownership interest,

security, or intangible asset by using one or more methods that compare the subject to similar businesses, business ownership interests, securities, or intangible assets that have been sold.

Market Capitalization of Equity—the share price of a publicly traded stock multiplied by the number of shares outstanding.

Market Capitalization of Invested Capital—the market capitalization of equity plus the market value of the debt component of invested capital.

Market Multiple—the market value of a company's stock or invested capital divided by a company measure (such as economic benefits, number of customers).

Marketability—the ability to quickly convert property to cash at minimal cost.

Marketability Discount—see Discount for Lack of Marketability.

Merger and Acquisition Method—a method within the market approach whereby pricing multiples are derived from transactions of significant interests in companies engaged in the same or similar lines of business.

Mid-Year Discounting—a convention used in the Discounted Future Earnings Method that reflects economic benefits being generated at midyear, approximating the effect of economic benefits being generated evenly throughout the year.

Minority Discount—a discount for lack of control applicable to a minority interest.

Minority Interest—an ownership interest less than 50% of the voting interest in a business enterprise.

Multiple—the inverse of the capitalization rate.

Net Book Value—with respect to a business enterprise, the difference between total assets (net of accumulated depreciation, depletion, and amortization) and total liabilities as they appear on the balance sheet

(synonymous with Shareholder's Equity). With respect to a specific asset, the capitalized cost less accumulated amortization or depreciation as it appears on the books of account of the business enterprise.

Net Cash Flows—when the term is used, it should be supplemented by a qualifier. See Equity Net Cash Flows and Invested Capital Net Cash Flows.

Net Present Value—the value, as of a specified date, of future cash inflows less all cash outflows (including the cost of investment) calculated using an appropriate discount rate.

Net Tangible Asset Value—the value of the business enterprise's tangible assets (excluding excess assets and non-operating assets) minus the value of its liabilities.

Non-operating Assets—assets not necessary to ongoing operations of the business enterprise. {NOTE: in Canada, the term used is "Redundant Assets."}

Normalized Earnings—economic benefits adjusted for non-recurring, non-economic, or other unusual items to eliminate anomalies and/or facilitate comparisons.

Normalized Financial Statements—financial statements adjusted for non-operating assets and liabilities and/or for non-recurring, non-economic, or other unusual items to eliminate anomalies and/or facilitate comparisons.

Orderly Liquidation Value—liquidation value at which the asset or assets are sold over a reasonable period of time to maximize proceeds received.

Premise of Value—an assumption regarding the most likely set of transactional circumstances that may be applicable to the subject valuation; for example, going concern, liquidation.

Present Value—the value, as of a specified date, of future economic benefits and/or

proceeds from sale, calculated using an appropriate discount rate.

Portfolio Discount—an amount or percentage deducted from the value of a business enterprise to reflect the fact that it owns dissimilar operations or assets that do not fit well together.

Price/Earnings Multiple—the price of a share of stock divided by its earnings per share.

Rate of Return—an amount of income (loss) and/or change in value realized or anticipated on an investment, expressed as a percentage of that investment.

Redundant Assets—see Non-operating Assets.

Report Date—the date conclusions are transmitted to the client.

Replacement Cost New—the current cost of a similar new property having the nearest equivalent utility to the property being valued.

Reproduction Cost New—the current cost of an identical new property.

Required Rate of Return—the minimum rate of return acceptable by investors before they will commit money to an investment at a given level of risk.

Residual Value—the value as of the end of the discrete projection period in a discounted future earnings model.

Return on Equity—the amount, expressed as a percentage, earned on a company's common equity for a given period.

Return on Investment—See Return on Invested Capital and Return on Equity.

Return on Invested Capital—the amount, expressed as a percentage, earned on a company's total capital for a given period.

Risk-Free Rate—the rate of return available in the market on an investment free of default risk.

Risk Premium—a rate of return added to a risk-free rate to reflect risk.

Rule of Thumb—a mathematical formula developed from the relationship between price and certain variables based on experience, observation, hearsay, or a combination of these; usually industry specific.

Special Interest Purchasers—acquirers who believe they can enjoy post-acquisition economies of scale, synergies, or strategic advantages by combining the acquired business interest with their own.

Standard of Value—the identification of the type of value being utilized in a specific engagement; for example, fair market value, fair value, investment value.

Sustaining Capital Reinvestment—the periodic capital outlay required to maintain operations at existing levels, net of the tax shield available from such outlays.

Systematic Risk—the risk that is common to all risky securities and cannot be eliminated through diversification. The measure of systematic risk in stocks is the beta coefficient.

Tangible Assets—physical assets (such as cash, accounts receivable, inventory, property, plant and equipment, etc.).

Terminal Value—See Residual Value.

Transaction Method—See Merger and Acquisition Method.

Unlevered Beta—the beta reflecting a capital structure without debt.

Unsystematic Risk—the risk specific to an individual security that can be avoided through diversification.

Valuation—the act or process of determining the value of a business, business ownership interest, security, or intangible asset.

Valuation Approach—a general way of determining a value indication of a business, business ownership interest, security, or intangible asset using one or more valuation methods.

Valuation Date—the specific point in time as of which the valuator's opinion of value applies

(also referred to as “Effective Date” or “Appraisal Date”).

Valuation Method—within approaches, a specific way to determine value.

Valuation Procedure—the act, manner, and technique of performing the steps of an appraisal method.

Valuation Ratio—a fraction in which a value or price serves as the numerator and financial, operating, or physical data serve as the denominator.

Value to the Owner—see Investment Value.

Voting Control—de jure control of a business enterprise.

Weighted Average Cost of Capital (WACC)—the cost of capital (discount rate) determined by the weighted average, at market value, of the cost of all financing sources in the business enterprise’s capital structure.

EXHIBIT 1. REVENUE RULING 59-60

Rev. Rul. 59-60, 1959-1 CB 237 – IRC Sec. 2031 (Also Section 2512.) (Also Part II, Sections 811(k), 1005, Regulations 105, Section 81.10.)

Reference(s): Code Sec. 2031 Reg § 20.2031-2

In valuing the stock of closely held corporations, or the stock of corporations where market quotations are not available, all other available financial data, as well as all relevant factors affecting the fair market value must be considered for estate tax and gift tax purposes. No general formula may be given that is applicable to the many different valuation situations arising in the valuation of such stock. However, the general approach, methods, and factors which must be considered in valuing such securities are outlined.

Revenue Ruling 54-77, C.B. 1954-1, 187, superseded.

Full Text:

Section 1. Purpose.

The purpose of this Revenue Ruling is to outline and review in general the approach, methods and factors to be considered in valuing shares of the capital stock of closely held corporations for estate tax and gift tax purposes. The methods discussed herein will apply likewise to the valuation of corporate stocks on which market quotations are either unavailable or are of such scarcity that they do not reflect the fair market value.

Sec. 2. Background and Definitions.

.01 All valuations must be made in accordance with the applicable provisions of the Internal Revenue Code of 1954 and the Federal Estate Tax and Gift Tax Regulations. Sections 2031(a), 2032 and 2512(a) of the 1954 Code (sections 811 and 1005 of the 1939 Code) require that the property to be included in the gross estate, or made the subject of a gift, shall be taxed on the basis of the value of the property at the time of death of the decedent, the alternate date if so elected, or the date of gift.

.02 Section 20.2031-1(b) of the Estate Tax Regulations (section 81.10 of the Estate Tax Regulations 105) and section 25.2512-1 of the Gift Tax Regulations (section 86.19 of Gift Tax Regulations 108) define fair market value, in effect, as the price at which the property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts. Court decisions frequently state in addition that the hypothetical buyer and seller are assumed to be able, as well as willing, to trade and to be well informed about the property and concerning the market for such property.

.03 Closely held corporations are those corporations the shares of which are owned by a relatively limited number of stockholders. Often the entire stock issue is held by one family. The result of this situation is that little, if any, trading in the shares takes place. There is, therefore, no established market for the stock and such sales as occur at irregular intervals seldom reflect all of the elements of a representative transaction as defined by the term "fair market value."

Sec. 3. Approach to Valuation.

.01 A determination of fair market value, being a question of fact, will depend upon the circumstances in each case. No formula can be devised that will be generally applicable to the multitude of different valuation issues arising in estate and gift tax cases. Often, an appraiser will find wide differences of opinion as to the fair market value of a particular stock. In resolving such differences, he should maintain a reasonable attitude in recognition of the fact that valuation is not an exact science. A sound valuation will be based upon all the relevant facts, but the elements of common sense, informed judgment and reasonableness must enter into the process of weighing those facts and determining their aggregate significance.

.02 The fair market value of specific shares of stock will vary as general economic conditions change from "normal" to "boom"

or “depression,” that is, according to the degree of optimism or pessimism with which the investing public regards the future at the required date of appraisal. Uncertainty as to the stability or continuity of the future income from a property decreases its value by increasing the risk of loss of earnings and value in the future. The value of shares of stock of a company with very uncertain future prospects is highly speculative. The appraiser must exercise his judgment as to the degree of risk attaching to the business of the corporation which issued the stock, but that judgment must be related to all of the other factors affecting value.

.03 Valuation of securities is, in essence, a prophesy as to the future and must be based on facts available at the required date of appraisal. As a generalization, the prices of stocks which are traded in volume in a free and active market by informed persons best reflect the consensus of the investing public as to what the future holds for the corporations and industries represented. When a stock is closely held, is traded infrequently, or is traded in an erratic market, some other measure of value must be used. In many instances, the next best measure may be found in the prices at which the stocks of companies engaged in the same or a similar line of business are selling in a free and open market.

Sec. 4. Factors To Consider.

.01 It is advisable to emphasize that in the valuation of the stock of closely held corporations or the stock of corporations where market quotations are either lacking or too scarce to be recognized, all available financial data, as well as all relevant factors affecting the fair market value, should be considered. The following factors, although not all-inclusive are fundamental and require careful analysis in each case:

- (a) The nature of the business and the history of the enterprise from its inception.
- (b) The economic outlook in general and the condition and outlook of the specific industry in particular.
- (c) The book value of the stock and the financial condition of the business.
- (d) The earning capacity of the company.
- (e) The dividend-paying capacity.
- (f) Whether or not the enterprise has goodwill or other intangible value.
- (g) Sales of the stock and the size of the block of stock to be valued.
- (h) The market price of stocks of corporations engaged in the same or a similar line of business having their stocks actively traded in a free and open market, either on an exchange or over-the-counter.

.02 The following is a brief discussion of each of the foregoing factors:

(a) The history of a corporate enterprise will show its past stability or instability, its growth or lack of growth, the diversity or lack of diversity of its operations, and other facts needed to form an opinion of the degree of risk involved in the business. For an enterprise which changed its form of organization but carried on the same or closely similar operations of its predecessor, the history of the former enterprise should be considered. The detail to be considered should increase with approach to the required date of appraisal, since recent events are of greatest help in predicting the future; but a study of gross and net income, and of dividends covering a long prior period, is highly desirable. The history to be studied should include, but need not be limited to, the nature of the business, its products or services, its operating and investment assets, capital structure, plant facilities, sales records and management, all of which should be considered as of the date of the appraisal, with due regard for recent significant changes. Events of the past that are unlikely to recur in the future should be discounted, since value has a close relation to future expectancy.

(b) A sound appraisal of a closely held stock must consider current and prospective economic conditions as of the date of appraisal, both in the national economy and in the industry or industries with which the corporation is allied. It is important to know that the company is more or less successful than its competitors in the same industry, or that it is maintaining a stable position with respect to competitors. Equal or even greater significance may attach to the ability of the industry with which

the company is allied to compete with other industries. Prospective competition which has not been a factor in prior years should be given careful attention. For example, high profits due to the novelty of its product and the lack of competition often lead to increasing competition. The public's appraisal of the future prospects of competitive industries or of competitors within an industry may be indicated by price trends in the markets for commodities and for securities. The loss of the manager of a so-called "one-man" business may have a depressing effect upon the value of the stock of such business, particularly if there is a lack of trained personnel capable of succeeding to the management of the enterprise. In valuing the stock of this type of business, therefore, the effect of the loss of the manager on the future expectancy of the business, and the absence of management-succession potentialities are pertinent factors to be taken into consideration. On the other hand, there may be factors which offset, in whole or in part, the loss of the manager's services. For instance, the nature of the business and of its assets may be such that they will not be impaired by the loss of the manager. Furthermore, the loss may be adequately covered by life insurance, or competent management might be employed on the basis of the consideration paid for the former manager's services. These, or other offsetting factors, if found to exist, should be carefully weighed against the loss of the manager's services in valuing the stock of the enterprise.

(c) Balance sheets should be obtained, preferably in the form of comparative annual statements for two or more years immediately preceding the date of appraisal, together with a balance sheet at the end of the month preceding that date, if corporate accounting will permit. Any balance sheet descriptions that are not self-explanatory, and balance sheet items comprehending diverse assets or liabilities, should be clarified in essential detail by supporting supplemental schedules. These statements usually will disclose to the appraiser (1) liquid position (ratio of current assets to current liabilities); (2) gross and net book value of principal classes of fixed assets; (3) working capital; (4) long-term indebtedness; (5) capital structure; and (6) net worth. Consideration also should be given to any assets not essential to the operation of the business, such as investments in securities, real estate, etc. In general, such nonoperating assets will command a lower rate of return than do the operating assets, although in exceptional cases the reverse may be true. In computing the book value per share of stock, assets of the investment type should be revalued on the basis of their market price and the book value adjusted accordingly. Comparison of the company's balance sheets over several years may reveal, among other facts, such developments as the acquisition of additional production facilities or subsidiary companies, improvement in financial position, and details as to recapitalizations and other changes in the capital structure of the corporation. If the corporation has more than one class of stock outstanding, the charter or certificate of incorporation should be examined to ascertain the explicit rights and privileges of the various stock issues including: (1) voting powers, (2) preference as to dividends, and (3) preference as to assets in the event of liquidation.

(d) Detailed profit-and-loss statements should be obtained and considered for a representative period immediately prior to the required date of appraisal, preferably five or more years. Such statements should show (1) gross income by principal items; (2) principal deductions from gross income including major prior items of operating expenses, interest and other expense on each item of long-term debt, depreciation and depletion if such deductions are made, officers' salaries, in total if they appear to be reasonable or in detail if they seem to be excessive, contributions (whether or not deductible for tax purposes) that the nature of its business and its community position require the corporation to make, and taxes by principal items, including income and excess profits taxes; (3) net income available for dividends; (4) rates and amounts of dividends paid on each class of stock; (5) remaining amount carried to surplus; and (6) adjustments to, and reconciliation with, surplus as stated on the balance sheet. With profit and loss statements of this character available, the appraiser should be able to separate recurrent from nonrecurrent items of income and expense, to distinguish between operating income and investment income, and to ascertain whether or not any line of business in which the company is engaged is operated consistently at a loss and might be abandoned with benefit to the company. The percentage of earnings retained for business expansion should be noted when

dividend-paying capacity is considered. Potential future income is a major factor in many valuations of closely-held stocks, and all information concerning past income which will be helpful in predicting the future should be secured. Prior earnings records usually are the most reliable guide as to the future expectancy, but resort to arbitrary five-or-ten-year averages without regard to current trends or future prospects will not produce a realistic valuation. If, for instance, a record of progressively increasing or decreasing net income is found, then greater weight may be accorded the most recent years' profits in estimating earning power. It will be helpful, in judging risk and the extent to which a business is a marginal operator, to consider deductions from income and net income in terms of percentage of sales. Major categories of cost and expense to be so analyzed include the consumption of raw materials and supplies in the case of manufacturers, processors and fabricators; the cost of purchased merchandise in the case of merchants; utility services; insurance; taxes; depletion or depreciation; and interest.

(e) Primary consideration should be given to the dividend-paying capacity of the company rather than to dividends actually paid in the past. Recognition must be given to the necessity of retaining a reasonable portion of profits in a company to meet competition. Dividend-paying capacity is a factor that must be considered in an appraisal, but dividends actually paid in the past may not have any relation to dividend-paying capacity. Specifically, the dividends paid by a closely held family company may be measured by the income needs of the stockholders or by their desire to avoid taxes on dividend receipts, instead of by the ability of the company to pay dividends. Where an actual or effective controlling interest in a corporation is to be valued, the dividend factor is not a material element, since the payment of such dividends is discretionary with the controlling stockholders. The individual or group in control can substitute salaries and bonuses for dividends, thus reducing net income and understating the dividend-paying capacity of the company. It follows, therefore, that dividends are less reliable criteria of fair market value than other applicable factors.

(f) In the final analysis, goodwill is based upon earning capacity. The presence of goodwill and its value, therefore, rests upon the excess of net earnings over and above a fair return on the net tangible assets. While the element of goodwill may be based primarily on earnings, such factors as the prestige and renown of the business, the ownership of a trade or brand name, and a record of successful operation over a prolonged period in a particular locality, also may furnish support for the inclusion of intangible value. In some instances it may not be possible to make a separate appraisal of the tangible and intangible assets of the business. The enterprise has a value as an entity. Whatever intangible value there is, which is supportable by the facts, may be measured by the amount by which the appraised value of the tangible assets exceeds the net book value of such assets.

(g) Sales of stock of a closely held corporation should be carefully investigated to determine whether they represent transactions at arm's length. Forced or distress sales do not ordinarily reflect fair market value nor do isolated sales in small amounts necessarily control as the measure of value. This is especially true in the valuation of a controlling interest in a corporation. Since, in the case of closely held stocks, no prevailing market prices are available, there is no basis for making an adjustment for blockage. It follows, therefore, that such stocks should be valued upon a consideration of all the evidence affecting the fair market value. The size of the block of stock itself is a relevant factor to be considered. Although it is true that a minority interest in an unlisted corporation's stock is more difficult to sell than a similar block of listed stock, it is equally true that control of a corporation, either actual or in effect, representing as it does an added element of value, may justify a higher value for a specific block of stock.

(h) Section 2031(b) of the Code states, in effect, that in valuing unlisted securities the value of stock or securities of corporations engaged in the same or a similar line of business which are listed on an exchange should be taken into consideration along with all other factors. An important consideration is that the corporations to be used for comparisons have capital stocks which are actively traded by the public. In accordance with section 2031(b) of the Code, stocks listed on an exchange are to be considered first. However, if sufficient comparable companies whose stocks are listed on an exchange cannot be

found, other comparable companies which have stocks actively traded in on the over-the-counter market also may be used. The essential factor is that whether the stocks are sold on an exchange or over-the-counter there is evidence of an active, free public market for the stock as of the valuation date. In selecting corporations for comparative purposes, care should be taken to use only comparable companies. Although the only restrictive requirement as to comparable corporations specified in the statute is that their lines of business be the same or similar, yet it is obvious that consideration must be given to other relevant factors in order that the most valid comparison possible will be obtained. For illustration, a corporation having one or more issues of preferred stock, bonds or debentures in addition to its common stock should not be considered to be directly comparable to one having only common stock outstanding. In like manner, a company with a declining business and decreasing markets is not comparable to one with a record of current progress and market expansion.

Sec. 5. Weight To Be Accorded Various Factors.

The valuation of closely held corporate stock entails the consideration of all relevant factors as stated in section 4. Depending upon the circumstances in each case, certain factors may carry more weight than others because of the nature of the company's business. To illustrate:

(a) Earnings may be the most important criterion of value in some cases whereas asset value will receive primary consideration in others. In general, the appraiser will accord primary consideration to earnings when valuing stocks of companies which sell products or services to the public; conversely, in the investment or holding type of company, the appraiser may accord the greatest weight to the assets underlying the security to be valued.

(b) The value of the stock of a closely held investment or real estate holding company, whether or not family owned, is closely related to the value of the assets underlying the stock. For companies of this type the appraiser should determine the fair market values of the assets of the company. Operating expenses of such a company and the cost of liquidating it, if any, merit consideration when appraising the relative values of the stock and the underlying assets. The market values of the underlying assets give due weight to potential earnings and dividends of the particular items of property underlying the stock, capitalized at rates deemed proper by the investing public at the date of appraisal. A current appraisal by the investing public should be superior to the retrospective opinion of an individual. For these reasons, adjusted net worth should be accorded greater weight in valuing the stock of a closely held investment or real estate holding company, whether or not family owned, than any of the other customary yardsticks of appraisal, such as earnings and dividend paying capacity.

Sec. 6. Capitalization Rates.

In the application of certain fundamental valuation factors, such as earnings and dividends, it is necessary to capitalize the average or current results at some appropriate rate. A determination of the proper capitalization rate presents one of the most difficult problems in valuation. That there is no ready or simple solution will become apparent by a cursory check of the rates of return and dividend yields in terms of the selling prices of corporate shares listed on the major exchanges of the country. Wide variations will be found even for companies in the same industry. Moreover, the ratio will fluctuate from year to year depending upon economic conditions. Thus, no standard tables of capitalization rates applicable to closely held corporations can be formulated. Among the more important factors to be taken into consideration in deciding upon a capitalization rate in a particular case are: (1) the nature of the business; (2) the risk involved; and (3) the stability or irregularity of earnings.

Sec. 7. Average of Factors.

Because valuations cannot be made on the basis of a prescribed formula, there is no means whereby the various applicable factors in a particular case can be assigned mathematical weights in deriving the fair market value. For this reason, no useful purpose is served by taking an average of several factors (for example, book value, capitalized earnings and capitalized dividends) and basing the valuation on the result. Such a process excludes active consideration of other pertinent factors, and the end result cannot be supported by a realistic application of the significant facts in the case except by mere chance.

Sec. 8. Restrictive Agreements.

Frequently, in the valuation of closely held stock for estate and gift tax purposes, it will be found that the stock is subject to an agreement restricting its sale or transfer. Where shares of stock were acquired by a decedent subject to an option reserved by the issuing corporation to repurchase at a certain price, the option price is usually accepted as the fair market value for estate tax purposes. See Rev. Rul. 54-76, C.B. 1954-1, 194. However, in such case the option price is not determinative of fair market value for gift tax purposes. Where the option, or buy and sell agreement, is the result of voluntary action by the stockholders and is binding during the life as well as at the death of the stockholders, such agreement may or may not, depending upon the circumstances of each case, fix the value for estate tax purposes. However, such agreement is a factor to be considered, with other relevant factors, in determining fair market value. Where the stockholder is free to dispose of his shares during life and the option is to become effective only upon his death, the fair market value is not limited to the option price. It is always necessary to consider the relationship of the parties, the relative number of shares held by the decedent, and other material facts, to determine whether the agreement represents a bonafide business arrangement or is a device to pass the decedent's shares to the natural objects of his bounty for less than an adequate and full consideration in money or money's worth. In this connection see Rev. Rul. 157 C.B. 1953-2, 255, and Rev. Rul. 189, C.B. 1953-2, 294.

Sec. 9. Effect on Other Documents.

Revenue Ruling 54-77, C.B. 1954-1, 187, is hereby superseded.