# Estimating the Blockage Discount in the Fair Market Value of Publicly Traded Company Restricted Stock

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In valuations developed for gift tax, estate tax, and generation-skipping transfer tax purposes, the fair market value of publicly traded stock may become a controversial issue. Such controversy may arise when the ownership interest of the publicly traded stock is restricted. And, such controversy may arise when the subject block of stock is so large relative to the stock's daily trading volume that it cannot be sold in open market transactions at the quoted trading prices without exerting negative price pressure on the stock. This discussion summarizes the factors to consider and the procedures that are generally relied on to develop an analysis of the difference between (1) the price of the block of stock based on the quoted stock price and (2) the fair market value of the subject block of stock. This value difference is typically referred to as the blockage discount.

#### INTRODUCTION

The fair market value of 100 shares of publicly traded stock may be approximated by the formula: fair market value = stock price<sup>1</sup> × number of shares of stock.

The fair market value of 100,000 shares of stock may be approximated by the same formula.

However, as the number of shares in the subject block of stock increases, that formula becomes incomplete and it may overstate the fair market value of the shares. This result occurs when the block of stock is so large relative to the daily trading volume that it cannot be sold over a short time period without depressing the market price of the stock (i.e., it suffers from "blockage").

In these circumstances, the fair market value of the block of stock is typically estimated as follows:

Stock price<sup>2</sup>

- × Number of shares owned
- x (1 Estimated blockage discount)
- Fair market value of the subject block of stock

In the above formula, the only variable that is not known is the blockage discount.

As the number of shares in the subject block continues to increase, the stock price multiplied by shares outstanding formula may underestimate the fair market value of the ownership interest. This is because of the ownership control inherent in the shares.

This discussion focuses on situations where an ownership interest in stock is large enough to be affected by blockage—but is small enough that it does not include the economic benefits of ownership control.

Valuation analysts are often asked to estimate the fair market value of blocks of publicly traded stock for many purposes. The purpose for such valuations can include valuations developed for gift tax filings, estate tax filings, generation-skipping transfer tax filings, income tax filings, corporate planning, or other purposes.

This discussion (1) provides an overview of the concept of blockage, (2) considers terms of Securities and Exchange Commission ("SEC") Rule 144 that affect blockage, (3) lists factors that may be considered in a blockage discount analysis, and (4) presents generally accepted methods and procedures to estimate the amount of the blockage discount.

#### THE CONCEPT OF BLOCKAGE

Market prices for publicly owned stock typically reflect the trading of relatively small blocks of a few hundred to a few thousand shares. A small block of stock typically enjoys instant marketability since it is relatively easy to find a willing buyer or a willing seller on the other side of the trade.

In contrast, large blocks of stock typically do not share this type of ready marketability.

Evidence exists that it is more difficult for a shareholder to sell a very large block of company stock compared to an otherwise identical small block of company stock. The price discount to account for the negative marketability factors associated with owning a large block of stock is often referred to as a "blockage discount."

Blockage discounts are, in effect, a type of valuation discount for lack of marketability, and such valuation discounts are typically associated with large blocks of publicly traded stock.

The theory behind blockage discounts is intuitive—the larger a block of stock owned by a single shareholder (or a collective shareholder group), the smaller the potential pool of buyers is likely to be, and the more difficult it is likely to be to sell that block of stock.

Therefore, it may take longer to sell a large block of stock and it may be more difficult to do so.

The Stout Restricted Stock Companion Guide describes this concept and states, "All else being equal, large blocks of unregistered stock (expressed as a percentage of total shares outstanding) are more illiquid than small blocks. This results from: (i) Rule 144's volume limits after the initial required holding period and prior to the ultimate holding period; and (ii) the difficulty in disposing of a large block of stock in a short period through public sales due to general market supply and demand conditions."<sup>3</sup>

Both the American Institute of Certified Public Accountants Statement on Standards of Valuation Services and the American Society of Appraisers Business Valuation Standards define the valuation blockage discount as "an amount or percentage deducted from the current market price of a publicly traded stock to reflect the decrease in the per share value of a block of stock that is of a size that could not be sold in a reasonable period of time given normal trading volume."

The Treasury Regulations ("Regulations") also recognize blockage discounts. According to Regulations Section 20.2031-2(e):

In certain exceptional cases, 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

"When blockage exists in a subject block of stock, it cannot be sold immediately in the open market at the existing market price for the stock."

of stock to be valued. If the executor can show that the block of stock to be valued 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 under writer, may be a more accurate indication of value than market quotations.

In valuation analyses developed for transfer tax planning and compliance purposes, fair market value is defined as "the price at which such property would change hands between a willing buyer and a willing seller, with neither being under any compulsion to buy or to sell, and both having reasonable knowledge of relevant facts."<sup>4</sup>

This definition affects how valuation analysts consider and estimate the blockage discount.

When blockage exists in a subject block of stock, it cannot be sold immediately in the open market at the existing market price for the stock.

Therefore, the "hypothetical willing buyer" of the block of stock that is contemplated in the aforementioned fair market value definition would demand a lower price than that resulting from the stock price multiplied by shares formula.

The blockage discount definition presented above is limited to large blocks of publicly traded stock. That issue is the subject of this discussion. However, it is noteworthy that other assets and interests can suffer from blockage as well.

For example, in the case of nonpublic stock, this phenomenon occurs when the value of the subject block of nonpublic stock is so large that it significantly reduces the number of potential buyers for the subject block of stock.

A large block of nonpublic stock with an undiscounted value of \$5,000 will attract more potential

buyers than a large block of nonpublic stock worth \$500,000,000, all other factors being equal.

This reduced liquidity is often considered and accounted for as a component of the discount for lack of marketability, but it is conceptually similar to a blockage discount.

## SEC RULE 144: SELLING RESTRICTED AND CONTROL SECURITIES

Restricted securities are securities acquired in unregistered, private sales from an issuer or from an affiliate of the issuer. Investors typically receive restricted securities through private placement offerings, Regulation D offerings, employee stock benefit plans, as compensation for professional services, or in exchange for providing start-up capital to the company.

Control securities are those held by an affiliate of the issuing company. An affiliate is a person, such as a director or a large shareholder, in a relationship of control with the issuer.

Control means the power to direct the management and policies of the company in question, whether through the ownership of voting securities, by contract, or otherwise.

Securities purchased from a controlling person or affiliate, even if the securities were not restricted in the affiliate's hands, are deemed restricted securities

Under Section 5 of the Securities Act of 1933 (the "1933 Act"), all offers and sales of securities must either be registered with the SEC or qualify for some exemption from the registration requirements. If an investor acquired restricted securities or holds control securities, the investor must find an exemption from the SEC's registration requirements to sell them in the marketplace.

Rule 144 allows for the resale of restricted and control securities if certain conditions are met.

#### Conditions of Rule 144

If an investor wishes to sell its restricted or control securities to the public, the investor can follow the applicable conditions set forth in Rule 144. The rule is not the exclusive means for selling restricted or control securities, but it provides a "safe harbor" exemption to sellers.

The five conditions of Rule 144 are summarized below:

1. Holding Period – Before an investor may sell any restricted securities in the marketplace, the investor should hold them for a certain period of time. If the company that issued the securities is subject to the reporting requirements of the Securities Exchange Act of 1934 (the "Exchange Act"), then the investor must hold the securities for at least six months.<sup>5</sup>

If the issuer of the securities is not subject to the reporting requirements, then the investor should hold the securities for at least one year. The relevant holding period begins when the securities were bought and fully paid for. The holding period only applies to restricted securities.

Since securities acquired in the public market are not restricted, there is no holding period for an affiliate who purchases securities of the issuer in the marketplace.

However, the resale of an affiliate's shares as control securities is subject to the other conditions of the rule.

2. Adequate Current Information – There must be adequate current information about the issuer of the securities before the sale can be made.

This condition generally means that the issuer has complied with the periodic reporting requirements of the Exchange Act.

 Trading Volume Formula – If you are an affiliate, the number of equity securities you may sell during any three-month period cannot exceed the greater of 1 percent of the outstanding shares of the same class being sold.

However, if the class is listed on a stock exchange or quoted on Nasdaq, the number of equity securities you may sell during any three-month period cannot exceed the greater of:

- a. 1 percent or
- b. the average reported weekly trading volume during the four weeks preceding the filing a notice of sale on Form 144.

Over-the-counter stocks, including those quoted on the OTC Bulletin Board and the Pink Sheets, can only be sold using the 1 percent measurement.

 Ordinary Brokerage Transactions – If you are an affiliate, the sales must be handled in all respects as routine trading transactions, and brokers may not receive more than a normal commission.

Neither the seller nor the broker can solicit orders to buy the securities.

5. Filing a Notice of Proposed Sale with the SEC – If you are an affiliate, you should file a notice with the SEC on Form 144 if the sale involves more than 5,000 shares or the aggregate dollar amount is greater than \$50,000 in any three-month period.

The sale should take place within three months of filing the form. And, if the securities have not been sold, you should file an amended notice.

## Treatment of an Affiliate of a Publicly Traded Company

SEC Rule 144 defines an "affiliate" of an issuer as "a person, such as an executive officer, a director, or large shareholder, that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, such issuer."

Furthermore, the term "person," when used with reference to a person for whose account securities are to be sold in reliance upon Rule 144, includes the following:

- 1. Any relative or spouse of such person, or any relative of such spouse, any one of whom has the same home as such person
- Any trust or estate in which such person or any of the persons specified in paragraph 1 above collectively own 10 percent or more of the total beneficial interest or of which any of such persons serve as trustee, executor, or in any similar capacity
- 3. Any corporation or other organization (other than the issuer) in which such person or any of the persons specified in paragraph 1 above are the beneficial owners collectively of 10 percent or more of any class of equity securities or 10 percent or more of the equity interest



## FACTORS THAT AFFECT THE BLOCKAGE DISCOUNT

Two factors that may influence the size of the blockage discount are as follows:

- 1. The size of the block
- 2. The trading volume (whether measured daily, weekly, monthly, or over some other period) of the subject company shares

Therefore, one of the first procedures developed by the valuation analyst in a blockage discount analysis is to review the number of shares comprising the subject block of stock relative to the daily trading volume for the subject company shares.

Typically, this procedure is viewed as a more relevant measure of liquidity with regard to the subject interest than the percentage ownership of the subject company—although that may also have an impact on the fair market value of the subject block of stock.

An analysis of the trading volume may include a comparison of the size of the subject block of stock to the average weekly trading volume of the subject stock during the 12-month period immediately preceding the valuation date.

In addition, the analyst may also consider the size of the block relative to the weekly high volume, the weekly low volume, and the weekly median volume over that 12-month period.

The valuation analyst may also analyze the historical trading activity for the subject company

stock to identify the impact of unusual or nonrecurring events. For example, trading volume can spike concurrent with an earnings announcement, a stock being added to a popular stock index (such as the Russell 2000), or for many other reasons.

If the blockage discount analysis is based on the stock's historical trading volume and the historical trading volume is either unusually high or unusually low in certain periods due to unusual or nonrecurring events, the analyst may normalize the reported historical trading volume in the affected periods.

The valuation analyst may also consider if the subject interest includes restricted securities or control securities. The prior section in this discussion titled, "SEC Rule 144: Selling Restricted and Control Securities," describes the factors to consider for restricted and control securities.

In certain circumstances, state law affects the restrictions or control inherent in the subject block of stock. For example, state statutes may restrict a share's voting rights or affect the subject company's ability to complete a merger or acquisition transaction.

It may be prudent for the valuation analyst to consult with legal counsel to clarify the impact that state law exerts on transfer restrictions with regard to the subject block of stock.

Judicial decisions may provide professional guidance on the relevant factors to consider when estimating the blockage discount.

In the U.S. Tax Court case, *Estate of Foote* v. *Commissioner*, 6 the valuation analyst for the Internal Revenue Service (the "Service") considered the following factors in his blockage discount analysis:

- The number of shares in the subject interest relative to the total subject company shares outstanding
- The number of shares in the subject interest relative to the subject company's daily trading volume
- 3. The existence of resale restrictions on the subject interest
- 4. The volatility of the subject company stock
- 5. The size of the trading "float" of the subject company stock
- 6. The stock market trend in general
- The trading market that the stock was traded on (e.g., the Nasdaq or the New York Stock Exchange)
- 8. The most recent projected earnings trend of the subject company

- 9. The market price performance of the stock compared to the general stock market
- The subject company's dividend-paying record
- 11. The current outlook for the subject company
- 12. U.S. economic trends
- 13. The number of subject company shareholders, including institutions
- 14. The percentage of institutional ownership of the shares of the subject company
- 15. Whether the stock was a marginable security
- 16. The stock price movement on days with large trading volume

In Estate of Murphy v. United States,<sup>7</sup> the District Court estimated the blockage discount based on consideration of the following qualitative factors:

- 1. The volatility of the stock
- 2. The actual price change in the stock under recent and preceding market conditions
- 3. The subject company's current economic outlook
- 4. The trend of the price and the financial performance of the stock
- The trend of the subject company's earnings
- The existence of any resale restrictions on the stock

In both the *Foote* decision and the *Murphy* decision, the valuation analyst that considered and analyzed the greater list of factors prevailed in the judicial determination.

## METHODS TO ESTIMATE A BLOCKAGE DISCOUNT

This section presents three generally accepted methods that are often considered for the purpose of estimating a blockage discount.

The information discussed below is focused on control or restricted stock. This is because blocks of stock that suffer from blockage tend to be control or restricted stock.

The methods outlined below also are applicable to subject equity interests that are not restricted.

Every valuation analysis should be based on the facts and circumstances of the individual case.

The purpose of the information presented next is primarily to facilitate an understanding of issues relating to blockage discounts. It is not intended to provide a template to estimate an appropriate level of blockage discount.

The owner of a block of control or restricted stock typically has the following methods of selling the stock:

- Secondary public offering
- "Dribble-out"
- Private placement
- Other methods (not discussed herein)

#### **Secondary Public Offering**

One method of selling control or restricted stock is through a secondary public offering. In order to conduct a secondary public offering, a registration statement would be required to be filed under the 1933 Act.

Once the control or restricted stock is sold through a secondary public offering, the shares would no longer be subject to the limitations of Rule 144.

If a secondary public offering were to be relied on to sell a large block of stock in a public company, several factors should be considered.

First, various costs would be incurred for a secondary offering. These costs may include, but would not be limited to, investment banking fees, legal fees, accounting fees, and other professional expenses.

Second, depending on the restrictions inherent in the subject block of stock the subject company would need to file a registration statement and prospectus for the block of shares subject to the offering. It may be the case that the subject company board of directors has sole discretion over this decision.

However, the subject block of stock may have a registration rights agreement with the subject company giving the owner of the subject block of stock the ability to force the subject company to register the subject block of stock.

If the subject company has previously announced special dividends and/or share repurchase programs within a reasonable time prior to the valuation date, the subject company may be less interested in offering new shares, such as through a secondary public offering, as of the valuation date.

Third, a secondary public offering would also be subject to indirect costs form market risk. These market risks may include the following:

- 1. Stock price fluctuations between the time of the decision to initiate a secondary offering and when the proceeds from the sale are received
- 2. Stock price dilution due to an increase in the number of shares available for sale
- 3. The potential negative informational message to the public market that the sale of a large block of subject company shares implies

In addition, secondary public offerings often occur at a price discount from the prevailing publicly traded price of the stock, which would typically reduce the attractiveness of this method as a means of selling a large block of stock.

Fourth, the analyst may consider actual correspondence the shareholder and/or authorized representatives have had regarding a potential offering of the subject shares.

The subject company may have indicated either in the affirmative or negative about its willingness to assist the shareholder with a secondary offering.

#### **Dribble-Out Rule**

A second method of disposing of control or restricted stock would be in "dribble-out" sales.

If the subject block of shares is restricted, the dribble-out period may be based on the Rule 144 trading volume formulas, which were previously discussed.

Under the dribble-out provision of Rule 144, the owner of a block of control or restricted stock may sell, during a three-month period, the greater of:

- 1. 1 percent of the outstanding shares of the same class being sold or
- 2. the average reported weekly trading volume of the stock during the four weeks preceding the filing a notice of sale on Form 144.

If the subject block of shares is not restricted and the dribble-out method is selected, then the time period can be estimated based on either the guidance in Rule 144 or based on discussions with the stock's market makers.

Market makers may be able to provide the analyst with information about how many additional shares the market could absorb without exerting negative price pressure on the stock.

As discussed previously, sales of control or restricted stock are subject to the other resale provisions as well. The other resale provisions include the following:

- 1. A required holding period
- 2. Adequate current information
- 3. Ordinary brokerage transactions
- The filing of a notice of proposed sale with the SEC

In addition, "dribble-out" sales may be subject to company-specific insider trading rules and restrictions.

The Black-Scholes option pricing model ("BSOPM") is typically applied to estimate the blockage discount and the fair market value of the subject block of stock relying on a dribble-out method analysis.

This model is discussed in the following section.

#### Black-Scholes Option Pricing Model

The BSOPM estimates a discount for lack of liquidity using option pricing theory. In particular, this model is based on a put option, which gives the holder the right (but not the obligation) to sell the underlying asset on or by the expiration date at the exercise price.

Typically, the BSOPM is relied on to estimate the price of a series of daily put options that could be used to hedge against any decline in the subject company stock price during the hypothetical period the subject block of stock could be sold into the market (i.e., the "dribble-out period").

The total cost of this hedge as a percent of the freely traded value of the subject block of stock on the valuation date represents the indicated illiquidity discount that is associated with the subject block of stock.

The following discussion summarizes this model.

An option that grants the right to buy an asset is a call option, while the corresponding right to sell an asset is a put option. The BSOPM calculates the price of a put option based on various inputs. The indicated put option price can be interpreted as a cost to insure the current market price of an investment over a period of time.

In other words, the price of a put option shows what investors are willing to pay to guarantee the ability to sell the stock at a predetermined price.

For the purpose of a blockage discount analysis, the price of the put option, with respect to the subject company stock market price on the valuation date, represents the discount that is associated with the shareholder's inability to sell the entire subject block of stock into the market immediately, without severely depressing the market trading price.

In other words, the analyst typically considers a ratio of (1) the price of the put option (or series of put options) to (2) the market trading price of the subject company stock represents the discount for illiquidity.

The basic BSOPM depends on five basic valuation variables. These variables are:

- 1. the current price of the underlying stock (the current stock price),
- 2. the exercise price of the option (the exercise price),
- 3. the length of time to the expiration of the option,
- 4. the risk-free interest rate, and
- 5. the standard deviation of the annual rate of return on the underlying stock.

The BSOPM for a dividend-paying stock is typically expressed as follows:

Put option value (P) = Xe-rt × N(-d2) – Se- $\delta t$  × N(-d1)

where:

S = Stock price

X = Exercise (strike) price

N() = Value of cumulative normal distribution at

the point ()

$$d_1 = \frac{\ln(S/E) + (r + \sigma^2/2)^t}{\sigma\sqrt{t}}$$

 $d_2 = d_1 - \sigma \sqrt{t}$ 

ln = Natural logarithm

r = Short-term riskless rate (continuously compounded)

t = Time to expiration, in years

e = Base of natural logarithms

 $\delta$  = Dividend yield

 $\sigma$  = Annual standard deviation of return (usually referred to as *volatility*)

The value of the put option is positively correlated with both the volatility and the time to maturity. As the volatility or the time to maturity increases/decreases, the value of the put option (and the resulting discount for lack of liquidity) also increases/decreases.

The benefits of applying the BSOPM to estimate the blockage discount are as follows:

- 1. It is based on empirical support.
- 2. The model parameters are based on observable market data.
- 3. It is useful in testing discounts.

- The model has flexibility with varying inputs.
- 5. It can be easily replicated.

#### PRIVATE PLACEMENT METHOD

Another method of selling a block of control or restricted stock would be in a private placement. A private placement is unlike a public offering because buyers of shares in a public offering acquire stock that is free of restrictions.

In contrast, the buyer of the subject block of stock through a private placement would:

- acquire the stock subject to the same restrictions currently covering the stock and
- be subject to a six-month holding period before dribble-out sales could begin.

Unlike a secondary public offering or a dribbleout sale, the buyer of the stock in a private placement transaction would not acquire the stock free of Rule 144 restrictions.

Specifically, if the seller of the subject block of stock is an affiliate of the subject company and the subject block of stock represents control shares, the buyer of the stock in a private placement would be subject to the initial six-month holding period under Rule 144.

As a result, the price that a buyer of restricted or control stock is willing to pay in a private placement is generally less than the public price of an otherwise identical security because the buyer is acquiring stock that lacks immediate marketability.

Although a private placement might offer a short-term path to liquidity, the associated restrictions with a private placement transaction indicates that the seller of the subject block of stock would likely have to accept a lower price for its shares.

In contrast, the dribble out method, as discussed above, offers a path to liquidity, but without the additional restrictions associated with private placement.

#### Nonaffiliate Purchaser

If a nonaffiliate were to purchase restricted stock from another nonaffiliate, the purchaser would be able to "tack on" the seller's initial required holding period.

However, if a nonaffiliate were to purchase restricted stock from an affiliate, a buyer of the subject block of stock through a private placement of the stock would still be subject to the initial sixmonth holding period because the stock would be purchased from an affiliate or affiliates.

After completion of the six-month holding period, the nonaffiliate purchaser would be able to resell the stock in compliance with Rule 144(c).<sup>8</sup>

More specifically, the nonaffiliate would not be required to comply with the trading volume, brokerage transaction, and notice conditions for reliance on the Rule 144 "safe harbor" exemption after the required six-month holding period.

The nonaffiliate would only have to comply with the adequate current publication requirement described in Rule 144(c).

After one year, the nonaffiliate purchaser would be permitted to sell the entire block of stock free of any restrictions, including Rule 144(c).

However, there is no guarantee that market conditions would allow for such a sale to take place, or that if the sale were to take place, it would occur at the full and freely traded market price.

#### **Affiliate Purchaser**

Alternatively, if the buyer of the subject block of stock through a private placement were an affiliate, the buyer would still be subject to the initial sixmonth holding period.

After completion of the six-month holding period, the affiliate purchaser would be able to resell the stock, but only in compliance with all Rule 144 conditions, such as the following:

- 1. The adequate current public information conditions under Rule 144(c)
- 2. The trading volume limitations under Rule 144(e)
- 3. The ordinary broker transactions requirement under Rule 144(f)
- 4. The filing notice with the SEC requirement under Rule 144(h)

#### **SEC Institutional Investor Study**

Pursuant to Congressional direction, the SEC undertook an analysis of the purchases, sales, and holding of securities by financial institutions in order to determine the effect of institutional activity upon the securities market. The study report was published in eight volumes in March 1971.

The fifth volume provides an analysis of restricted securities and deals with such items as the characteristics of the restricted securities purchasers and issuers, the size of transactions (dollars and



shares), the lack of marketability discounts on different trading markets, and their sale provisions.

This research project provides some guidance for measuring the price discount on privately placed shares in that it contains information based on the actual experience of the marketplace.

This research showed that, during the period surveyed (January 1, 1966, through June 30, 1969), the amount of discount allowed for restricted securities from the trading price of the unrestricted securities was generally related to the following four factors:

 Earnings – Earnings and sales consistently have a significant influence on the size of restricted securities discounts according to the study. Earnings played the major part in establishing the ultimate discounts at which these stocks were sold from the current market price.

Apparently earnings patterns, rather than sales patterns, determine the degree of risk of an investment.

 Sales – The dollar amount of sales of issuers' securities also has a major influence on the amount of discount at which restricted securities sell from the current market price.

The results of the study generally indicate that the companies with the lowest dollar amount of sales during the test period accounted for most of the transactions involving the highest discount rates, while they accounted for only a small portion of all transactions involving the lowest discount rates.

 Trading Market – The market in which publicly held securities are traded also reflects variances in the amount of discount that is applied to restricted securities purchases.

According to the study, discount rates were greatest on restricted stocks with unrestricted counterparts traded over-the-counter, followed by those with unrestricted counterparts listed on the American Stock Exchange, while the discount rates for those stocks with unrestricted counterparts listed on the New York Stock Exchange were the lowest.

4. Resale Agreement Provisions – Resale agreement provisions often affect the size of the discount. Certain provisions are often found in agreements between buyers and sellers that affect the size of discounts at which restricted stocks are sold.

These provisions may include "piggy-back" registration rights or demand registration rights.

In Revenue Ruling 77-287, the Service acknowledged the conclusions of the SEC Institutional Investor Study and the prices of restricted securities purchased by investment companies as part of the "relevant facts and circumstances that bear upon the worth of restricted stock."

The Service described the purpose of Revenue Ruling 77-287 as, "to provide information and guidance to taxpayers, [the Service], and others concerned with the valuation, for Federal tax purposes, of securities that cannot be immediately resold because they are restricted from resale pursuant to Federal security laws."

### Application of the Private Placement Method

In developing an analysis that relies on the private placement method to estimate a blockage discount for a large block of stock, it is typical for analysts to rely on guideline private placement transactions of restricted stock of companies that had identical securities traded on a public stock market exchange.

Since shares of restricted stock are not immediately marketable, such private placements of restricted stock generally occur at a price below the concurrent market price of the actively traded shares.

These private transactions enable the analyst to compare:

- the prices of shares which may not be immediately traded in a public market due to restrictions and
- 2. the concurrent market price of their publicly traded counterparts.

As a result, these guideline private placement transactions provide an indication of the lack of marketability inherent in restricted shares compared to their freely traded counterparts.

Analysts can rely on numerous databases to search for guideline private placement transactions of restricted stock. It should be noted that many of the guideline private placement transactions may have occurred prior to 1997.

For these transactions, the required holding period for the stock that was acquired pursuant to Rule 144 was two years.

Following the two-year holding period, the holder of the stock was allowed to dribble the stock into the public market, subject to certain volume limitations.

Effective April 29, 1997, the SEC changed the minimum required holding period under Rule 144 from two years to one year. As a result, any guideline private placement transactions that occurred after 1997 incorporate a one-year required holding period.

The SEC then made another change to the required holding period for privately placed stock. Effective February 15, 2008, the required holding period was reduced from one year to six months.

Assuming the valuation date of the blockage discount analysis is after February 15, 2008—that is, as of a date when the required holding period was six months—it may be necessary to make a downward adjustment to the analyst's concluded price discount.

That adjustment should account for a reduction in the required holding period if the majority of the guideline private placement transaction data reflect a required holding period of one or two years.

#### **SUMMARY AND CONCLUSION**

Determining the blockage discount to apply in estimating the fair market value of large block(s) of publicly traded stock requires consideration of assignment-specific facts and circumstances and generally accepted valuation methodology.

The valuation methodology selected, and its application, may also be influenced by trading volume history and considerations, discussions with market makers and counsel, and judicial precedent, among other factors.

The analyst should make sufficient inquiries of the subject publicly traded company and the owner of the large block of stock in the subject publicly traded company (to the extent possible) and should conduct sufficient research to understand the various alternatives available for the transfer of the subject interest.

In a blockage discount analysis, a valuation analyst may consider the realistic alternatives to selling the large block of stock. Those alternatives may include:

- selling the stock in a secondary public offering,
- dribbling out the block of stock in the open market,
- selling the stock in a private placement, and/or
- 4. some other method.

#### Notes:

- For gift and estate tax valuations, the stock price may be defined as ((high price on the valuation date + low price on the valuation date) ÷ 2). For other valuation purposes, the stock price may be the daily closing price, or some other measure.
- 2. Ibid
- 3. Stout Restricted Stock Companion Guide (Stout Risius Ross, LLC, 2021).
- 4. Treas. Reg. Section 20.2031-1(b).
- The SEC changed the initial required holding period from one year to six months effective February 15, 2008.
- Foote v. Commissioner, T.C. Memo 1999-37 (Feb. 5, 1999).
- Estate of Murphy v. United States, No. 07-CV01013, 2009 WL 3366099 (W.D. Ark. Oct 2, 2009).
- 8. Rule 144(c) states that adequate current public information about the issuer of the stock being sold must be available before any sale can be made. Generally, this condition is satisfied when the issuer has complied with the periodic reporting requirements of the Exchange

Act.

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