AN INTRODUCTION TO BUSINESS VALUATION

by

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This article discusses the framework for conducting a supportable valuation, and focuses on basic factors to be considered, valuation approaches and methods, selecting capitalization and discount rates, selecting premiums and discounts, common valuation errors, and regulatory issues.

Fair market value is the appropriate standard of value to be applied in valuing closely held companies for succession purposes (excluding an outright sale to a strategic buyer). The phrase "fair market value" means *the price at which a property would change hands between a willing seller and a willing buyer, when the former is under no compulsion to sell and the latter is under no compulsion to buy, and with both parties having reasonable knowledge of the relevant facts*. Business owners who have spent years building their closely held corporation often have only a vague idea of what their company is worth. Although many will gladly offer you their opinion, their concept of value, which is emotionally charged, is usually not the same as the company's fair market value. More importantly, the owner's opinion of value does not meet the applicable legal and regulatory requirements, even if it is accurate.

FACTORS TO CONSIDER

Because the conclusion of fair market value cannot be determined as a mathematical certainty, it's critical that the valuation analysis be based on pertinent information that is accurate, objective and comprehensive. Only then can a conclusion be reached as to the fair market value of the company being appraised. To ensure the thoroughness of the analysis, the valuation of a company should take into consideration the following factors:

- The nature of the business and the history of the enterprise from its inception.
- The economic outlook and the condition and outlook of the industry in particular.
- The book value of the stock and the financial condition of the company.

- The earning capacity of the company.
- The dividend paying capacity of the company.
- Whether or not the enterprise has goodwill or other intangible value.
- Sales of the stock and the size of the block of stock to be appraised.
- The market price of stocks of corporations engaged in the same or a similar business and having their stocks actively traded in a free and open market.

Is one factor more important than another? No; the relative weight afforded a particular factor depends upon the nature of the corporation's business.

Having identified the basic factors which must be considered in a valuation, we'll now take a closer look at each factor.

Nature and History of the Business

This provides a multi-dimensional picture of the company and its operations. Within this framework, the appraiser looks at how the company arrived at its present position and how it was operating around the valuation date in terms of product line, customers, competition, employees, management, business facilities, opportunities and problems. The results of this analysis will bring to light such points as growth or decline in the market, depth of management, potential risks to the company from changes in technology, and how the company is positioned for future growth. Significant events in the company's history are noted, as are changes in the way it does business. Keep in mind that one of the main reasons for analyzing the past is as a guide in projecting the future. Therefore, events that are unlikely to re-occur should be discounted.

Economic Outlook and the Condition and Outlook of the Industry

A study of the economic outlook looks at current and future economic conditions as they affect the company, its industry, and the environment in which the company operates. General economic factors are analyzed to see what impact they may have regionally and nationally, while short and long range industry forecasts are prepared to project cyclical patterns and other trends. For example, if the industry is experiencing rapid changes in its technology, how well is the company positioned to keep up with these changes and maintain a competitive position?

Book Value of the Stock and the Financial Condition of the Company

The financial analysis begins with a careful review of the company's balance sheet around the valuation date and for a representative number of previous years. When this information is set up in comparative format, patterns, trends and changes emerge that provide an insight behind the numbers and suggest a starting point for further inquiry.

Earning Capacity of the Company

An equally thorough examination of the company's comparative income and expense data is made covering the same years as the balance sheets. The purpose of this examination is to arrive at the true historical earning capacity of the business which is used in projecting future earning capacity.

It is usually necessary to adjust the income and expense statements of the company being valued to arrive at its true earning capacity· With the adjusted earnings in hand for a representative period of time, the appraiser can then develop an earnings base with which to approach value. While past performance is one indication of future performance, trends in earnings should be considered along with any changes that have occurred which may influence how the company can be expected to perform in the future.

Using financial statements prepared in a comparative format, the appraiser looks for extraordinary or non-recurring items of income and expense that may be adjusted in determining earning capacity. These could include losses from closing an unprofitable plant, one time costs of computerizing the business, or similar items that are unlikely to recur. Close attention is paid to substituting a more conservative straight line method for depreciation rather than the accelerated methods allowable for income tax purposes, and to items that are personal in nature and being charged to the business such as vacations, health club memberships or rent paid to maintain an apartment for so-called business associates. An officer's salary is examined to determine if it is excessive in terms of what a non-owner would be paid for the same job. Other salary accounts are also examined to determine if the company is paying salaries to other family members who are either not employed in the business or earning more than a non-family member

would be paid. As mentioned before, income and expenses related to non-operating assets are also eliminated from the statements.

Dividend-Paying Capacity of the Company

If the valuation is of a controlling interest of the company, dividend paying capacity is more important than the actual dividends or distributions paid, since the controlling stockholder often takes out cash in other ways (compensation, related party leases, etc.) which leaves less earnings to be distributed in the form of dividends. However, in valuing a minority interest, the actual dividends paid are more important than the dividend paying capacity, because the minority stockholder generally cannot force a company to pay dividends, even if it has the capacity to do so.

Existence of Goodwill or Other Intangible Value

The existence of goodwill, and its value, is a function of the amount by which earnings exceed a fair return on the company's net tangible assets. Goodwill is usually thought of in terms of a company's operating characteristics: quality of management, reputation, trade name or location. However, these characteristics can only be quantified by their contribution to earnings. If a company has other intangibles, such as patents, these would be valued separately and not lumped into the goodwill factor.

Most often the appraiser is concerned with arriving at the value of a going concern in its entirety and does not value goodwill separately. Thus, the characteristics that make up goodwill are factored into the overall assessment of the company, and the value of their contribution to the company as a whole is a matter of judgment.

Previous Sales of Stock

Prior sales of the company's common stock can be an excellent indicator of value if the transactions occurred relatively close to the valuation date and if the transactions were at arms' length.

Market Price of Stocks of Corporations Engaged in the Same Business

Valuing a closely held company in relation to the trading prices of guideline public companies is one of the most useful techniques available to the appraiser. It is also one of the most complex.

A careful analysis of the guideline companies is required to develop various investor ratios which relate the market price of each of the guidelines around the valuation date to such factors as earnings per share, price/earnings ratio, dividend yield and book value. By using these investor ratios as a guide, together with all other pertinent information, the appraiser is able to develop indicated values for the subject company.

APPROACHES TO BUSINESS VALUATION

No single formula can be used to determine the value of every closely-held company in every situation. Therefore, a number of generally accepted approaches and methods for valuing closely-held companies have been developed, none of which is necessarily superior to the others. The selection of valuation approaches and methods depends on the purpose of the engagement, standard of value being determined, type of company being valued, available data, and other factors. The following discussion summarizes the three most generally accepted valuation approaches, and the valuation methods employed within each method.

Asset-Based Approach

In a limited number of situations, a company's worth can be measured by reference to the net value of its underlying assets. This approach consists of the Adjusted Book Value Method and Liquidation Value Method. Both of these methods determine value based on a hypothetical sale of the company's assets, rather than focusing on its earnings potential, and are generally used if the subject company (1) is an investment or holding type of company with significant tangible assets; (2) has no established earnings history or a volatile earnings history; or (3) is not able to continue as a going concern. The application of these methods is also more appropriate when

valuing a controlling interest, rather than a minority interest, since a minority shareholder typically cannot cause a sale of the company's assets.

Adjusted Book Value Method

This method involves adjusting the company's assets and liabilities to their appraised values to determine the value of the company. A key consideration in the adjusted book value method is to recast the current balance sheet data to bring it from an accounting basis to an economic basis. This would involve such adjustments as substituting an appraised value of fixed assets; revising inventory figures to market value; and determining the value of any intangibles that exist in the company but which do not appear on its balance sheet. Liabilities may also require adjustment to record such items as contingent liabilities. A further adjustment may be required to reflect the potential income tax implications from a presumed sale of the assets.

Liquidation Value Method

This method involves discounting the net proceeds from liquidating the company's assets and paying off its liabilities to determine the value of the company. In situations where a company has had a history of losses, or where the sole owner-manager has died and the company's future is in doubt, it is reasonable to value the company based on the likelihood of liquidation. In these cases, the adjusted book value is further adjusted to factor in the costs of liquidation and the potential income tax implications of disposing of the company's assets.

Market Approach

This approach consists of an analysis of previous sales of the company's stock, sales of privately held companies similar to the subject company, and sales of stock of publicly traded companies similar to the subject company.

Previous Sales of the Company's Stock

This is perhaps the most reliable indication of a company's fair market value provided the transactions were for reasonable consideration and at arms' length. Details of the transactions should be carefully examined in light of the willing seller-willing buyer concept of value to rule

out isolated sales made under distress conditions or bargain sales to employees or family which would not be considered arms' length transactions.

Where valid transactions have occurred, the terms of the transaction should be taken into consideration. For example, if payment for the stock was received in the form of a note, or cash and a note, the face value of the note would be discounted to its net present value at the time of the transaction to arrive at fair market value. Another factor to be taken into consideration is the size of the block of stock being valued. A controlling interest, with its added element of value, would command a premium while a minority interest may be subject to a discount.

Sales of Privately Held Companies

The value may also be based on recent sales of closely held companies that are similar to the subject company. Although this method has a strong conceptual appeal, the availability of adequate, reliable and timely information on actual sales of private companies is often difficult to obtain or simply not available.

Sales of Stock of Publicly Traded Companies

Finally, the fair market value can be determined by reference to the trading prices of stocks of public companies engaged in the same or a similar business as the subject company. 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 similar line of business are selling in a free and open market.

In determining whether or not a particular company should be considered a guideline company from a valuation perspective, several important factors must be considered: products, market, earnings, dividend paying capacity, book value, position in the industry, capital structure, credit status, depth of management, nature of competition, personnel experience, maturity of the business.

Once suitable guideline companies have been identified, there are a number of valuation methods which can be employed to develop a range of indicated values. Some of the more common methods include price to earnings, price to gross cash flow, price to dividends, price to revenues, price to book value, price to net asset value

In these methods, the market price of each guideline company's common stock is divided by the appropriate benefit stream to arrive at a multiple. After adjustment for differences between the guideline companies and the subject company in terms of size, sales and earnings trends, depth of management, market diversification, and scope of marketing area, the multiples are then applied to the subject company's applicable benefit streams to arrive at an indication of value.

Income Approach

Although there a number of methods included in this approach, the two most commonly used are the Capitalization of Earnings method and Discounted Cash Flow method.

Capitalization of Earnings Method

This method develops an indicated value based on the company's historic earnings, and tends to be more appropriate when a company's current operations are indicative of its future operations. The indicated value is determined by dividing an historical benefit stream by a capitalization rate.

Depending on the history of the company, it may be appropriate to use only the most current earnings or a weighted average of historical earnings for a number of years. Selecting an appropriate earnings base is another area where judgment comes into play, as the common practice of indiscriminately using five year average earnings or three year average earnings can significantly distort the valuation conclusion. One must keep in mind that in talking about earnings, we are concerned with the amount that would be available to be paid out in dividends or reinvested in the company. In other words, we are looking at after tax earnings. In the same vein, when adjustments are required to add back such items as non-recurring expenses, or excess officer's salary, the add backs are made on an after tax basis.

Discounted Cash Flow Method

This method develops an indicated value based on the company's projected future cash flows, and tends to be more appropriate when future returns are expected to be different from current operations. In this instance, the indicated value is determined by discounting future cash flows to their present worth using a discount rate that reflects both the current market rate of return and the risks inherent in the specific investment.

SELECTING CAPITALIZATION AND DISCOUNT RATES

A capitalization rate is any divisor, usually expressed as a percentage, that is used to convert a benefit stream into value. It is usually derived by subtracting the subject company's expected long term average growth rate from its discount rate. Based on this premise, a company's capitalization rate is usually lower than its discount rate.

A discount rate represents the rate of return an informed investor would expect to receive on an investment in the subject company, given the degree of risk inherent in that investment. Unlike a capitalization rate, a discount rate is not used as a divisor to determine a company's value. Rather, the discount rate is used as a base to determine present value factors which are then used to discount a future benefit stream (i.e. cash flow or earnings) to present value.

Some of the factors that must be considered in developing the discount rate include the nature of the business and its outlook at the valuation date, the risks involved, and the stability of earnings. This is clearly an area where all pertinent factors that have a bearing on value must be considered, which makes it one of the most difficult tasks in the valuation process.

In constructing a discount rate, the starting point is usually the rate of return available on "risk-free" investments. The second layer adjusts upward to a return on "moderate-risk" investments and the final layer represents a risk premium that reflects the degree of risk in the company. In other words, the risk premium quantifies the appraiser's assessment of the company itself as an investment: its outlook, the outlook for the industry as a whole, the quality and depth

of management, the company's financial strength, and competitive position. Only after all these factors have been considered can an appropriate discount rate be constructed.

In practice, the discount rate is often derived from a compilation of the following variables:

Risk Free Rate of Return

This is the return an investor could obtain from a low-risk, guaranteed investment, where such return is normally equivalent to the yield to maturity of long-term U.S. Treasury Bonds. In this instance, the rate was based on the 20-year Treasury bond yield in effect at the valuation date.

Equity Risk Premium

This is the additional return earned on stocks by an average equity investor in excess of the return on long-term Treasury Bonds. Although there are many sources from which this premium can be determined, the premium is often based on data contained in *Ibbotson SBBI Valuation Yearbook* published by Morningstar, Inc.

Risk Premium for Size

This represents the additional risk associated with an investment in a smaller closely held company as compared to an investment in a larger company, and recognizes that investors typically demand a higher return from companies which are smaller in terms of sales and capitalization. The premium is often developed based on data contained in the *Ibbotson SBBI Valuation Yearbook* published by Morningstar, Inc. As with the equity risk premium, this premium is generally based on research which measures the difference between monthly small stock total returns and monthly common stock total returns. The small stock total return represents the return earned by companies listed in the smallest 20 percent of the New York Stock Exchange, plus companies generally similar in size and capitalization that are listed on the American Stock Exchange or are traded in the over-the-counter markets. The common stock total return is based on the Standard and Poor's Composite Index.

Risk Premium for Other Risk Factors

This represents the additional risk associated with an investment in a smaller closely held company as compared to an investment in an average Standard & Poor's 500 company. The

premium captures factors such as financial risk, diversifiable risk (products, customer base, geographic location, etc.), and additional operational risks (management depth and competence, customer dependence, etc.). The Company's perceived strengths, weaknesses, opportunities, and threats (SWOT) are considered in developing the company specific risk premium, and a number of perceived SWOT components are noted below.

Strengths

Accounting systems/ IT & Computer systems
Asset size relative to competitors
Availability of capital
Availability of supplies
Cost of sales relative to competitors
Debt to equity ratio relative to the industry
Degree of customer leverage
Degree of customer loyalty
Depth of customer base (customer dependence)
Diversification of product line/services/operations
Duration of product life cycle
Employee morale
Existence of second line management
Expected growth in earnings and cash flow
Facilities and equipment
Future capital expenditure requirements
General business outlook
Gross sales relative to competitors
Incremental working capital needs
Interest coverage ratio relative to industry
Inventory days relative to industry
Length of time in business
Level of debt
Level of marketing expertise
Liquidity – current & quick ratio
Market position relative to market size
Persistency of revenue growth
Profitability/ Profits at EBT level
Quality of employees
Quality of product or service
Reputation in the industry or in its market
Resistant to economic cycles
Resistant to seasonality
Sales capacity in current location
Serves a niche market
Stability of earnings
Strength of senior management team

Opportunities

Availability of skilled workers
Changes in interest rates/ Inflation
Demand for product or service
Factors indicating possibility of additional volume growth
Factors indicating possibility of expanding geographic market
Favorable growth projections for the industry
Growth of customer base
Industry outlook
Lack of competitive intensity
Lack of product differentiation amongst competitors
Market position – leader
Outlook for general economy
Patent/Copyright/Franchise protection
Recession/Depression/Expansion
Regulatory environment
Stable prices for raw material

Weaknesses

Accounting systems/ IT & Computer systems
Asset size relative to competitors
Availability of capital
Availability of supplies
Cost of sales relative to competitors
Debt to equity ratio relative to the industry
Degree of customer leverage
Degree of customer loyalty
Depth of customer base (customer dependence)
Diversification of product line/services/operations
Duration of product life cycle
Employee problems
Existence of second line management
Expected growth in earnings and cash flow
Facilities and equipment
Fluctuation of revenues/ growth/ uneven growth
Future capital expenditure requirements
General business outlook
Gross sales relative to competitors
Incremental working capital needs
Instability of earnings
Interest coverage ratio relative to industry
Inventory days relative to industry
Length of time in business
Level of debt
Level of marketing expertise
Liquidity – current & quick ratio
Market position relative to market size
Profitability/ Losses at EBT level
Quality of employees
Quality of product or service
Reputation in the industry or in its market
Sales capacity in current location
Serves a niche market
Strength of senior management team
Susceptible to economic cycles
Susceptible to seasonality

Threats

Availability of skilled workers
Changes in interest rates/ Inflation
Competitive intensity
Competitors are larger and conceivably have greater financial resources
Existence of alternative products, potential for obsolescence of products
Exposure to litigation
Growth of customer base
Industry outlook
Market position – small fish in a big sea or target
Managing rapid growth could require capital investment beyond the Company's ability
New competitor entry rate/ Ease of entrance
Outlook for general economy
Product differentiation amongst competitors
Recesscion/Depression/Expansion
Regulatory environment
Shrinking demand for product or service…
Unfavorable growth projections for the industry
Unstable prices for raw material

PREMIUMS AND DISCOUNTS

Depending on the valuation methods used, the facts and circumstances surrounding the subject company, and the ownership interest that is being valued, the indicated values often require additional adjustments to arrive at a final conclusion of value. This brings us to the subject of premiums and discounts.

Control Premium

A controlling interest in a closely-held corporation is generally held to be worth more than its proportionate share of the value of all the outstanding shares. 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. The added element of value is measured by a premium that attaches to the shares that have control. In practice, the premium can be quantified by reference to prices paid in the public market for a control position in a corporation whose stocks had previously traded as minority interests.

The magnitude of a control premium is influenced by the shareholder's ability to exercise any or all of a variety of rights typically associated with control. Some of the more common benefits of control include:

- Electing directors and appointing management.
- Determining management compensation and perquisites.
- Setting policy and changing the course of business.
- Acquiring or liquidating assets.
- Making acquisitions of other companies.
- Liquidating, dissolving, selling or recapitalizing the company.
- Selling or acquiring treasury shares.
- Registering the company's stock for public offering.
- Declaring and paying dividends.
- Changing the articles of the corporation or bylaws.

Several firms follow acquisition transactions and publish studies on control premiums, from which an implied minority discount can be computed. One well regarded study is the *Mergerstat*

Control Premium Study published by FactSet Mergerstat, LLC of Los Angeles, California. This study tracks acquisition transactions in a broad cross section of industries and computes the premiums paid for controlling interests in publicly traded companies over the market prices at which the stocks of such companies had previously traded as minority interests. For the twelve months ending December 31, 2008 (most recent data available), a study of 192 transactions across industry lines showed an average control premium of 25 percent, and a median control premium of 35 percent.

Minority Discount

A minority interest in a closely-held corporation is generally held to be worth less than its proportionate share of the value of all the outstanding shares. This is because minority shareholders generally cannot effect control of the company. The magnitude of a minority discount depends on the shareholder's inability to exercise any or all of a variety of rights typically associated with control, as discussed previously.

To arrive at a minority interest discount, the control premium is converted to an implied minority interest discounts using the formula below.

Minority Discount = (1-(1/(1 + Median Control Premium Paid)))

Marketability Discount

In contrast to shares of stock in public companies which have an active market, ownership interests in closely-held companies are typically not readily marketable. Consequently, it is often appropriate to apply a discount to the value of the closely-held shares to reflect the reduction in value attributed to the lack of marketability.

Rather than selecting an arbitrary discount to quantify lack of marketability, the experienced appraiser derives a discount by reference to a number of factors including prevailing discounts on restricted stocks and the cost of creating a public market in the stock. A greater or lessor discount is permitted based on the impact of such factors as:

- Restrictions on transfer.
- A buy-sell agreement.
- The prospect of a public offering or sale of the company.
- Market available that may be interested in purchasing shares.
- The dividends or partnership payouts.

COMMON VALUATION ERRORS

A valuation might yield less than accurate results for a number of reasons. Some of the more common valuation errors that often occur are:

- Failing to obtain adequate background information on the company, the industry, and the economic environment in which the company operates.
- Valuing the company solely on the basis of its financial statements.
- Using financial statements for only one or two years instead of a five year or more period, which would be more representative of a normal business cycle.
- Failing to consider the company's working capital position.
- Ignoring the existence of intangible assets or other off-balance sheet value.
- Failing to adjust income statements to arrive at true earning capacity.
- Basing a valuation on a single method without considering other methods.
- Using incorrect methods based on the facts and circumstances.
- Disregarding prior "arms' length" sales of the company's stock.
- Failure to consider trading prices of public companies in the same or a similar business.
- Capitalizing an earnings base that arbitrarily ignores loss years.
- Failure to apply a minority interest discount or control premium when appropriate.
- Incorrect application of a discount for lack of marketability.

Considering the critical role of valuation, it goes without saying that the appraiser must make every effort to avoid errors in theory or methodology which would invalidate the conclusion of value.

Federal Challenges to Valuations

Having discussed the factors to be considered in the valuation process, the various approaches and methods available to the appraiser, and the application of discounts and premiums, let's take a look at the more common situations giving rise to challenges to valuations:

- Do-it-yourself valuations where the corporation, or one of its employees, determines the value of the corporate stock.

- Using the corporation's regular accounting firm which often lacks the necessary independence.
- Having the valuation done by a person or firm not thoroughly experienced in performing valuations.
- Using unconventional valuation methods that are not acceptable to the IRS.
- Failing to adequately document the valuation analysis.

CONCLUSION

At the risk of belaboring the point, it bears repeating that business valuation is a complex and time consuming process. To reach a sound conclusion, the appraiser's analysis must include all pertinent factors that have a bearing on value.

The goal of the appraisal process is to develop a supportable conclusion of value a conclusion that represents economic reality; that can withstand challenges, and that meets the accepted definition of fair market value.

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Mr. Murphy conducts valuations of privately held companies and professional practices for a broad range of purposes. He represents buyers and sellers of middle market companies, and has negotiated and structured complex recapitalizations, leveraged and management buyouts, and corporate acquisitions. Mr. Murphy is also instrumental in implementing Employee Stock Ownership Plans, the placement of senior and subordinated debt, and orchestrating family business transfers.

Atlantic Management Company, Inc. is a leading valuation and financial advisory firm serving the business, legal and financial communities throughout New England from its offices in Portsmouth, New Hampshire. Founded in 1968, the firm's Valuation Group provides business valuations, fairness and solvency opinions, and litigation support for private and public companies. The Ownership Transition Group specializes in mergers and acquisitions, ESOPs, and business succession strategies for privately owned companies and public companies desiring to go private.