The DLOM Conundrum: Measuring Marketability Discounts for Controlling Interests

By Jim Turner, CPA, CVA

The value of a minority interest in a privately held business can be impaired by marketability limitations, necessitating a discount for lack of marketability (DLOM). This concept is widely accepted by the courts, the IRS, the valuation community, and the marketplace. There is no consensus, however, on the application of a DLOM in the valuation of controlling interests. This article discusses the factors that may affect the marketability of a controlling interest and offers a logical approach to measuring the discount.

Distinction Between Marketability and Liquidity

The DLOM generally reflects two distinct characteristics:

1. The right (or lack thereof) to offer an investment for sale in a readily available, discernible market (referred to as marketable or nonmarketable), and
2. The speed with which the investment can be converted to cash (referred to as liquid or illiquid).

By way of example, if you own 100 shares of McDonald's stock, the shares can be sold at your discretion and cash will be received within approximately three days. The three-day conversion period from investment to cash is considered liquid. Therefore, a noncontrolling (or "minority") interest in publicly traded stock is both marketable and liquid.

The Marketability Discount and Private Equity

What happens when an owner attempts to sell equity in a privately held business? Typically, it will take months or even years to convert the equity investment to cash. The degree of marketability for private equity is directly related to three key characteristics:

1. Whether the interest is controlling or minority,
2. The amount of annual cash distributions, and
3. The expected holding period before the equity can be converted to cash (sold).

There are other factors, but these are the most influential. Arguably, the single most important factor affecting marketability is whether the private equity interest is controlling or minority. This is intuitively correct, because owners of controlling interests in private equity typically have the right to sell at their discretion and there are readily available markets via several venues, such as business brokers and internet-based markets. Despite enjoying the right and ability to sell, interests in private equity—even controlling ones—typically cannot be converted to cash quickly. So, a controlling interest is marketable but illiquid. We will take a closer look at the DLOM for a controlling interest below, but let us begin by examining the minority interest.

Usually, the prospects for quickly selling a minority interest in private equity are difficult at best. Holders of minority interests soon learn that there are no readily available markets to sell their investments nor can these investments be converted quickly to cash. In other words, minority interests are nonmarketable and illiquid.

Quantifying the Discount for Minority Interests

Marketability discounts for minority interests are often quantified using restricted stock or IPO studies. These studies show that the value of minority interests in publicly traded companies can be impaired due to the lack of a readily available market.

Restricted stock (also known as "letter stock") is stock in a public company that is identical in all respects to the company's freely traded stock except that it is restricted from trading on the open stock market for a certain period of time. Even though this stock cannot be sold to the public on the stock exchange, it may be sold in private transactions under certain circumstances. These transactions must be reported to the SEC and become a matter of public record. Accordingly, empirical data on the prices of private transactions in restricted stock can be used for comparison with prices of otherwise identical unrestricted securities eligible for trading on the open market. The restrictions eventually lapse, usually within 24 months up to 1997, and generally within a year since that time, except for the "dribble out" provisions, subject to volume limitations. Restricted stock studies show that these stocks traded at a 13–45 percent discount from the trading price of otherwise identical stock in the same company on the public stock exchange.[1]

IPO studies track the price of stocks several months before they are offered to the public and compare those prices to the price at which the stock was initially offered to the public.

These studies show that private transaction prices were 40–72 percent less than the price at which the stock was initially offered to the public.[2]

Discounts observed in both the restricted stock and IPO studies were derived by observing transactions involving minority interests. The marketability of a minority interest in a private business can be further impaired by transfer restrictions in buy-sell or shareholder agreements.

Inapplicability to Controlling Interests

Restricted stock and IPO studies based on discounts paid for minority publicly traded stocks can be used as a benchmark to quantify a DLOM for minority, privately held equity, because the base is the same—that is, they are both minority equity interests. However, it is inherently incorrect to rely on the results of restricted stock or IPO studies (studies of minority interests) to quantify a DLOM for a controlling interest (a different base).

Given the different reasons for applying a DLOM to minority and controlling interests, Dr. Shannon Pratt issued the following stern warning: "Extensive empirical studies are available … to help quantify discounts for lack of marketability for minority interests. However, starting with such data and somehow moving from there to a discount for lack of marketability for a controlling interest is an unacceptable leap of faith, not grounded in a logical connection."[3]

Factors That Affect the Marketability of Controlling Interests

Selling a controlling interest in a private company continues to be difficult, even in the age of the internet. However, selling a 100 percent interest has gotten a lot easier. Arguably, the evolution of the business brokerage profession has enhanced the prospects of selling a privately held controlling interest. Moreover, there are several internet-based sites where business owners can advertise their private businesses for sale. The most well-known, BizBuySell.com, lists over 35,000 businesses for sale at any given time. However, since we use the three-day conversion cycle from investment to cash as our benchmark, the prospects for a DLOM still exist even for a controlling interest. This is especially true if the controlling interest does not have

1 Shannon P. Pratt and Alina V. Niculita, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, 5th ed. (New York: McGraw-Hill, 2008), 430–431.
2 Ibid., 438.
3 Shannon P. Pratt, *Business Valuation Discounts and Premiums*, 2nd ed. (Hoboken, NJ: John Wiley & Sons, Inc., 2009), 399.

the power to distribute cash in the form of dividends/ distributions. Factors that affect the size of the DLOM for a controlling interest include:

- Whether or not the business is market ready
- Uncertainty with regard to the time it will take to sell
- The ability of the company to pay cash dividends/ distributions

Preparing a small business to be sold is comparable to selling real estate—the business needs to be painted, polished, and generally primed to sell. At a minimum, this means the business should have the most recent three years' business tax returns and financial statements, and a current year interim financial statement readily available. The business should analyze, document, and be prepared to discuss any major changes in the business's performance. It should also ensure that all legal agreements, employment information, key customer information, supplier information, and other critical information is documented and easily accessible. The less prepared a business is to be sold, the more likely there will be a DLOM, even for a controlling interest.

Research shows that it takes between six and 12 months to sell a 100 percent interest in a private business. A recent BizBuySell insight report indicated that the median time to sell a business had dropped from 181 days to 171 days.[4] Common sense dictates that it would likely take longer to sell anything less than a 100 percent interest. A conversation with management to ferret out previous offers and current activity in the controlling interest can help determine how long it would take to sell.

It is intuitive that an investment that has the ability to generate cash distributions would have a smaller DLOM or perhaps no DLOM. A critical step in determining any DLOM for a controlling interest is to analyze the company's history of dividend/distribution payments. Even if the company has not made distributions, the ability to distribute will mitigate the DLOM (distributions can be disguised as excessive officer compensation, rent, perquisites, etc.).

If a company distributes (or has the ability to distribute) cash, then the owner of a majority interest has the opportunity to receive a return on his or her equity during the sales process. In contrast, the holder of a nondistributing interest must wait until the interest is sold to receive any return on equity.

Privately Held Controlling Equity Interests and the DLOM Conundrum

Unlike minority interests, a controlling interest is marketable but illiquid—that is, it cannot be converted to cash within three business days like actively traded public stock. Likewise, real property, while marketable, is also illiquid because, generally, it takes time to convert a parcel of real estate into cash by selling it.

The valuation community lacks consensus on the application of discounts for lack of marketability/liquidity in the valuation of controlling interests. Opponents of marketability discounts generally contend that the lack of marketability is reflected in the pricing of the controlling interest. Proponents believe some discount for lack of marketability/liquidity should be made over and above the applied discount or price multiple based on public markets. They argue that when comparisons are made to liquid public stocks in the application of a valuation method, liquidity may be embedded in the private company value.[5]

So, we are left with the conundrum that private company controlling interests may suffer from illiquidity, but we have no empirical studies to benchmark the magnitude, or even the existence, of a DLOM.

The DLOM Solution: A Logical Approach

The solution to this problem lies in the essence of valuation theory: that hypothetical buyers and sellers are aware of all material facts and are under no compulsion to act. It makes sense that hypothetical market participants (both buyers and sellers) would rely on expected rates of return to ascertain any discount for marketability/liquidity. The biggest factors that affect the rate of return on a controlling interest are distributions/dividends and the expected holding period until the interest can be sold.

By way of example, let us assume it would take Bob two years to sell his 51 percent interest in HVAC, Inc., a small, but stable, heating, ventilation, and air conditioning business. Bob is going through a divorce, and his valuator, Valerie, has valued a 100 percent interest in the company at $1 million, using the private company guideline transaction P/EBITDA market method.

Valerie is not certain whether a discount for lack of marketability is applicable, and no empirical data exists to benchmark whether such a discount applies to a controlling interest. However, Valerie knows that the business has averaged distributions of $200,000 annually and, based upon a survey of local business brokers, that it would take Bob two years to sell the entire business for $1 million.

4 BizBuySell Insight Report, Second Quarter 2022, July 15, 2002, https://www.bizbuysell.com/news/bizbuysell-2022-second-quarter-insight-report/.

5 James R. Hitchner, *Financial Valuation: Applications and Models*, 4th ed. (Hoboken, NJ: John Wiley & Sons, Inc., 2017), 412.

Using the internal rate of return (IRR) function in Excel, Valerie calculates Bob's rate of return if she applies a 20 percent DLOM to the value of Bob's 51 percent interest.

The results of the IRR calculation, shown in Table 1, indicate a 35.61 percent annualized rate of return if it takes Bob two years to sell his 51 percent interest. Is this return reasonable? This question can be answered by examining rates of return realized over the long haul on similar investments. According to empirical data, the long-term rate of return on the smallest publicly traded stocks is 15.79 percent.[6] A 35.61 percent rate of return would be exorbitant for a small, but stable HVAC business, so the 20 percent DLOM would likely be challenged in the divorce proceeding.

Now, assume the same facts as above, except Valerie applies no DLOM. By updating the internal rate of return parameters with the expected cash flow amounts, the results are much different (see Table 2).

The 20 percent IRR in this second scenario is more in line with the long-term rate of return on small-cap publicly traded stocks. The only difference between scenarios 1 and 2 is that in scenario 2, the valuator recognized no DLOM. This illustrates how critical it is for valuation professionals to calculate rates of return to ensure they do not apply a DLOM that is unsubstantiated. The IRR methodology is intuitive and can be used to quantify the illiquidity concerns that affect a controlling interest.

Table 1

Internal Rate of Return Calculation	Scenario 1
Distributions—100%	$200,000
Percentage Ownership	51.00%
Pro Rata Share of Distributions	102,000
Value of 51% with 20% DLOM*	$408,000
IRR Calculation	
Initial Outlay for Equitable Distribution	($408,000)
Income Year 1—Distributions Pro Rata	102,000
Income Year 2—Sales price (51%) plus pro rata distributions**	$612,000
IRR%	35.61%

*($510,000 * 80% = $408,000) The assumed value of 100% is $1MM
**($1,000,000 * 51% + $102,000) The assumed value for 100% Yr. 2 is $1MM

Table 2

IRR Calculation	Scenario 2
Distributions—100%	$200,000
Percentage Ownership	51.00%
Pro Rata Share of Distributions	102,000
Value of 51% with no DLOM	$510,000
IRR Calculation	
Initial Outlay for Equitable Distribution	$510,000
Income Year 1—Distributions	102,000
Income Year 2—Distributions plus 51% of selling price	$612,000
IRR%	20.00%

Conclusion

A DLOM is often an inherent characteristic of minority interests in private equity. The restricted stock and IPO studies can be relied upon to quantify the DLOM for minority interests of private equity because the starting base is the same. However, it is inherently incorrect for a valuator to quantify a DLOM for a controlling interest using the same restricted stock and IPO studies, because the control bases are different. Moreover, the factors that affect the DLOM for a controlling interest are different than those that affect the DLOM for a minority interest.

The IRR function in Excel is a powerful tool that calculates the annualized rate of return of an investment under various scenarios. Using the IRR function, a valuator (or even a layperson) can determine whether a DLOM is warranted for a controlling interest.[7] VE

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6 Kroll, U.S. Cost of Capital, return as of August 31, 2022.
7 For additional reading on this topic, see the discussion of the Quantitative Marketability Discount Model in Z. Christopher Mercer and Travis W. Harms, *Business Valuation: An Integrated Theory*, 3rd ed. (Hoboken, NJ: John Wiley & Sons, Inc., 2021), 355–358.