CHAPTER SEVEN

VALUATION DISCOUNTS AND PREMIUMS

"Democracy is the recurrent suspicion that more than half of the people are right more than half of the time."
E. B. White (1899–1985)
Columnist, New Yorker, July 3, 1944
Author: Stuart Little; Charlotte's Web

I. OVERVIEW

Determination of the value of an equity interest requires the valuation practitioner to carefully scrutinize the specific investment characteristics inherent in the specific equity instrument. Knowledge of these investment characteristics is critical for a proper risk assessment and, thereby, producing a conclusion of value that addresses these risks.

In addition to understanding the investment characteristics of a specific equity instrument, it is equally important that the valuation practitioner understand the mechanics of the many commonly used valuation methodologies under the three broad valuation approaches (income, market and asset-based). Depending upon valuator inputs into the mathematical models under the various methodologies, each has the ability to produce a valuation conclusion that differs in relation to the specific equity interest.

The difference arises from the varying investment characteristics contained within the methodologies. If these investment characteristics do not parallel those of the equity interest under valuation, it may be necessary to modify the conclusion of value reached there under.

Most often, these modifications are reflected as discounts and/or premiums to the conclusions generated under various valuation methods. The two investment characteristics most often addressed in this manner are those related to control, or lack thereof, and those related to a lack of liquidity or marketability.

It is important to note that, by themselves, discounts and premiums do not exist. That is to say, these items are not traded on an open market, nor is there discernable direct evidence as to the proper level of discount or premium to use in any specific instance.

In effect, "discounts and premiums" are the "fallout" of using "less-than-perfect" market data to measure value.[1] The common acceptance of these methodologies necessitates that the business valuator utilize discounts and premiums to modify the conclusions reached in order to accommodate the characteristics of the equity interest under valuation.

There is often no greater dollar adjustment than that attributable to the business valuator's final determination of discounts and premiums. As a simple example, a pre-discount value conclusion of

[1] Michael Bolotsky, p. xxi, foreword – *Business Valuation Discounts and Premiums*, Shannon Pratt, 2001

$1,000,000 would be reduced by $350,000, should the business valuator select a total discount of 35 percent.

Such significant numbers are not uncommon, resulting in an ever-growing attempt by the Internal Revenue Service, as well as various state inheritance tax authorities to challenge the validity of the valuator's conclusions. The Internal Revenue Service primary guidance is based on a foundation of language contained in Revenue Ruling 59-60.

Revenue Ruling 59-60, 1959-1 Cumulative Bulletin 237, defines fair market value as:

> *"The price at which the subject equity ownership interest would change hands between a willing buyer and a willing seller when the former is under no compulsion to buy and the latter is under no compulsion to sell and both parties having reasonable knowledge of relevant facts."*

Court decisions frequently state that, in addition to a hypothetical buyer and seller being "willing," they must also be "able" to trade and be well informed about the property and the market for such property.

Practice Pointers

Revenue Ruling 59- 60 sets forth the premise that valuation of closely held business interests is not an exact science and reasons that sound valuations result from:

Consideration of all relevant facts
Use of common sense
Exercise of informed professional judgment
Application of reasoned assessment

A. OTHER DISCOUNTS

Other value modifications beyond those considering control and marketability often include:

1. Market absorption and blockage discounts
2. Key person/thin management discounts
3. Investment company discount
4. Information access and reliability discount
5. Lack of diversification discount
6. Non-homogenous assets discount
7. Restrictive agreement discount
8. Small company risk discount
9. Specific company risk discount
10. Built-in gains tax discount
11. Liquidation costs discount

It is important to note that valuation professionals often compensate for value detriment attributable to many of these items in the development of their discount/capitalization rates. As such, it is incumbent upon the business valuator to avoid a "double effect" of these characteristics in his or her valuation conclusion.

The key for successfully utilizing discounts and/or premiums is to truly understand the ownership characteristics and attributes of the subject equity interest and the third party supporting base data.

B. DISCOUNTS AND PREMIUMS/ FUNDAMENTAL CONCEPTS

The fair market value of a business interest is determined by transactions between buyers and sellers. Ultimate estimation of fair market value under commonly accepted valuation approaches and methodologies requires the business valuator to identify and consider those ownership interest characteristics that are specific to the interest being valued.

Investors are risk averse. Ownership interest attributes that increase the risk of holding the investment will inherently depress the value of the ownership interest. Likewise, those specific characteristics that serve to diminish investment risk will increase that ownership interest's value.

The propriety of any discount or premium is undeterminable until the base to which the adjustments are applied is clearly defined. Utilization of discounts and premiums cannot produce a correct result if applied to an inappropriate base conclusion of value.

No "prescribed" levels or ranges of discounts or premiums exist from which the valuator can ascertain the proper adjustments for a specific case. Moreover, the valuator cannot expect to use a common set of computations or formulas to determine the appropriate adjustments in jobs with differing facts and circumstances.

Though not totally mutually exclusive concepts, the discount for a lack of ownership control (minority) and the discount for lack of marketability are generally held to be separate and distinct. While it is true that some crossover exists whereby a non-controlling interest is less marketable than a controlling interest by virtue of the non-control feature, sufficient third party information exists to support separation of the two. Otherwise, insurmountable difficulties arise in determining a proper level of combined discount.

Practice pointer

In those instances where the business valuator deems it appropriate to apply both a discount for lack of ownership control and a discount for the lack of marketability, the application of the discounts is multiplicative, not additive.

The discount for lack of ownership control is generally applied first, principally due to the common understanding that both control and minority ownership interests may be subject to a discount for a lack of marketability. Moreover, the only empirical data for lack of marketability is available at the minority interest level, further supporting the concept of applying the minority discount first.

Due to specific characteristics requiring the application of discounts for both a lack of control and a lack of marketability, minority ownership interests in privately held businesses may be worth much less than their proportionate share of the overall business value. In other words, the sum of the parts may not add up to the whole.

C. GENERAL FACTORS THAT INFLUENCE THE APPLICABILITY AND SIZE OF THE DISCOUNT OR PREMIUM

1. Purpose of the valuation – divorce, estate, ESOP, etc.
2. Attendant rights and characteristics of specific ownership interest being valued
3. Transfer restrictions or put option
4. Ownership structure of the entity being valued – voting vs. nonvoting shares
5. Quality of management team – thin management, strained family relationships
6. Size of company – small "Mom and Pop" vs. large multifaceted business
7. Size of block of stock being valued – swing vote consideration
8. Propriety of management salaries, perquisites, etc. – excess compensation and/or benefits
9. The control of a minority shareholder
10. Stock-related issues – dividend policy and history, stock redemption policies, restrictions on stock sales, right of first refusal, etc.
11. Financial condition of the subject company and volatility of earnings – bank restrictions on dividends, etc.
12. Federal and state regulatory restrictions – Treasury regulations regarding estates/gifts; Department of Labor regarding ESOPs
13. State corporation statutes – New York/Illinois supermajority
14. Market desirability – struggling vs. thriving industry
15. Potential synergies, if any, with potential buyer(s)
16. Investment time horizon
17. Pass-through entities

D. LEVELS OF VALUE

The business valuation community generally assumes four basic levels of value:

1. Synergistic value (assumes a different standard of value)
2. Controlling interest value
3. Marketable minority interest value
4. Non-marketable minority interest value

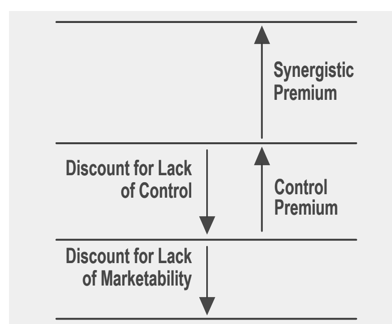
The graphic below illustrates the various levels of value in terms of ownership characteristics.

Control, Marketable Value
(on an investment or synergistic value basis)

Control, Marketable Value
(on a FMV basis)

Minority, Marketable Value

Minority, Non-marketable Value



Note the highest level of value is on an investment or synergistic value basis and not fair market value.

A controlling interest in a privately held business may also be subject to a discount for lack of marketability, but usually not at the same level as a minority or non-controlling interest.

E. CALCULATION OF TOTAL DISCOUNT APPLICABLE TO A SUBJECT INTEREST

The following example is provided to illustrate the multiplicative calculation of an overall discount applicable to a minority interest in a privately held business enterprise.

Example:

Gross value of entity		$1,000
X Subject percentage		10%
10% Interest (pre discounts)		$100
Less: Discount for lack of control (30%)		(30)
Minority, marketable value		70
Less: Discount for lack of marketability (20%)		(14)
Minority, non-marketable value		$56
Calculation of overall discount:	=	1 – [(1-.30) x (1-.20)]
	=	1 – [(.70) x (.80)]
	=	1 – .56
	=	.44
	Overall discount:	**44%**

Note that the total discount in the example is 44 percent, not 50 percent (the sum of the 30 percent discount for lack of control and the 20 percent discount for lack of marketability). Although the Courts have erred in this matter of discount application, it is an accepted business valuation practice to apply the discounts sequentially.

Discounts and premiums can play an important role in the determination of value in a privately held business interest. The type and level of discount and/or premium can depend on numerous factors as listed in C above.

Almost universally accepted is the concept of four levels of value from which adjustments can be made via discounts and premiums to attain the correct conclusion, given the specific characteristics of the ownership interest under valuation.

II. CONTROL PREMIUM AND MINORITY INTEREST BASICS

Of all the intrinsic characteristics related to an equity interest, arguably none may be more important than the element of control. Widely accepted theory within the business valuation community holds that an investment in a privately held company is worth the present value of all of the future benefits inuring to the holder of that equity interest. Clearly, then, if the equity holder has a control position, he or she can accelerate the receipt of those future benefits and via management and operational initiatives, take direct steps to enhance the future benefits, or at least the probability that they will be generated.

On the other hand, a minority or non-controlling position in a privately held company is generally held at the great risk of being subject to the judgment, ethics and management skills of the controlling shareholder(s). Depending on a number of items, the impairment of value can be significant in this circumstance.

It is not really proper to use the term minority discount in all cases. A minority discount is a discount for lack of control applicable to a minority interest. A discount for lack of control is an amount or percentage deducted from the subject pro rata share value of 100 percent of an equity interest to compensate for the lack of any or all powers afforded a control position in the subject entity.

Control premiums and discounts for lack of control, sometimes referred to collectively as "control adjustments," have enjoyed wide acceptance in the federal tax system. The estate and gift tax regulations on valuing publicly traded stock recognize a basic inequality between controlling and non-controlling interests, noting in Treasury regulation sections 20.2031-2(e) and 25.2512-2(e).

> *"If the block of stock to be valued represents a controlling interest, either actual or effective, in a going business, the price at which other lots change hands may have little relation to its true value."*

Regulation sections 20.2031-2(f) and 25.2512-2(f) also list as a factor in valuing closely held stock "the degree of control of the business represented by the block of stock to be valued." These provisions prompt swing vote consideration as well.

The primary IRS ruling on valuation of closely held shares, Revenue Ruling 59-60, clarifies which way this factor cuts. The ruling states:

> *"Although it is true that a minority interest in an unlisted corporation's stock is more difficult to sell than a similar block of listed stock, it is equally true that control of a corporation, either actual or in effect, representing as it does an added element of value, may justify a higher value for a specific block of stock."*

Court decisions and rulings employing minority discounts and control premiums have become the standard over the years, applying these principles not only to stocks, but other types of property as well. The business valuation community in "non-estate/gift tax" venues also broadly accepts the application of these discounts.

A. ADVANTAGES OF MAINTAINING A CONTROL POSITION IN A PRIVATELY HELD ENTERPRISE

1. Setting company policy and influencing the operations of the business
2. Appointing management and determining management compensation and benefits
3. Power to acquire and dispose of business assets
4. Power to select vendors and suppliers
5. Facilitating business reorganizations:
    a. Business acquisitions
    b. Business dispositions
    c. Liquidation
    d. Recapitalization
    e. Initial public offering
6. Sell or acquire treasury shares
7. Power to dictate dividend policy and payments
8. Power to revise company organization documents
9. Ability to establish or revise buy/sell documents
10. Power to block any of the above

B. CONSIDERATION OF OWNERSHIP CHARACTERISTICS IN ASSESSING CONTROL

1. Representation on the Board of Directors

a) Direct representation
b) Indirect via cumulative voting shares

2. Contractual Restrictions

a) Loan agreements with restrictive covenants

3. Other Agreements Including Organization Documents

a) Shareholder agreements setting shareholder responsibilities such as buy/sell agreements
b) Employment agreements
c) Voting Trusts

4. Industry Regulations

a) Limiting many advantages of control

5. State Corporate Law and Statutes

a) Simple majority vs. super majority

6. Voting Rights

a) Related to control – the greater the shareholder's control, the more significant the voting rights become in the valuator's determination of value

7. Financial Condition of Business

a) Potentially severe control limitations can arise in a business suffering from financial difficulties

8. Size of the Block of Stock Being Valued

a) Noted in Revenue Ruling 59-60 as relevant

9. Concentration of Ownership

a) A two percent interest in conjunction with two 49 percent interests would invoke a lower minority discount than where the remaining 98 percent was held by 10 equal equity owners or a single shareholder.

C. THEORETICAL ARGUMENTS *FOR* CONTROL PREMIUMS[2]

1. Performance Improvement Opportunity

A perception by "control buyers" that they can run the company better and increase returns via operational improvements or synergistic benefits. Caution: synergistic benefits may pertain to other than "hypothetical buyer" and thus may alter standard of value.

2. Investment Protection Enhancement

Control is assumed to carry with it the ability to quickly act to modify operational decisions, thereby providing the interest holder with added investment protection not present in a non-control situation.

3. Ability to Self-Deal

Control is assumed to carry with it the ability to withdraw excess financial benefits on terms favorable to the controlling equity holders. Examples include asset and opportunity diversion, as well as receipts of excess cash flow related to compensation, related party rentals, etc.

4. Greater Information Access

A perception exists that controlling shareholders hold a higher level of access to company financial and operational information than that available to non-control shareholders.

5. Psychological and Intangible Benefits

Totally non-financial in nature, there is often thought to be a non-monetary benefit to holding the power of a controlling interest in a company. While difficult to quantify, there is clearly a buyer group in the entire universe of buyers envisioned by Revenue Ruling 59-60 that is willing to pay a premium for this privilege.

D. THEORETICAL ARGUMENTS *AGAINST* CONTROL PREMIUMS

1. Performance Improvement Opportunity

Fair market value assumes a hypothetical buyer from an entire universe of buyers and not an actual buyer. The question of assuming increased profitability is totally judgmental (what of the situation where increased profitability is totally judgmental? what of the situation where the company already appears to be at an optimal performance level?). Certain court cases have rejected this argument as a reason for adding a control premium[3]. And, if this motive does indeed exist, would increased profitability not proportionally affect the value of all interests?

[2] Federal Tax Valuation, John A Bogdanski, Warren, Gorman & Lamont, pp. 4-36.
[3] Ahmanson Found. vs. United States, supra note 161, 674 F2d at 770 (rejecting management replacement rationale in a particular case on grounds that "companies were already very well managed"). Also, Continental Water Co. v. U.S., 49 AFTR2d 1070, 1078 (Ct. Cl. Tr. Div).

2. Investment Protection Enhancement

Again, fair market value assumes a hypothetical buyer from an entire universe of buyers and not an actual buyer. Investment protection enhancement differs somewhat from performance improvement opportunity in that the former acts as a hedge against unfavorable occurrences. The latter embraces an attitude of increasing the benefit stream. Note, however, the necessary operational moves to accomplish this task enhance non-controlling share value, as well.

3. Ability to Self-Deal

The counter agreement to the use of a control premium for self-dealing is the state corporation statutes in the U.S., whereby the control shareholders have a fiduciary responsibility to the non-control shareholders. As such, unfair transactions can be mediated by intervention of the courts, sometimes by having the minority shares redeemed at fair value.

4. Greater Information Access

Securities laws prevent trading on insider information. Additionally, many states prohibit controlling shareholders from trading on insider information. Lastly, state statutes protecting non-control shareholders can play a role in equalizing information access.

5. Psychological and Intangible Benefits

When assuming a hypothetical buyer, it is again difficult to place a quantifiable premium on the base value that would be generally applicable to the entire universe of buyers.

E. METHODOLOGIES FOR VALUING MINORITY INTERESTS

1. **Horizontal** – computed by comparison with other minority interest transactions
2. **Top Down** – control value less applicable discounts
3. **Bottom Up** – start with minority value and add premiums for control interest valuations

Most practitioners prefer horizontal and/or top down; however, all approaches are viable.

F. THE RANGE OF CONTROL

There are other levels of control/non-control positions in a privately-held enterprise; this chart is intended to provide some examples:

CONTROLLING
100 % Equity Ownership Position
Control Interest with Liquidating Control
51% Operating Control
Two equity holders, each with 50% interest
Minority with largest block of equity interest
Minority with "swing vote" attributes
Minority with "cumulative voting" rights
Pure minority interest – no control features
LACK OF CONTROL

G. SOURCES OF EMPIRICAL DATA ON CONTROL/MINORITY INTERESTS

1. *Mergerstat® Review* – published annually by Applied Financial Information LP (formerly Houlihan, Lokey, Howard & Zukin).

a) Extensive analysis of tender offers and completed transactions by industry
b) Published yearly with historical data included
c) Premium paid over market is based on the seller's closing market price five business days prior to the initial announcement of sale. Negative premiums are excluded
d) May understate the control premiums and implied minority interest discounts because the stock of the target's acquisition may begin to rise more than five days prior to the public announcement
e) Industry-wide average for 2002 – 59.7 percent
f) Industry-wide median for 2002 – 34.4 percent
g) Implied minority discount: 1 – [1/(1+Median premium paid)]

2. Houlihan, Lokey, Howard and Zukin, Inc. (HLHZ) Control Premium Study

a) Issued quarterly
b) Data from 1986
c) Study was undertaken to:

   (1) Quantify the difference, if any, in the premiums paid by synergistic buyers and those paid by other types of buyers
   (2) Understand the composition of transactions, by type of buyer, in the Control Premium Study

d) The study determined that synergistic buyers generally pay similar or lower premiums than non-synergistic and other types of buyers
e) Those performing the study stated that they found no evidence that an valuator needs to adjust the beta to result in a non-synergistic control premium
f) Attempts to select a price that is unaffected by pre-announcement speculation about the proposed transaction

3. SEC Studies

These can be found in "The Effects of Dual-Class Recapitalizations on the Wealth of Shareholders" Office of the Chief Economist - SEC, June 1987, pp. 1-34.

a) Studies compared the prices of two identical classes of publicly traded common securities in the same company except one had voting privileges and the other did not
b) Mean average discounts – five to eight percent
c) For small minority interests, the value of voting rights is limited because of their inability to influence the prerogatives of control

4. Partnership Profiles

a) For a valuation of an entity such as a family limited partnership owning marketable securities, Partnership Profiles publishes two reports on closed-end funds:

(1) Stock Closed-End Fund report – covers 43 closed end equity stock funds
(2) Fixed Income Closed-End Fund Report – covers 30 closed-end bond funds holding municipal, U.S. government, and corporate debt securities
(3) Historical discount information is included on a monthly basis from 2001 to the present

b) For a valuation of an entity such as a family limited partnership owning real estate, Partnership Profiles publishes a database of over 300 publicly-held limited partnerships that own real estate and real estate mortgages and trade on the secondary market

5. Morningstar Principia

a) Provides a database on a monthly or quarterly subscription basis containing information on closed-end funds that own domestic and international stocks and government, corporate, and municipal bonds
b) Provides discounts used in the Price to Net Asset Value (P/NAV) method under the Market Approach in valuing non-controlling interests

H. QUANTIFICATION OF CONTROL PREMIUMS & MINORITY INTEREST DISCOUNTS

Primary base observations are extrapolated from the sale of controlling interests in freely traded public companies. Numerous sales of this type occur annually with most transaction prices including a premium over the market price at which the stock previously traded.

1. The "premiums" associated with these controlling interest purchases are compiled and published by several services
2. Most notable *is Mergerstat® Review*

I. CALCULATING THE PREMIUM

Control premiums are only applicable in valuations where you are starting with lack of control value and you are trying to arrive at control value. In many valuations, control adjustments are made to the benefit stream. In those cases, to add a control premium would be inappropriate.

The most common practice is to observe the premiums in the public securities markets. The primary source of base information market evidence is *Mergerstat® Review*. As described in the 2006 publication, the Mergerstat database, published by Applied Financial Information L.P.

> *"…includes formal transfers of ownership of at least 5% of a company's equity and where at least one of the parties is a U.S. entity. When a transaction involves less than 100% of an entity, the percentage bought is stated after the seller's name. When REM accompanies this percentage, the buyer already owns a portion of the selling entity and this transaction will lead to 100% ownership. Data is collected for publicly traded, privately owned and foreign companies."*

The primary issue encompassed in utilizing the Mergerstat data is the composition of the premium and the lack of clarity in the conclusions. Mergerstat generally develops the data by comparing prices at which publicly traded companies are acquired with pre-acquisition announcement prices of the same stock. *Mergerstat Review* notes that the calculations are based on the seller's closing market price five business days before the initial announcement.

An example of the basis for the *Mergerstat Review* calculations of observed control premiums is as follows:

Widget Company Computation of Control Premium

Date	*Price per Share*	Days before Transaction
Day 1 –Monday	$21.50	*6*
Day 2 – Tuesday	$21.25	*5*
Day 3 – Wednesday	$23.25	*4*
Day 4 – Thursday	$23.75	*3*
Day 5 – Friday	$24.00	*2*
Day 9 – Tuesday	$28.00	*Date of Announcement*

Observed Premium (28.00 – 21.25)/21.25 = 31.8%
(Announcement to sixth prior day)

Historical Premium Compilation

A historical analysis of the control premiums and the corresponding minority discounts calculated in this study are as follows:

Year of Buyout	Number of Transactions	Average Premium Paid over Market (%)	Median Premium Paid over Market (%)	Implied Minority Interest Discount (%)
1980	169	49.9	44.6	30.8
1981	166	48.0	41.9	29.5
1982	176	47.4	43.5	30.3
1983	168	37.7	34.0	25.4
1984	199	37.9	34.4	25.6
1985	331	37.1	27.7	21.7
1986	333	38.2	29.9	23.0
1987	237	38.3	30.8	23.5
1988	410	41.9	30.9	23.6
1989	303	41.0	29.0	22.5
1990	175	42.0	32.0	24.2
1991	137	35.1	29.4	22.7
1992	142	41.0	34.7	25.8
1993	173	38.7	33.0	24.8
1994	260	41.9	35.0	25.9
1995	324	44.7	29.2	22.6
1996	381	36.6	27.3	21.5
1997	487	35.7	27.5	21.6
1998	512	40.7	30.1	23.1
1999	723	43.3	34.6	25.7
2000	574	49.2	41.1	29.1
2001	439	57.2	40.5	28.8
2002	326	59.7	34.4	25.6

Source: Mergerstat® Review 2003. (Los Angeles: Applied Financial Information L.P.)

Computation of Implied Minority Discount from *Mergerstat Review* Data Formula:

x = 1 – [1/ (1 + y)]
x = implied minority discount
y = median premium paid

Application:

x = 1 – [1/ (1 + .344)]
x = 1 - (1/1.344)
x = 1 - .7440
x = .256

J. OBSERVATIONS AND ISSUES

Upon analysis of the *Mergerstat Review* data, it can be observed:

1. The annual median control premium observations conducted over this historical period range from 27.3 to 44.6 percent
2. Mean 35.1 to 59.7 percent
3. The dispersion of the premiums is broad with 87 of 326 transactions in 2002 having a premium under 20 percent to 42 of the base transactions having a premium over 100 percent

However, several issues must be addressed in regard to the data:

1. Negative premiums are excluded from the median and mean calculations, thereby inflating the control premium data.
2. Data for the computations is extrapolated from the reported financial information and not the adjusted financial information both parties might consider.
3. The observation methodology does not provide for quantification of buyer differences—specific transactions result from specific buyers with alternating motives. As such, transactions with synergistic buyers are interspersed with transactions with financial buyers.

The conclusion that the valuation analyst must draw from the above noted issues is that utilization of the scheduled *Mergerstat Review* median and/or mean premiums for control without adjustment are likely overstating control premiums in many valuation engagements.

Conversely, as many valuation professionals develop the implied minority ownership interest discount from the observed premiums, these discounts are also often overstated, underestimating the value of minority ownership interests.

K. QUANTIFY THE OVERSTATEMENT

Dealing with the overstatement is difficult at best, given the limitations related to information gathered for *Mergerstat Review*. In 1996, Z. Christopher Mercer attempted to emphasize the overstatement of the reported mean and median control premiums by arbitrarily modifying the data inputs into the *Mergerstat Review* calculations.

In his paper presented to the Joint CICBV/ASA conference in Toronto, Mercer recalculated the control premiums (and the implied minority discount) under three alternatives:[4]

1. First, he excluded, as *Mergerstat Review* does, transactions with control premiums less than zero; but he also excluded those with control premiums over 150 percent.
2. Next, he included negative control premiums (less than zero percent) and again excluded those transactions with control premiums over 150 percent.
3. Lastly, he included negative control premiums and excluded those transactions with control premiums over 100 percent.

[4] Mercer, Z. Christopher. "A Brief Review of Control Premiums and Minority Interest Discounts." The Journal of Business Valuation (Proceedings of the 12th Biennial Business Valuation Conference of The Canadian Institute of Chartered Business Valuators). Toronto: The Canadian Institute of Chartered Business Valuators, 1997, pp. 365-87.

An example of just how influential the modifications are on the listed premiums can be found in the following chart (excerpted from Mercer's 1996 paper):

	Mergerstat Review **Historical Control Premiums**		**Implied Minority Interest Discounts**	
	Averages	**Median**	**Averages**	**Median**
As reported from 1995*	44.7%	29.2%	31.0%	23.0%
Exclude < 0% and > 150%	35.3%	28.9%	26.0%	22.0%
Exclude > 150%; Include < 0%	28.3%	24.9%	22.0%	20.0%
Exclude > 100%; Include < 0%	24.2%	24.0%	19.0%	19.0%

* *Mergerstat Review* excluded two premiums exceeding 100 percent in the reported averages. Also, the reported figures exclude 37 transactions with calculated premiums of less than or equal to zero,

Simply including the negative premiums for the fourth quarter 2000 transactions reflect a decrease in the average premium from 44.7 to 31.0 percent. Therefore, it is critical that the business valuator consider the implications of the data modifications in general and the exclusion of negative control premiums in particular.

In the January 1999 issue of Shannon Pratt's "Business Valuation Update," Dr. Pratt observed that for the quarter ended September 30, 1998, 20 of 58 reported domestic transactions reported in the HLHZ Control Premium Study sold at discounts from their prior public trading prices. For the fourth quarter, 2000, the numbers are not quite as sharp with 30 of 147 domestic transactions reporting a discount. This equates to 20 percent of all transactions reported selling at a discount instead of a premium.

Obviously a valuator must be careful, but how does one best develop the appropriate control premium? The HLHZ Control Premium Study, which is published quarterly, offers numerous data points with which specific control premium conclusions can be developed.

Each situation should be considered based on its specific facts and circumstances. After an intimate knowledge of the company under valuation is developed, consider the appropriateness of each of the reported transactions considered for comparison purposes. The valuator must then adjust the data to exclude unwarranted/ non-comparable transactions due to the inclusion of acquisition premiums, synergistic premiums and/or consolidation premiums.

III. MINORITY DISCOUNTS FOR FAMILY TRANSFERS

For years, the Internal Revenue Service had tried to eliminate minority interest discounts for transfers of stock in family-owned corporations. Without judicial intervention, such discounts would now be completely disallowed. Despite the directive from the courts to allow discounts in such cases, until 1993 the IRS attempted to disallow them. In Rev. Rul. 93-12, the IRS formally recognized that gifts of closely held stock among family members should be valued separately. However, in subsequent TAMs, the IRS has tried to limit this opportunity by imposing a swing vote premium, collapsing transfers made in contemplation of death and exploiting the discounts in marital deduction scenarios.

In *Estate of Simplot v. Commissioner,* 112 T.C. 130 (1999) rev'g, 249 F.3d 1191 (9th Cir. 2001), ("Simplot" hereafter) the Tax Court held that it was foreseeable that one day the voting characteristic associated with the decedent's Class A shares could have "swing vote" potential.

- TAM 9436005
- TAM 9449001

Given the current IRS position, especially after *Simplot*, swing vote attributes must be taken into account when valuing minority stock interests. Therefore, it is important for taxpayers and practitioners to understand how the IRS defines a swing vote attribute. It is also important to understand that swing vote potential is not tantamount to control. Thus, in many cases, the discount between a control and minority value would be reduced by this potential, but it would not be eliminated.

In May of 2001, the Ninth Circuit reversed the Tax Court's decision and held for the taxpayer, ruling that the minority interest in the voting shares was worth the same price as the non-voting shares. The Ninth Circuit held that the Tax Court committed three errors:

1. The Tax Court departed from the hypothetical willing buyer/seller under the fair market value standard. The Court also attempted to construct potential purchasers.
2. The calculation of the voting stock premium for the shares held by the Estate. The value attributed to the control of Simplot could not be proportionally attributed to a fraction of the total shares.
3. The Tax Court did not provide sufficient evidence to support the application of a control premium. The Ninth Circuit noted that even a controlling block of stock is only to be valued at a premium for estate tax purposes if the Commissioner can prove that the buyer will enjoy an increased economic advantage from the control position. The Ninth Circuit's opinion stated that Tax Court's factors of control were speculative and the 18 shares of Class A voting stock did not offer a clear increased economic advantage.

The Tax Court failed to consider the economic realities of an investment by a "hypothetical willing buyer" in the Class A voting shares held by the Estate. The speculation on the part of the Tax Court was completely out of the realm of the fair market value standard.

Revenue Ruling 93-12 is, perhaps, the most significant IRS pronouncement in many years. The ruling reverses the IRS position of prohibiting discounts due to family attribution. The ruling is the primary impetus for the prolific growth of family limited partnerships as an estate and gift tax-planning vehicle.

Some of the benefits garnered under Revenue Ruling 93-12 were eroded with the release of the "swing vote" letter rulings. However, even in view of the swing vote rulings, understanding of Revenue Ruling 93-12 is critical to the proper consideration of lack of control discounts.

Certain critical judicial interpretations of the concepts included in the rulings are addressed in *Simplot*. This case is important because it deals with numerous aspects relating to control in a family ownership situation.

A. OTHER JUDICIAL DEVELOPMENTS AFFECTING CONTROL PREMIUMS AND MINORITY DISCOUNTS

Discounts for lack of control play an important role in many business valuations. Not surprisingly, in the estate planning arena, these discounts can form the very foundation for a taxpayer's estate plan if he or she is holding controlling interests in privately held businesses.

With Revenue Ruling 93-12 firmly in place, family attribution is no longer a source of Internal Revenue Service scrutiny in planning the transfer of non-control interests in family-owned businesses. Although "swing vote characteristics" still envelop overall discount consideration, most valuators and estate planners agree that minority ownership interest should be valued significantly lower than ownership interest conveying control.

Nowhere is more information available for public observation than from the Internal Revenue Service and subsequent judicial follow-up. As the party with the most to lose (via lower gift and estate tax collections), the IRS, through its judicial challenges, continues to be a prime source of valuation theory and interpretation.

The following cases are by no means all inclusive of recent court cases involving minority and/or lack of control issues. The list is only intended to be a sample, representative of the decisions regarding the subject:

1. *Estate of Joseph Cidulka*, T.C. Memo 1996-149
2. *Estate of Elizabeth B. Murphy v. Commissioner*, T.C. Memo 1990-472
3. *Bonner v. United States*, KTC 1996-278 (5th Cir. 1996)
4. *Estate of Mellinger v. Commissioner*, 112 T.C. 26 (January 26, 1999)
5. *Estate of Weinberg v. Commissioner*, T.C. Memo 2000-51(February 2000)
6. *Gow v. Commissioner*, T.C. Memo 2000-93, affd., 19 Fed. Appx. 90 (4th Cir. 2001)
7. *Ferraro v. Ferraro*, 2000 Va. App. LEXIS 164 (March 2000)
8. *Maggos v. Commissioner*, T.C. Memo 2000-129 (April 2000)
9. *HMO-W v. SSM Health Care System*, 228 Wis. 2d 815, 598 N.W.2d 577 (WI Ct. App. 1999) affd., 2000 WI 46, 234 Wis.2d 707, 611 N.W. 2d 250 (June 2000)
10. *Estate of True v. Commissioner,* T.C. Memo 2001-167, affd., F3d (10th Cir. 12/02/2004)
11. *Estate of Heck v. Commissioner*, T.C. Memo 2002-34, U.S. Tax Ct.
12. *Estate of Mitchell v. Commissioner*, T.C. Memo 2002-98
13. *Estate of Godley v. Commissioner*, 286 F.3d 210, 214 (4th Cir. 2002)
14. *Estate of Bailey v. Commissioner*, T.C. Memo 2002-152
15. *Estate of Josephine Thompson*, T.C. Memo 2004-174
16. *Estate of Kelley v. Commissioner*, T.C. Memo 2005-235

Court cases, while not authoritative beyond each specific case addressed, can provide the valuation analyst with significant guidance in jurisdictional matters related to the use of control premiums and minority discounts. Moreover, the cases have, over time, provided a window to how these value adjustments can be utilized and what planning implications are necessary to ensure a defendable result.

IV. DISCOUNT FOR LACK OF MARKETABILITY (DLOM)

Protection from many risks attendant to holding a minority interest in a business can be controlled in the public stock market by selling the equity holdings, should the holder decide that management actions are elevating his or her risk beyond an acceptable level. This same ability to liquidate (convert into cash) an interest in a privately held company rarely exists. Moreover, due to size and other specific company nuances, as well as a lack of a perfect market mechanism for disposition, risk attendant to a lack of liquidity or of marketability can often be an issue for even a control interest in a privately held enterprise.

Clearly, the ability to convert an investment from an illiquid asset to cash is an ownership characteristic of considerable value. Often, when this trait is missing, an investor is subject to substantially higher risk, and valuation of the attendant equity interest must be adjusted accordingly.

Marketability, as a business valuation concept, has been defined a number of ways in business valuation treatises. Dr. Shannon Pratt et al define marketability as:

> *"The ability to convert the business ownership interest (at whatever ownership level) to cash quickly, with minimum transaction and administrative costs in so doing and with a high degree of certainty of realizing the expected amount of net proceeds."*[5]

Another definition can be found in the Encyclopedia of Banking and Finance[6] where marketability is found to connote the existence of a buying interest and a selling interest and is indicated by the average daily volume of current transactions and the size of the bid-ask spread. The smaller the size of the spread (e.g., the smaller the mark-up demanded by the market maker) the more active is the market for the underlying security. Alternatively, the more infrequently an equity interest is traded, the larger the bid-ask spread.

While privately held business interests never have a "market maker," except, perhaps, the ultimate business broker, the general concept accorded the bid-ask theory is equally applicable to these interests. Investors are risk averse and will prefer investment holdings that can easily be converted into cash. Investment holdings lacking this attribute will almost always trade for less. The difference in trading value is that specific equity interest's discount for lack of marketability. Quantification of the discount for lack of marketability is an arduous task, even for the most seasoned of valuation professionals. A great amount of research has been developed over the last four decades in an attempt to quantify the phenomenon of illiquidity as it applies to a specific investment. However, valuators continue to struggle with the reconciliation of the available research to the attendant equity interest under valuation. A logical path from the research to the ultimate discount selected is imperative to attain the proper conclusion of value.

Internal Revenue Service Position

The Internal Revenue Service addressed the issue of discounts for lack of marketability in Revenue Ruling 77-287, stating:

> *"Securities traded on a public market generally are worth more to investors than those that are not traded on a public market."*

The Internal Revenue Service Valuation Training for Appeals Officers, 1998 page 4-9, lists two primary court cases as the basis for discounts for lack of marketability.

In *Central Trust Co. v. United States*, 305 F 2d 292 (Ct. Cl., 1962) the Court of Claims stated:

> *"It seems clear, however, 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 courts have followed this principle. This discount is meant to act as a means of equalizing an investment in closely held stock with an investment in publicly traded stock. All other attributes being similar, the only resulting issue from not being traded on a public market is marketability or liquidity.

[5] *Valuing a Business*, Fourth Edition. Shannon P. Pratt, Robert F. Reilly and Robert P. Schweihs. P. 26
[6] *Encyclopedia of Banking & Finance*, Tenth Edition, Charles J. Woelfel, p. 729.

In *Estate of Andrews*, 79 T.C. 938, page 953, the Court stated:

> *"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."*

Control v. Minority Interest

One of the more controversial issues in the area of discounts for lack of marketability is whether any discount is applied to a control interest in a business enterprise. The issue has frequently been addressed by the United States Tax Court, which affirms the use of such discounts when valuing controlling interests.

Theoretical support for the use of a discount for lack of marketability in valuing controlling interests arises from the risks associated with a potential sale of the interest. Dr. Pratt et al categorize these risks into five categories:[7]

1. Uncertain time horizon to complete the offering or sale
2. Cost to prepare for and execute the offering or sale
3. Risk as to eventual sale price
4. Non-cash and deferred transaction proceeds
5. Inability to hypothecate (or inability to borrow against the estimated value of the stock)

The key element to keep in mind is that very diverse considerations go into the determination of a discount for lack of marketability related to a minority interest versus one related to a controlling interest. While many considerations may overlap, rarely will the discount for a controlling interest be as high as one for a minority interest.

A. DISCOUNT FOR LACK OF MARKETABILITY CHECKLIST

1. Factors That May Increase the Discount

a) Restrictions on transfers
b) Little or no dividends or partnership payout
c) Little or no prospect of either public offering or sale of company; especially if so stated in corporate minutes or other documentation
d) Limited access to financial information

2. Factors That May Decrease the Discount

a) "Put" option
b) Limited market available that may be interested in purchasing shares (e.g., ESOP)
c) Imminent public offering or sale of company
d) High dividend or partnership payouts

[7] Valuing a Business, Fourth Edition, Shannon P. Pratt, Robert F. Reilly and Robert P. Schweihs, p. 393.

3. Factors That May Increase or Decrease the Discount

a) Size of block – depending on size and circumstances
b) Buy-sell agreement – depending on provisions

A significant number of studies have been undertaken in an attempt to understand the impact of marketability as a characteristic of equity ownership. The studies themselves are varied and complex. However, they can be generally classified into four categories:

1. Comparison of private placements of restricted shares of public company stocks with publicly traded unrestricted shares of the same company. The restrictions imposed on the private placement shares are generally imposed by Securities and Exchange Commission rules. These are commonly referred to as Restricted Stock Studies.
2. Comparisons of pre-initial public offering stock transaction values with post-initial public offering transactions and stock value of the same company. These are commonly referred to as pre-IPO Studies.
3. Comparisons of public companies price/earnings ratios with price earnings multiples on acquisitions of privately held companies.
4. Measurement of flotation costs as a means of measuring the effects of marketability on control interest value. This method is not commonly used due to numerous practical limitations.

B. A CRITICAL LOOK AT EMPIRICAL STUDIES TO SUPPORT A DISCOUNT FOR LACK OF MARKETABILITY

Practice Pointer

In recent years, the U.S. Tax Court has been critical of inadequate justification provided by valuation analysts for both the DLOM and DLC. For example, in *Estate of Josephine T. Thompson*, T.C. Memo 2004-174 (July 26, 2004) the U.S. Tax Court criticized both experts; the estate experts were criticized since they "based their minority and lack of marketability discounts on general studies and not on the facts of the case. The experts for the estate selected discount rates that were extremely and highly favorable for the estate, without any credible substantive discussion of how the facts of this case support such particular discount"; respondent expert did not apply a minority discount, no explanation was provided. As a result of these deficiencies, the U.S. Tax Court devised its own discount minority and marketability discounts.

It is critically important that valuation analyst focus on the reasons underlying the discount(s) and that the studies cited hereunder not merely be regurgitated or cited.

Lack of marketability is defined as the absence of a ready or existing market for the sale or purchase of the securities being valued. Tax cases are not determinative of discounts in non-tax related valuations, but the valuator must be aware of these cases when performing a valuation for a tax-related purpose. The courts have repeatedly indicated that prior decisions are an important element for the valuator to consider when determining the level of discount and the method of determining those discounts. The courts have tended to be conservative in the level of lack of marketability discounts they have allowed.

The studies discussed in this chapter give some support to the level of discount to apply in lack of marketability situations. The key to the successful application of discounts in a valuation situation (whether tax related or not) is to properly support and explain the basis for the discount. Traditionally, this is an area where valuators have failed the most.

It is not uncommon for business valuators to devote 30-50 pages of text determining a pre-discounted value of a privately held business. It is also not uncommon for a valuator to devote a few paragraphs discussing pre-IPO studies and restricted stock studies and reducing an entity's value by 25-40 percent with little explanation or support. The courts have become much more sophisticated and are less likely to blindly accept such a discount without proper explanation or support.

The studies noted throughout the remainder of this chapter are the better-known studies that are being used by valuation professionals. Each restricted stock or pre-IPO study examines transactions in the shares of public companies to gauge the impact of the absence of marketability on shares of closely held businesses. A table summarizing the studies is included at the end of each section.

1. Restricted Stock Studies

Restricted stock (also known as *letter stock*) is stock of a publicly traded company that is restricted from trading for a specific period of time. It is identical to the publicly traded stock except that it is not freely traded. Although restricted stock cannot be sold in the public markets, it can be sold in private transactions. These transactions usually must be reported to the Securities and Exchange Commission and therefore become public record, allowing a comparison be done of the price of the restricted stock to the publicly traded stock.

a) SEC Institutional Investor Study (1971)

(1) Restricted stock study
(2) Compared the difference in value of restricted stock (letter stock) as compared to identical unrestricted stock sold on the open market
(3) Resulted from responses by over 300 institutional investors to an SEC generated questionnaire covering the period 1966-1969
(4) Found that restricted securities generally involve smaller issuing companies than the companies whose marketable securities are held in institutional portfolios
(5) Discounts were smallest for NYSE-listed securities and increased, in order for AMEX-listed stocks, OTC reporting companies and OTC non-reporting companies
(6) 93.5 percent of all transactions with discounts of 40-50 percent involved OTC stocks
(7) The overall mean discount was 25.8 percent – the average discounts rose over the period January 1, 1966 through June 30, 1969; and the average discounts were 27.9 percent in the first half of 1969
(8) (For non-reporting OTC companies, that are more likely to resemble most closely held companies in terms of size, the average discount was 32.6 percent
(9) Unfortunately, the study is more than 30 years old

b) Gelman Study (1972)

(1) Restricted stock study
(2) Analyzed data to determine the discounts actually received by professional investors who purchase shares in publicly traded companies with restrictions as to their marketability

(3) Analyzed data from four large, closed-end investment companies that were formed in 1968 – the companies specialized in restricted securities investments
(4) Reviewed 89 transactions between 1968 and 1970
(5) Both the average and median discounts were 33 percent
(6) Almost 60 percent of the purchases were at discounts of 30 percent or higher

c) Moroney Study (1973)

(1) Restricted stock study
(2) Analyzed the prices paid for restricted securities by 10 registered investment companies—the study reflected 146 purchases
(3) Average discount was 35.6 percent; median discount was 33 percent
(4) Contrasted the evidence of the actual cash deals with the lower average discounts for lack of marketability adjudicated in most prior court decisions on gift and estate tax cases
(5) Found that the courts allowed discounts for lack of marketability ranging between 10-30 percent
(6) Concluded that the courts were overvaluing interests in closely held companies

d) Maher Study (1976)

(1) Restricted stock study
(2) Compared prices paid for restricted stocks with the market prices of their unrestricted counterparts
(3) Discounts were derived by comparing the cost of the restricted securities to the market value of unrestricted securities of the same class in the same companies on the acquisition date
(4) Mean discount of all transactions amounted to 35.43 percent
(5) Maher then eliminated the top 10 percent and bottom 10 percent to remove especially high-risk or low-risk purchase—result was remarkably similar, yielding a mean discount of 34.73 percent
(6) Concluded that most valuators underestimate the discount for lack of marketability
(7) Also concluded that the mean discount would not contain elements of a discount for a minority interest because it is being measured against other minority interests

e) Trout Study (1977)

(1) Restricted stock study
(2) Constructed a financial model to estimate the discount that should be accorded investment letter stock
(3) Analyzed data on purchases of investment letter stock by six mutual funds during the period from 1968 to 1972
(4) Final database consisted of 60 purchases in the five-year period
(5) Model included five variables that Trout felt may influence the size of the discount:

(a) Exchange listing
(b) Number of shares outstanding

(c) The number of shares purchased as a percent of the shares outstanding
(d) Purchases of less than one percent
(e) Value of purchase

(6) Trout then applied multiple regression analysis to the data and determined a discount of 33.5 percent
(7) However, Trout states that the statistical correlations indicate "a moderate ability of this model to account for variations in the observed discounts"
(8) Trout concludes that this is not surprising, given the unique characteristics of various letter stock transactions and the lack of an auction market for restricted securities

f) Willamette Management Assoc. Study (1981-1984)

(1) Restricted stock study
(2) Analyzed 33 restricted stock transactions between January 1981 and May 1984
(3) Median discount was 31.2 percent
(4) Study reported in Pratt's Valuing a Business

g) Stryker/Pittock Study (1983)

(1) Restricted stock study
(2) Analyzed private placements of common stock to test the current applicability of the SEC study
(3) Studied 28 private placements of restricted common stock from October 1978 to June 1982
(4) Discounts ranged from 7-91 percent with a median of 45 percent

h) Silber Study (1991)

(1) Restricted stock study
(2) Analyzed purchases of restricted securities by institutional investors as reported by Securities Data Corporation for the period of 1981 through 1988
(3) During this period, there were 310 private placements of publicly traded common stock, many of which had warrants or other special provisions
(4) Elimination of special situation private placements left 69 transactions for analysis in this study
(5) By applying least-squares estimation to the data, the study found characteristics of companies (34) with discounts greater than 35 percent and characteristics of companies (35) with discounts less than 35 percent
(6) Median discount was 35 percent
(7) Found that firms with higher revenues, earnings and market capitalizations were associated with lower discounts; the reverse is also true
(8) Additionally, discounts are larger when a block of restricted stock is large relative to total shares outstanding
(9) Likewise, volume (in dollars) is inversely related to size of discount

i) Hall & Polacek Study (1994)

(1) Restricted stock study
(2) Analyzed Tax Court decisions from 1981-1993 in an attempt to read the changing pulse of the Tax Court with respect to discounts for minority interest and lack of marketability
(3) Analyzed the results of a study performed by FMV Opinions, Inc.

(a) Examined over 100 restricted stock transactions from 1979 through April 1982
(b) Regarded as an update to the Institutional Investor Study Report of the SEC
(c) Corroborated the conclusions of the SEC Study–the size of the discount is often a function of the size of the subject company's revenues, earnings and the exchange on which the restricted stock was traded
(d) Mean discount of 23 percent was very similar to overall mean discounts of 25.8 percent from the SEC Study
(e) Highlighted three additional variables as influencing the size of discount for lack of marketability:

i) Market value or capitalization of the issuing company
ii) Dollar value of the block of stock
iii) Percentage size of the block of stock being sold

(f) Also analyzed the temperament of the Tax Court with respect to the use of empirical studies:

i) Referenced the Moore Study ("Valuation Revisited," 126 Trusts & Estates 40, Feb, 1987) which observed that between 1985 and 1992, the discounts for lack of marketability ranged between 10-36 percent, with a mean discount of 21 percent—a decline from the levels of prior years
ii) A review of these cases by the authors suggests that:

> *"Taxpayers who failed to present any empirical data or reasoning as to why a certain discount should be granted were generally awarded low discounts. Similarly, where the Service's expert presented convincing reasons why a low discount was appropriate, the lack of rebuttal evidence by the taxpayer caused the court to accept the Service's argument in its entirety."… High discounts will be allowed in appropriate cases but will be disallowed absent convincing proof by the taxpayer."*

j) Johnson Study (1999)

The Bruce Johnson study included 72 restricted stock studies from 1991 to 1995 with an average discount of 20.2%. Johnson's study concluded that companies with the highest level of earnings had an average discount of 6.3%. Additionally, those with a transaction size of $25 million or greater had an average discount of 10.8%. The range of discount in this study was -10% to 60% with a standard deviation of 16%. The average discount for lack of marketability was less than the earlier studies due primarily to the increase in the number of investors in restricted stocks in the past five years. This study provided the valuation industry with an insight to the correlation of the investment characteristics of the companies studied to the level of discount. The key factors identified were size, profitability and transaction amount. The study indicted that the discount for lack of marketability increased as the size of the company decreased.

Total Sales	Avg. Disc.
$0 to $10M	23.5%
$10M to $50M	19.4%
$50M to $200M	17.7%
Over $200M	13.0%

The study analyzed the relationship of profitability of the companies studied to the level of discount. The study found that the average discount increases as the level of profit decreases.

Total Net Income	Avg. Disc.
Negative	22.5%
$0M to $1M	26.0%
$1M to $10M	18.1%
Over $10M	6.3%

The size of the transaction was analyzed to determine the correlation between the size of the transaction and the discount. The study concluded that larger transactions had lower discounts than smaller transactions.

Transaction Size	Avg. Disc.
$0 to $5M	26.7%
$5M to $10M	20.9%
$10M to $25M	17.0%
Over $25M	10.8%

The last analysis in this study compared the profitability of the companies in the study to the discount. Companies with higher net income margins had lower discounts.

Net Income Margin	Avg. Disc.
Negative	22.5%
0% to 5%	23.7%
5% to 10%	15.2%
Over 10%	11.6%

Consistent with other findings of the study, the risk of the investment has a relationship with the level of discount. The riskier the investment, the greater discount for lack of marketability.

k) Columbia Financial Advisors, Inc. Studies (2000)

(1) Addressed change in restricted stock discounts resulting from two key events that increased the liquidity of these securities over time:

(a) In 1990, the SEC adopted Rule 144A, which relaxed the SEC filing restrictions on private transactions
(b) Then in 1997, the holding period requirements under Rule 144 were amended to permit the resale of limited amounts of restricted stock after one year (additionally, the amendment permits unlimited re-sales of restricted stock held by non-affiliates of the issuer after a holding period of two years, rather than three years)

(2) Encompassed the period: January 1, 1996 to April 30, 1997
(3) Search of a private placement database provided 123 private placements of common stock during the period covered by the study
(4) Transactions with no offer price or public market price available and transactions with non-U.S. issuers that were not traded in the U.S. were eliminated; as a result, 23 transactions remained
(5) The average discount was approximately 21 percent—discounts ranged from 0.8 to 67.5 percent with a median of 14 percent
(6) Using the same methodology, another study was conducted:

(a) Examined the period: January 1, 1997 to December 31, 1998
(b) Identified impact of the increased liquidity of restricted securities as a result of the reduction of holding period requirements
(c) Out of 270 private placements of common stock, 226 were eliminated, as they did not involve public companies
(d) An additional 29 companies were eliminated because no offer processes were reported and/or the placements were not restricted or unregistered
(e) Of the remaining 15 transactions the average discount was 13 percent—discounts ranged from 0 to 30 percent with a median of 9 percent

l) Management Planning Study (2000)

(1) Performed by Robert Oliver and Roy Meyers
(2) Covers the 17-year period: January 1, 1980 to December 31, 1996
(3) Used 53 transactions without registration rights and 27 transactions with registration rights
(4) The following were the observations regarding the 53 transactions in stocks without registration rights:

(a) The average discount was approximately 27 percent
(b) The median discount was approximately 25 percent
(c) Only one of the transactions occurred at a price equal to the market price, while the remaining transactions reflected discounts ranging from 3 to 58 percent

(5) The following were the observations regarding the 27 stocks with registration rights:

(a) The average discount was 12.8 percent
(b) The median discount was 9.1 percent

(6) The results indicate the difference between risk (which is reflected in the resulting discount) and the anticipated holding period
(7) Discounts vary based on the liquidity in the near future as opposed to an uncertain holding period when liquidity may be available
(8) Analyzes the relationships of other specific factors and the size of the discount

m) FMV Opinions (2001)

(1) Provides a method for determining the appropriate discount for restricted liquid securities and a method for distinguishing among the discounts appropriate for privately held companies as opposed to restricted stock of public entities
(2) Includes 243 transactions of restricted stock:

(a) 110 transactions in manufacturing
(b) 55 transactions in business services
(c) 25 transactions in finance, insurance and real estate
(d) 22 transactions in transportation, communications, electric, gas and sanitary services

(3) Overall average discount is 22.1 percent
(4) Median discount is 20.1 percent
(5) Standard deviation of the sample is 16 percent
(6) Median discount for securities traded on an exchange is 15.3 percent, while the median discount for over-the-counter securities is 22.4 percent
(7) Concluded that since privately held companies have less of a market for their stock, and many smaller, less attractive public companies have little prospect of establishing a market for their stock, the discounts for restricted stock with longer-than-average holding periods are particularly applicable to privately held stock
(8) This study is available on Shannon Pratt's BV Market Data site at www.bvmarketdata.com

n) The Hertzel/Smith Study (1993)

(1) "Market Discounts and Shareholder Gains for Placing Private Equity" by Michael Hertzel and Richard Smith was published in June 1993 in The Journal of Finance
(2) Covered 106 private placement announcements in the period: January 1, 1980 to May 31, 1987
(3) Mean and median discounts of 20.14 and 13.25 percent, respectively
(4) Additional discount of 13.5 percent on placement of restricted shares (18 of the 106 announcements)
(5) Suggests lower discounts for companies with larger market values and vice versa

(6) Suggest portions of the discount represent issues other than illiquidity that include:

(a) Costs incurred by private investors to gain sufficient amounts of information to determine a company's value
(b) Costs of monitoring services and other professionals
(c) Changes in the ownership structure
(d) Study noted reasons for increased discount:

i) The lower the opportunity for resale
ii) As the size of the placement decreased
iii) As the market value of a company's equity decreased
iv) Uncertainty/difficulty in determining value of a company
v) Where intangible assets are a significant portion of a company's value

Summary Results of Restricted Stock Studies

Study	Transactions Observed	Median	Mean	Std. Dev.	Range Low	Range High
SEC Inst. Investors	398	24%	26%	N/A	(15%)	80%
Gelman	89	33%	33%	N/A	<15%	>40%
Moroney	146	34%	35%	18%	(30%)	90%
Maher	34	33%	35%	18%	3%	76%
Trout	60	N/A	34%	N/A	N/A	N/A
Williamette Mgt.	33	31%	N/A	N/A	N/A	N/A
Stryker/Pittock	28	45%	N/A	N/A	7%	91%
Silber	69	N/A	34%	24%	(13%)	84%
Hall & Polacek	100+	N/A	23%	N/A	N/A	N/A
Johnson	72	N/A	20%	15%	(10%)	60%
CFIA (1)	23	14%	21%	N/A	0.8%	68%
CFIA (2)	15	9%	13%	N/A	0%	30%
Mgt. Planning (1)	53	25%	27%	N/A	3%	58%
Mgt. Planning (2)	27	9%	12%	N/A	N/A	N/A
FMV Opinions	243	20%	22%	16%	N/A	N/A

2. Pre-IPO Studies

Pre-Initial Public Offering (or Pre-IPO or simply IPO) studies analyze the stock prices of companies before and after they become public companies. The difference between these prices has been attributed to the stock's marketability.

a) Robert W. Baird & Co. Studies (The Emory Studies)

(1) Pre-IPO studies
(2) Conducted eight studies covering various time periods from 1980 through 1997
(3) Analyzed 2,241 offerings to determine the relationship between the price at which the stock was initially offered to the public and the price at which the latest private transaction occurred up to five months before the IPO
(4) 310 qualifying transactions were ultimately identified and analyzed
(5) 67 sale transactions
(6) 239 option transactions
(7) Mean discount was 44 percent; median was 43 percent

Results of the study are as follows:

Time Period	No. of IPOs	Discount to IPO Mean	Median	High	Observations Low	StdDev
1980-1981	13	60%	66%	N/A	N/A	N/A
1985-1986	21	43%	43%	83%	3%	21%
1987-1989	27	45%	45%	82%	4%	21%
1989-1990	23	45%	40%	94%	6%	22%
1990-1992	35	42%	40%	94%	(6%)	22%
1992-1993	54	45%	44%	90%	(4%)	21%
1994-1995	46	45%	45%	76%	6%	18%
1995-1997	91	43%	42%	N/A	N/A	N/A
All Years	310	44%	43%			

Time Period	No. of Comp.	No. of Trans.	Standard Mean	Trimmed Mean	Median	Std.Dev.
1975-1978	17	31	34.0%	43.4%	52.5%	58.6%
1979	9	17	55.6%	56.8%	62.7%	30.2%
1980-1982	58	113	48.0%	51.9%	56.5%	29.8%
1983	85	214	50.1%	55.2%	60.7%	34.7%
1984	20	33	43.2%	52.9%	73.1%	63.9%
1985	18	25	41.3%	47.3%	42.6%	43.5%
1986	47	74	38.5%	44.7%	47.4%	44.2%
1987	25	40	36.9%	44.9%	43.8%	49.9%
1988	13	19	41.5%	42.5%	51.8%	29.5%
1989	9	19	47.3%	46.9%	50.3%	18.6%
1990	17	23	30.5%	33.0%	48.5%	42.7%
1991	27	34	24.2%	28.9%	31.8%	37.7%
1992	36	75	41.9%	47.0%	51.7%	42.6%
1993	51	110	46.9%	49.9%	53.3%	33.9%
1994	31	48	31.9%	38.4%	42.0%	49.6%
1995	42	66	32.2%	47.4%	58.7%	76.4%
1996	17	22	31.5%	34.5%	44.3%	45.4%
1997	34	44	28.4%	30.5%	35.2%	46.7%
Overall Averages			**39.1%**	**44.2%**	**50.4%**	**43.2%**

b) Willamette Management Associates Studies

(1) Pre-IPO studies
(2) Conducted 12 studies examining the prices of private stock transactions relative to those of subsequent price offerings of stock of the same companies
(3) Years covered were 1975 to 1993
(4) Average discounts varied from period to period, but in all cases were higher than the average discounts shown in the studies for restricted stocks of companies that already had an established public trading market

c) Emory (Dot-Com) Studies

(1) Outgrowth of the eight pre-IPO discount studies covering the time period 1980 through 1987 published by John D. Emory, Sr.
(2) Analyzed discounts arising from sale transactions in the 92 IPOs of companies that had ".com" in their names
(3) Covered the time period: May 1997 through March 2000
(4) Prices of stock transactions were compared five months before IPO and five months after IPO
(5) Included 53 transactions:

  (a) 42 convertible preferred stock transactions
  (b) 11 common stock transactions

(6) Mean discount prior to IPO was 54 percent; median discount also 54 percent:

  (a) 42 convertible preferred stock transactions: mean = 54 percent; median = 59 percent
  (b) 11 common stock transactions: mean = 54 percent; median = 53 percent

d) Emory Business Valuation, LLC

(1) Tenth study prepared by Emory in an ongoing analysis of pre-IPO discounts
(2) Covered 44-month period from May 1997 through December 2000
(3) Reviewed 1,847 prospectuses to find 222 sale transactions
(4) This population was narrowed to 36 qualifying transactions that met the established criteria
(5) Resulted in a mean discount of 48 percent and a median discount of 44 percent
(6) Study expanded using less restrictive filters to qualify transactions:

  (a) Included 283 transactions
  (b) Resulted in mean discount of 50 percent and median discount of 52 percent

e) Hitchner Study No. 1

James R. Hitchner's studies took the Emory study data a step further. The Hitchner study analyzes the discounts at which stock and options traded by months remaining to the date of the IPO.

Results of the study are listed below:

Transactions from January 1980 through June 1995						
		Stock			Options	
	Transactions	Mean	Median	Transactions	Mean	Median
Fifth month	47	54%	50%	32	55%	51%
Five months prior	219	45%	43%	166	44%	43%
Fourth month	43	51%	51%	31	52%	51%
Four months prior	172	43%	42%	134	42%	41%
Third month	56	43%	42%	45	41%	40%
Three months prior	129	40%	38%	103	39%	37%

Transactions from January 1994 through June 1995						
		Stock			Options	
	Transactions	Mean	Median	Transactions	Mean	Median
Fifth month	10	50%	46%	8	53%	49%
Five months prior	46	45%	45%	33	44%	43%
Fourth month	17	48%	50%	12	47%	48%
Four months prior	36	43%	45%	25	42%	38%
Third month	11	44%	43%	9	43%	43%
Three months prior	19	39%	38%	13	37%	33%

f) Hitchner Study No. 2

In Hitchner's second study, the breakdown of information is the same as the first study; but, the subject of the analysis changed.

The study was based on 23 transactions of 14 consulting industry companies that filed prospectuses between February 1995 and June 1996 and became public companies.

Results of the study are listed below:

Stock Prices for Companies Analyzed		
	Mean	Median
Fifth month	49%	53%
Five months prior	44%	36%
Fourth month	56%	57%
Four months prior	41%	36%
Third month	31%	31%
Three months prior	31%	35%

g) Hitchner Studies Conclusions

(1) The results of the analyses suggest that the longer the period until a company's IPO, the greater the discount applicable to its stock price.
(2) The theory behind the higher discount is that the longer period remaining until the company's IPO creates more uncertainty that the IPO will actually occur; thus, the stock and/or options trade at a larger discount. The discount is related to the expectation of liquidity of the investment.
(3) In the application of discounts to small closely-held businesses, the argument is made that since there is little or no chance that the company will ever go public, the discounts are at least as high as those calculated in some of these studies.

3. Summary of Private Transaction Studies

a) Baird and Willamette studies covered hundreds of transactions over 21 years
b) Average differentials between private and public market prices varied under different market conditions, ranging from 40-63 percent
c) Pre-IPO and restricted stock discount studies have been the subject of attacks regarding their validity and applicability
d) The most recent of such attacks can be found in the March 2002 issue of Shannon Pratt's Business Valuation Update
e) The May 2002 issue of BVU features a guest article by John Emory, Sr. and John Emory, Jr., responding to certain points of attack

4. Observations & Conclusions Upon Examination of Empirical Studies

a) The smaller the company (revenues, earnings, market capitalization), the larger the discount for lack of marketability
b) Issuers of restricted stock are generally considered good credit risks—not necessarily true of the closely held business (CHB)
c) Issuers of restricted stock are publicly traded companies for whom an active market exists for their stock

d) Owners of stock in a CHB have no access to an active market for their stock; most CHB’s will never be publicly traded
e) Publicly traded companies offer annual dividends and/or an established record of capital appreciation in share price; CHB’s seldom (if ever) can offer either
f) Purchasers of restricted stock are institutional investors with investment goals and criteria far different from the individual purchaser of a CHB
g) Institutional investors have different levels of risk perception and risk tolerance than purchasers of CHB stock
h) Purchasers of restricted securities usually intend to market these securities in the future and a ready market will exist at that time
i) Purchasers of CHB stock have little or no expectation to market the CHB stock in the future and if so, a limited market exists
j) Investments of venture capital companies in OTC non-reporting companies most closely resemble purchases by CHB owners
k) Venture capital investments are generally of relatively short duration, suggesting even higher discounts by CHB owners
l) Use of median discounts from restricted stock studies by valuators of CHB’s infer that publicly traded issuers of restricted stock are “comparable” to CHB’s—this may not be the case
m) The courts are allowing discounts that are less than those determined by the restricted stock studies; blind reliance on empirical studies or discounts allowed by the courts in other cases is dangerous as each valuation has its own unique facts
n) Valuation analysts often fail to adequately support discounts with sound reasoning to support a specific discount
o) In the valuation of stock in most closely held businesses, mean discounts observed in the results of the restricted stock studies should be used as a starting point for calculating a company specific discount.

Observation

Valuation analysts who rely solely upon empirical studies often understate discounts and overstate value.

V. THE *MANDELBAUM* DECISION AND ITS EFFECTS ON MARKETABILITY

Mandelbaum v. Commissioner, T.C. Memo 1995-255, aff’d. 91F3d 124 (3rd Cir. 1996) is an important case in business valuation in that it isolates size of a discount for lack of marketability as its only substantial issue. Rarely have the courts been so specific in their analysis of an issue nor has a court’s decision been open to so much commentary and review by practitioners.

Setting up a list of factors to consider in developing a discount for a lack of marketability could have and should have provided the business valuation community with a useful tool. However, given the listing provided by Judge Laro in the decision, practitioners, once again, find themselves addressing tough issues with added cloudiness and complexity.

Mandelbaum v. Commissioner, is an important decision for two reasons:

1. Issue of a lack of marketability discount was the only issue before the court
2. The court's ultimate and unusual resolution of the case sheds light on possible matters to consider in assessing the size of discounts for lack of marketability in the future

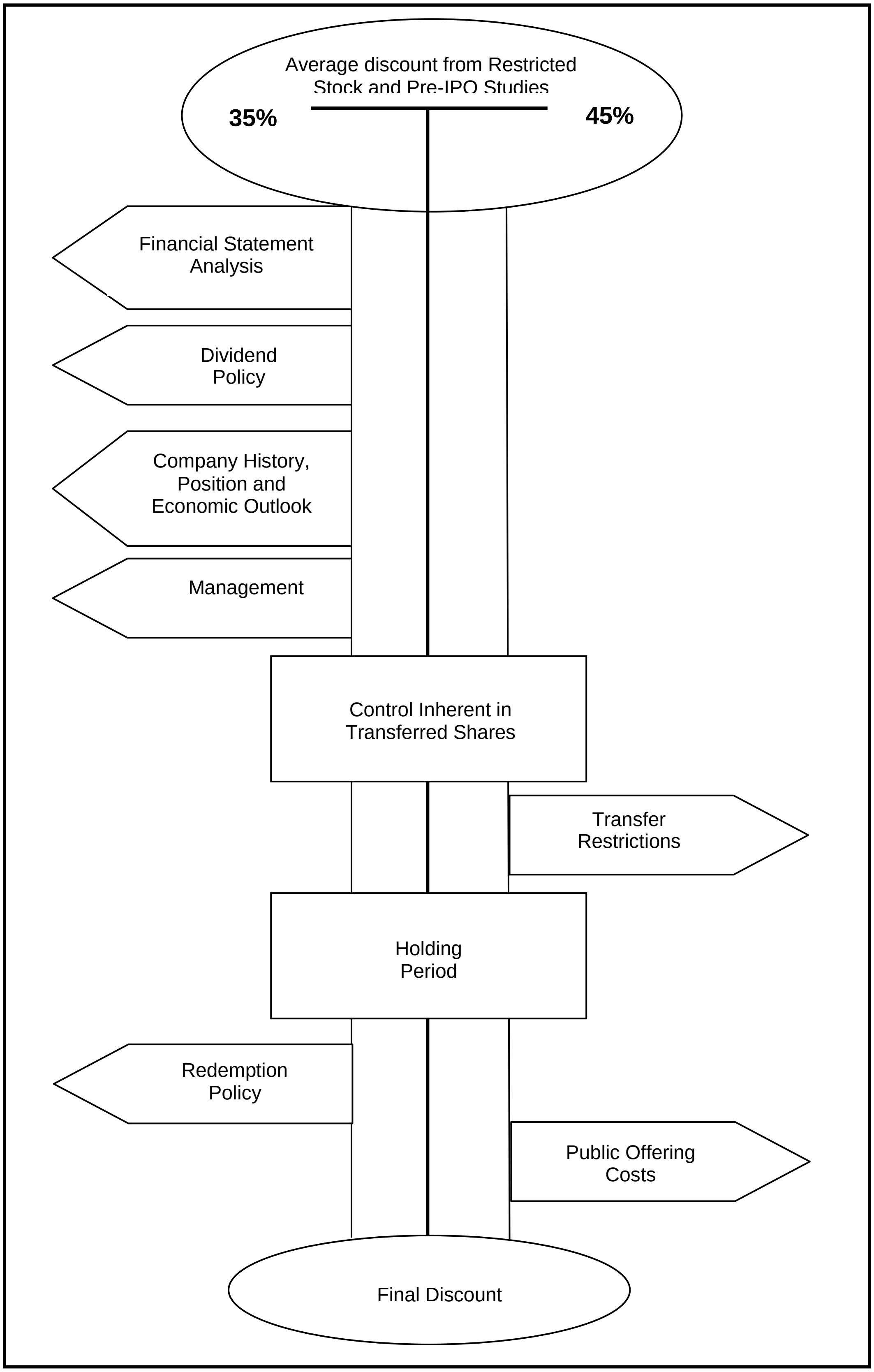
There are several important points to remember regarding the Mandelbaum case. Scorecard of deviations related to nine factors in reference to an average discount is not typical of prior cases.

1. Some factors may have been duplicated given that the stipulated values were "freely traded" values
2. The Court's determination of discount, if taken to its farthest degree, could negate the entire valuation process
3. The Court's 30 percent discount, in addition to any applicable minority discount, is not substantially lower than what other recent court cases have allowed (generally, around 35 percent)
4. The case clearly reflects a need to produce credible evidence to support the discount for lack of marketability and a critical need to tie the final reasoning for the size of the discount to the specific attributes of the ownership interest being valued

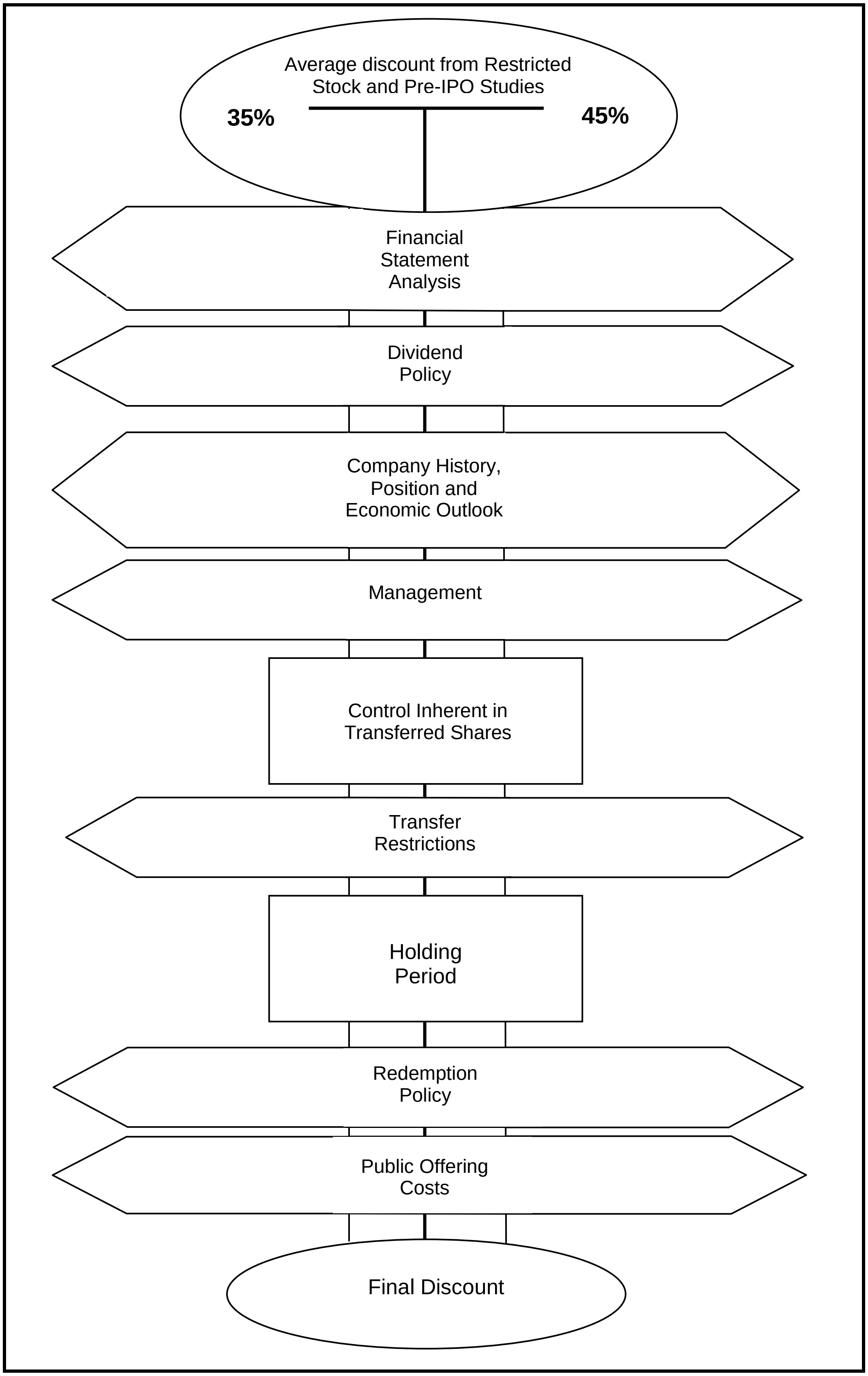
Judge Laro made an important distinction in *Mandelbaum*. He emphasized that in determining the marketability discount, one must consider the discounts willing sellers would accept in addition to the discounts hypothetical buyers would demand.

The *Mandelbaum* case was affirmed in the Third Circuit in 1996. A case that followed, *Estate of Kaufman v. Commissioner*, embraced the nine factors under *Mandelbaum*. Judge Laro also decided this case.

FOR EXAMPLE, HERE ARE THE NINE FACTORS CONSIDERED BY THE *MANDELBAUM* COURT TO INCREASE OR DECREASE BENCHMARK DISCOUNT AND THE DIRECTION (INCREASE / DECREASE) APPLIED IN *MANDELBAUM*



NINE FACTORS CONSIDERED BY THE COURT TO INCREASE OR DECREASE BENCHMARK DISCOUNT



VI. JUDICIAL DEVELOPMENTS AND DISCOUNTS FOR LACK OF MARKETABILITY

When appraising a privately held business interest, the discount for lack of marketability is often the largest adjustment in determining a conclusion of value. Even though it is clear that discounts for lack of marketability should be applicable in most valuations of privately held interests, the amount of these discounts is constantly the subject of controversy. Therefore, it is critical for the valuation analyst to be knowledgeable of the court cases addressing the subject.

A partial list of selected court cases regarding discounts for lack of marketability is as follows:

1. *Estate of Davis v. Commissioner,* 110 T.C. 530 (1998)
2. *Estate of Jameson v. Commissioner*, 267 F.3d 366 (5th Cir. 2001)
3. *Estate of William J. Desmond v. Commissioner*, Docket No. 26237-96, T.C. Memo 1999-76 (Mar 1999)
4. *Walter L. Gross, Jr. v. Commissioner*, T.C. Memo 1999-254, 272 F.3d 333 (6th Cir. 2001), cert. den. U.S. (2002)
5. *Adams v. United States*, 218 F.3d 383 (5th Cir, July 2000)
6. *Janda v. Commissioner*, T.C. Memo 2001-24 (Feb 2001)
7. *Swope v. Siegel-Robert, Inc*., 2001 U.S. App. LEXIS 2760 (8th Cir. Feb 2001)
8. *Wall v. Commissioner*, T.C. Memo 2001-75 (Mar 2001)
9. *Offenbecher v. Baron Services, Inc*., 2001 Ala. Civ. App. LEXIS 219 (May 2001)
10. *Pueblo Bancorporation v. Lindoe, Inc*., 37 P.3d 492 (Colo. 2003)
11. *Estate of Hoffman v. Commissioner*, T.C. Memo 2001-109
12. *Norton Co v. Smyth*
13. *Okerlund v. United States*, 2002 U.S. Claims LEXIS 221(Fed. Cl. August 2002)
14. *Baltrusis v. Baltrusis*, 2002 Wash. App. LEXIS (September 2002)
15. *Gottsacker v. Gottsacker*
16. *Estate of Kelley v. Commissioner*, T.C. Memo 2005-235
17. *Estate of Jelke v. Commissioner*, T.C. Memo 2005-131
18. *McCord v. Commissioner*, 120 T.C. No. 13 (March 2003)
19. *Peter S. Peracchio v. Commissioner*, T. C. Memo 2003-280
20. *Clarissa W. Lappo v. Commissioner*, T.C. Memo 2003-258

VII. QUANTITATIVE MARKETABILITY DISCOUNT MODEL

As previously mentioned throughout this material, the discount for lack of marketability is often the largest adjustment made in appraisals of privately held businesses. Business valuators are constantly searching for more objective ways to quantify this discount. This section presents an overview of one model, the Quantitative Marketability Discount Model (QMDM), which develops DLOM at the non-marketable minority interest level.

The model focuses on a rate of return analysis in determining a discount for lack of marketability. It is based on the time value of money that an illiquid investment sacrifices. The model attempts to recognize the impact on value of minority shares of not benefiting from all the cash flow of a closely held business.

A. DEVELOPMENT OF THE QMDM

The treatise, *Quantifying Marketability Discounts*, by Z. Christopher Mercer was presented in 1997 to assist valuators in developing, quantifying and defending marketability discounts based on the facts and circumstances of each case. The valuation model to estimate marketability discounts presented in the book reflects the fair market value of a subject business interest at the non-marketable minority interest level. Mercer attempts to address two major issues regarding quantifying discounts for lack of marketability as he stated in his book.

1. The fact is that the two largest adjustments in most business valuation reports often receive only limited support and documentation.
2. The real issue is the absence of tools.

The Quantitative Marketability Discount Model (QMDM) addresses the incremental return represented by a marketability discount that is above the enterprise-level discount rate. This incremental return applicable to a non-marketable security is necessary to induce investors to make the purchase rather than making an investment in a similar freely traded security. The quantitative methodologies developed in Mercer's book focus on the factors that influence the concept of the incremental return.

B. BASIC FRAMEWORK FOR THE QMDM

Mercer focuses on five categories of "the fundamental elements of value" used by investors in making their investment decisions.

1. Capital Appreciation

Quantifying a discount for lack of marketability requires consideration of the anticipated growth in the value of the investment.

2. Dividend Yield

The valuator must consider the expected dividend yield based on the marketable minority interest value (the dividends are the expected interim cash flows to the holder of the investment).

3. Holding Period of Investment

The QMDM provides a means for the valuator to make an assessment of the expected holding period of the investment.

4. Prospects for Liquidity

Since there is no ready market for investments in privately held securities, investors are concerned with the prospects for liquidity while holding the investment.

5. Investor's Required Holding Period Return

The QMDM develops a means of assessing the required holding period rate of return for a hypothetical investor. The basis for estimating this discount is the equity discount rate used in the appraisal at the marketable minority discount level. Additional specific risks, which relate to investors in illiquid interests of the enterprise, are added. The required holding period return utilized in the QMDM is usually expressed in terms of an approximate range.

Mercer explains:

> *"Since the expected cash flows generated by the business are the source of the non-marketable minority investor's cash flows, the risks faced by the non-marketable minority investor encompass the risk of the business generating those cash flows, as well as incremental risks arising from the illiquidity of the investment. Therefore, the embodiment of risk for valuation purposes, the relevant discount rate, must for non-marketable minority investors be greater than or equal to, but cannot be less than, the discount rate applicable to the valuation of the business."*

C. UTILIZING THE QMDM

In developing a valuation utilizing the QMDM, the model assumes that any necessary normalization adjustments, including those related to nonrecurring items and discretionary owner compensation and/or benefits, have been made when arriving at the capitalizable benefit stream. There have been some challenges to this assumption under the model, as owner compensation adjustments are generally an element of control and not considered in a valuation of a minority interest.

Using the five elements discussed previously, the discount can be calculated using the following equation:

$$\text{Marketing Discount (MD)} = 1 - \left[\frac{\text{Shareholder's Value}}{\text{Enterprise Value}}\right]\%$$

$$1 - \left[\frac{\text{Value of Expected Cash Flows to Minority Shareholder}}{\text{Value of Expected Cash Flows in Context of Ongoing Business}}\right]\%$$

Source: *Quantifying Marketability Discounts, Developing and Supporting, Marketability Discounts in the Appraisal of Closely Held Business Interests*, Z. Christopher Mercer, ASA, CFA

D. USING MERCER'S EQUATION

Assumptions:

Discount rate	25% Enterprise Level
Anticipated growth	5%
Capitalization rate	20% Enterprise Level
Net earnings multiple (1/cr)	5 P/E Multiple
After-tax earnings power	$0.40 per Share
Freely tradable value	$2.0 per Share
Growth rate of value	5%
Interim cash flows (earnings retained to grow business)	0%
Probable holding period	10 Years
Required holding period rate of return	20% per Year

Based on the above assumptions, the subject interest would be valued at $0.53 per share. This value is calculated by growing the freely tradable value ($2) at five percent for 10 years, and discounting this terminal value back to the present by the 20 percent required holding period rate of return.

As a result, the implied marketability discount based upon the assumptions contained herein is calculated using the equation as follows:

$$MD = 1 - \left[\frac{\$0.53}{\$2.00} \right] \% = (1 - 0.265)\% = 73.5\%$$

Utilizing the above assumptions, the marketability discount calculated under this example is 73.5 percent. According to Mercer, the discount calculated is the "net impact of the factors that differentiate the postulated non-marketable minority interest from a freely tradable interest."

E. COURT CHALLENGES OF THE QMDM

As previously stated in this chapter, the QMDM is another means of quantifying the marketability discount. Since the model's introduction in 1997, there has been criticism by valuators and in the courts. Two recent court cases specifically cited the QMDM.

1. ***Estate of Weinberg v. Commissioner*, T.C. Memo 2000-51**

2. ***Janda v. Commissioner*, T.C. Memo 2001-24**

In *Estate of Weinberg*, the IRS expert adopted the QMDM and argued a 15 percent discount for lack of marketability. The Court criticized the expert's use of the model, "…slight variations in the assumptions used in the model produce dramatic differences in the results."

The Court ultimately determined that a 20 percent discount for lack of marketability was appropriate in the case.

In *Janda v. Commissioner*, the Petitioner's expert used the QMDM and determined a 65.77 percent marketability discount. The Court rejected the application of the QMDM and further stated, "We have grave doubts about the reliability of the QMDM model to produce reasonable discounts, given the generated discount of over 65 percent."

VIII. BUILT-IN CAPITAL GAINS TAX ADJUSTMENT

Deferred income taxes resulting from "built-in" or deferred gains on a company's balance sheet have long been recognized under Accounting Principles Board Opinion No. 11 and later in Financial Accounting Standard No. 109 as a necessary adjustment to the balance sheet. Clearly, when writing up fixed assets to fair market value for valuation purposes, it is likewise relevant to consider the application of a deferred tax liability to reflect the economic reality of the company's balance sheet.

In an open market transaction, there is little argument that a willing buyer would alter his or her offer price for the stock in a C corporation due to the tax liability associated with appreciated assets inside the corporation since the liability still remains even when ownership changes. The Internal Revenue Service has historically argued that provisions within the Internal Revenue Code could shelter such built-in gains.

According to these provisions, the tax payable on the built-in gains was too speculative and should not be included in the valuation. However, since the General Utilities doctrine was revoked under the Tax Reform Act of 1986, a tax liability upon liquidation is not necessarily speculative.

The IRS continued to argue that when corporate liquidation itself is not contemplated, a reduction for built-in gains taxes should not be taken. Moreover, in Technical Advice Memorandum 9150001, the IRS noted that unless liquidation is imminent, there is no accurate way to estimate the liability due to potential future tax law changes.

The last few years (beginning in 1998) have seen the first truly salient decisions on this matter coming from the Tax Court. A review of these cases, including the watershed *Estate of Davis* decision, will be undertaken in this chapter. After understanding the current position of the Courts in this matter, discussion will focus on alternatives to properly compute the adjustment.

The treatment of trapped-in capital gains tax with regard to S corporations is not very clear. At the time this chapter was prepared, there was not any definitive case law providing clear direction on this subject.

Prior to *Davis* and *Eisenberg,* no element of business valuation was more intensely debated than that related to the federal and state income tax liabilities associated with corporations holding appreciated assets or assets that have been substantially depreciated below their fair market value at the date of valuation.

The long-standing applicability of Revenue Ruling 59-60 and its mandate that fair market value is based upon a hypothetical willing buyer and willing seller, each acting prudently and in their own best interest, absolutely requires that the valuator consider the corporate level trapped-in gains in completing business valuations.

Technical Advice Memorandum 9150001 documents the position of the IRS with regard to the issue. In this TAM, the National Office concluded that no discount was appropriate for two reasons:

1. A number of courts had previously disallowed such a discount, arguing that any sales of appreciated assets giving rise to a corporate level tax liability were just too speculative for consideration.
2. There is no definitive proof that a buyer would buy the stock being valued with intent to sell or liquidate the underlying assets.

In a footnote, the National Office noted that a buyer may, in some circumstances, elect S status. If the S corporation held the assets for more than 10 years prior to sale, the tax under Internal Revenue Code §1374 (Built-in Gains) would not apply.

Until recently, the Internal Revenue Service, U.S. Tax Court and many family courts did not recognize the impairment of value offered by these tax liabilities unless a sale was imminent. (*Ronald Hay v. Marilyn Hay*, Court of Appeals of Washington, Division 3, December 16, 1995)

Most practitioners feel the impact of capital gains taxes must be considered when estimating value. However, whether that impact is incorporated via a discount or in some other element of the value estimate, is best left to the judgment of each valuation professional in light of the specific facts and circumstances of the project.

1. *Eisenberg v. Commissioner*, T.C. Memo. 1997-483
2. *Welch v. Commissioner*, No. 27513-96 1998 WL 221313 (U.S. Tax Court, May 6, 1998)
3. *Estate of Davis v. Commissioner*, Docket No. 9337-96 (U.S. Tax Court, June 30, 1998)
4. *Estate of Helen Bolton Jameson v. Commissioner*, 267 F.3d 366 (5th Cir. 2001)
5. *Estate of Richard R. Simplot v. Commissioner*, 112 T.C. 130 (1999) rev'g, 249 F.3d 1191 (9th Cir. 2001)
6. *Estate of Dunn v. Commissioner*, T.C. Memo. 2000-12
7. *Estate of Dunn*, 301 F.3d 339 (5th Cir. 2002)
8. *Estate of Borgatello v. Commissioner*, T.C. Memo. 2000-264
9. *Estate of H.A. True,* T.C. Memo 2001-16, aff'd., F.3d (10th Cir. 12/02/2004)

IX. A BRIEF LOOK AT DISCOUNTS IN FAMILY LIMITED PARTNERSHIPS

No planning strategy for minimization of federal estate and gift taxes has generated more opportunity over the last several years than those connected with the structuring of Family Limited Partnerships (FLPs). FLPs have been present in estate planning for many years. However, with the release of Revenue Ruling 93-12 and the Internal Revenue Service changing its position on family attribution related to minority privately held business interest transfers, the vehicle has taken on new viability.

The key element underlying the successful utilization of an FLP is the ability to leverage the property transfer via the appropriate use of minority and/or lack of marketability discounts. For example, using a 35 percent combined discount, an individual can transfer almost $17,000 annually without the imposition of the gift tax ($16,923 X (1-.35) = $11,000 gift value, all excluded by the annual gift tax exclusion)[8].

Currently, the IRS is challenging various aspects of FLPs[9] in addition to discounts (e.g., business purpose – *Estate of Strangi*, 115 TC No. 35) through rulings and litigation. With the increased popularity of Family Limited Partnerships we will see more challenges by the IRS in the future. The current climate surrounding FLPs is forcing practitioners to strictly adhere to state laws concerning their formation and operation.

The cases contained in this section are selected cases focusing on FLPs. As previously mentioned throughout this material, the compilation of cases is not intended to be all inclusive of relevant cases concerning the subject.

1. Historical Case Law

a) *Estate of Watts*, T.C. Memo 1985-595
b) *Estate of Harwood*, 82 T.C. 239 (1984)

[8] Note that the annual gift tax exclusion for 2005 was $11,000, but is indexed for inflation.
[9] Currently, the two primary arguments revolve around IRC Section 20-36 (a non-valuation issue), and the quality of the valuation evidence to support the discounts.

2. Chapter 14 of the Internal Revenue Code

a) Rules related to rights attributable to the partners may apply when dealing with restrictive FLPs and gifts to family members
b) Depending on valuator's level of expertise in this area, he/she may be comfortable in determining if such a situation applies
c) However, it may be prudent to request that the attorney or estate planner make the determination as to whether Chapter 14 rules apply, and if so, in what ways

3. Technical Advice Memorandum 9719006

Issued on January 14, 1997 to the District Director of the Internal Revenue Service's Southern California District.

a) TAM 9719006 – Internal Revenue Service Response
b) *Kerr v. Commissioner*, 113 T.C. No. 30 – Docket 14449-98
c) *Church v. United States*, No. SA-97-CA-07740OG, 2000 U.S. Dist. LEXIS 714
d) *Estate of Reichardt v. Commissioner*, 114 TC No.9 (2000)
e) *Shepherd v. Commissioner*, 115 TC No. 30 (Oct 2000)
f) *Estate of Strangi et.al v Commissioner*, No. 03-60992 U. S. Court of Appeals for the Fifth Circuit, July 15, 2005
g) *Estate of Dailey v. Commissioner*, T.C. Memo 2001-263
h) *Estate of Baird v. Commissioner*, T.C. Memo 2001-258
i) *Estate of Cook v. Commissioner*, 2001 T.C. Memo 2001-170
j) *Estate of Jones v. Commissioner*, 116 T.C. No. 11 (2001)
k) *Estate of Thompson* – Facts
l) *Estate of Hackl v. Comm*., 118 T.C. No. 14 (2002), aff'd, F.3d (7th Cir. July 11, 2003)
m) *Estate of Harper v. Comm*., T.C. Memo. 2002-121 (May 2002)
n) *David A. Kimbell Sr., et al. v. United States*, F.3d (5th Cir. 05/20/2004) (Docket No. 03-10529)
o) *McCord v. Commissioner*, 120 T.C. No. 13 (March 2003)
p) *Peter S. Peracchio v. Commissioner*, T.C. Memo 2003-280
q) *Clarissa W. Lappo v. Commissioner*, T.C. Memo 2003-258
r) *Huber v. Commissioner*, T.C. Memo, 2006-96, May 9, 2006
s) *Estate of Kelley v. Commissioner*, T.C. Memo. 2005-235, October 11, 2005

Observation[10]

Empirical data that is used to develop discounts for FLPs can be found in Partnership Profiles and Morningstar databases as discussed earlier in this chapter.

[10] For a more in-depth study on discounts in FLPs, the Consultants' Training Institute (CTI) offers additional training on this topic.

X. A BRIEF LOOK AT ESOP VALUATIONS

An Employee Stock Ownership Plan can present special issues related to discounts and premiums. Specific questions on the applicability and size of minority discounts and control premiums continue to generate commentary and analysis by business valuation practitioners, the Department of Labor and the courts.

Additional issues arise in conjunction with a discount for lack of marketability. Given the ERISA mandated requirement of a "put" option, the business valuator must include, in addition to the general factors under consideration, an analysis of the Company's ability to meet this future obligation.

A. FACTORS TO CONSIDER IN ESOP VALUATIONS

1. Minority/Control

a) Pursuant to Department of Labor (DOL) proposed regulations 29 CFR Part 2510, control premiums are unwarranted unless the plan obtains BOTH voting control and control in fact.
b) If ESOP purchases shares in small amounts, and the company ultimately intends to sell a controlling interest to the plan, a control premium is warranted only to the extent that there is a binding contract to pass control within a reasonable time.

2. Standard of Value

a) DOL prop. reg. 3(18)(b) – "Adequate consideration"
b) Revenue Ruling 59-60 fair market value
c) Issues:

(1) Given fair market value definition, does "hypothetical" buyer/seller hold when purchase is identified (the plan)?
(2) Should a participant's account reflect a substantial increase in the year the plan obtains control (via a control premium)?

3. Lack of Marketability

a) Consider all normal factors
b) Consider "put" option

4. "Put" Option[10]

a) Required by ERISA
b) Generally serves to reduce discount for lack of marketability

[10] Participants of an ESOP have the right under IRC section 409(h) to require that the employer repurchase employer securities.

5. Repurchase Obligation Liability

a) Requires a careful analysis; often an actuarial study for plans with a significant number of participants
b) Requires analysis of company's ability to meet this obligation
c) Factors increasing the repurchase obligation:

(1) Additional shares allocated to ESOP
(2) ESOP share value grows
(3) Additional vested shares

B. FACTORS TO CONSIDER FOR MARKETABILITY DISCOUNT

1. Company liquidity position
2. Plan document provisions
3. Company repurchase experience
4. Nature of company growth
5. Financial solvency and position of the company
6. Company borrowing capacity
7. Repurchase obligation liability and related funding mechanism
8. Contingent claims against future company income

Observation

As the repurchase obligation increases, the certainty to fund the repurchase decreases, thus the discount for lack of marketability may also increase.

XI. A LOOK AT OTHER DISCOUNTS

While discounts for a lack of marketability and lack of control are the most commonly used discounts in business valuations, there are a host of additional gross value adjustments practitioners might encounter in conducting business valuation engagements. The critical pitfalls in considering the application of these "other" discounts are threefold.

1. First, it is important that the valuation practitioner not duplicate value influences in other facets of the valuation and, again, in the discount. When using these discounts, consideration should be given to whether they are already reflected in the development of capitalization or discount rates, future benefit stream scenarios, market multiples or even other discounts.
2. Second, careful consideration should be given to the base to which the discount is applied, and how theoretical and empirical support for the practitioner's opinion can best be developed and articulated in the valuation result.
3. A final important consideration in applying such discounts is recent judicial developments. For those valuation engagements that ultimately will be settled in a court venue, a thorough understanding of the appropriate court's opinion on the additional discount is critical. Obviously, such decisions can provide important guidance and support for certain discounts in other venues, as well.

While there may be an endless number of potential discounts deemed appropriate by valuators in different engagements, those most commonly used by the business valuation community and encountered in judicial decisions include:

1. Blockage discount/market absorption
2. Key person discount

3. Restrictive agreement discount
4. Investment company discount
5. Lack of voting rights discount

A. BLOCKAGE DISCOUNT/MARKET ABSORPTION

The need for a blockage discount usually arises in consideration of supply and demand influences in the publicly traded securities markets. In other words, a transaction offering a substantial block of a single entity's issued and outstanding shares may create a supply that exceeds current demand. Such an occurrence will generally impair the subject company's value because of the reduced liquidity associated with the oversupply.

The business valuator, under these circumstances, must consider a discount to adjust the value of subject shares for this reduced liquidity characteristic. The discount applied in this circumstance is generally referred to as a blockage discount.

Treasury Regulation §20.2031-2 states the following:

> *"The size of the block of stock to be valued in relation to the number of shares changing hands in sales may be relevant in determining whether selling prices reflect the fair market value of the block of stock to be valued. If…the block of stock is so large in relation to the actual sales on the existing market that it could not be liquidated in a reasonable time without depressing the market, the price at which the block could be sold as such outside the usual market, as through an underwriter, may be a more accurate indication of value than market quotations..."*

The concept of blockage is not usually applied directly in the case of closely held stocks, since there is no record of average trading volume with which to compare the size of the block. The data...on discounts for lack of marketability do, however, suggest that larger blocks tend to sell at a greater discount than smaller blocks, so the large size of a block could be a factor that influences the magnitude of the discount for lack of marketability.[11]

There are several factors to consider when using a blockage discount:

1. Size of block to total shares outstanding
2. Size of block to daily trading volume
3. Volatility of stock
4. General economic and industry trends
5. Alternative stock disposition mechanisms
6. Time requirements for full market absorption of the subject block without affecting current market price
7. Special stock offerings
8. Sales of the block in smaller units over a reasonable disposition period
9. Exchange and reorganization mechanisms
10. Private placements
11. Use of an underwriting syndicate

Note: Not all larger blocks of stock require a blockage discount. The valuator must weigh all facets of the blockage effect, if any, in determining the appropriateness and size of the discount.

[11] Shannon Pratt, Robert Reilly and Robert Schweihs, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, 5th edition, (McGraw-Hill, 2000).

One recent court case that allowed one of the largest blockage discounts was the *Estate of Mellinger* (112 T.C. 26). In this case, the Tax Court deemed it appropriate to apply a 25 percent blockage discount (as applied by the taxpayer) to large blocks of Frederick's of Hollywood stock, which was thinly traded.

B. KEY PERSON DISCOUNT

Business valuators would generally consider an additional discount for a company where thin management and a strong company dependency on the efforts of a single individual for future operational and financial success would threaten the company's long-term viability. Such a discount is generally referred to as a key person discount.

A few factors should be considered when using a key person discount:

1. Key executive's duties from both a day-to-day standpoint, as well as his or her involvement in guiding the long-term strategic course of the business
2. Key executive's reputation within the industry and the effect of that reputation on overall operational and financial results both historically and prospectively
3. Depth of overall management, experience of lower management, if any, and presence of a succession plan
4. Cost and time requirements to hire necessary replacement personnel for the key executive
5. Availability and adequacy of key person life insurance to fund such a transition, if necessary—key person life insurance is sometimes earmarked for specific purposes beyond management transition

    a. Funding repurchase of company stock
    b. Funding purchase of company utilized real property or other assets held by key person

The impact of the key person on the overall value of equity securities is often incorporated into the future benefit stream computations or the company-specific discount and/or capitalization rate development.

The courts have often recognized the impact of key persons on value via a discount. In *Estate of Paul Mitchell*, T.C. Memo 1997-461, vacated and remanded 250 F.3d 696 (9th Cir. 2001), on remand T.C. Memo. 2002-98. In the earlier U.S. Tax Court case, the Tax Court recognized a 10 percent discount, which equated to a $15 million reduction in value. Also in *Furman v. Commissioner* (1998 WL 209265) the Court accepted a 10 percent key person discount. In *Estate of Stirton Oman*, (T.C. Memo 1987-71), a key person discount was rejected since the decedent's sons were managing the Company both before and after the father's death. In this case, it also appeared that the decedent's son had been groomed for the position and that succession planning had taken place.

C. RESTRICTIVE AGREEMENT DISCOUNT

Observation

In family controlled entities, the impact of restrictive agreements in valuation are governed by IRC Section 27-03. The provisions of Section 27-03 can eliminate the impact of any restrictions within the agreements if they do not satisfy the exceptions in IRC Section 27-03.

Restrictions under various shareholder documents including buy-sell agreements, restricted stock agreements, etc., can severely limit the shareholder's ability to sell or transfer his or her stock; the impairment increases with the severity of the restriction. Value impairment due to the presence of restrictive agreements is generally incorporated into the overall discount for lack of marketability. The Courts have historically looked at these agreements as minor evidence influencing estimates of value, but seldom have they let such agreements necessarily set value.

A number of factors should be considered when reviewing stockholder's rights:

1. Income and dividend preferences
2. Liquidation preferences
3. Voting rights
4. Stock sale limitations
5. Stock value formulas
6. Preset stock price

Do not confuse a right of first refusal with a more severe restrictive agreement discount. If history shows that fair market value has been paid, pursuant to a right of first refusal, and the company's financial ability to pay in the future appears sound, such a right does not really impair value.

D. INVESTMENT COMPANY DISCOUNT

Investment companies are generally sold on the basis of underlying assets rather than future benefit streams. Such an asset approach is rooted in Revenue Ruling 59-60, which states:

> *"The value of the stock in a closely held investment in a real estate holding company...is closely related to the value of the assets underlying the stock."*

An analysis of publicly traded investment real estate companies (Partnership Profiles) and publicly traded closed end funds reveals that minority interests in investment companies typically sell at a discount from their respective pro rata share of the firm's net assets restated at fair market value. The application of an investment company discount would account for the shareholders' indirect ownership of these assets, and their inability to force the sale, liquidation or merger of these assets.

Investment company discounts typically range anywhere from 10 percent to 60 percent or higher, depending on the facts and circumstances of each case. In a purely theoretical sense, this is a minority interest discount, but may include an influence from marketability.

Several Court decisions address this discount. In *Estate of T. John Folks, Jr*. (T.C. Memo 1982-43), the Court agreed to a 50 percent discount for a minority interest, plus a discount for lack of marketability. In *Estate of Albert L. Dougherty* (T.C. Memo 1990-274), the Court allowed a 35 percent discount for non-marketability and operating and liquidation costs. The entity was a second tier trust holding a corporation that held real property.

E. LACK OF VOTING RIGHTS DISCOUNT

In valuing minority interests, the issue of voting versus nonvoting shares must be considered. Assuming that voting shares can guide corporate policy and strategy, some difference in value must connect to a share of stock with voting rights versus one without.

That difference in value depends, to a great degree, on the size of the block being valued and the overall distribution of the ownership. If a very small percentage of outstanding shares control the overall company, the discount for lack of control would be substantial on the balance of the minority interests. Where control is not in play, empirical studies have held the difference in value for non-controlling minority voting shares and minority nonvoting shares to be under five.

Several factors should be considered when using the lack of voting rights discount:

1. Size of block being valued
2. Distribution of stock
3. Restrictive agreements
4. Convertibility provisions of the non-voting shares

In addition to the foregoing chapter of Fundamentals, Techniques and Theory, there are other sources of information that many professionals in the valuation business have read and/or added to their library. The valuation analyst, progressing through the steps in a valuation, should be generally familiar with the body of knowledge represented by this text and other publications. These can include books, papers, articles, seminars, classes and the experience of a valuation mentor or other business mentor the valuation analyst may know. Those at the top of the field continue to grow.

Recommended reading includes, but is not limited to:

- Abraham, Mel H., *Valuation Issues and Case Law Update*, all cases.
- Abrams, Jay B., "Discount Rates as a Function of Log Size and Valuation Error Measurement" (3 parts), *The Valuation Examiner*, F/M 1997.
- Bogdanski, John A., *Federal Tax Valuation*, Warren, Gorman & Lamont
- Blackman, Irving L., *Valuing Your Privately Held Business, The Art & Science of Establishing Your Company's Worth*, Chapter 9 (Valuation Discounts).
- Campbell, Ian R., and Howard E. Johnson, *The Valuation of Business Interests,* Chapter 12 (Controlling and Minority Interests) and Chapter 13 (Discounts for Non-Control and Illiquidity).
- Cornell, Bradford, Corporate Valuation, *Tools for Effective Appraisal and Decision Making*, Chapter.
- Dorrell, Darrell, "Marketability Discounts – A Comprehensive Analysis" *The Valuation Examiner*, M/A 2002.
- Grossman, Robert J., "Considering Voting Rights Premiums After Simplot", *The Valuation Examiner*, M/A 2000.
- Hitchner, James R., "Financial Valuation Applications and Models," Chapter 8 *Valuation Discounts and Premiums.*
- Hofman, Cornelius A., "Volume Discounted Yield Curve: Computing a Realistic Discount Rate," *The Valuation Examiner*, J/J 1997.
- Jones, Gary E., "The Case of Contingent Liability: To Discount or Not?," *The Valuation Examiner*, 1qtr, 1994.
- Kelting, Herman, "Deriving Discount Rates from Geometric Mean Internal Rates of Return," *The Valuation Examiner*, M/J 2003.
- Kelting, Herman, "Stock Prices Reflect the Value of the Underlying Assets," *The Valuation Examiner*, J/A 2000.
- McChesney, Robert C., "Minority and Marketability discount: A Present Value Approach to Determination," *The Valuation Examiner*, S/O 2000.
- Mercer, Z. Christopher, *Quantifying Marketability Discounts*, all chapters.
- Nalley, David W. Jr.., "Swing Vote Effect on Valuation Discounts," *The Valuation Examiner*, 2qtr, 1995.
- Pratt, Shannon P., R. F. Reilly and R. P. Schweihs, *Valuing a Business, The Analysis and Appraisal of Closely Held Companies*, Part IV (Discounts, Premiums, and the Value Conclusion).
- Pratt, Shannon P., R. F. Reilly and R. P. Schweihs, *Valuing a Business, The Analysis and Appraisal of Closely Held Companies*, Part IV (Discounts, Premiums and the Value Conclusion).
- Pratt, Shannon, *Business Valuation Discounts and Premiums*, all chapters.
- Radom, Carl C., "Disputes Over Minority Discounts Continue" (2 parts), *The Valuation Examiner*, MA 1996.
- Rosen, Corey, "Valuation Discounts in ESOPs", *The Valuation Examiner*, D/J 1997.

- Sheeler, Carl L., "Two Halves Don't Equal a Whole: Theory and Practice of the Minority Interest," *The Valuation Examiner*, M/A 2003.
- Skvoretz, Mark A., "The Weighted Average Cost of Capital Approach in Developing a Discount Rate," *The Valuation Examiner*, J/J 1996.
- Taylor, Timothy, "Marketability Discount Issues of the Relief Act of 1997", *The Valuation Examiner*, D/J 1999.
- Van Acker, Marty, "Tax Court Allows Valuation Discount for Built-in Gains Tax," *The Valuation Examiner*, A/S 1998.
- Laro, David and Pratt, Shannon P., *Business Valuation and Taxes—Procedure Law and Prospective*, Wiley, 2005.

PARTICIPANT NOTES

BUSINESS VALUATIONS:

FUNDAMENTALS, TECHNIQUES AND THEORY (FT&T)

CHAPTER 7

REVIEW QUESTIONS

FT&T

CHAPTER REVIEW QUESTIONS

Chapter 7: Valuation Discounts and Premiums

1. Select the reason(s) why a discount for lack of marketability (DLOM) for a controlling interest, even one that is 100%, may be applicable.

   a. Uncertain time horizon to complete the offering or sale
   b. Cost to prepare for and execute the offering or sale
   c. The eventual sale price is finalized
   d. Market conditions may require a quick sale

2. What circumstances permit the additive application of the DLOC and DLOM?

   a. There are no circumstances permitting additive application of discounts
   b. When the DLOM is applied prior to the DLOC
   c. When the DLOC is applied prior to the DLOM
   d. All circumstances require the addition of all applicable discounts

3. Which of the following best describes the concept of marketability?

   a. How much one will be paid for a bundle of rights
   b. The best listing price to get the greatest number of buyers
   c. How quickly an interest can be sold in terms of cash
   d. Having control of the assets of a business

4. The DLOM and DLOC show a relationship in valuations that:

   a. Indicate it is more difficult to sell a non-controlling (i.e., minority) interest in any privately-held business than to sell a controlling interest in that same business
   b. The greater the DLOC, the greater the DLOM
   c. A DLOM is only available for a non-controlling interest, which is also subject to a DLOC
   d. Indicate it is harder to sell a controlling interest in any business than to sell a non-controlling (i.e., minority) interest in that same business

5. It would be appropriate for the valuation analyst to use the restricted stock studies DLOM average of 35% in the valuation of a non-controlling (i.e., minority) interest.

   a. Yes. The studies were done by well-known entities, including the SEC, and, as such, can be trusted by the valuation analyst and report receiver to be accurate.
   b. No. Not all the studies are published, and, therefore, those numbers must be deleted from what the valuation analyst uses.
   c. Yes. The studies are updated periodically, so the average is current and applicable to today's valuations.
   d. No. The average rate of 35% may be used as a starting point for the valuation analyst.

6. The formula used to generate an implied minority interest discount from control premium data (such as found in the *Mergerstat Review*) is:

   a. 1 minus ((1) divided by (1 minus Control Premium))
   b. 1 plus ((1) divided by (1 plus the control premium))
   c. 1 minus ((1) multiplied by (1 plus the control premium))
   d. 1 minus ((1) divided by (1 plus the control premium))

7. In a valuation in which the valuation analyst applies both a marketability discount and a discount for lack of control, the application of the discounts is additive not multiplicative.

   a. True
   b. False

8. Which level of value would be considered equivalent to owning stock in a publicly traded company?

   a. Control marketable
   b. Minority marketable
   c. Synergistic value
   d. Minority non-marketable

9. The ability of an individual to set company policy, appoint management, and ability to determine dividend policy and payments are examples of:

   a. A minority interest
   b. A control interest
   c. An equal shareholder with 50% operating control
   d. A shareholder of a publicly traded company

10. The following are sources of empirical data on control/minority interests EXCEPT for:

   a. *Mergerstat Review*
   b. Morningstar Principia
   c. SEC Studies
   d. Emory Studies

11. It would not be surprising for a valuation analyst to have the same marketability discount for a controlling interest as they would when valuing a minority interest.

    a. True
    b. False

12. Which of the following factors may increase a marketability discount?

    a. Restrictions on transfer, limited access to financial information, and an imminent public offering
    b. Little or no dividends, little prospect of going public, and high dividend payouts
    c. Low dividend payouts, limited access to financial information, and an imminent public offering
    d. Restrictions on transfers, little or no dividends, and limited access to financial information

13. What are the two primary cases listed in the Internal Revenue Service Valuation Training for Appeals Officers as the basis for discounts for lack of marketability?

    a. *Simplot* and *Central Trust Co.*
    b. *Central Trust Co.* and *Estate of Andrews*
    c. *Estate of Andrews* and *Estate of Gross*
    d. *Estate of Gross* and *Estate of Adams*

14. Which court case specifically isolates the issue of marketability discounts?

    a. *Simplot* and *Central Trust Co.*
    b. *Estate of Kelly*
    c. *Mandelbaum*
    d. *Gross*

15. It would be appropriate for a valuator, when adjusting assets to their fair market value, to also make an adjustment for the liability resulting from a built-in capital gains tax.

    a. True
    b. False

16. Transactions offering a substantial amount of a single entity's stock, which visibly creates a supply that exceeds current demand may result in a:

    a. Blockage discount
    b. Key person discount
    c. Restrictive agreement discount
    d. Investment company discount

Chapter 7 Bonus Questions Responses

1. Your state __________________ What does your state consider a majority interest?

2. Synergy—what is this and how does it affect value?