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The Valuation of Minority Interests in a Closely Held Corporation

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Richard Houlihan, BS

An Abstract Presented to the Faculty of the Graduate School
of Lindenwood College in Partial Fulfillment of the
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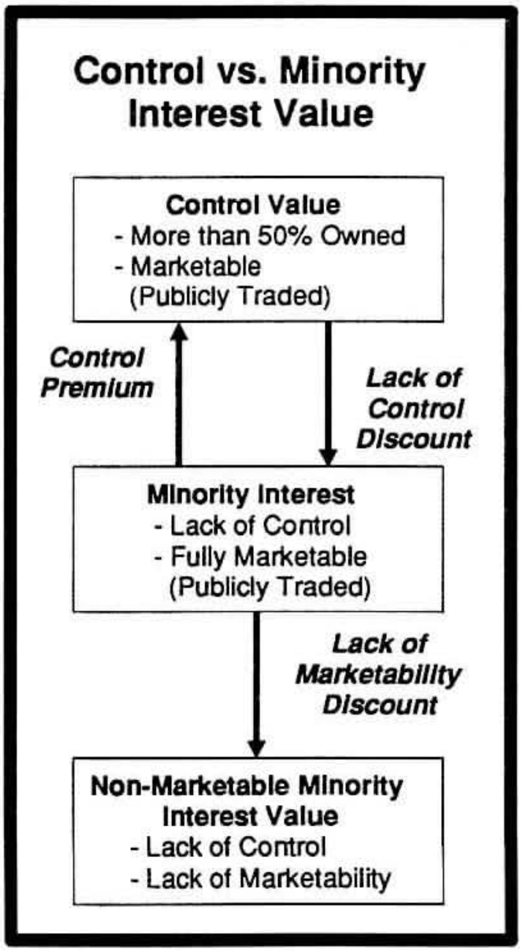
Abstract

According to the 1990 Statistical Abstract of the United States, approximately 17 million businesses exist in the U.S. They are comprised of over 3.4 million corporations, 1.7 million partnerships, and more than 12 million sole proprietorships. Furthermore, the United Shareholders Association reports that there are approximately 47 million minority shareholders in approximately 10,000 U.S. public companies. It is logical to infer from this data that millions of minority shareholders also exist in closely held companies - that is, non-publicly traded companies.

A minority interest is an interest which has no meaningful control over the day-to-day operations of a business, as in the case of a minority shareholder who owns less than 50.1 percent of a corporation and has no input as to management's salaries or other corporate matters, including the payment of dividends. In a public corporation, the minority shareholder with free-trading stock can simply sell his stock through the appropriate exchange and receive cash for his stock based on the bid price less commissions. Simply put, such a minority shareholder, while not having "control," does have "marketability." In a closely held situation, however, the minority shareholder often has little, if any, opportunity to attract a buyer to assume his position, which has neither control nor liquidity.

The following schematic illustrates the three basic levels of value. The example assumes a corporate structure with common stock; this valuation principle, however, applies to other business entities, such as partnerships, as well.

- Top level - corporate control and marketable (liquid)
- Middle level - lack of control but marketable (liquid)
- Bottom level - lack of control and lack of marketability (not liquid)



As can be seen in the schematic, the non-marketable minority interest (bottom level) is worth much less than the marketable controlling interest level (top level) because of control and marketability differences. To determine the proper value for the minority interest, the higher levels of value must be discounted. Since we are examining the issue of a minority interest in a closely held corporation, the first discount to be taken is the "lack of control" discount. Accordingly, the second discount, known as "lack of marketability," would be taken from the already reduced value. If a controlling interest is being valued that lacks a public market, then only the "lack of marketability" discount would be applied.

Each minority interest valuation situation differs, requiring detailed analysis by a business valuation expert to determine the appropriate discount levels. Other premiums and discounts, exclusive of the discounts for lack of control and lack of marketability, are present in many minority interest situations. One discount that is often overlooked is the discount for lack of capability to be a public company, which applies to companies that could not reasonably go public. This discount is not accounted for in the "typical" lack of marketability discount, which is based on restricted stock studies of companies that are already public.

The business valuation expert must carefully examine the subject minority interest for other premiums and discounts. The expert must then quantify the other premiums/discounts and correctly incorporate them in his/her valuation in order to correctly prepare a minority interest valuation.

THE VALUATION OF MINORITY INTERESTS IN A CLOSELY HELD CORPORATION

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Minority shareholders are shareholders who generally, but not always, have no meaningful control over the corporation in which they are a shareholder and an investor. Minority shareholders in a closely held corporation generally have limited liquidity, if any, relative to realizing cash or cash equivalents for their equity interest. In many cases, minority shareholders have no control over their investment and limited capability, if any, to sell their equity interest. This can be a difficult situation for a minority shareholder seeking to realize a return on/of his/her investment. This circumstance is believed to impact many investors in closely held businesses. The development of a business appraisal to quantify the value of a minority interest in a closely held business is a typical but challenging engagement for even the most skilled business appraiser.

This paper introduces the concept of minority interests in closely held corporations and presents an overview of their importance and history. The literature review section presents much of the salient material that has been written concerning minority interest premiums/discounts typically encountered during the preparation of a valuation for a minority interest in a closely held corporation. The theoretical orientation section discusses minority interest premium/discount theory and identifies other potential minority interest premiums/discounts which may be encountered in addition to the conventional lack of control and lack of marketability discounts. The methodology section proposes an appraisal aid, in the form of a checklist, for identifying and applying various minority interest premiums/discounts. Lastly, the paper suggests some potential additional research which would add to the body of knowledge surrounding minority interest premiums/discounts.

A. Businesses and corporations in the U.S.

According to the 1990 Statistical Abstract of the United States, published by the U.S. Department of Commerce, Bureau of the Census, there were approximately 17 million businesses in the United States in 1986, comprised of:

- Over 3.4 million corporations
- In excess of 1.7 million partnerships
- More than 12 million sole proprietorships

Also, as reported in the 1990 Statistical Abstract, there were approximately 3,500 mergers and acquisitions representing $200 billion in value, 1,100 divestitures representing $80 billion and approximately 400 leveraged buy-outs representing $45 billion in 1988 alone. Additionally, there were approximately 122,000 new business formations during the year.

According to the United Shareholders Association (an association formed in 1986 to represent minority shareholders in public corporations), there are approximately 47 million minority shareholders in publicly traded corporations ("public companies"). There is no association or central source of information as to the number of minority shareholders in closely held companies; however, it is entirely possible, if not probable, that minority shareholders in closely held corporations also number well into the millions. Since there are only approximately 10,000 public companies out of a total of approximately 3.4 million corporations that offer any significant stock market liquidity, it would stand to reason that the number of minority shareholders in closely held corporations is very substantial.

It is interesting to note that hundreds of thousands of businesses change ownership every year and millions of partial changes of ownership also occur. This activity represents billions of dollars that change hands based on the estimated values of businesses. In spite of this substantial number of financial transactions, business valuation is just beginning to emerge as a cottage industry. Furthermore, critical financial decisions are entered into daily based on the "business valuation advice" of well meaning advisors, such as attorneys, real estate appraisers, business brokers or accountants, who may have excellent general financial training but lack the specialized training, experience, credentials and independence of a properly trained and seasoned business appraiser. The premier certifying appraisal organization for business appraisers is clearly the American Society of Appraisers, which bestows the designation "ASA-Business Valuation" on business appraisers who have a minimum of five years of full-time business appraisal experience and can pass the required education, examination and ethical standards requirements.

B. Definition of a minority interest

A minority interest is generally defined as less than a 50 percent ownership interest in a corporation or other entity. In this paper, the focus is on minority interests in publicly traded or closely held (e.g., not publicly traded) U.S. corporations. Minority interests are also prevalent in partnerships, joint ventures, and even in proprietorships where there are agreements between two or more parties, either written or as a matter of law, which have the effect of giving control over the business to one of the parties over the other parties.

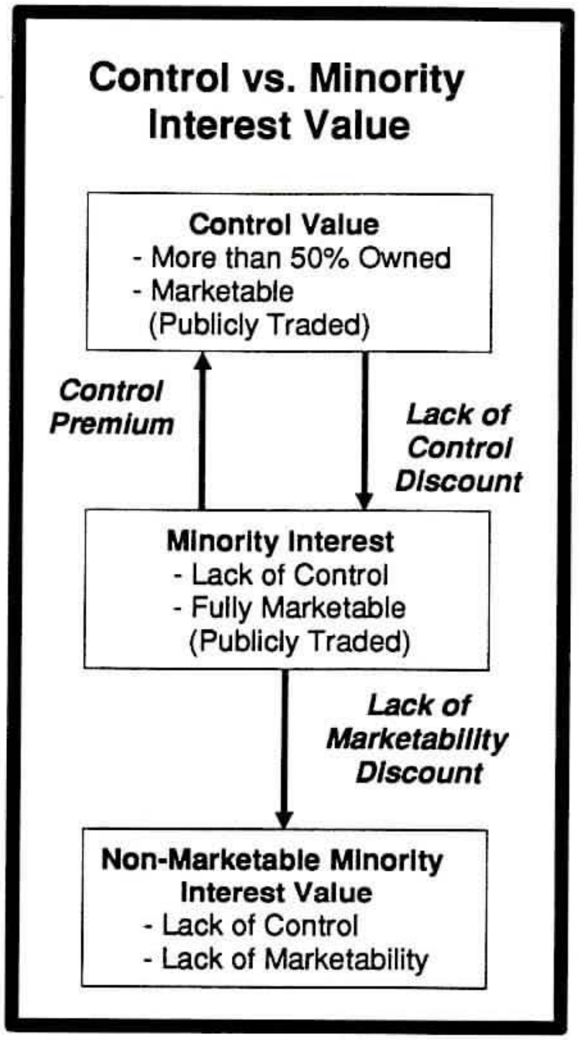
Knowledgeable investors or business operators should always consider the advantages and disadvantages of alternative forms of ownership prior to committing to a corporate structure. By simply using a partnership, joint venture or other form of entity, an investor or operator can preserve any number of rights not normally held by a minority investor in a closely held corporation. The subject of this paper deals primarily with the valuation of minority interests in closely held corporations; therefore, the question of minority interests in other entities will not be examined. However, many of the principals inherent in dealing with closely held corporate minority interests also apply to minority interests in other types of entities.

The definition of a minority interest in a closely held corporation to be used throughout this paper (as set forth by Yale Kramer, ASA, CPA, a business valuation expert and attorney, in his chapter titled "Perspectives On Valuing A Minority Interest In A Private Company," to be included in a new book (not yet published), entitled A Business Valuation Handbook...For Buyers, Sellers, And Their Advisors, edited by Jeffrey Jones, ASA) is as follows:

> "A stock ownership interest in a private, closely held corporation which constitutes less than 50 percent of the issued and outstanding stock of the corporation."

C. Schematic of control value vs. minority interest value

The following schematic is an excellent tool for visualizing the relationship of minority interests to other corporate interests. Three levels of value are illustrated:



- Top Level - Corporate Control Level (control over corporation plus ability to sell the stock quickly; e.g., through the public stock market or to an ESOP)

- Middle Level - Lack of Control but Marketable Level (less than a controlling interest in the corporation but able to sell the stock quickly)

- Bottom Level - Lack of Control & Lack of Marketability (less than a controlling interest in the corporation and unable to quickly or easily sell the stock)

D. The order of application of discounts

As can be seen on the "Levels of Value" chart of corporate valuation discounts, the "lack of control" discount occurs prior to the "lack of marketability" discount. Since we are examining the issue of a minority interest in a closely held corporation, the first discount to be taken is the "lack of control" discount. Accordingly, the second discount, in this case "lack of marketability," would be taken from the already reduced value representing the lack of control value. In the event a controlling interest is being valued that lacks a public market, only the lack of marketability discount would be applied when it is determined to be applicable.

For example, assuming that a marketable control value of $10,000,000 is determined for the business, a lack of control discount would first be taken (for purposes of illustration, assume a 30 percent lack of control discount, equivalent to a control premium of 42.86 percent*), reducing the value to $7,000,000, equivalent to a freely trading minority interest; next, a lack of marketability discount is applied (for purposes of illustration, assume 40 percent), resulting in a net valuation of $4,200,000 on a nonmarketable, minority interest basis. As can be seen in this example, a total discount of $5,800,000, or 58 percent of the control level value, has been applied to reflect the value of a minority interest which has no ready market.

*The lack of control discount from marketable control value (the top level) is equal to one minus the reciprocal of one plus the control premium. Expressed in formula form (in this example) = 1-1/(1+.4286)=.30.

E. History of minority interests in closely held corporations

Glenn Desmond and Richard Kelley, in "Valuing Fractional Interests In Closely-Held Businesses" from their book, Business Valuation Handbook (233-241), render an excellent record of the history of minority interests:

> "Prior to the 1930s, such minority interests could be freely marketed to anyone who would be interested in owning the stock. There was no Securities and Exchange Commission and there were few state agencies effectively regulating stock issuance and sale. No registration statements were needed and no prior notice of sale was required. Shares could be sold as expedient to do so. There were fewer and less complex laws in general. Income taxes were not significant. Most incorporated closely-held firms tended to issue only one class of unrestricted, voting, common stock. If a partnership, the ownership could be expanded or contracted with virtually no governmental interference. As a result, minority interests tended to be valued more nearly in direct ratio to their share of the total value of the concern. Thus, a 25 percent interest was worth $250,000 if the entire operation was valued at $1 million."
>
> "The courts reflect the trends in the marketplace, albeit on a somewhat delayed basis. In consequence, between 1920 and 1929, all major court cases involving the valuation of minority interests in closely held firms resulted in no discount being applied. In the

1930s, about 20 percent of such cases involved discounts. By the 1970s, about two-thirds of the cases recognized minority interest discounts, and, whereas during the earlier period the maximum discount was 33 percent, in the 1970s it reached 55 percent. Thus, the courts have given recognition to the ever increasing restrictions on minority interests and the resulting lack of marketability. It seems probable that even greater discounts will be allowed by the courts in the future, since even greater discounts prevail in the marketplace. One knowledgeable writer suggests that discounts of up to 90 percent may now be in order."

In "Methods of Valuation" (199) from The Professional Handbook of Business Valuation, Jeff Schnepper cites the case of Couzens, a minority shareholder, who sold his shares in 1913. The IRS then attacked his valuation. In an appeal to the Board of Tax Appeals, the following quote of the Board laid out the evolving logic of valuation at that point in time:

> "Whether a method of valuing closed corporation stock should proceed from a definite study of original cost...or cost of reproduction new, less depreciation...or from general opinions of qualified witnesses, or from book value, or from recognized market quotations or other data, must depend upon the nature of the property under consideration and the extent to which such evidence bears a relation to its share...we believe there is no authoritative formula available..."
>
> "The method of valuation is, in itself, unimportant, so long as it gives due regard to all the facts and relevant evidence...there may be no slavish adherence to a formula..."

It should be noted that, while Couzens may have been the first minority interest valuation case, it arose from a question of tax basis, not from the various appraisal remedy statutes used in connection with dissenter's stock issues.

Implicit in the decision was the Board's recognition that every valuation analysis would necessarily present unique situations in which peculiar valuation factors should be compared or weighed. Revenue Ruling #59-60 was the latest attempt at establishing a uniform listing of those valuation factors that should be considered. Another important principle was laid down in 1925, when the U.S. Supreme Court established two important principles: a) that the value of the stock in a company and its underlying assets bear no necessary relationship to each other; and b) that small amounts of stock are not necessarily worth their proportionate share of the whole.

In the 1935 Cravens v. Welch valuation case, 10 Fed. Supp. 94 (1935)., it was stated that "minority stock interests in a closed corporation are usually worth much less than the proportionate share of the assets to which they attach." This growing awareness of the minority discount has intensified, as both court decisions and empirical studies have developed additional data indicating various measures of the lack of control and lack of marketability discounts.

II. Literature Review

A. Definition of minority discount

The Business Valuation Committee of the American Society of Appraisers has defined the term "minority discount" as "the reduction, from the pro-rata share of the value of the entire business, to reflect the absence of the power of control."

One point of semantic confusion that occurs with the use of the term "minority discount" is that the term is often used to connote only the "lack of control discount." The term "minority discount" is also often used in a more inclusive form to include both the lack of control discount and the lack of marketability discount (and other discounts that may exist). This confusion of terms probably occurs due to the fact that the term "minority interest" often includes both the lack of control and lack of marketability discounts. This paper will generally refer separately to the "lack of control" discount and "lack of marketability" discount in order to clarify their usage and eliminate confusion.

B. There is no set formula for valuing minority interests

It is important to understand that the appraisal problem of discounting for a minority interest can be a complex issue, because there is no clear formula approach to follow, in that each case is different and requires a healthy dose of appraisal judgement. Peter Gampel, ASA, CA, CBV, in his article "Recent Thoughts When Valuing A Minority Interest In A Closely Held Company," Business Valuation Review, June 1987, (64-65), states the following:

> "The issues involved in valuing a minority interest have long been debated and discussed by taxpayers, practitioners, taxation

authorities and the courts. Although various guidelines have been introduced in recent years, there exists no specific formula or mathematical approach as to the valuation of a minority interest of common shares of a privately-owned company."

"A minority interest is one which has the following two attributes:

i) Less than de jure control as represented by 50 percent plus one of the issued common shares of a company; and ii) Lack of de facto control; i.e., not having effective control which necessitates having a large block of common shares without a majority of the issued common shares when all other minority shareholdings are widely dispersed."

Mr. Gampel has only defined "lack of control" in his definition. He has excluded "lack of marketability," which can also be present in a minority interest.

Typically, in the case of a minority holding in a closely held corporation, the other shares are held by one or more individuals who act on their own for their own welfare irrespective of the wishes of the minority shareholder. The minority shareholders, in most cases, accept their fate with little resistance, due to a lack of knowledge, resources and, in many cases, lack of rights due to restrictive agreements they have entered into or other conditions.

Mr. H. Calvin Coolidge, a former bank trust officer with the responsibility of attempting to sell minority interests in closely held companies, wrote an article titled "Discount for Minority Interest: Rev. Rul. 79-7's Denial of Discount is Erroneous," Illinois Bar Journal 68-July

1980 (744), in which he painted an excellent word picture of the position of a minority shareholder:

> "The holder of a minority interest can, at best, elect only a minority of the directors, and for corporations chartered in states which do not permit cumulative voting, he may not be able to elect even one director. Lacking control of the board of directors, he cannot compel payment of dividends which must be declared equally and which would give him his pro-rata share of earnings. Lacking control of the board of directors, he cannot compel his election as an officer or his employment by the corporation, which the holders of the controlling interest can do, often with resultant handsome compensation. In short, the holder of a minority interest has no voice in corporate affairs and is at the mercy of the holders of the controlling interest, who have no reason to pay anything but a token dividend, if any, and no reason to buy out the minority holder except at a nominal price."

> "A willing buyer contemplating purchase from a willing seller of a minority interest, being under no compulsion to buy (which would exclude a buyer already owning some shares whose new purchase would cover control), would suffer the same disadvantages of lack of control. The buyer is asked to make an investment with no assurance as to certainty of current yield or as to when, or the amount at which, he may be able to liquidate his investment. Regardless, therefore, of the value of 100 percent of the corporation, the buyer will not purchase a minority interest except at a discount from its proportionate share of the value of 100 percent of the corporation."

C. Control value premium and lack of control discount

In Valuing A Business, The Analysis And Appraisal Of Closely Held Companies (55-57), Shannon Pratt, Ph.D., CFA, ASA, provides a most eloquent and excellent summary of the impact of controlling versus minority interests:

> "Whether an interest is a controlling or a minority interest is not necessarily a cut-and-dried distinction, but it may well be a matter

of degree. The value of control depends on the ability to exercise any or all of a variety of rights typically associated with control. Consequently, if control is an issue in the valuation, the analyst should assess the extent to which the various elements of control do or do not exist in the particular situation and consider the impact of each element on the value of control. The following is a checklist of some of the more common prerogatives of control:

1. Elect directors and appoint management.
2. Determine management compensation and perquisites.
3. Set policy and change the course of business.
4. Acquire or liquidate assets.
5. Select people with whom to do business and award contracts.
6. Make acquisitions.
7. Liquidate, dissolve, sell out, or recapitalize the company.
8. Sell or acquire treasury shares.
9. Register the company's stock for a public offering.
10. Declare and pay dividends.
11. Change the articles of incorporation or bylaws.

"From the above list, it is apparent that the owner of a controlling interest in an enterprise enjoys some very valuable rights that an owner not in such a position does not."

As can be seen from the preceding "Levels of Value" schematic, the first element that must be understood is "control value." Control value represents the value attached to the corporate equity interest that has substantial or total control over the affairs of the corporation. This control is generally achieved by either owning or effectively controlling 50.1

percent of the voting stock of the corporation. In some instances, control may be less than 50 percent, where the largest block maintains effective control due to lack of other significant or directed blocks of stock. As indicated on the schematic, control value is, generally speaking, worth more than the minority value.

D. Control premium studies and lack of control discounts

The difference between freely traded minority interest value (the middle block on the "Levels of Control" chart) and control value (the top block) is called the "control premium." The Business Valuation Committee of the American Society of Appraisers has defined the control premium as "the additional value inherent in the control interest as contrasted to a minority interest that reflects its power of control." Applying this definition, the lack of control discount is the antithesis of the control premium, as can be seen on the chart. Certain control premium studies have been conducted to estimate the magnitude of the control premium. One such study is that conducted by Mergerstat Review (previously known as W.T. Grimm), owned and published by Merrill Lynch:

Mergerstat Review Control Premium Study

Year of Buyout	Number of Transactions	Avg. Premium Paid over Mkt. (percent)	Median Premium (percent)	Implied Minority* Discount (percent)
1980	169	49.9	44.6	33.3
1981	166	48.0	41.9	32.4
1982	176	47.4	43.5	32.2
1983	168	37.7	34.0	27.4
1984	199T37.9	34.4	27.5	
1985	331	37.1	27.7	27.1
1986	333	38.2	29.9	27.6
1987	237T38.3	30.8	27.7	
1988	410	41.9	30.9	29.5
1989	303	41.0T29.0	29.1	
1990	175	42.0	32.0	29.6

Note - The premium paid over market is a percentage based on the buyout price relative to the market price of the seller's stock five business days prior to the acquisition announcement date.
*Formula: 1-1/(1+average premium paid)

Source: Mergerstat Review

There are other control premium studies published which tend to develop similar results (including a study by Houlihan Lokey Howard & Zukin Inc., entitled the HLHZ Control Premium Study, which includes premiums on cash deals only); however, the Mergerstat Review study is considered by many business valuation professionals to be the most widely accessible, accepted and credible control premium study due to its more inclusive nature.

E. Separation of the lack of control and lack of marketability discounts

It is important to recognize and develop the lack of control and lack of marketability discounts as two separate discounts. While the discounts may be interrelated, they represent two different discount concepts and should, accordingly, be computed separately. Dr. Pratt states (60) that:

> "Even controlling interests suffer to some extent from lack of marketability. It usually takes at least a few months to sell a company, and sometimes considerably longer. The relationship between the discount for lack of marketability and that for minority interest lies in the fact that even after discounting a minority interest for its lack of control, it is still usually much harder to sell a minority interest than to sell a controlling interest in a closely held business."

> "Many court decisions, especially those involving valuations for gift and estate tax purposes, have taken a single lump sum discount to reflect marketability, minority, and sometimes other factors. However, conceptual thinking in the valuation exercise usually can be more precise to the extent that it is possible to isolate and separately quantify the various valuation factors, especially the more important ones. Fortunately, in recent years, both valuation practitioners and courts increasingly have been giving separate recognition to the impact of minority interest and marketability factors."

A 1982 estate tax decision, Estate of Woodbury G. Andrews, 79 T.C. 938 (1982), set forth the distinction between minority and marketability discounts:

> "In their arguments, neither petitioner nor respondent clearly focuses on the fact that two conceptually distinct discounts are involved here, one for lack of marketability and the other for lack of control. 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 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."

Robert P. Lyons and Michael J. Wilczynski, in their article "Discounting Intrinsic Value," Trusts & Estates, February, 1989 (22-26), point out that in defining fair market value there is no benchmark to measure what a willing buyer would pay or what a willing seller would accept. As a result, a two-step process has developed. First, the inherent or intrinsic value of the business is determined. Second, discounts are applied to the intrinsic value in valuing minority interests, since a minority interest is worth less than control and since there is no ready market for the minority interest. They also point out that the price at which stock is traded does not in fact represent that stock's proportionate share of the intrinsic value of the entire enterprise. Conversely, the per share price of the stock represents the value of a minority interest equal to one share of that enterprise. Thus, the price of a traded security actually represents that security's proportionate share of the company's value after applying a minority interest discount.

Lyons and Wilczynski also point out that, from 1968 to 1987, over $1.1 trillion was spent on approximately 63,000 publicly announced mergers and acquisitions. During this 20-year period, the average premium paid over the pre-acquisition market price of the stock was 37.84 percent. For each year from 1983 to 1987, the average premium paid over market ranged from 37.1 percent to 38.3 percent, meaning that acquirers have consistently paid an average premium for control of 37 to 38 percent. Put differently, the market generally applies a 27 to 28 percent minority interest discount to the intrinsic value of an enterprise to reflect the value of a minority interest in that enterprise.

The authors believe that if a shareholder/taxpayer can develop information regarding previous sales of minority interests in his/her company or sales involving similarly situated enterprises, such evidence may be compelling, if not controlling. However, such evidence generally does not exist. In its absence, taxpayers should rely on the lessons learned in the marketplace over a 20 year period in thousands of transactions. The authors claim that the evidence establishes a 27 to 28 percent minority interest discount as being generally warranted. The next consideration is whether stock value is subject to further discounting for lack of marketability.

E. Lack of marketability discount

1. Definition of lack of marketability discount

The term "marketability discount" is defined by the ASA Business Valuation Committee as "an amount or percentage deducted from an equity interest to reflect the lack of marketability." Referring back to the "Levels of Value" schematic, the next discount applicable after the minority interest (lack of control) discount is the marketability discount. According to Milton Gelman, in his article "An Economist-Financial Analyst's Approach to Valuing Stock of a Closely Held Company," Journal of Taxation, June 1972 (354), "perhaps the most difficult aspect in the valuation of closely held stocks is the quantification of the size of the discount to apply to the gross value ascertained for the stock due to the absence of a public market for the stock."

Glenn Garlick, of Wright Houlihan & Associates Inc., A Subsidiary of OTRA Securities Group, Inc., and John Mavredakis, of Houlihan Lokey Howard & Zukin Inc., in "Valuation Case Study," Financial Valuation: Businesses and Business Interests, Chapter 6 (39), discuss the discount for marketability. They point out that it is accepted valuation practice to discount the value of closely held minority interests that are not traded in a free and active market, because such interests lack the inherent liquidity of traded securities. They also indicate that the magnitude of the discount depends upon the particular facts and circumstances. In their opinion, the marketability discount will generally fall in the range of 10 to 50 percent of the value otherwise determined.

They further indicate that historical court cases can provide an indication of the magnitude of discounts allowed by the courts in cases involving valuation of fractional interests but, based on recent rulings, "rules of thumb" should not be relied upon. They also note that empirical evidence measuring the difference in value between a marketable and nonmarketable security can often be found in private placement transactions involving publicly traded securities restricted under Rule 144 of the Securities and Exchange Act of 1934. Rule 144 essentially requires that insiders and others holding "Rule 144" stock (often referred to as "lettered" stock) hold their stock for a minimum period of two years, after which they can begin trading the stock within certain parameters. Thus, a marketability restriction of one kind is imposed under Rule 144. They cite Revenue Ruling #77-287, which was issued by the Internal Revenue Service and is based on the SEC Institutional Investor Study performed in 1971, wherein the SEC examined the price differentials between restricted (144) stock and freely trading stock. This study has been referred to by the IRS as a means of establishing the marketability discount.

The IRS, in its IRS Valuation Guide for Income, Estate and Gift Taxes-IRS Appeals Officer Valuation Training Program (85-88), has the following to say about lack of marketability discounts (we quote, in that it is not this author's practice to paraphrase the IRS):

> "By far the most frequent claim for substantial discounts is made on the basis that the stock lacks marketability. Lack of marketability is defined as the absence of a ready or existing market for the sale or purchase of the securities being valued."

A court has stated the following principle in the case of Central Trust Co. vs. U.S., 305 F. 2d 393 (Ct. Cl., 1962), as follows:

> "It seems clear... in that an unlisted closely held stock of a corporation... in which trading is infrequent and which therefore lacks marketability, is less attractive than a similar stock which is listed on an exchange and has ready access to the investing public."
>
> "The extent, however, to which any restriction or limitation on marketability will reduce the value of a specific stock as of a certain date is entirely a matter of opinion. If the owners of closely held stocks should try to list a block of such securities on a stock exchange for sale to the public, they would probably have to make the offerings through underwriters. There will be costs for registering nonpublicly traded stocks with the Securities and Exchange Commission (SEC) involving, among other fees, the expense of preparing a prospectus. In addition, the underwriters themselves will have to receive commissions. The actual costs of such an offering might range from 10 percent to 25 percent of the selling price to the public."

The IRS Valuation Guide goes on to discuss the SEC study dealing with the costs of taking a company public:

> "In December 1974, the SEC published a study of the average cost of "going public," or the estimated costs of flotation of a public offering of privately held stock. The study also analyzes average flotation costs by price of stock offered, asset value, and industry. Although the study is 10 years old, it is still relied upon by appraisers because the percentages are still valid."

The IRS guide goes on to say that "the use of flotation costs to determine lack of marketability has been upheld by the courts." In the last paragraph on page 86, it also states that "another method of determining a lack of marketability discount is by reducing the overall capitalization rate." (Author's note: the preceding statement appears to have been expressed incorrectly, in that if the capitalization rate goes down the value is increased, not decreased). "It can also be taken into account in weighing other factors conservatively; however, arbitrary percentage discounts should not be resorted to as an answer for allowing a discount for lack of marketability."

Raymond Miles, in his book Basic Business Appraisal, in the chapter "Discounts for Lack of Marketability" (277), addresses the issue in a generalized fashion. He writes that there is a distinct difference between minority interests in companies that are publicly traded and companies that are closely held. He states that "the amount of discount for lack of marketability that is appropriate in a given situation is a complex question regarding which there is no close agreement, either among appraisers or among judicial authorities who have rendered decisions on such matters." He further indicates that the marketability discount from pro-rata market value may range from a few percent to as much as 50 percent or more, but that the majority of such discounts appear to fall within the range of from roughly 10 percent to 35 percent.

The distinction between a discount for minority interest and a discount for lack of marketability is best explained by Dr. Shannon Pratt (58), who states:

> "The concept of minority interest deals with the relationship between the interest being valued and the total enterprise value, and the factors which impact the difference between the two

> values. The primary factor bearing on the value of the minority interest in relation to the value of the total entity is the degree of control the minority interest does or does not have over the particular entity. The concept of marketability deals with the liquidity of the interest; that is, how quickly and certainly it can be converted to cash at the owner's discretion."

The basic concept of marketability is liquidity. If a security can be easily liquidated, then that feature adds value. Conversely, if a security cannot be easily liquidated, then that lack of marketability detracts from the security's value. Since minority interests in closely held businesses do not trade in the public market, they are substantially less liquid in almost all cases. The lack of control discount and lack of marketability discount are two separate discounts; however, these discounts are interrelated, in that they build on each other to cumulatively reduce the value of a minority interest security in a closely held corporation.

2. Empirical data used to quantify marketability discounts

According to Dr. Pratt (239), there are three categories of empirical data which are generally used to quantify marketability discounts:

- Discounts on sales of restricted shares of publicly traded companies
- Discounts on sales of closely held company shares compared to prices of subsequent initial public offerings of the same companies' shares

- Costs of floating a public offering

a. Discounts on sales of restricted shares of publicly traded companies

Dr. Pratt (241-248) summarizes various studies which present the difference in the prices of restricted stock vs. freely traded stock:

- SEC Institutional Investor Study (241-243)

  The Securities and Exchange Commission conducted a study (the SEC study), published in 1971, entitled <u>The Institutional Investor Study Report of the Securities and Exchange Commission</u> on sales of restricted shares of public companies titled "Discounts Involved in Purchases of Common Stock" in U.S. 92nd Congress (Washington, D.C.: U.S. Government Printing Office, March 10, 1971, 5:2444-2456, Document No. 92-64, Part 5).

  > "This study shows that "letter stock," i.e., stock that essentially cannot be traded for a period of two years in the public market place, trades at a discount to its free-trading counterpart. The discounts on the letter stocks were the least for NYSE-listed stocks, and increased, in order, for AMEX-listed stocks, OTC reporting companies, and OTC nonreporting companies. For OTC nonreporting companies, the largest number of observations fell in the 30 to 40 percent discount range. Slightly over 56 percent of the OTC nonreporting companies had discounts greater than 30 percent on the sale of their restricted stock compared with the market price of their free-trading stock. A little over 30 percent of the OTC reporting companies were discounted over 30 percent, and over 52 percent had discounts over 20 percent. The overall mean average discount was 25.8 percent and the median was approximately the same. For nonreporting OTC companies, which are more likely to resemble most closely held companies, the average discount

was 32.6 percent and the median discount again was about the same."

- Gelman Study (243):

  Milton Gelman, "An Economist-Financial Analyst's Approach To Valuing Stock Of A Closely-Held Company," Journal of Taxation, June 1972, p. 352.

  > "In 1972, Milton Gelman published the results of his study of prices paid for restricted securities investments. From 89 transactions between 1968 and 1970, Gelman found that both the arithmetic average and median discounts were 33 percent and that almost 60 percent of the purchases were at discounts of 30 percent and higher."

- Trout Study (244):

  Robert R. Trout, "Estimation of the Discount Associated with the Transfer of Restricted Securities," Taxes, June 1977, pp. 381-85.

  > "In a study of letter stocks purchased by mutual funds from 1968 to 1972, Robert Trout attempted to construct a financial model that would provide an estimate of the discount appropriate for a private company's stock. His multiple regression model involved 60 purchases and found an average discount of 33.45 percent for the restricted stock from freely traded stock."

- Moroney Study (244):

  Robert E. Moroney, "Most Courts Overvalue Closely Held Stocks," Taxes, March 1973, pp. 144-54.

  > "In an article published in the March 1973 issue of Taxes, Robert E. Moroney presented the results of a study of the prices paid for restricted securities by 10 registered investment companies. The study reflected 146 purchases. The average discount for the 146 transactions was 35.6 percent, and the median discount was 33.0 percent."

- Maher study (246):

  J. Michael Maher, "Discounts for Lack of Marketability for Closely-Held Business Interests," Taxes, September 1976, pp. 562-71.

  > "Mr. Maher compared prices paid for restricted stocks with the market prices of their freely-traded counterparts. The study showed that the mean discount for lack of marketability for the years 1969-73 amounted to 35.43 percent."

- Standard Research Study (246):

  Standard Research Consultants Study-"Revenue Ruling 77-287 Revisited," SRC Quarterly Reports, Spring 1983, pp. 1-3.

  > "In 1983, Standard Research Consultants (SRC) analyzed recent private placements of common stock to test the current applicability of the SEC study. SRC studied 28 private placements of restricted common stock from October 1978 through June 1982. Discounts ranged from 7 percent to 91 percent, with a median of 45 percent."

- Willamette Management Associates Study (247):

  > "Willamette Management Associates, Inc. analyzed private placements of restricted stocks for the period of January 1, 1981 through May 31, 1984. Willamette identified 33 transactions during that period that could reasonably be classified as arm's length and for which the price of the restricted shares could be compared directly with the price of trades in identical but unrestricted shares of the same company at the same time. The median discount for the 33 restricted stock transactions compared to the prices of their freely tradeable counterparts was 31.2 percent."

Summary of Restricted Stock Studies

Study	Years Covered In Study	Average Discount
SEC Overall Average	1966-1969	25.8%
SEC Nonreporting OTC	1966-1969	32.6
Gelman	1968-1970	33.0
Trout	1968-1972	33.5
Moroney	not specified	35.6
Maher	1969-1973	35.4
Standard Research	1978-1982	45.0
Willamette Management	1981-1984	31.2

Dr. Pratt (248) then goes on to summarize the results of these studies, wherein he concludes that the results are quite consistent, considering the time span and various researchers. He points out that "there is a very significant difference between holding stock in a public company that you know will probably have a market and holding stock in a closely held company where there is no promise of future liquidity." Dr. Pratt summarizes this difference:

> "It should be noted that various restrictions are incorporated into letter stock. Often the letter stockholder will have demand rights or piggyback rights to register the stock, etc. Sometimes the letter stockholder has to rely on Rule 144, where they can sell after two years if other parts of the rule are followed. In any case, they generally expect to be able to resell the stock in the public market in the foreseeable future. Therefore, minority stock in a closely held company for which there is no apparent market represents a significant step down on the ladder to marketability when compared to letter stock."

This is a key concept which will be examined later in this paper.

b. Discounts on sales of closely held company shares compared to prices of subsequent initial public offerings of the same companies' shares

Any serious student of marketability discounts should be familiar with the following studies, often referred to as "The Emory Studies":

- Robert W. Baird & Company Studies-John D. Emory, "The Value of Marketability as Illustrated in Initial Public Offerings of Common Stock-January 1980 through June 1981," Business Valuation News, September 1985, pp. 21-24; also in ASA Valuation, June 1986, pp. 62-66; and "The Value of Marketability as Illustrated in Initial Public Offerings of Common Stock-January 1985 through June 1986," Business Valuation Review, December 1986, pp. 12-14; and "The Value Of Marketability As Illustrated In Initial Public Offerings Of Common Stock-February 1989 through July 1990," Business Valuation Review, December 1990, pp. 114-116.

John D. Emory, ASA, a highly respected valuation expert with the firm Robert W. Baird & Company, examines the issue of marketability discount measures in his latest article "The Value Of Marketability As Illustrated In Initial Public Offerings Of Common Stock" in the Business Valuation Review, December 1990, (pp. 114-116). During an 18 month period, the author analyzed all of the initial public offerings that Robert W. Baird & Co. (a large regional investment banking firm controlled by

Northwestern Mutual Life Insurance Company) was either involved in or for which Mr. Emory had offering prospectuses. Such prospectuses are required to identify recent transactions in the registrant's common stock involving principals and insiders. The final test group included 23 companies considered to be in sound financial condition after eliminating development-stage companies, companies with a history of operating losses, and companies with no recent transactions in their common stock prior to the public offering.

Private sales and transactions took place at a 45 percent average discount from the price at which the stock subsequently came to market. The range was from 6 percent to 94 percent, with the median being 40 percent. The author concludes that the size of the discount for lack of marketability depends on the individual situation and is governed by the promise of the company and the likelihood of future marketability:

> "Since an initial public offering often takes four or five months from conception to completion, the transactions mentioned in the prospectuses in our study would almost certainly have reflected the likelihood of marketability within the next half year. This is similar to the marketability of the blocks of securities being purchased with registration rights by registered investment companies in the 1960s and early 1970s. In all of these situations the companies were promising in nature, and their securities had good potential for becoming readily marketable. Why else would a sophisticated investment company have bought the unregistered block and why would a bona fide investment banker pursue a firm underwriting commitment?"

> "The final question to be answered is that if these kinds of discounts are appropriate for promising situations where marketability is probable, but not a certainty, how much greater

should discounts be for the typical company's stock that has no marketability, little if any chance of ever becoming marketable, and is in a neutral to unpromising situation? The inability to get out of a once promising investment that has turned sour or has failed to materialize as anticipated is something to be avoided. The warning that a minority investor cannot control the destiny of his investment and may well be reduced to watching its value decline without recourse cannot be over-emphasized."

"In summary, size of the discount for lack of marketability depends on the individual situation. While there is no one discount for lack of marketability applicable at all times and to all situations, it is apparent that the lack of marketability is one of the most important components of value, and the public market emphasizes this point."

Dr. Pratt relates the results of his own firm's studies in this area (250-255):

- Willamette Management Associates Studies

  "Willamette conducted a series of five studies on the price of private stock transactions relative to those of subsequent public offerings of stock of the same companies. The five studies covered the following time periods for a total of 10 years: 1. 1975-1978; 2. 1979; 3. 1980-1982; 4. 1984; 5. 1985. These studies were conducted using the complete SEC registration statements and therefore considered all private transactions, not just affiliated parties, within three years prior to the public offering. Also, the Willamette studies attempted to include only arm's-length transactions and therefore generally excluded sales to insiders and stock options. Additionally, because the private transactions occurred over a period of up to three years prior to the public offering, Willamette made certain adjustments to reflect differences in market conditions for the stocks of the respective industries between the time of each private transaction and the time of each subsequent public offering. Prices were adjusted by an industry price index. P/E ratios were adjusted for differences in the industry average P/E ratio between the time of the private transaction and that of the public offering. The following tables summarize the findings of the Willamette studies."

Summary of discounts for private transaction prices compared to public offering prices adjusted for changes in industry stock price indexes:

Time Period	Number Analyzed	Number of Companies Analyzed	Median Transactions Discount %
1975-1978	28	59	64.3
1979	11	30	68.1
1980-1982	98	185T68.2	
1984	53	94	80.0
1985	39	75	60.0

Summary of discounts for private transaction P/E ratios compared to public offering P/E ratios adjusted for changes in industry P/E ratios:

Time Period	Number Analyzed	Number of Companies Analyzed	Median Transactions Discount %
1975-1978	20	34	49.6
1979	9	17	62.9
1980-1982	58	113	55.5
1984	20	33	74.4
1985	18	25	41.7

As concluded by Dr. Pratt (255):

> "The evidence from the Baird and Willamette studies taken together seems quite compelling. The studies covered hundreds of transactions over a span of 11 years. Average differentials between private transactions prices and public market prices varied under different market conditions, ranging from about 42 percent to 74 percent. This is very strong support for the hypothesis that the fair market values of minority interests in privately held companies are greatly discounted from their publicly traded counterparts."

c. Cost of flotation studies

It is offered by Dr. Pratt (256) that the cost of flotation, i.e., the cost of taking a private company public, does not apply to a minority interest because minority interest holders do not have the right to register their stock for a public offering. In 1974, the SEC issued a study on the cost of flotation which, based on current flotation costs, is seriously outdated and greatly understates the costs of going public. The costs of flotation and their applicability to minority interests will be discussed later in this paper.

3. Actual sales of minority interests in closely held businesses

One particularly interesting article summarizes the plight of a bank trust officer attempting to sell minority interest positions in closely held companies. The article is presented by H. Calvin Coolidge, a bank trust officer responsible for administering trusts and estates that owned all or portions of closely held businesses, and is entitled "Fixing Value of Minority Interests in a Business; Actual Sales Suggest Discount as High as 70 Percent," Estate Planning, Spring 1975 (141). This article presents a poignant picture of the market for minority interests based on two studies in which the author compiled data on actual sales prices of closely held businesses, as follows:

> "A number of years experience has demonstrated that it is extremely difficult to find any market for minority interests..., despite efforts to do so...On the relatively rare occasions when an offer is made to buy a minority interest, it is almost always for an amount far less than the fiduciary and beneficiary expect to get."

In his first study, Coolidge compiled data on 30 actual sales of minority interests. He found that the average transaction price was 36 percent below book value (book value is generally considerably below the fair market value of an enterprise) and concluded with the following observations:

> "Only 20 percent of the sales were made at discounts less than 20 percent. A little more than half the sales (53.3 percent) were made at discounts that ranged from 22 percent to 48 percent, and 23.3 percent of the sales were made at discounts of from 54.4 percent to 78 percent. It would be dangerous to draw too many generalizations from the survey, but those sales where the discounts were below 20 percent involved, with one exception, purchases from close relatives where friendly relations existed. The exception was the sale by a holder of swing shares who used his leverage well, but still took a 4.3 percent discount. At the other end of the spectrum was the settlement of a three year bitter dispute between two families; the majority family raised its token offer only after threat of a lawsuit, but the price the minority interest took nonetheless represented a 78 percent discount."

It should again be emphasized that Mr. Coolidge's computations were based on historical book value (since he did not have access to fair market value amounts in most cases), which is generally substantially lower than fair market enterprise value for most going concerns. This suggests that the discount would be even larger if computed from fair market enterprise value.

4. Court cases dealing with lack of marketability

Dr. Pratt (257-262) provides a summary of lack of marketability discounts emanating from court decisions. Such decisions are also set forth by Robert E. Moroney, "Why 25 Percent Discount for Nonmarketability in One Valuation, 100 Percent in Another?," Taxes, May 1977 (320):

- Edwin A. Gallun, CCH Dec. 32,830 (M), 33 T.C.M. 1316 (1974) allowed 55 percent.

- Est. of Maurice Gustave Heckscher, CCH Dec. 33,023,63 T.C. 485 (1975) allowed 48 percent.

- Est. of Ernest E. Kirkpatrick, CCH Dec. 33,524 (M), 34 T.C.M. 1490 (1975) found per share values without mentioning discount; expert witnesses for both sides used 50 percent-note that a government witness recommended 50 percent.

- Solberg Study of Court Decisions on Restricted Shares-Thomas A. Solberg, "Valuing Restricted Securities: What Factors do the Courts Look For?," Journal of Taxation, September 1979 (150-154).

Thomas A. Solberg conducted a study of 15 cases in which the courts valued restricted securities. He discussed Revenue Ruling 77-287 and federal securities law, especially Rules 144 and 237. Of the 15 cases, the range of discounts from market value was 10 to 90 percent, with a median of 38.9 percent and a mean of 37.4 percent. He concluded:

> "The valuation of restricted securities is not a numbers game, and each case must stand on its own facts as presented to the court. Legal precedent, in terms of discounts granted in cases previously decided, is not as

important as the nature, quality, and quantity of the evidence and the skill with which that evidence is marshalled and presented. The cases indicate that the courts, if provided with the factual basis to do so, are willing to grant significant discounts for restricted securities to properly reflect the economic realities of the marketplace."

- Est. of Saul R. Gilford, 88 T.C. 38 (1987). Mr. Gilford was the largest stockholder in a company that traded in the over-the-counter market; he owned 23 percent of the stock, all restricted shares. The court allowed a 33 percent discount for lack of marketability.

Recent Court Decisions on Closely Held Minority Interests-Lack of Marketability

- Virginia Z. Harwood v. Commissioner, 82 T.C. 239 (1984). In this case, the court ruled for a combined discount from net asset value of 50 percent to reflect combined minority interest and lack of marketability, the latter influenced by a restrictive agreement. It appears that, had the appraisal expert better substantiated the marketability discount, the overall discount may have been higher.

- Est. of Mark Gallo v. Commissioner, 50 T.C.M. 470 (1985). In this case a lack of marketability discount of 36 percent was awarded.

- Roy O. Martin, Jr. and Barbara M. Martin v. Commissioner, 50 T.C.M. 768 (1985). This case involved a series of gifts of minority interests of common stock in a closely held personal holding company. The holding company owned minority interests in each of seven closely held companies. The court determined that the one company that clearly was an operating company should be valued on a capitalization of earnings basis, that two companies that clearly were nonoperating companies should be valued on an asset value basis, and that four companies should be valued using both going-concern and liquidation approaches. To the values thus derived, the court applied a 70 percent discount "to reflect the marketability/minority considerations." Finally, the court allowed a 5 percent second-stage discount at the holding company level.

- Estate of Martha B. Watts, 87-2 U.S.T.C., paragraph 13726 (11th Cir. 1987); 51 T.C.M. 60 (1985). In this case, the court allowed a discount for lack of marketability of 35 percent from the estimated price at which minority interests would have traded in a public market had such a market existed for them.

5. Other studies/articles dealing with lack of marketability discounts

George S. Arneson, in "Nonmarketability Discounts Should Exceed Fifty Percent," Taxes, January 1981 (25-31), maintains that discounts for lack of marketability should exceed fifty percent and discusses several factors that should be taken into consideration in making a discount determination. Maher laid a good base for factual analysis and Moroney pointed out that in many instances registered investment companies purchased "lettered stocks" at discounts far beyond 35 percent. According to Arneson, most of the companies included in the SEC study are fairly large; for small companies the 35 percent discount might not provide adequate coverage for compensation to underwriters. Also, there are often other costs of flotation, such as warrants/options. Other factors listed by Arneson as subjective issues are: a) lack of pre-established market; b) risk; c) ability to market because of company size and history; and d) time and timing. Given the addition of these additional factors, the author reasons that the discount should be closer to fifty percent.

Robert E. Moroney, in "Why 25 percent Discount for Nonmarketability in One Valuation, 100 percent in Another?" Taxes, May 1977 (316-320), explains why discounts for nonmarketability of minority shares in closely held corporations ought to vary widely from one case to another. Factors cited by the author are:

1. Exceptionally High Dividend Yield

2. Exceptionally Bright Growth Prospects

3. Degree of Control, Swing Value

4. Restrictions on Transfer

5. Buy-Sell Agreements

6. Stock's Quality Grade

7. Controlling Stockholder's Honesty

8. Controlling Stockholder's Friendliness

9. Prospects for the Corporation

10. Prospects for the Industry

11. Prevailing Mood of the Investing Public

While this article brings up some very good points of consideration, one may question whether the requisite standard of fair market value is in operation when the question of a person's honesty or friendliness has a bearing on the valuation process.

Michael J. Maher, formerly with the IRS, in "Discounts for Lack of Marketability for Closely Held Business Interests," Taxes, September 1976 (562-571), researched the purchases of restricted stock by several mutual funds and determined that the average mean discount was 35 percent. The author maintains that a portion of the discount reflects the expense that would be incurred to register the stock. This inclusion of the cost of registration in the discount for lettered stock is an interesting point.

Richard D. Johnson and George A. Racette, in "Discounts on Letter Stock Do Not Appear to Be a Good Base on Which To Estimate Discounts for Lack of Marketability on Closely Held Stocks," Taxes, August 1981 (574-581), examine the premise that discounts on letter stock placements provide a base from which to assess non-marketability discounts on closely held stocks. They suggest that the price of a privately placed security may differ from that of its freely traded counterpart for reasons other than differences in marketability. They point out that studies by Maher and Moroney report average discounts that range between 33 percent and 40 percent. They also explain that letter stock may be resold in one of three ways:

- It can be sold under registration
- It can be sold under the "dribble provisions" of Rule 144
- It can be sold to a third party on a private placement basis

The authors continue to reflect on the relationship of other factors which effect the price difference between freely marketable and restricted stock. They sample 86 restricted transactions of lettered stock and determine an average mean discount of 34.01 percent. The authors' analysis suggests that there is a built-in value of "information," either good or bad, that impacts the value of lettered stock, since the holders of lettered stock are generally privy to inside information and are likely to receive information on a more timely basis. Using their sample group, the authors' computations show that the prices of the stocks they selected declined within months of the private placements which generated the lettered stock. They therefore conclude that the stock has declined for reasons other than just marketability. It is interesting to note that investment companies who traffic in lettered stock do not seem to have done well, as expressed in this article. The value of being able to get out of a stock on a timely basis is at least somewhat demonstrated by this poor showing of the investment companies.

G. Summary of findings relative to lack of control & lack of marketability

As suggested by various control premium studies, a lack of control discount of at least 28 percent (or the reciprocal of approximately a 35 percent control premium) would seem reasonable in valuing the shares of a closely held corporation, depending upon the particular fact situation. An additional lack of marketability discount ranging between 35 to 70 percent, depending upon the particular fact situation, is indicated by the various cited studies and literature.

In dealing with marketability discounts, it should be remembered that the SEC study of OTC market lettered stock discounts determined that approximately 46 percent of OTC lettered stock sales involved "lettered stock" discounts of at least 30 percent. As set forth by many of the cited authorities, it would appear logical that sales of the stock of closely held corporations would be priced at a greater discount to intrinsic value than would the sale of restricted securities of a publicly held corporation relative to the freely trading prices of such stock. Some of the cited authors, as presented in the tables and literature review, appear to generally conclude that the discount for lack of marketability applicable to the valuation of common stock of closely held businesses should approximate at least a minimum of 35 to 40 percent, as suggested by the marketplace.

As the courts become more aware of the plight of the minority shareholder in a closely held corporation, they may be further inclined to issue additional rulings supporting these higher levels of minority interest discounts, as illustrated by the following cases:

- In Whittemore vs. Fitzpatrick, 127 F. Supp. 710 (D.C. Conn. 1954), the taxpayer was the sole shareholder of an investment company that owned securities of listed corporations, making simple the determination of intrinsic value. The taxpayer gave 200 of the 820 issued and outstanding shares in trust to each of his three sons. The Court held that each 200 share gift was to be valued separately, as a minority interest. The Court applied a 66 percent discount to net asset value, 16 percent for the minority interest and 50 percent for lack of marketability.

- In Estate of Walker avan Loben Seis vs. Commissioner, 52 T.C.M. 731 (1986), the tax court primarily relied upon a recent family sale and applied a 60 percent discount to the net asset value of the taxpayer's undivided interest in timberlands.

- In Harwood vs. Commissioner, 82 T.C. 239 (1984), the taxpayer made gifts of minority limited partnership interests in owned timberland. The tax court accepted a 30 percent minority interest discount, as asserted by the IRS, then added an additional 20 percent discount for lack of marketability, for a total discount of 50 percent.

It is extremely important that the business appraiser have the credentials, expertise and business experience to examine each case on its individual merits. The appraiser should properly document those factors which increase or reduce the indicated lack of control and lack of marketability discounts. The appraiser should not routinely apply an "average" discount to a minority interest without isolating control and/or marketability features which differentiate the subject minority interest.

H. Other typical potential minority discounts

1. Key man/woman discounts

The IRS Valuation Guide (89) recognizes the fact that the loss of a key man/woman (the IRS Guide does not mention women; however, the writer will take the liberty of amending this, as it is an obvious oversight) may have a depressing effect upon value. The Guide enumerates three attributes that should be analyzed prior to accepting a key man discount:

- Whether the claimed individual was actually responsible for the company's profit levels.

- If there is a key man/woman, whether the individual can be adequately replaced.

- Whether there was key man/woman life insurance that adequately compensated the company for the loss of the key man/woman.

2. Blockage discounts

Blockage discounts emanate from the fact that if a shareholder in a public company were to place a large "block" of stock for sale on the public market, in comparison to average daily trading volumes in the stock, it would probably have a depressing effect on the stock's share price.

3. Discount for locked-in capital gains tax

This discount typically applies to investment companies where a reasonable assumption is made that the portfolio of investments will eventually be liquidated and the capital gains tax will have to be paid. This is particularly the case following the repeal of the General Utilities Doctrine in the Tax Reform Act of 1986, resulting in two levels of liquidation taxes, one at the corporate level upon disposition of the assets and one at the personal level when the owners of the corporate stock (in C corporations) receive their proceeds from liquidation of the stock. This discount has typically not been successfully applied to going-concern valuations for tax purposes.

I. How standards of value affect minority interest values

As pointed out by Dr. Pratt (394), different standards of value will impact the minority interest value.

1. Fair market value

Fair market value is defined under Revenue Ruling 59-60 as the price at which a willing buyer and a willing seller agree, neither being under any compulsion to buy or sell, and both having reasonable knowledge of the relevant facts. Under this standard of arm's-length dealing, a minority interest would typically be heavily discounted. This is the standard of value that is applied in estate tax and gift tax areas.

2. Investment value

In real estate terminology, investment value is defined as "value to a particular investor based on individual investment requirements, as distinguished from the concept of market value, which is impersonal and detached." In the case of a minority interest, this value would be present only where a stream of income could be expected to be routinely generated by the minority interest, or some other condition existed that would create liquidity for the minority shareholder.

3. Fair value

Fair value is set by statutory requirements on a state-by-state basis. Therefore, the definition is determined by the relevant jurisdiction and as such has no exact definition. The term is most generally used with reference to dissenting shareholder or oppression of minority shareholder litigation. In one state the term may mean fair market value and in another state it may mean pro-rata interest of total enterprise value. In fair value cases, it is important to have the attorney assist the valuation expert in researching and understanding the case law relative to the state of venue in order to determine the correct standard of value to be applied.

I. Description of approaches used to value minority interests

Dr. Pratt (389-403) outlines three broad approaches to valuing minority interests, as summarized below:

1. The total enterprise approach

   a. Determine the value of the total enterprise on a control basis, and deduct any discounts appropriate for minority interest and/or lack of marketability, as follows:

      1) Determine the value of the total enterprise as if a public company

      2) Compute the minority owner's pro-rata interest in the total

      3) Determine the nature and amount of discounts, if any, applicable to the pro-rata value of the total enterprise to properly reflect the value of the minority interest

2. The marketable minority interest approach

   a. Value the interest by direct comparison with other minority interest transactions. (Since most available data on minority interest transactions is derived from the public stock market, this approach usually requires the further step of deducting a discount for lack of marketability, but no further deduction for minority interest). This method is considered to be the simplest and most straightforward approach to valuing minority interests and has been widely accepted in courts of law:

1) The appraiser uses existing data on publicly traded shares, which already have a "built-in" minority discount (since they are minority shares)

2) The appraiser then adjusts for marketability and other relevant discounts or premiums

3. The "bottom-up" approach

a. Value the interest using a "bottom-up" approach based on the discounted future returns the shareholder may reasonably expect to realize through dividends and/or liquidation of the interest at some future date. According to Dr. Pratt, when valuing minority interests, actual dividends paid rather than dividend-paying capacity is relevant, since the minority stockholder can't force the payment of dividends, regardless of how much dividend-paying capacity the company has. This approach starts at zero and builds up the minority interest elements of value, if there are any. The steps in the approach are as follows:

1) Project the flow of expected distributions (timing and amounts)

2) Project an amount realizable on sale of the interest (timing and amount)

3) Discount the results of steps 1 and 2 to present value at an appropriate discount rate, reflecting the degree of uncertainty of realizing the expected returns at the times and in the amounts projected

Dr. Pratt goes on to explain that when a minority interest in a closely held business is being valued by capitalization of earnings, book value, adjusted book value, or some other approach, wherein the capitalization rates or multiples employed are applicable to controlling interests, discounts should be considered to reflect both lack of control and marketability. Dr. Pratt states that "it is not uncommon to find a minority interest valued at 35 percent or less of the stock's underlying net asset value, reflecting both the minority interest and lack-of-marketability factors."

Dr. Pratt further explains that if a controlling interest in a closely held business is being valued with reference to day-to-day trading prices of public stocks (which are minority interests), it is generally correct to add a premium for control to the indicated value. Since the control premium often works out to be approximately the same as the indicated discount for lack of marketability in closely held companies, the premium for control and the discount for lack of marketability occasionally offset each other. Dr. Pratt offers one possible explanation, in "that public companies acquiring private ones tend to be reluctant to incur dilution by paying a higher price/earnings ratio than the price at which their own stock is selling. In effect, a controlling stockholder of a closely held company who sells to a public company is giving up control but gaining liquidity." However, the appraiser should always review the subject's particular fact situation to determine the correct levels of the individual discounts or premiums, rather than mechanically implementing such simplifying offsetting assumptions.

John S. Harper, Jr. and Peter J. Lindquist, in "Quantitative Support for Large Minority Discounts in Closely Held Corporations," The Appraisal Journal, April 1983 (270-277), point out that it is necessary to clarify the economic rationale for minority interest discounts: a) when a market exists, and b) when a market does not exist. They suggest a mathematical approach that supports greater discounts than those typically allowed by the Internal Revenue Service and the courts. They go on to state that a fair minority discount for a closely held stock is often equal to the control premium that such a stock would command if the stock were publicly traded. If the market for the minority shares is restricted and the shares have limited liquidity, the discount would likely be higher. They also point out that a minority interest position is usually not attractive from an investment standpoint and therefore requires a higher rate of return.

The approach the authors suggest is as follows:

- Estimate today's per share value assuming a sale of 100 percent of all shares.
- Estimate the number of years before this investment will be liquidated at a fair price.
- Determine the "future value" (i.e., the probable value per share in the year of sale).
- Discount the future value in the year of sale to present value using the selected internal rate of return.

The appraiser should determine the number of years before a sale is most likely to take place, which is largely a function of the age, health, and motivation of the controlling stockholder(s). Of the three factors, usually age and health are of the greatest importance when the owner is over fifty years old. The technique makes the underlying assumption that the minority shareholder will be bought out at the same time and price as the control shareholder.

However, this technique also brings up the important issue of the standard of value being applied to the subject. If fair market value is the applicable standard of value, as is generally the case for estates and gifts, it is relevant to consider whether the prospective purchaser is a buyer without a compulsion to buy.

K. Where minority interest discounts typically come into play

1. The oppression of minority shareholders

One area which deals heavily with minority shareholders and attendant discounts and premiums is litigation surrounding the oppression of minority shareholders. This litigation usually arises as a result of alleged abuses of minority shareholders in either public or privately held companies. Lawsuits in this area of litigation seem to be on the increase, as evidenced by the increasing number of court cases dealing with oppression issues.

As a backdrop to this section, a few statistics concerning the size of the U.S. litigation participant population is of interest:

- On June 17, 1991, at the annual ASA Conference in Philadelphia, Mr. Dexter D. MacBride, FASA and an attorney-at-law, revealed the following startling statistics:

    - A legal dispute takes, on average, 4 years to move through the U.S. legal system to a resolution
    - There are approximately 17,000 courts in the U.S.
    - There are approximately 800,000 attorneys in the U.S.
    - There are approximately 15 million civil lawsuits filed each year
    - There are approximately $16 billion in claims paid each year
    - There are approximately $19 billion in court costs paid each year

According to the 1990 Statistical Abstract, there are approximately 253 million residents of the United States. This means that there is one civil lawsuit each year for every 17 persons in the country. It also means that there is approximately one lawyer for every 316 persons. Additionally, approximately $138.00 each year for every man, woman and child is paid in claims and court costs. Unhappy minority shareholders, otherwise referred to as "dissident" shareholders, are numbered among the above statistics.

Because of the differences between control and minority shareholders, the body of law surrounding the issue of oppression of minority shareholders has and is continuing to rapidly evolve. An excellent reference source for this specialized area is the two volume set O'Neal's Oppression of Minority Shareholders, by F. Hodge O'Neal and Robert B. Thompson. The authors (Volume 1, p. iii) offer a view of this increasing area of litigation:

> "Most American lawyers do not realize the tremendous amount of litigation in this country arising out of shareholder disputes. Since the publication of the first edition of this treatise, the volume of litigation grounded on minority shareholder oppression-actual, fancied, or fabricated-has grown enormously, and the flood of litigation shows no sign of abating. The increase in litigation has been pronounced in both federal and state courts, with an especially large number of suits challenging the validity of "cash-out" mergers. Also worthy of note is that in the last four or five years there has been a substantial increase in the number of suits minority shareholders have brought for involuntary dissolution of their corporation or to force majority shareholders to purchase their shares."

Robert E. Healy and George D. McCarthy, in "Case re: Stock of Dissenting Stockholders," Valuing A Company (405), indicate that dissenting stockholders are not typically suing solely over valuation issues:

> "The cases where dissenting stockholders bring suit solely in a dispute over the valuation of their shares are very infrequent. Usually there are other issues involved, such as alleged bad faith

> on the part of corporate officers in negotiating a merger or consolidation or the sale of the assets of the corporation. Other issues included in such actions may be alleged violations of federal antitrust laws, the antifraud provisions of the securities laws, and fraud under state laws."

Craig R. Reinhardt, in "Indiana Dissenters' Case Upholds Use of Minority Interest and Lack of Marketability Discounts," Hilliard Lyons News, Spring 1991 (1-3), cites current case law dealing with the issue of oppression of stockholders and the resulting discounts:

- Case of Freedom Financial Corporation vs. Hyman Goodman, et al, Clark Court Cause No. 10C01-8810-CP-332 (hereafter the "Freedom Case").

In a dispute over the value of a 15.3 percent interest in a corporation domiciled in Indiana in July of 1989, the Court appointed three appraisers to assist in the determination of fair value. The Court instructed the appraisers not to appraise the pro-rata portion of Freedom as a whole represented by the dissenters' shares, but rather the dissenters' shares standing alone. The appraiser who applied a 30 percent overall discount to reflect several aspects of the dissenters' situation, including their lack of control, or "minority interest," won the day. The decision pointed out that consideration of more than one valuation approach, coupled with appropriate discounts for minority interest and lack of marketability, are necessary to determine fair value in a dissenters' case.

However, it should be emphasized that "fair value" is determined by state law, and that there is no set national criteria. For example, in California, where minority shareholders are generally treated with a higher degree of concern, the outcome of the case could very well have dictated a minority interest calculation that was based on a pro-rata share of the total enterprise value exclusive of any discounts.

2. Controlling shareholders right to sell vs. minority shareholders right to sell

Typically, controlling shareholders have the "run of the coop" or, in this case, the company, as discussed previously. Furthermore, in many cases they can sell their stock and leave the minority shareholder in the company. Therefore, in such cases, the appraiser must take into consideration the likelihood that the minority shareholder will be locked into the company beyond the retirement or sale of the controlling interest. Along these lines, O'Neal and Thompson, in O'Neal's Oppression of Minority Shareholders (4), make the following statement:

> "The traditional view is that a shareholder, irrespective of whether he is also a director, officer, or both, may sell his shares, just as other kinds of personal property, for whatever price he can obtain, even if his shares constitute a controlling block and the price per share is enhanced by that fact. Further, he is under no obligation to obtain for other shareholders an opportunity to sell their shares on the same favorable terms he is receiving or even to inform them of that price or of the terms of the sale."

3. Estate and gift tax planning

Discounts for lack of control and lack of marketability have been utilized extensively in estate tax and estate tax planning applications. In estates where the controlling interests have been gifted or sold to junior family members, often by splitting the controlling interest into smaller minority interests, very substantial estate tax savings may be realized. However, it is important that the transfers not be accomplished "in anticipation of death." The guideline generally applied by the IRS is that transfers should occur at least three years prior to the death of the transferor. There are many techniques which are used in estate tax planning. The most popular techniques generally involve the transfer of assets from the estate of the potential decedent to another person or entity, be it a family member, company, partnership, trust or charity. A brief description of some estate tax planning concepts involving business valuation follows.

4. Minority interest transfers

Stock in a closely held corporation can be transferred either through gifting or sales of stock to family members. The transfer of minority interest stock to family members is generally discounted to reflect lack of control and lack of marketability. However, the IRS takes the position, as set forth in Revenue Ruling 81-253 and referred to as "unity of interest," that intra-family transfers of minority interests should not be discounted for lack of control except in the case of family discord. The IRS position is inconsistent with its own definition of fair market value and has been consistently dismissed in a number of court cases. If one accepts the concept of a hypothetical "willing buyer and willing seller" as the standard, then the fact that the transferee is a family member should not impact the discounting procedure. Therefore, in all but a few cases, the IRS has not been able to sustain its unity of interest position.

5. Recapitalizations

Prior to December 1987, "estate tax freezes" were a popular method of transferring corporate or partnership equity to younger generations. The procedure simply involved recapitalizing the entity, which was expected to grow in terms of future value, into an income equity interest and a growth equity interest. The income interest, such as preferred stock or a limited partnership interest, was retained by the senior family member(s) and the equity growth interest, such as common stock or general partnership interest, was transferred to the younger generation, thereby freezing the value held by the older generation.

In December 1987, IRC Section 2036(c) was introduced, whereby the growth interest was essentially brought back into the estate for estate tax purposes. This, of course, put a damper on estate tax freezes. However, in late 1990, certain estate tax freeze techniques were again brought back to life under "Chapter 14" provisions. These new provisions are quite stringent and, among other things, essentially require that an income interest receive cash payments in the form of dividends or limited partnership distributions. Generally speaking, for an estate tax freeze to work under the new rules, the company or partnership must have a reasonably predictable and substantial future earnings growth pattern. In these cases, a valuation will be required of both the income and the equity interest, and minority interest issues may be involved.

6. Buy/Sell agreements or sale of options

As set forth by Dr. Pratt (487), a binding buy/sell agreement or option can effectively freeze value for estate tax purposes. In order for the buy/sell agreement to be binding, a) it must restrict the transfer of securities to the buy/sell price during the owner's life as well as death; b) there must be a valid business purpose for establishing the agreement; c) the value established in the agreement must be at an adequate and fair price at the time the agreement is executed. Accordingly, a valuation of the company or partnership will be required at the time the buy/sell agreement or option is established.

7. Remainder interest sale

A remainder interest sale involves selling an asset to an heir but retaining the income interest until death. The valuation of the remainder interest is based upon the estimated fair market value of the interest at death, which is determined through the use of IRS actuarial tables. The seller retains the control and income rights, but the asset passes to the heir free of estate tax at death, since it was previously transferred out of the estate through the earlier remainder sale.

8. Grantor Retained Income Trusts (GRITs)

This technique is similar to a remainder sale, whereby a sale is made to a trust at an appraised discounted value based on the same IRS actuarial tables used for remainder sales. The remainder interest passes to the trust beneficiaries. The owner receives the income from the trust.

9. Charitable gifts

An owner may elect to gift to a charity and receive a tax deduction equivalent to the appraised fair market value of the gift. All gifts of securities in excess of $10,000 require that an independent appraisal be made and that IRS form 8283 be filed with the return. The owner may also elect to gift a remainder interest to a charitable trust and receive the income during his/her lifetime.

10. Other estate tax planning techniques

There are innumerable permutations and combinations of the various estate tax planning strategies, a few of which are briefly described above.

It is extremely important that an owner of a closely held company be aware of the need for expert estate tax planning well in advance of his/her planned departure from the business. Almost all estate tax planning strategies dealing with closely held corporations will encompass valuation considerations and in many, if not most, the valuation of minority interests will be involved. Generally, an attorney who has a strong background in estate tax planning and the ever-changing accompanying tax laws is consulted to "captain" the estate tax planning team. The team will normally also include an accountant as well as an appraiser.

11. Employee Stock Ownership Plans (ESOPs)

Employee Stock Ownership Plans (ESOPs) essentially involve a tax-advantaged method whereby the owner(s) of either a closely held or public firm can transfer corporate equity to their employees in exchange for consideration and/or the pre-tax financing of corporate debt. The ESOP concept has grown rapidly during the 1980s and 1990s. It is estimated by the 1990 Statistical Abstract of the United States (534) that there are approximately 10,000 ESOPs in the country and that each ESOP has an average of 100 participating employees. Obviously, the use of ESOPs is a well accepted and growing corporate financial strategy.

One of the major factors currently propelling the growth of ESOPs is the "1042 Rollover Provision." Briefly, this tax provision allows an owner of a closely held company to essentially sell his/her company to the employees through an ESOP using tax-deductible corporate contributions (note that the employees do not buy the company with their take-home pay) at an independently appraised stock price and defer the taxes, sometimes permanently, on the gain. In order for an owner to receive this immensely favorable tax treatment, the ESOP must own in excess of 30 percent of the employer company and the proceeds must be reinvested in a qualified U.S. security within twelve months after the date of sale.

Another popular strategy involves the use of ESOP contributions through "leveraged ESOPs," whereby debt principal is amortized with pre-tax rather than after-tax income, providing cash flow savings roughly equivalent to forty cents on every dollar. Typically, owner stock sales are coupled with leveraged ESOP financial strategies and used in tandem to accomplish numerous owner, corporate and employee financial objectives, which are largely made possible by ESOP-specific tax advantages. Obviously, before entering into such a program, a prudent owner would conduct an ESOP feasibility study to properly analyze the relative advantages and disadvantages and to quantify the forecasted financial results of implementing an ESOP vs. maintaining the status quo.

The Tax Reform Act of 1986 required that ESOP trustees obtain an independent valuation of the ESOP stock annually. The first or initial ESOP valuation is therefore "updated" each year. The vast majority of ESOPs exist in closely held firms; therefore, the topic of minority interest discounts is encountered in virtually almost every ESOP valuation.

The selling owner will, in most cases, be seeking the highest possible price under the circumstances, and will therefore often ask for the "control premium price," i.e. the fair market value of the company as if the controlling interest were being sold on a fully marketable basis. In the past, the fully marketable control price was the price the selling owner often received, even when he did not sell control. The proposed Department of Labor (DOL) regulations dealing with ESOP valuations essentially require that the stock be valued at the price that a third party would pay for the stock unless there is a binding agreement which delivers control of the company to the ESOP within a reasonable period of time.

Perhaps the single most important factor in applying ESOP valuation discounts is consistency. If an ESOP is charged a control premium by an owner/seller, but the retiring employee subsequently receives only a minority interest price, then those transactions and valuations may be viewed cynically by the DOL and others. However, when an ESOP has been paying a minority interest price for its stock and subsequently acquires control of the company, then the retiring or terminated employee may be rightly entitled to receive the control premium price.

Generally speaking, the control premium/lack of control discount is the major question of the day when dealing with ESOP valuations. Most reputable valuation firms are following the previously mentioned proposed DOL regulations, coupled with the principles of consistency and fairness, in this regard. Lack of marketability discounts come into play based upon the ESOP's capability to promptly amortize forecasted employee stock redemptions, as indicated by an ESOP repurchase liability study. Each ESOP and associated ESOP company must be analyzed on its own merits, and the lack of marketability discount, if any, determined on the basis of the company's ability to meet employee "put" requirements. If it is apparent that a company can promptly meet its repurchase requirements under foreseeable conditions and circumstances, then a lack of marketability discount may not be required.

12. Other types of valuations requiring minority interest discounts

In addition to the above mentioned valuation areas, minority interest discounts are applied in many other types of valuations for many other reasons. In many cases, a business owner or shareholder will seek a minority interest discount in connection with a marital dissolution action, while the spouse will be seeking to support a control premium. Owners of companies acquired in non-taxable reorganizations by public companies in exchange for restricted stock of the acquiror will often bargain for additional stock, based on a minority interest discount for both lack of control and lack of marketability due to the Rule 144 trading restriction. Venture capital providers will seek to increase their equity stake in a company by discounting the value of equity using minority interest discounts. The list of potential applications for minority interest discounting considerations is endless, and impacts most business appraisals.

L. Availability of minority interest discount on transfers to/from controlling shareholder

Since the hypothetical independent buyer/seller premise is the standard for determining the fair market value of a minority interest, it would appear logical that a minority interest should generally maintain its discount regardless of the presumed buyer. However, for tax purposes it appears that the acquisition of an additional minority interest in a closely held corporation will generally not be allowed a minority interest discount where the acquiror is already a majority or controlling shareholder. In Turner, TC Memo 1964-161, the Tax Court said, "in the present case, however, an outsider is not acquiring a minority interest in a family corporation; rather, the owner of the largest block of shares is increasing his holding and diluting the value of the other interests.

Surely, he cannot complain that this block is worth less to him when, if anything, it would seem to be worth more."

Conversely, the courts have held that when a minority interest is transferred by a controlling or majority shareholder, the general rule for allowing a minority interest discount under the willing buyer/willing seller test applies. Thus, if a controlling shareholder transfers minority portions of his/her controlling interest, the shares thus transferred are valued as minority shares.

Simply put, for tax purposes minority shares that are transferred to a control shareholder generally take on the value aspects of the control block. This interpretation is, however, based on case law and could be overturned. For other than tax purposes, it would seem logical that a minority interest should generally be valued as a minority interest under the hypothetical independent buyer/seller premise. Shares that are part of a control block and are transferred to a minority shareholder generally take on the reduced value aspects of a minority block.

III. Theoretical Orientation

As can be seen from the literature review section, which is certainly not all inclusive, a great deal has been written and presented concerning the discounting of minority interests. As cited throughout the literature review section, the second edition of Valuing A Business, The Analysis and Appraisal of Closely Held Companies, by Dr. Shannon Pratt, is a very accomplished work which does an excellent job of summarizing many minority interest issues. The theoretical orientation portion of this paper will primarily deal with some additional or alternative premiums and discounts which have received less notice and acceptance. Coupled with this discussion will be a summary of issues relative to the more widely accepted discounts.

The basic concept of appraisal that appears to be predominant relative to minority discounts and/or premiums is the use of public companies for purposes of comparison, referred to as "guideline" and/or "comparable" companies, as a proxy for the development of discounts or premiums. This approach is essentially a market approach and involves a "pairing analysis," wherein the subject is valued based on comparison to the guideline or comparable companies. In some instances, the income approach is also used, wherein a future income stream is projected and discounted back to present value at a risk-adjusted required rate of return. Admittedly, the market approach generally weathers the storm best in front of the trier of fact, such as a courtroom or arbitration panel. Of course, the best technique, when available, is one that uses more than one appropriate approach to arrive at a similar result, thereby further validating the valuation conclusions and related premiums/discounts.

A. Primary reasons for premiums/discounts under the market comparison approach

One of the key tasks in searching for other premiums/discounts impacting a minority interest is to isolate material factors which impact the minority interest differently than the controlling interest. An excellent example of this type of factor is the lack of control discount. Another basic element of the procedure is the identification and culling out of significant factors which are endemic to the company but not to the public guideline companies on a long-term basis. These features must impact the minority shares and be readily transferable with the minority position, thereby having an impact on the value of the minority shareholder interest. An example of the impact of this type of factor is the lack of liquidity discount that generally impacts minority interests in closely held businesses. Factors that are not endemic to the minority interest and not transferable will not typically impact value, and therefore are generally not discount or premium considerations.

B. The hypothetical willing buyer/willing seller criteria and premiums/discounts

The premium and/or discount factor must stand the test of the hypothetical "willing buyer/willing seller" analysis if fair market value is to be the standard of value applied. This means that the factor causing the difference would impact any buyer or seller and is fully transferable. An example of a factor that would not impact value is a minority position that had always been granted a special dividend due to a non-transferability agreement between the control shareholder and that specific minority shareholder. The factor must be fully transferable, of long duration, and not specific to any certain buyer or seller in order to qualify as a premium or discount for the standard of fair market value.

C. Determining if other premiums/discounts are present

The task of the business appraiser in assessing other premium and/or discounts impacting a minority interest is to determine which material premium and/or discount factors, outside of the "normal" lack of control and lack of marketability discounts, are applicable to either the guidelines companies or the subject company, but not both, and which premium and/or discount factors are endemic to the minority interest but not the controlling interest and are transferable with the minority interest. Simply stated, the lack of control and lack of marketability discounts are, in some cases, not all-inclusive. A classic example of such a premium would be a requirement that a specific minority interest receive a specified monthly dividend. An example of such a discount outside the scope of the previously mentioned discounts would be for a very small company that has no identifiable chance to become a public company.

D. Issues surrounding lack of control and lack of marketability discounts

No discussion of lack of control and lack of marketability discounts would be complete without mention of some of the criticisms surrounding these popular discounts. The lack of control discount, which is the reciprocal of the premium for control, has in recent times come under heavy attack. Similarly, the discount for marketability has also seen a number of significant questions posed. One key concept that should be borne in mind is that appraising is a profession that requires professional judgement and, as such, no premium and/or discount can be scientifically proven to be precisely accurate in connection with any valuation approach utilized. Furthermore, if the profession could be reduced to exact formulae, then computers would quickly replace appraisers. Solid debate over such appraisal issues is not only healthy, but is necessary in order to maintain and improve the stature of the appraisal profession. Such debate is clearly evident in the case of discounts for lack of control and lack of marketability.

Concerning the lack of control discount and its reciprocal, the premium for control, Mr. Eric W. Nath wrote an article entitled "Control Premiums And Minority Interest Discounts In Private Companies" (39-46) in the June 1990 edition of Business Valuation Review. In this interesting and well written article, Mr. Nath arrives at the basic conclusion that "public stocks tend to trade at or near their takeover value; therefore, valuation of a private minority interest using publicly-traded stock multiples or discount rates requires discounts for both lack of liquidity and lack of control." Mr. Nath articulates a number of points to support his view:

Control premiums paid for public companies occur primarily because companies are significantly undervalued relative to their break-up values or their stock is trading at too low a price for various other reasons. Another logical reason for the existence of control premiums is that the acquiror is making a strategic acquisition with a focus towards seeking entrance into new markets, increasing market share, developing product and management synergy, etc. And, last but not least, the acquiror may have paid more than fair market value for the target company, a la Campeau's overvalued, overleveraged and disastrous acquisition of Federated Department Stores.

Tender offers, or "takeovers," represent a very small portion of the market and are not representative of the vast majority of public companies. Takeovers are accomplished for many reasons, including strategic considerations. Control premium statistics take huge swings on both large and small deals, and are therefore rendered further suspect. In some cases, premiums are paid for minority blocks.

Mr. Nath goes on to indicate that "it has been established that valuation of a private company using publicly traded stocks as proxies should automatically yield a majority interest value without having to resort to a control premium analysis." Therefore, he argues that discount rates derived from public stock data represent controlling interest rather than minority interest discount rates.

This writer agrees with Mr. Nath as far as pointing out the basic flaws of the control premium studies is concerned. However, this writer does not agree that minority interests in the public market are really controlling interests; they simply are not. The interests which trade in the market are minority interests by definition. In spite of the flawed control premium concept, attempting to relabel these interests as trading at a price reflecting a control premium, when they are not in fact control interest securities, is imaginative, but not correct. Mr. Nath is correct when he states in closing that "only after a thorough analysis of case specifics will the total minority discount be determined."

Mr. Lester Barenbaum, Ph.D., of Financial Research, Inc., launched another compelling assault on the control premium from an entirely different point of view in his incisive and convincing presentation entitled "The Measurement of Control Premiums and Minority Discounts" (to be later published as an article in the Journal of Small Business) to the American Society of Appraisers Business Valuation members and candidates at the 1991 international convention held in Philadelphia. He maintains that the only real measurable value of control is the present value of net cash flow that will ultimately flow to the controlling interest that, absence control of the company, would otherwise flow to the minority shareholders. Such cash flows take the form of "perquisites" that accrue to controlling shareholders over and above "normal" levels of compensation. He points out that while psychological benefits may possibly be involved, they are not presently reasonably measurable.

Dr. Barenbaum's opinion is enticing and extremely logical. The implicit assumption that appears to be present in his theory is that controlling interest is simply defined as control over earnings and cash flow. In this context, Dr. Barenbaum's argument is most reasonable and acceptable to this writer. However, if we consider a broader definition of control to be the long-term ability to effect synergies by acquisition, then this writer believes that other considerations come into play that go beyond the simple control of the minority's share of earnings and cash flow, such as the ability of a controlling interest to increase earnings and cash flow. Dr. Barenbaum would be quick to point out that there is no data that proves that controlling interests run a company better than minority interests; on this point, the writer believes that improved control over a business will often result in improved earnings and cash flow. However, the logic presented by Dr. Barenbaum exposes yet another serious gaping black hole in the tapestry of the logic of the so-called "premium control studies."

David Dorton, CFA, ASA, a principal in the firm of Houlihan Valuation Advisors, A Subsidiary of OTRA Securities Group, Inc., makes an interesting observation concerning the Ibbotson Associates historical data on securities returns, entitled "Stocks, Bonds, Bills, and Inflation," that is so often used in the computation leading to the development of the discount rate and/or capitalization rate used in valuing minority interests. He points out that the Ibbotson data is primarily comprised of minority interest transactions, with the exception of a few controlling interest transactions. Furthermore, he adds that there are no transactions in the Ibbotson data which reflect the rate of return of "control going in," "control coming out" transactions. There are, however, transactions included in the data which reflect the rate of return of "minority interest going in," "control coming out" transactions, e.g., tender offers for control in the public market. Because of the control premium paid in such transactions, they obviously generate a higher rate of return than strictly minority interest transactions.

Consequently, the Ibbotson equity premia appear to overstate the historical returns and, consequently, the future expected required rate of return (and therefore risk), of strictly minority interest transactions.

Therefore, since the required rate of return appears to be overstated, the resultant derived value estimate for the minority interest is arguably understated. Simply put, since transactions in the public market are comprised of a mix of both minority and control interest transactions, calculations of minority interest values using public market historical rates of return do not yield an entirely accurate picture of the value of minority interests in the public market.

In looking at the specific control premium studies, there are a number of problems. The HLHZ Control Premium Study is based solely on cash deals on an inconsistent timing basis, which greatly limits the available data relative to the universe of both cash and stock acquisitions. The Mergerstat Review control premium analysis is far more complete; however, the premium estimate (price increase) is consistently based on the price of the stock five days prior to the acquisition announcement, which begs the question of a possible run-up in price due to inside information leaks and rumors.

The Emory Studies, mentioned in the literature review section of this paper, which have been compiled to reflect the difference between pre-public prices to affiliates (officers and directors) and public prices, are not without some flaws. The base price of the preregistration stock revealed in the registration statements is, by definition, paid by affiliates who generally understand the plans and direction of the company and would, in many cases, know that the company is planning to go public eventually. Therefore, the use of the data contained in these studies for a company that may never go public, or does not have the ability to go public, will most likely result in a significant understatement of the discount for lack of marketability.

The above cited issues are only a few of the more significant criticisms surrounding control premium studies, lack of control discounts, and lack of marketability discounts. The writer agrees with most of the arguments leveled against the control premium studies and agrees that these studies are, at best, a very rough estimate of the control premium. The writer is of the opinion, however, that the minority interest data reflected in the prices of publicly traded stocks is both reasonably reliable and a reasonably accurate proxy for valuing fully marketable minority interests. Therefore, using publicly traded minority interests as a base point for measuring the value of minority interests in closely held companies, prior to the application of other discounts and premiums, is a reasonable business valuation approach. However, once this point is reached, the business appraiser must next consider other premiums and discounts, including but not limited to the lack of marketability discount, in order to arrive at a reasonable final value estimate for a minority interest in a closely held business.

E. Premium factors that may impact minority interests in closely held companies

1. As indicated earlier, dividends or distributions to the minority interest which are anticipated to be paid on a regular basis and which are fully transferable should be considered in the earnings estimate and cash flow analysis that is used to value the minority interest. The business appraiser should be careful to discover all such distributions and determine whether they are routinely made and are fully transferable to any future buyer of the minority interest.

2. A swing block of shares (or a block which could swing voting control) which can reasonably be expected to remain a swing block between other large minority shareholders (and is therefore endemic to the minority interest), thereby prospectively converting their position to an occasional or indefinite control position sometimes approaching an effective control position, may have a substantial premium attached to it. The premium should be applied as a percentage increase to the marketable minority interest value, prior to application of the lack of marketability discount, based on the business appraiser's judgement as to

the value increment that a willing buyer would be willing to pay for the swing vote as if it were marketable. Also, a large minority block in the presence of only small minority blocks may come close to representing effective control, and therefore it may be applicable to attach a premium to the value of the large block.

3. In the case of estate and gift tax valuations, any interest representing less than a control block (e.g., over 50 percent) is defined by tax law as a minority position and therefore does not warrant a premium. In the case of a 50 percent block in the presence of another 50 percent block, neither block receives a premium, since they are in a classic standoff position with neither side having control. (This is the case in estate and gift tax valuation; however, in the case of other types of valuations, it can be argued that 50 percent blocks may have a premium attached for the "veto power.")

4. Superior long-term management which is endemic to the subject business, as compared to the public guideline comparable companies, that is expected to remain in place gives rise to a minority interest premium. The premium, however, should properly be reflected in the forecasted

income/cash flow stream. Since this premium is incorporated directly into the income stream, it is not again applied as a direct percentage increase to the derived value amount.

5. When the existing ownership of the company is advanced in years or wishes to divest the company for any number of other reasons, and it can be reasonably projected that it is planning to arrange for the sale of the entire company, including the minority interest, a premium is likely warranted. As can be seen, this benefit is endemic to the company and would accrue to any buyer of the minority interest. This premium is best reflected under the income approach as a terminal value at some point in the future, and would be discounted to present value using the normally derived discount rate. Once this is accomplished, a lack of marketability discount would be applied. If the near-term sale of the business is assured, then the minority interest value becomes the pro-rata share of the estimated selling price on a control value, fully marketable basis, which would then be present valued to the valuation date based on the anticipated date of sale.

6. Minority interests involved in shareholder oppression lawsuits often receive a control premium depending upon the particular state the case is being tried in and the applicable definition of "fair value" in that state. The business appraiser should always work closely with the attorney involved to determine the proper state definition of fair value and applicable state law. It appears that there is a definite trend towards the recognition of minority shareholders' rights in many states, which is resulting in minority shareholders often obtaining control level value for their shares through the courts.

7. There are new and innovative "White Knight" techniques on the horizon that are currently under development by an aggressive middle market financial services company that may, in the near future, develop very large premiums for some minority shareholders. These new techniques involve the enhancement of minority shareholder leverage through the application of specialized legal processes. These new techniques are proprietary and, accordingly, cannot be presented in this paper. Furthermore, since the techniques are not generally known or currently available to the masses of minority shareholders in closely held companies,

their application does not yet constitute a transferable minority interest premium condition and therefore are not yet endemic to minority interests. This may change in the future, as these techniques become more widely known and employed by experts familiar with their application. These techniques will give minority shareholders in closely held businesses a vastly improved opportunity for liquidity in many cases.

F. Additional discounts beyond the normal lack of control and lack of marketability discounts

1. When the company does not have the reasonable capability of "going public" and is being compared to public companies, an additional discount, taken as a percentage of the publicly traded minority interest value, should properly be applied. Once this discount is applied, an additional lack of marketability discount based on the previously mentioned restricted stock studies should be taken. These various discounts represent a sequential chain of "pairing" comparisons to the publicly traded guideline companies, and are therefore multiplicative. These "chain" discounts capture the basic differences that exist between the public

companies used as comparable guideline companies and the subject private company.

Simply put, the restricted stock studies used to substantiate the lack of marketability discount are based on companies that are already public. The lack of marketability discount does not include any discount for a company's lack of ability to go public, since it typically only measures the difference between the value of stock that can be traded into the market on an immediate basis and the value of the same stock which must be held for up to two years under restrictive Rule 144 conditions. Legend stock then represents a stock issue which has already achieved public market status, and is therefore inherently more marketable than privately held stock. However, if a company is unable to go public in the first place, it then warrants the lack of capability to be a public company discount, sequentially followed by the lack of marketability discount. Both of these discounts properly apply, since we are attempting to adjust the comparable to the subject through the appraisal pairing process, thereby bringing the subject to its equivalent value.

Many business appraisers understand the difference between this discount and the standard marketability discount as explained above. The business appraiser will often reflect the discount via an increased discount rate or a lower earnings multiple as a "small company discount." When the discount is reflected in this manner, it is generally done on the basis of a "professional judgement" estimate, and is well buried within the computations leading to the final value estimate. This discount should not be confused with the small company discount rate premia included in the Ibbotson studies, since the Ibbotson data only measures the returns of companies that are already public. Interestingly, there is a little known, but reasonably reliable statistical study in Mergerstat Review which develops the data required to compute the "discount for lack of capability to be a publicly traded company." The writer must acknowledge and thank Gary Schroeder, ASA, an instructor at the Lindenwood College Master's of Valuation Science Program, for pointing out the existence and source of this important set of statistics.

In the 1990 Mergerstat Review, Figure 50 (87), there is a set of statistics going back to 1981 which measures the median price/earnings ratios paid to acquire both public and private companies. Mergerstat points out that "higher P/Es are paid for public companies than for private concerns. Since publicly traded companies tend to be larger, more sophisticated businesses with solid market shares and often strong public identities, they are more likely to command correspondingly higher price multiples." It can be argued that many of the private companies included in the statistics could be public; this tends to indicate that the discount should be even larger than indicated. The study, however, is a much more authoritative source than a "professional judgement" increase in the discount rate or a proportional reduction of the price/earnings ratio or other market value ratios. The following table presents the Mergerstat Review data and the implied "discount for lack of capability to be a public company:"

Median P/E Paid
Public vs. Private
1981-1990

	Acquisitions of Public Companies (Base*)	Acquisitions of Private Companies (Base*)	Implied Discount for Lack of Capability to be a Public Company
1981	14.0 (160)	11.5 (70)	17.9%
1982	12.8 (150)	10.1 (43)	21.1
1983	15.5 (141)	11.5 (48)	25.8
1984	15.1 (183)	11.4 (63)	24.5
1985	16.4 (240)	12.3 (187)	25.0
1986	24.3 (259)	16.5 (105)	32.1
1987	21.7 (191)	15.2 (25)	30.0
1988	18.3 (309)	12.8 (187)	30.1
1989	18.4 (222)	12.7 (42)	31.0
1990	17.1 (117)	13.2 (36)	22.8

*Base: Number of transactions disclosing P/E ratio paid

The application of the "discount for lack of capability to be a public company" is, of course, based upon an analysis that leads the appraiser to the conclusion that the business has very little, if any, chance of going public. This conclusion should be based not on the opinion of ownership and/or management but on the characteristics of the business itself. Such factors as size, product appeal and/or technology, market and market share, growth in sales and earnings, record and quality of earnings, financial strength, and management capability are some of the factors that must be considered in order to determine the appeal of a particular business to an investment banking firm.

The key man/woman discount, if applicable, would be encompassed in the "lack of capability to be a public company" discount, since it is one of the factors that would stop the company from going public, much the same as being too small a company. Obviously, the factors supporting a discount for lack of capability to go public must be carefully examined. This type of analysis is best accomplished by an experienced business appraiser who well understands investment banking criteria. Actual business operating experience would also be very helpful to the appraiser faced with this analysis. The appraiser must be careful not to double count when developing the discount, since it is inclusive of almost all operating factors (but does not include the lack of marketability discount).

2. In the event the discount for lack of capability to be a public company does not apply, then the key man/woman discount should be considered. The key man/woman discount applies when there is evidence that the company is run by a key man/woman without adequate succession capabilities in place in comparison to the comparable publicly traded guideline companies. The discount should be developed based on an analysis of the potential impact

of the loss of the key man/woman. In the case of a key man/woman discount, the discount can be built into the discount rate or taken as a straight percentage from the minority interest valuation based on the public marketplace.

3. In some cases of valuing minority interests in public companies, there should be a "blockage" discount applied based on the size of the block of shares being valued relative to the average trading volume of the stock. The lack of marketability discount will not normally be applied to a public entity and, similarly, the blockage discount, which is a form of the lack of marketability discount, will not normally be applied to a privately held company. Thereby, potential double counting of these discounts is eliminated. An example of blockage: if 40 percent of the shares of a public company were suddenly offered for sale, or "dumped" on the market, the market would likely react by discounting the fair market value of the shares, as a result of supply/demand imbalance. Again, the experienced appraiser will examine the public market from an investment banking perspective to determine if this discount applies.

4. Portfolio discounts relate to subject companies that are heavily diversified to the extent that operations may be impaired by unrelated and/or different profit centers. This discount should be built into the earnings/cash flow forecasts under the income method. Under the market method, the market value ratios selected should be from comparable public companies.

5. Cost of flotation discounts are generally not applied to non-public minority interests. The cost of flotation discount is generally more appropriately utilized to value a non-marketable controlling interest. As pointed out in the literature review section, a minority interest can not, generally speaking, force a company to go public.

6. Specialized transfer restrictions, such as buy/sell agreements or bank loan covenants, outside the normal Rule 144 trading restrictions must be considered on a case-by-case basis to determine if the restriction is substantive, transferable and measurable. Then, it must be determined where the discount best fits. In other words, the question must be answered as to whether the discount for the specialized restriction is multiplicative (a "chain" discount), overlapping, or mutually exclusive.

In summary, as can be seen from the above theoretical orientation discussion, there are a number of premiums and discounts that must be carefully considered by the business appraiser beyond the conventional premium for control and lack of control and lack of marketability discounts. These premiums and discounts should not be routinely considered to be offsetting against each other unless a thoughtful and probing analysis indicates that such is the case. Furthermore, each valuation study should be carefully examined through a logical premium/discount determination procedure to better ascertain the level and amount of premium and/or discount to be applied, based on the specific valuation case. There may be additional premiums/discounts to be considered in specific cases other than those discussed above, and the business appraiser must have the knowledge and experience to recognize the circumstances that bring about specific premiums or discounts, as discussed previously.

As to the preferable approach in adjusting value for the various minority interest premiums and discounts discussed above, the writer is of the firm opinion that in most cases it is best to begin the procedure by estimating the value of fully marketable minority interests, as determined by comparison with comparable publicly traded companies under the market approach. In applying the income approach, the starting point should also be valuation on a fully marketable, minority interest basis.

This results from the adoption of a discount rate based on the historical/future expected rates of return generated by minority interests in the public guideline businesses. The use of the fully marketable minority interest level of value, as indicated by the public market, is a logical starting point for premium/discount determination and leads to the "methodology" portion of this paper.

IV. Methodology

A. Minority interest appraisal is a combination of an art form and a science

The number of minority shareholders in closely held corporations is not an available statistic, but logic would lead one to believe that they number in the millions. A business appraiser who is given the responsibility of valuing a minority interest in a closely held firm truly faces one of the most important and challenging appraisal tasks in the profession. Appraisal is, always has been and will continue to be a mixture of art and science. In some cases, more science will be available to guide the appraiser; in other cases, "professional judgement" will be the order of the day. The challenge comes in properly applying the scientific attributes of appraisal to determine the various value factors while using the necessary professional judgement to weigh the elements and apply them to the final value opinion.

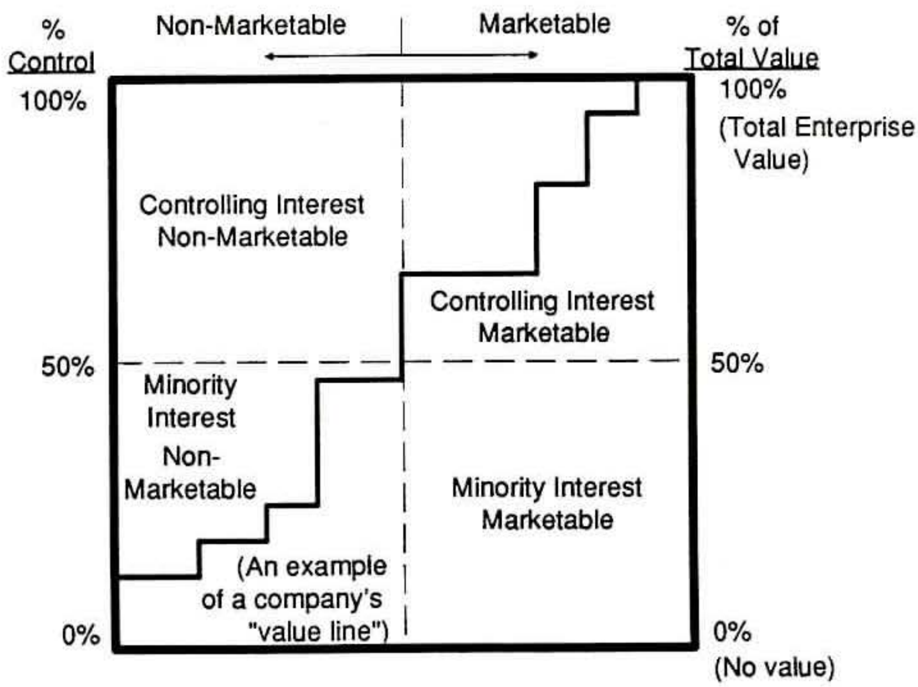
Business appraisal is a profession, in that its exercise requires a substantial amount of human judgement. In appraisal activities, a valuation opinion is just that, an "opinion," and reasonable men/women will often differ on such an opinion. The appraisal of a minority interest in a closely held business is far too important to simply apply gross percentages for lack of control and lack of marketability. A more in-depth examination of the subject and attendant application of other relevant premiums/discounts is required. The qualified business appraiser should have the requisite knowledge and experience to examine and consider other factors giving rise to additional premiums/discounts. Essentially, if the business appraiser can put himself/herself in the place of the minority shareholder by researching the particular value factors of the company that are endemic to the minority position, then he/she will be in a much improved position to assess value.

The tool that the writer would propose for considering the various premium/discount factors is essentially a "checklist" approach. The information that has been presented in this paper relative to valuing minority interests in closely held businesses is brought together in this checklist to assist the business appraiser in reviewing potential applicable premium and/or discount factors and assigning a value to them. The checklist is not presented as a panacea or an all-inclusive document containing every possible premium and/or discount that an appraiser may encounter. The checklist simply reminds the appraiser of some of the potential premiums/discounts and provides an approach for consideration of their impact on value.

B. Methodology for valuation of minority interests in a closely held corporation

The business appraiser should first determine that the interest is correctly classified as a minority interest in a closely held business. The following chart will assist the appraiser in visualizing the correct value definition of the interest:

The Spectrum of Value Quadrant



*Each company has its own "value line" based on endemic factors particular to the interest being valued relative to the public comparables selected.

Once it is determined that the interest fits in the lower left hand "minority interest/non-marketable" quadrant, which is the lowest value quadrant available in the above illustration, the business appraiser can commence to identify and quantify the attendant minority interest premiums/discounts using the below suggested checklist:

1. Determine the pre-premium/discount value of the minority interest by applying the income and market approaches and utilizing public guideline companies

Do not apply "guesstimate" percentage increases to the discount rate for size of company or operating characteristics; these factors will be accounted for by the "lack of capability to be a public company discount" in the steps to follow. This approach will essentially yield the value of a fully marketable minority interest before adjustment for other premiums/discounts and the lack of marketability discount.

Additional premiums search

2. Distributions

Determine if the minority interest receives a long-term distribution or dividend based on a long-term binding agreement (which is not typically received by minority interests in the public guideline companies), e.g., cumulative dividends, etc., which are fully transferable. In the alternative, determine if distributions are typically made and the likelihood of the distributions being paid to a new minority interest holder. The distributions should then be forecasted over the time period during which they are expected to occur, with a terminal value generally calculated after the fifth year. The discount rate and capitalization rate should be based on the estimated uncertainty (risk) associated with receiving the forecasted income stream in the future, as determined by the appraiser. The terminal value assigned should be equal to the capitalized value of the estimated future annual income stream from the sixth year on. The capitalization rate used should be equal to the previously determined discount rate less the expected long-term rate of inflation or other reasonable long-term dividend growth rate. The income stream, including the terminal value, is then present valued back to the valuation date at the indicated discount rate. Reserve this premium computation for later use in deriving the final value estimate.

3. Swing vote

Determine, through a careful examination of the stockholder list and a computation of percentage holdings of voting stock, if a classic swing vote situation exists. Determine if the swing vote is called upon to settle disputes or establish company policy on a regular and long-term basis. Determine if this would likely be the case if the swing vote position was owned by another party. Determine if any offers have been made or discussed relative to the swing vote position and their status should another owner take over the swing vote position. It should also be determined that there is a very strong likelihood that the swing vote can be sold. In the rare event that all of these conditions indicate the presence of a swing vote premium, it will be necessary to determine the value of the swing vote by computing the present value of the estimated terminal value. Reserve this premium computation for later use in deriving the final value estimate.

4. Superior management

This premium is best estimated by reflecting the efforts of management in the forecasts of future earnings and cash flow, or by adjusting or "normalizing" historical earnings and cash flow for application of ratios emanating from the public guideline comparable companies. In this way, the premium is incorporated into the value estimate derived in step one. Since this premium is already incorporated into fully marketable minority interest value, which is our starting point, no additional premium computation, outside of ascertaining that normalized and forecasted earnings and cash flow reflect the abilities of management, is necessary. The negative impacts of inferior management would similarly be accounted for in the projections.

5. Obvious near-term change in ownership

A buy-out of a company generally, but not always, signals the purchase of either all of the assets or all of the stock of the company. It is an unusual buyer that wants to be stuck with leftover minority shareholders. In this case, if a 100 percent sale of the company is imminent, the business appraiser should value the minority interest at its pro-rata portion of the prospective purchase price. In essence, what has occurred is that the minority interest has taken on the value of the control premium. Some states may recognize the right of a minority shareholder to be purchased on the same terms as the controlling shareholder when a sale is made. Therefore, an understanding of the prevailing legal environment surrounding cases dealing with the oppression of minority shareholders is critical. In the event the premium is applicable, the value is determined as a pro-rata portion of the anticipated selling price, if it is known. In the absence of sales price information, the control premium will have to be estimated. This writer would recommend using the control premium data contained in Mergerstat Review. This data has flaws, as indicated earlier, but is the best measure readily and reasonably available at this writing. The control premium is applied to the minority interest value determined in step 1 in order to compute the applicable control value. Since change of ownership is imminent, no discount for lack of marketability is required. In this situation, the value estimate is complete.

6. Minority interests involved in minority oppression cases

The business appraiser must carefully, with the guidance of the attorney, research the specific state case law surrounding "fair value" issues dealing with oppression of minority shareholders. In many states, minority shareholders are receiving more acknowledgement through the courts as to their rights as shareholders. Generally, with the assistance of the attorney, the appraiser can determine whether a control premium and/or other potential premiums/discounts are applicable to conform to the particular state's definition of "fair value." If a control premium is applicable, the control premium data contained in Mergerstat Review should be used to adjust the marketable minority interest value.

7. "White Knight" premiums

Some control shareholders who smugly deny their responsibility to minority shareholders by draining corporate assets through excessive compensation and other such devices may find life more difficult in the future. New and innovative techniques are being developed that are beyond the scope of this paper which may bring about significant future change in the area of minority oppression. As it currently stands, minority shareholders generally must turn to the courts for relief, a costly and time-consuming activity. The potential premium relative to oppression of minority shareholder litigation is covered under item 6 above.

Additional discounts search

8. Lack of capability to be a public company

The appraiser should ascertain whether the company has a reasonable opportunity to become a publicly traded company in terms of its operating characteristics. For purposes of this analysis, it is not relevant whether or not management has any intention of taking the company public. The sales and normalized net profit, as well as the operating ratios of the subject business, should be compared to the public guideline comparable companies. Also, the subject company's short- and long-term opportunities for growth should be analyzed and compared to the growth prospects of the guideline companies. The financial condition of the subject business as compared to the guideline companies should be reviewed to determine if the subject business has superior or inferior financial safety ratios. It should be determined whether the subject company has a proprietary product(s) that would generate public interest. The management capability of the company relative to the public guideline companies should be reviewed. If it is determined after this review that the subject business could go public, this discount should be disregarded. On the other hand, if it is determined that the subject business is not a reasonable candidate for being a public company, then a discount for the relative difference in acquisition multiples between public and private companies is appropriate. The discount is computed from the Mergerstat Review exhibit entitled "Median P/E Paid Public vs. Private." The discount is determined based on the percentage difference between the median P/E ratio paid in acquisitions of public companies vs. private companies. This writer would suggest that the appraiser use the indicated discount for the year in which the subject is being appraised, or the previous year statistic if the current year figure is not available.

9. Key man/woman discount

This discount applies to a subject business that is run essentially by one individual. If the appraiser determines that the key man/woman situation is present, the likelihood of the company being able to go public in the foreseeable future is probably nil. Therefore, application of the discount for lack of capability to be a public company will in all likelihood include the key man/woman discount, in the same way it includes the small company discount. If, on the other hand, the key man/woman discount is determined by the appraiser to be applicable to a company that could go public, then the magnitude of the discount is based upon the appraiser's analysis of the impact on the company's value were the key man/woman to be lost to the business, adjusted for the risk of that occurrence actually occurring. Such factors as age and health of the key person and estimates of potential earnings/cash flow declines assuming the loss of the person should be prime considerations.

10. Blockage discount

This discount applies to subject public companies and reflects the decline that would likely occur in share price if a substantial portion of the shares issued and outstanding were "dumped" on the market relative to normal trading volumes. In this instance, the appraiser will be required to simulate the public market to determine the applicable discount. An "opportunity cost" analysis may also be appropriate in this situation. In past cases dealing with estate and gift tax valuations, blockage discounts ranging between 10 to 20 percent have generally been accepted by the IRS.

11. Portfolio discount

This discount represents a reduction in value due to heavily diversified and unrelated business activities. This discount should be incorporated into the earnings/cash flow forecasts.

12. Cost of flotation discount

The writer is of the opinion that this discount should be incorporated into the earnings/cash flow forecasts as a reduction of future earnings, or in the alternative as a percentage reduction, only when the normal lack of marketability discount is not taken. This is done to reflect the estimated cost of taking the subject company public if it is determined that the subject business has the characteristics of a public company (in which case the discount for lack of capability to be a public company would not be applicable). However, this discount should only be taken in lieu of the normal lack of marketability discount when it is determined that the lack of marketability discount is not applicable (e.g., when a public offering of the company's stock is imminent).

13. Specialized restrictions

This is a broad category of discounts which could include anything from a restrictive buy/sell agreement to an agreement prohibiting the sale of the interest to anyone but a particular shareholder. Obviously, such restrictions must be examined and their impact on value estimated from the standpoint of determining a value amount that coincides with the imposed conditions. The business appraiser examining the restrictions, depending upon the complexities of the restrictions, should seek the counsel of an attorney who is familiar with the legal aspects of the restrictions in order to better estimate their impact on value. Generally, an absolute amount based upon a present value analysis of the value impact of the restrictions will be more definable and therefore more supportable, as opposed to a blanket percentage discount.

14. Other premiums/discounts

The above checklist is not meant to be an exhaustive itemization of every premium or discount available relative to a minority interest in a closely held business. It is merely a reminder of some of the more prevalent premiums/discounts that arise upon closer inspection of the subject business. The appraiser, after checking for the above mentioned "other" premiums/discounts, should carefully reflect on the subject business and look for other significant differences between the subject and the comparable public guideline companies, such as tax structure and/or special arrangements among the shareholders not mentioned above. Upon discovering any such additional premiums/discounts, the business appraiser then must apply both quantitative techniques and common sense to best estimate their respective value impact on the minority interest. Generally, a present value analysis with definable income, risk and time factors will yield better support for the premium/discount than some arbitrary percentage estimate subjectively derived using the caveat "professional judgement." Of course, percentage estimates are best used when there are reasonable empirical studies which validate their use, such as the various lack of marketability studies.

15. Summarization of discounts and/or premiums

It next must be determined how to apply the above indicated premiums/discounts and in which order. The premiums/discounts are either sequential, additive or mutually exclusive. The sequential, or multiplicative, premiums/discounts are those that occur in sequence, such as the lack of control discount, which is taken prior to the lack of marketability discount; therefore, these discounts are taken in steps multiplicatively. Additive premiums/discounts are those that occur at the same level and therefore are added to each other. Mutually exclusive premiums/discounts are those that stand on their own and do not impact each other on a sequential level. The following analysis would appear to best suit the above mentioned premiums/discounts:

a. The premiums for distributions and swing vote (#2 and #3) would appear best categorized as premiums prior to the lack of capability to be a public company and/or lack of marketability discounts; therefore, the present value effect of these premiums should be added to the marketable minority interest value determined in step #1. The lack of capability to be a public company and/or lack of marketability discounts would impact these premiums, since the question at hand is the value of the security that receives the benefits; therefore, these discounts should be applied (if applicable) after the premiums have been added.

b. The premium for superior management (#4) is best reflected in the valuation as an increase in forecasted earnings/cash flow. In the market approach, the market multiples will be applied to historical results which presumably already reflect the impact of superior management. This premium is therefore not displayed as a separate percentage amount which is added to the minority interest. Sequential discounts for lack of control, inability to be a public company, and/or lack of marketability can impact this premium.

c. The premium for anticipated near-term change of ownership (#5) will be determined based upon the relevant circumstances. If the change in ownership is imminent and it is clear that the minority interest will receive its pro-rata portion of the purchase price, then the control value of the business, as suggested by the known purchase price, or the minority interest value plus the <u>Mergerstat Review</u> control premium, in the event the purchase price is not known, will determine the final value.

d. The premium resulting from a minority oppression case (#6) will be the result of the legal interpretation of "fair value" in the particular state in which the case is to be tried. The appraiser, upon determination with the assistance of a lawyer of the legal precedent (if any), must then properly compute the indicated level of value: either control value/marketable, control value/non-marketable, minority interest value/marketable, or minority interest value/non-marketable.

e. "White Knight" (#7) premiums are relatively rare and can occur in almost any form. In order for the value to be appropriately considered fair market value, the special white knight benefit to the minority shareholder would need to be fully transferable to, and realizable by, a hypothetical buyer. The business appraiser should work closely with a knowledgeable attorney to determine the applicable standard of value.

f. The lack of capability to be a public company discount (#8) substantially fills in the gap between the lack of marketability discount, based primarily on studies of what a restricted public stock would trade for, and the overall lack of marketability discount for a company that could not "go public" in the first place. Therefore, the discount is applied sequentially. If it is determined that a company cannot reasonably be a public company, as previously outlined, then the discount as suggested by the previously described computation using Mergerstat Review is applied to the marketable minority interest level of value previously computed through normal valuation procedures as indicated in step #1. Subsequently, the lack of marketability discount is applied.

g. The key man/woman discount (#9) would appear best categorized as a sequential or multiplicative discount prior to the lack of capability to be a public company and/or lack of marketability discounts; therefore the present value impact or percentage discount estimate should be deducted from the marketable minority interest value determined in step #1. The lack of capability to be a public company and/or lack of marketability discounts would impact this discount, since the question at hand is the value of the security that is potentially impacted by the potential future loss of key management. Therefore, these discounts should be applied, if applicable, after this discount is deducted.

h. The blockage discount (#10) is, in essence, another element of marketability which would apply only to the valuation of public companies. Therefore, the blockage discount is only used in the valuation of marketable minority interests (public companies) and, as such, is sequentially applied to the marketable minority interest value based on the business appraiser's analysis as to the impact on marketable value if the entire subject block of stock was "dumped" on the market at the same time. The lack of marketability discount would not be applied.

i. The portfolio risk discount (#11) should be built directly into the earnings/cash flow forecast. In those cases where the business appraiser determines that the discount is not adequately provided for, it will be necessary for the appraiser to estimate a percentage reduction of the marketable minority interest value. The lack of capability to be a public company and/or lack of marketability discount(s) would then be applied to the resulting value, if applicable.

j. The cost of flotation should only be applied as a discount when the normal lack of marketability discount for a non-public company is not used. The use of both discounts would quite likely develop some double-counting of discounts. Typically, the normal lack of marketability discount will be used rather than the cost of flotation. However, in rare cases, the business appraiser may determine that the cost of flotation is a better measure in those cases where a public offering is imminent or a non-marketable controlling interest is being valued.

k. Special restrictions (#13) and other premiums/discounts (#14) should be examined on an individual basis relative to their impact on value. This is the "catch all" step for all other specialized premiums/discounts not discussed above which are endemic to the minority interest. The business appraiser should carefully determine how these factors impact value and at what point relative to control and/or marketability. The appraiser should then determine whether the resultant premiums/discounts are multiplicative, additive or mutually exclusive, and apply them accordingly.

1. Generally, the final discount to be applied is the lack of marketability discount. This discount can be taken from the previously mentioned "Rule 144" studies detailed in the literature review section, adjusted for company-specific factors, or alternatively can be based upon any current analysis the business appraiser believes can be reasonably defended.

16. Estimate of final value

The business appraiser can now estimate the final value of the minority interest in the closely held business, having considered and incorporated the various premiums/discounts referred to above.

The business appraiser who has considered the points brought out in the above checklists may gain an improved perspective of premiums/discounts beyond the typical premium for control and lack of control and lack of marketability discounts. The need for further financial research relative to developing improved information and appraisal methods dealing with all business valuation premiums and discounts is apparent from the review of existing literature and related data conducted by this writer.

V. Further Research

As can be seen from the contents of this paper, the determination of the value of a minority interest, even when just considering the conventional discounts for lack of control and lack of marketability, is far from a cut and dried matter. It has been pointed out that the valuation of a minority interest utilizes appraisal methods which are essentially based on comparative data, sometimes called a "pairing analysis," obtained from the public market. It has also been demonstrated that the primary criterion for consideration as a premium or discount to a minority interest is the presence of significant differences, endemic to the minority interest on a long-term basis, between the public comparatives and the subject business. A discussion of other premiums/discounts has been presented, along with a methodology for discovering the existence of these other premiums/discounts. Techniques have been suggested for determining the impact of the premiums/discounts on the minority interest value and for adjusting the minority interest value accordingly.

The valuation of minority interests is one of the most important and difficult tasks a business appraiser is called upon to complete and opine upon. Yet, it is interesting to note, in the available literature reviewed, that, for the most part, the emphasis has been placed on determining total enterprise value, with only a passing regard to discounts that may impact the enterprise value by sixty percent or more. Dr. Shannon Pratt's book, Valuing A Business, The Analysis And Appraisal Of Closely Held Companies, second edition, is a most significant exception to this observation, and is a valuable resource to any appraiser faced with a minority interest business valuation. Accordingly, the book has been quoted throughout this paper.

It is entirely obvious to this writer that a great deal of additional research is required to further the knowledge and quantification of the premiums/discounts impacting the value of minority interests. Much of the research required is, of necessity, intertwined with legal theory, as well as the dynamic legal area of oppression of minority shareholders and dissident shareholder litigation. It will be most interesting to see how future legal decisions impact minority interest valuation issues. However, based on existing circumstances, the following research projects would seem to be of benefit in assisting the business appraiser to better understand and apply minority interest premiums/discounts:

A. Research improved measures for the lack of control discount and the premium for control

It has been well demonstrated by a number of highly respected business appraisal authorities, as previously discussed in the literature review portion of this paper, that the so-called "premium for control" studies have some very serious logic flaws. The premium for control, which, in this writer's opinion, is best compiled in the Mergerstat Review, is regularly applied to values determined using market comparables, which are inherently minority interests, in order to determine total or enterprise value. The use of this premium contributes some potential inaccuracy to a major area of business appraisal work. Such inaccuracies are largely unavoidable at this point in time due to the lack of sanctioned alternative valuation research data on which to base the necessary adjustment. Alternative studies of discounts for lack of control and premiums for control should be undertaken and published. Such a study is currently being summarized and presented in a paper under draft by Mr. Richard Wright, CPA, a principal in the firm of Wright Houlihan & Associates Inc. of California, A Subsidiary of OTRA Securities Group, Inc. The writer does not yet have a copy of this draft; however, based on a telephonic discussion with Mr. Wright, it appears that he has accomplished a most important and significant new study in the area of minority interest discounts for lack of control and, hence, the reciprocal premium for control.

Mr. Wright surveyed in writing over 2,500 Certified Public Accountants, accountants, business appraisers, business brokers and investment bankers who had direct knowledge of transactions in which minority interests were involved in a buyout. In these particular buyouts, the lack of marketability discount was assumed not to be a factor, since knowledge of the forthcoming buyout was held by both the minority and control shareholders. Interestingly, the minority interests were separately identified in the buyouts and given a reduced offer. According to Mr. Wright, the average discount for lack of control experienced in these transactions was approximately 27 percent. This then suggests a control premium of 37 percent (.27/(1.00-.27)). It is interesting to note that this figure is similar to the popular control premium estimate of 35 percent used by many business appraisers. The completion, publication and acceptance of Mr. Wright's paper will give business appraisers and other concerned parties another valuable tool to support their lack of control discount/premium for control estimates.

B. Research improved measures for lack of marketability discounts

In the literature review portion of this paper, the various lack of marketability studies which give rise to the lack of marketability discount were discussed. The studies which appear to yield the most generally acceptable lack of marketability percentage estimates appear to be those which deal with the difference in market value brought about by the SEC Rule 144 restrictions imposed on legend stock as opposed to free-trading stock. These restrictions generally require that the stock be held for two years prior to being traded in the public market. As pointed out previously, this proxy for lack of marketability would logically seem to understate the lack of marketability discount for privately held minority interests in most cases, since having a security that can be freely traded in two years is generally superior to having a security for which there is no ready or available market that can be reasonably anticipated.

The writer believes that the studies prepared by John Emory and Willamette Management Associates, discussed in the literature review portion of this paper, which measure the difference in price between what investors paid for stock in a private company versus the price at which the company subsequently went public, may be a more accurate measure of lack of marketability than the Rule 144 studies. The Emory and Willamette studies indicate lack of marketability discounts ranging from 42 to 74 percent, while the restricted stock studies indicate an average discount of approximately 35 percent. Additional research should be undertaken to isolate more public offerings with pre-offering minority interest purchases to determine if, in fact, these studies are not a better measure of lack of marketability. It would be important, when possible, to take special note of such transactions that occurred in companies where minority shareholders did not anticipate the subsequent public offering. Also, it would be interesting to perform a survey of business appraisers, business brokers, investment bankers and Certified Public Accountants regarding known sales of closely held companies where minority shareholders had sold out prior to having knowledge of the sale, particularly where minority shareholders are separately identified, as in the previously mentioned Richard Wright study dealing with the lack of control discount.

C. Research other premiums and /or discounts that apply to minority interests

While some research exists relative to other premiums/discounts which effect minority interests, a great deal more could be accomplished. Simply identifying and developing definitions of other premiums/discounts encountered in minority interest valuations would be a good start. The best appraisal expert in valuing a minority interest in a closely held business may well be the appraiser who has had the somewhat dubious opportunity to own and sell, or attempt to sell, a minority interest in a closely held business. If these individuals could be found and surveyed within the fraternity of business appraisers, such as in the ranks of the American Society of Appraisers, a wealth of practical knowledge in identifying and valuing these premiums/discounts could emerge, providing a significant resource to the profession.

The key is that each business must be examined individually for its endemic characteristics that have an impact on minority interest value. Often these characteristics can be hidden in the intricacies of a joint venture agreement, shareholder agreement, buy/sell agreement, or other contract. In some cases, for example, the configuration of ownership held by other shareholders may give rise to a potential swing vote premium. The trained eye of a business appraiser who has substantial business experience in these matters is often necessary in order to successfully conduct the search required to find these sometimes hidden and elusive but extremely material premiums/discounts. The careful development of "checklists," designed to insure that the necessary factors are considered before arriving at a final value estimate for a minority interest, can help the business appraiser avoid a subsequent charge of negligence. Such a checklist has been offered in this paper, along with suggested methods for determining other premiums/discounts.

The writer of this paper has been careful to point out that there is no set amount of premium and/or discount which applies to every valuation of a minority interest. To the contrary, every minority interest valuation is a unique study which deserves, and requires, the careful analysis of the business appraiser as to the premiums/discounts that should be applied in that specific case. The studies of conventional premiums/discounts that have been provided are, for the most part, an extremely important contribution to and element of the business appraisal profession. However, the results of those studies should never be blindly and routinely applied to determine a minority interest value without careful consideration of their applicability and magnitude relative to the specific case the appraiser is working on. Also, the appraiser must have the necessary common sense and requisite professional knowledge and experience to search for and recognize, as well as value, other premiums/discounts that may apply to a particular case.

While some facets and elements of business valuation can be resolved by using logic formulas and computerized equations, business appraisal is not a candidate for the simple application of all-encompassing mathematical formulae or complete computerization. Often, a business appraisal will be used to summarize, in monetary terms, the results of an individual's entire working life, including the risk and stress that accompanies entrepreneurial business ownership. It is extremely important that the business appraiser recognize the absolute need for careful consideration and inclusion of all significant qualitative and quantitative factors, including all relevant premiums/discounts, that go into the final value estimate. There is no better evidence that the business appraisal profession is a combination of art and science than in the appraisal of a minority interest in a closely held business. The value estimate derived for such an interest can have immense ramifications; it deserves to be accomplished carefully and correctly.

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