INTRODUCTION TO DISCOUNTS & PREMIUMS

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Valuing a business consists of numerous steps including: collecting data, selecting the capitalization rate, reaching a conclusion about the "en-bloc" value of the firm, allocating this amount and preparing a valuation report supporting all the decisions. While none of them are easy, one causes more problems than almost any other: the allocation of the en-bloc value to the various securities involved. These are usually different classes of shares but may include convertible debt, options, warrants, partnership units, or other specific forms of ownership. For convenience, they are collectively referred to as "stocks".

Discounts & Premiums Reflect Relative Risk

The allocation of the en-bloc value to the various stocks is usually done by the applying selected discounts & premiums to a Base Value; their purpose is to adjust this amount so as to reflect the differences between the characteristics of the stocks being valued and those of the Base Value. In general, these relate to variations in risks, either to the entity or to the owners. Such differences may arise from factors such as: restricted voting rights, lack of control, limited marketability, contingent liabilities, etc.

Discounts decrease values and increase the expected rates of return; premiums have the opposite effect. When discounts & premiums are applied correctly, the resulting changes in the value should reflect the variations in expected rate of return that the investors require to compensate for the different investment characteristics.

Over the long term, investors have achieved total returns (dividends plus capital appreciation) on high quality listed shares of about 9% a year. Suppose an investor expects a 10% return on tradeable stocks and 15% on otherwise similar non-tradeable stocks. To achieve these results, the shares of a listed company, paying out all its earnings as a $1.00 annual dividend, would sell for $10.00 each, while the similar non-tradeable stock would sell at $6.67 a share. Therefore, the investor requires a 33.3% discount for lack of marketability.

Certain discounts, such as those for a keyman or environmental liabilities that apply to the entity as a whole, are often reflected in the Capitalization Rate and are not covered in this paper. The remainder of the discussion relates to those discounts & premiums that reflect characteristics of ownership. They fall into two main categories: Degree of Control and Lack of Marketability.

Discounts & Premiums Can Involve Big Money

In many business valuation cases, the amounts in dispute relating to which discounts or premiums are applicable is greater than the differences in the Base Values. A thorough understanding of the nature of each discount or premium, when it may or may not be applicable and how to quantify it, are essential parts of the tool kit of all business valuators.

For example, in Swope v. Siegel Robert Inc. Civil docket No.97-CV-2016 (U.S.D.C. E.D., Mo., June 23, 1999), one appraiser gave a value of $98.40 per share and the other $30.90 per share, a ratio of over 3 to 1. The Base Values were $72.90 and $46.20 respectively (1.6 to 1); the rest of the difference came from one appraiser applying a 35% control premium and nothing for lack of marketability, while the other ignored the control premium and claimed a 35% discount for lack of marketability. Interestingly, the Court declined to apply either the premium or the discount and concluded the value was $63.36 per share, very close to the mean of the Base Values.

In numerous cases, such as, Estate of Weiberg v. Commissioner, T.C. Memo 2000-51 (February 15, 2000), the parties agree on Fair Market Value. In this case it was $10,050,000 for an apartment building, the sole asset of a Limited Partnership. The disagreement centred on the magnitudes of the discounts for absence of control and lack of marketability relating to a 25.32% Limited Partnership interest.

The experts' positions and the Court's conclusions are shown below.

	Taxpayers	**IRS Expert**	**Mean**	**Tax Court**
Discounts (%)				
Absence of Control	43.0%	20.0%	31.5%	37.0%
Lack of Marketability	35.0%	15.0%	25.0%	20.0%
Combined	63.0%	32.0%	48.6%	49.6%
Value of Interest ($'000)				
No Discount	2,545.0	2,545.0	2,545.0	2,545.0
With Discount	942.9	1,730.6	1,307.5	1,282.7
Index	100.0	183.5	138.7	136.0

Guidelines from Mandelbaum

The most famous US case dealing solely with discounts is Bernard Mandelbaum et al v. Commissioner, T.C.Memo 199-255 (June 13, 1995). The parties agreed as to the values on a "freely traded minority interest" basis, so the only issue was the discount for lack of marketability.

The IRS expert used a 30% discount relying on third party studies of transactions of restricted (otherwise publicly traded) stocks. The taxpayer's expert reached a 75% discount using not only the restricted stock studies (with a mean of 35%), but also pre-IPO studies (a mean of 45%); in addition, he argued that a holding period of 10 to 20 years would be considered by a willing buyer and that holding period returns of 35% to 40% were required.

While the Judge did not accept either expert's report, and chose to perform his own analysis, his conclusion at 30% was the same as that of the IRS expert. Taking the restricted stock and pre-IPO studies as a starting point for determining the discount, the Judge looked at the nine factors listed below.

Financial Statement Analysis - This process is an integral part of any valuation. It is important to go beyond the usual trend and ratio analysis for the company as a whole and look at the profitability of the various lines of business, as required by FASB 131, including their return on assets. In this respect the article "Disclosing Disaggregated Information" in the September 2000 issue in the Journal of Accountancy can be helpful.

Company's Dividend Policy - While the Court in Mandelbaum did not agree, a low dividend payout ratio usually suggests a higher discount for lack of marketability. Even if earnings and cash flow are retained rather than paid out as dividends and the marginal rate of return on this re-invested capital is higher than WACC, the limited, or no, immediate return increases the uncertainty with the sale of minority stock in a closely held company as there is no real market.

The Nature of the Company, its History, its Position in the Industry, and its Economic Outlook - While all these factors should have been considered in the development of the Base Value, it is desirable to look at them again with respect to marketability as long as no double accounting occurs. Selling a minority interest in a strong, closely held company is difficult; for a "weak sister" it is nearly impossible.

Company's Management - In Mandelbaum, the Court quoted "the strong management team' as a factor favouring a below- average marketability discount. The benefits of superior management are reflected in the financial performance of the company, which determines the Base Value. While this factor would eliminate the need for a "keyman" discount, its benefit to the liquidity of the shareholdings will be if management's ability makes the business a target for a takeover.

Amount of Control in Transferred Shares - The differences between minority and control rights are an important factor in establishing the discount or premium from the Base Value relating to the size of the holding. Many practitioners believe that discounts for lack of marketability for minority stock should rise as the amount of control decreases.

Restrictions on Transferability of Stock - This is one of the most important factors in establishing the appropriate discount for lack of marketability. Shareholders' agreements are normally enforceable legal documents and any "right of first refusal" in them tends to affect the ability to sell. Normally when an investor offers to purchase stock, he wishes to obtain it rather than have the "prize" acquired by another for whom he has been a stalking horse.

The Court in Mandelbaum did not accept the position of the taxpayers' expert that a right of first refusal severely restricted the marketability of the stock; this was mainly on the grounds that shareholders' agreements did not contain any pricing or valuation formula. This conclusion suggests that a buy-sell agreement with a formula or fixed price would be given more weight.

Holding Period for Stock - This is probably the second most important factor as market risks tend to increase and hence marketability decrease as the holding period gets longer. Among valuators there is considerable debate about using estimated holding periods to establish discounts for lack of marketability. It is sometimes argued that unless substantial dividends are being paid, the only way a minority stockholder can receive a return is to wait until the controlling persons decide to sell the whole company or buy him out. This makes a minority position a gamble on if and when the firm will be sold.

Company's Redemption Policy - The ability of a company to redeem its own stock is a possible source of liquidity to minority shareholders. However, unless there has been a pattern of such redemptions, relying on this source is similar to a gamble on the sale of the business.

Costs Associated with Making a Public Offering - The Court opined that an above average to average discount would be appropriate if the buyer bore the costs of registering the stock. The discount would be less if he had piggy-back rights. This factor appears to relate to control value in a limited number of cases as few closely held companies are IPO candidates and a minority stockholder does not have any power to force a company to go public.

Level of Value

Valuation theory and practice has established a number of levels of value of which the four are in general use are set out below. The discount for degree of control is usually considered before that for lack of marketability. Although they are separate issues, the extent of control, or lack of it, has a bearing on both the size of the discount for lack of marketability and the procedures that are appropriate to quantify it.

Level of Value	Amount Per Share	Reason
Strategic (Synergistic or Investment)	$12.00	20% strategic acquisition premium
Control	$10.00	42.9% control premium
Marketable Minority	$7.00	30% minority interest discount on $10.00
Non-Marketable Minority	$4.20	40% discount for lack of liquidity on $7.00

The Base Value is usually either Control or Marketable Minority (sometimes called "publicly traded equivalent value", "as if freely traded minority interest value", or "stock market value"). It is generally not practical to use a non-marketable minority value as a starting point as there are no databases of such transactions, nor other empirical data at that level. Strategic Value forms the basis of many M & A transactions.

In general, the discount for lack of marketability is applicable at the minority but not the controlling interest level. A marketable minority interest in a traded security can be sold for cash within a few days. Some "quoted" stocks are so "thin" that a transaction of any size will move the market, but even these can be relatively quickly converted into cash.

No such liquidity is available for controlling interests of either quoted or private companies, although in many industries investment bankers actively participate in a market for "change of control". Therefore, there are no bench marks against which to classify a controlling interest as marketable or non-marketable. Some commentators consider the concept of "control, marketable" to be an oxymoron; others find it a useful theoretical concept, similar to "imaginary numbers".

Extent of Control and Marketability

The benefits of control cover a whole spectrum. Some of the important levels are shown below.

Voting	**Benefits**
100%	Full access to Cash Flow
80%	Ability to consolidate tax returns
66.7%	Ability to merge in 17 supermajority States
50% + 1	Right to elect directors and merge in most States
50%	Unless other 50% holder, right to elect directors
33.4%	Ability to block supermajority transactions
20%	Ability to include share of earnings
10%	Usually gives right to nominate a director and call shareholders' meetings

In a similar manner there is a wide spectrum of marketability, ranging from active public trading (instant sale with cash in three business days) to tight restrictions on any attempt to sell. As previously discussed, investors cherish liquidity and abhor the lack of it; therefore, when a stock is not readily marketable any sale will take place at a significant discount from that of otherwise comparable publicly traded stock.

Effect of Valuation Approach on Level of Value

Each of the three standard valuation approaches result in different levels of Base Value. The Income Approach can produce either a Marketable Minority or Control Value depending on whether the income capitalized (or the cash flow discounted) represents a minority basis (generally business-as-usual), or has been adjusted to reflect the policies of a majority owner.

Most capitalization or discount rates used in the Income Approach are derived using data from public securities markets and involve the implicit assumption of full marketability. This is so whether the Capital Asset Pricing Model, the Build-up Approach, or the DCF method is used to develop the rate. Therefore, when minority interest figures are used, the result is a Marketable Minority Value. Control income or cash flows generate a Control Value; in this event a small additional premium may be applicable for the ability to exercise the "prerogatives of control".

As there are no benchmarks for the marketability of controlling interests, it is a matter of judgment as to what discount, if any, is warranted for lack of marketability. Such amounts are usually much smaller than those applicable to minority interests.

The Market Approach gives a Marketable Minority Value if the guideline publicly traded company method is used as such stocks are actively traded minority interests. If the Merger & Acquisition transaction approach is adopted, the result is a Control Value.

Both Asset Based approaches, adjusted net assets or excess earnings, assume control over the resources involved and result in a Control Value. It is essential to recognize that ownership of stock is totally independent and not equivalent to a proportionate share of the underlying assets to which title is held by the corporation.

Conclusion

This paper is intended as an introduction to "shareholder level" discounts & premiums that are specifically the result of ownership characteristics; it also covers the Base Values to which they are applied. Reference has been made to several prominent Tax Court cases relating to discounts & premiums and to "restricted stock" and "pre-IPO" studies that provide the empirical underpinning with respect to the discounts for lack of liquidity.

One of the major contributors to pre-IPO studies is John D. Emory. At the end of his most recent pre-IPO study, on dot.com companies, (Business Valuation Review, September 2000) he stated:

The final question to be answered is that if the kinds of discounts found in this study occur where marketability is probable, but not a certainty, how much greater should discounts be for stock that has no marketability, little if any chance of ever becoming marketable, and is in a neutral to unpromising situation?

In summary, the size of the discount for lack of marketability depends upon the individual situation. While there is not 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 marketplace emphasizes this point.