RESTRICTED SHARES AS COMPENSATION: THE BENEFIT THAT BENEFITS ALL

Valuation Services

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Restricted Shares as Compensation: The Benefit that Benefits All

Executive compensation continues to evolve, but the goals remain the same: align the incentives of the shareholders with the executives. Financial engineering will progress in all areas, and executive compensation is not immune. We have seen complex incentive structures created to reward executives for specific performance or market-based achievements. While these structures remain relevant and can be used to tailor an executive's compensation, we have also observed an increase of standard equity awards with post-vesting restrictions. In general, equity compensation is intended to align the objectives of shareholders and executives. The addition of post-vesting restrictions promotes executive retention and incentivizes stable long-term growth.

The following benefits have encouraged the use of post-vesting holding requirements in restricted shares:

- Improved corporate governance
- Reduced compensation expense

The benefits achieved are dependent on the restrictions and rights issued with shares. We will discuss the corporate governance benefits that are achieved with lower compensation expense. The lower compensation expense is due to the discounts in the valuation for the post-vesting restrictions. Corporate governance is enhanced, the company has reduced expenses and the employee receives equity compensation, making restricted shares a benefit for all.

IMPROVED CORPORATE GOVERNANCE

Executive compensation (as a percentage of corporate earnings) is at an all-time high and has been targeted both politically and socially. Public companies are required to disclose executive compensation, allowing shareholders and the general public to scrutinize executive rewards relative to performance. The pay-for-performance idea is not novel, yet it is challenging to implement. The issue is that value and performance are difficult to quantify and can also be fleeting. In order to adjust for misaligned compensation and discourage the pursuit of short-term economic policies, companies have implemented time restrictions and clawback provisions for executive compensation. In the event of poor corporate governance, compensation adjustments can be executed to preserve an equitable arrangement.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 was established to protect investors. Final Securities and Exchange Commission (SEC) rules associated with the requirement for recovery mechanisms have not been finalized. Upon adoption, all listed companies will be required to incorporate effective compensation clawback policies.

The intent of corporate governance is to align shareholders, Boards of Directors and executives toward common goals. Issuing restricted shares with time-based post-vesting restrictions and clawback provisions supports strong corporate governance.

REDUCED COMPENSATION EXPENSE FOR FINANCIAL REPORTING PURPOSES

The potential benefit to the company issuing restricted stock awards (RSAs) is primarily associated with the discounts utilized when valuing post-vesting restrictions. ASC 718 and IFRS 2 Restricted Share Awards require the determination of fair value as of the grant date.

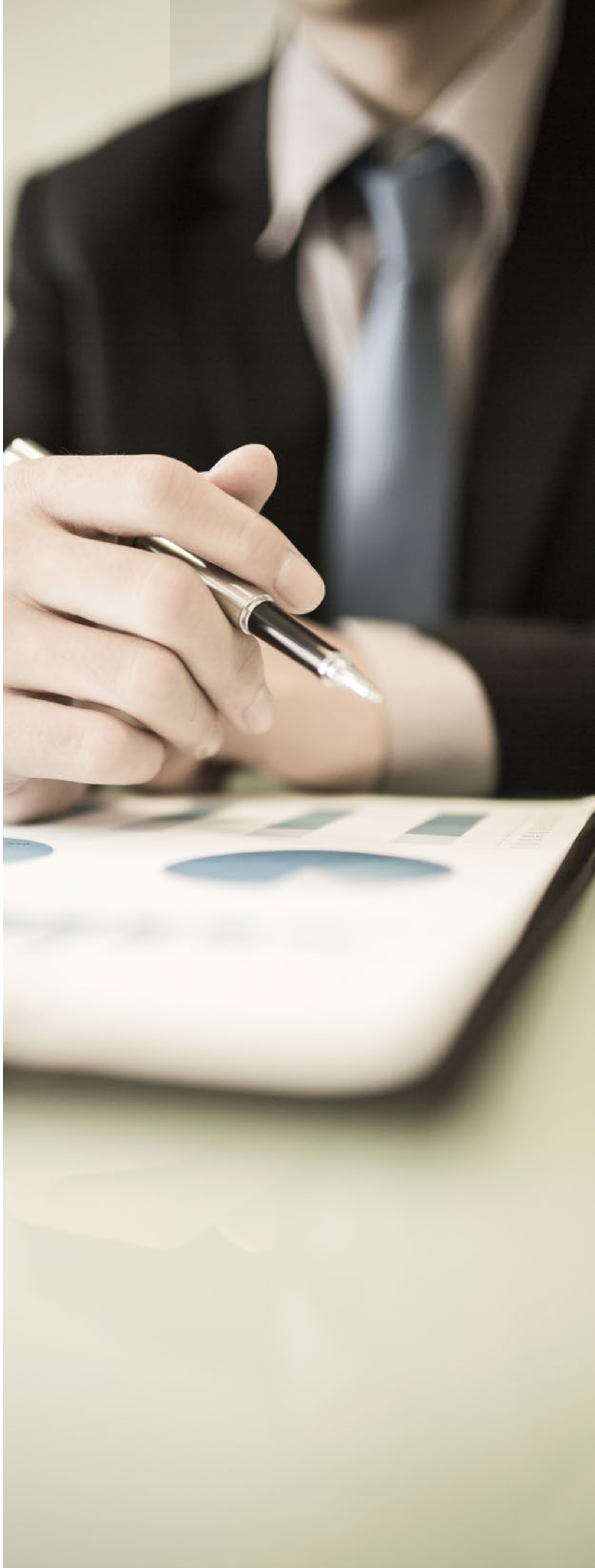
Fair Value is defined as:

The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement (valuation) date.

The annual compensation expense for an RSA is determined by amortizing the grant date fair value over the service period associated with the RSA (assuming an RSA is consistently rewarded with shares and use of equity accounting). The grant date fair value is expensed over the service period, but must consider the discounts for any post-vesting restrictions in its fair value determination. In general, time-based post-vesting restrictions constrain the marketability of a share, causing the share to be less desirable and valuable to market participants. Careful consideration of these restrictions is essential, as discounts for lack of marketability (DLOM) generally range between 15 percent and 35 percent, and often significantly impact a company's reported compensation expense.

When determining if a mandatory post-vest holding requirement influences the award's fair value, the following criteria must be satisfied:

- The restrictions associated with a post-vest holding requirement must be attributes of the subject award. In other words, if award agreements include an absolute prohibition on the post-vestment sale of shares, a discount in consideration of this liquidity restriction may be appropriate. Alternatively, a discount for illiquidity cannot be applied to reflect restrictions that are ancillary to the equity award.



Discounts related to post-vesting time-based restrictions can range from 15 percent to 35 percent.

- The restriction must represent an absolute prohibition on sale, rather than a limitation on an employee's ability to sell the stock. For example, publicly traded companies sometimes issue shares of Rule 144 stock (or Letter Stock) that have not been SEC registered and impose an open market selling restriction of six-months from issuance. However, Rule 144 stock may be sold to qualified investors in a private transaction during this restriction period. The SEC contends that these constraints represent limitations on the ability, but not a full prohibition, of a sale and therefore preclude the application of a DLOM.

Standards boards, regulatory agencies and court opinions have provided the following guidance in support of the application of DLOMs.

FASB (ASC 718) – "A restriction that continues in effect after an entity has issued instruments to employees, such as the inability to sell vested shares for a period of time, is considered in estimating the fair value of the instruments at the grant date.

A share that will be restricted after the employee has a vested right to it, shall be measured at its fair value, which is the same amount for which a similarly restricted share would be issued to third parties."

IASB (IFRS2) – "If the shares are subject to restrictions on transfer after vesting date, that factor shall be taken into account, but only to the extent that the post-vesting restrictions affect the price that a knowledgeable, willing market participant would pay for that share."

SEC (2007 remarks at AICPA conference) – "One common term we see in share-based payment arrangements is a restriction that prohibits the transfer or sale of securities. If the security contains such a restriction that continues after the requisite service period, that post-vesting restriction may be factored as a reduction in the value of the security… The discount should be specific to the security and not derived based on general rules of thumb."

AICPA (2013 Guidance) – "There are many quantitative and qualitative methods for assessing a discount for lack of marketability. The most popular quantitative methods estimate the discount as a function of the duration of the restriction (time) and the risk of the investment (volatility). In most cases, the researchers developing each method then validated the results via a regression analysis using data from restricted stock studies."

IRS – "The IRS has published a work aid for its valuators to help them assess when a discount for lack of marketability is appropriate. They accept that when there is a significant reason to believe that both a buyer and seller would be willing to accept a lower price due to liquidity restrictions a DLOM is appropriate."

Mandelbaum Case – Judge Laro's methodology in Mandelbaum required valuation experts to consider the following "factors influencing marketability" and the associated DLOM:

- Private vs. public sales of the stock
- Financial statement analysis
- Dividend policy
- Nature of the company: its history, industry position, economic outlook
- Company management
- Amount of control in the transferred shares
- Restrictions on transferability
- Holding period for the stock
- Company's redemption policy
- Costs associated with a public offering

Discounts may be appropriate based on the restrictions imposed and will vary from award to award. Valuation professionals must consider the factors above and choose a supportable valuation methodology to estimate a fair value.

METHODS FOR QUANTIFYING THE IMPACT OF ILLIQUIDITY

If the aforementioned criteria have been met and application of a DLOM is warranted, then quantitative methods of calculating DLOMs and corroborative empirical data must be considered.

Empirical evidence for a DLOM commonly considers observations of pre and post-IPO data and transactions in unregistered shares. In general, DLOMs are derived in consideration of changes in share price, with and without the associated marketability discount. Pre-IPO shares are generally priced at a discount to post-IPO shares. Similarly, unregistered shares tend to sell at a discount relative to transactions post-restriction.

Table 1 below illustrates the results of studies conducted by Emory & Co. on DLOMs implied by pre-IPO transactions.

TABLE 1 PRE-IPO ILLIQUIDITY DISCOUNT STUDIES FROM EMORY & CO.			
TIME PERIOD	NUMBER OF OBSERVATIONS	AVERAGE DISCOUNT	MEDIAN DISCOUNT
1997-2000*	53	54.00%	54.00%
1995-1997	91	43.00%	42.00%
1994-1995	46	45.00%	45.00%
1991-1993	54	45.00%	44.00%
1990-1992	35	42.00%	40.00%
1989-1990	23	40.00%	40.00%
1987-1989	27	45.00%	45.00%
1985-1986	21	43.00%	43.00%
1980-1981	13	60.00%	66.00%
All 9 Studies	363	46.90%	46.60%

These studies primarily utilize exercise prices of employee stock options as a proxy for pre-IPO stock prices. Use of this proxy is imperfect at best and therefore the results of these studies, in isolation, may tend to overstate the DLOM. However, the empirical evidence suggests that pre and post-IPO prices support DLOMs approaching 50 percent.

Empirical data derived from transactions of unregistered stock (Rule 144) can provide some evidence of DLOMs that may be applicable for restricted stock awards with post-vest holding requirements. Rule 144 allows companies that do not wish to pay the underwriting expenses for a secondary offering to issue unregistered shares in a transaction called a private investment in a public equity (PIPE). These shares are identical to publicly traded shares except that they have a selling restriction. The difference in price can be entirely attributed to a discount for illiquidity.

There have been numerous studies of Rule 144 transactions that can help illustrate the DLOM implied by transactions of stock having such liquidity restrictions.

Table 2 below summarizes the results from 20 different studies conducted on PIPE transactions.

TABLE 2 RULE 144 TRANSACTION STUDIES FROM MULTIPLE SOURCES

STUDY NAME	TIME PERIOD	NUMBER OF OBSERVATIONS	AVERAGE DISCOUNT	MEDIAN DISCOUNT
Bajaj, Denis, Ferris and Sarin	1990-1995	88	22.20%	- -
Bruce Johnson	1991-1995	72	20.00%	- -
FMV Opinions Inc.	1980-1997	243	22.10%	20.10%
FMV Opinions Inc.	1980-2005	- -	22.00%	- -
FMV Opinions Inc.	1997-2005	- -	21.60%	- -
FMV Opinions Inc.	2002-2005	- -	14.60%	- -
LiquiStat	2005-2006	61	32.80%	34.60%
Management Planning Inc.	1980-2000	259	27.40%	24.80%
Management Planning Inc.	2000-2007	1,600	14.60%	- -
Michael Maher	1969-1973	34	35.40%	33.00%
Milton Gelman	1968-1970	89	33.00%	33.00%
Robert Moroney	1968-1972	146	35.60%	33.00%
SEC Institution Investor	1966-1969	389	25.80%	23.60%
Standard Research Consultants	1978-1982	28	- -	45.00%
Trugman Valuation Associates	2007-2008	80	18.10%	14.40%

At inception, Rule 144 required a two-year holding period for shares issued in PIPE transactions. In 1997, the holding period was reduced to one year, and then again in 2008 the holding period was reduced to the present day holding period of six months. These studies encompass transactions that were subject to each of these three different holding periods. The DLOM shown from these studies that are more than five years in length has an approximate range of 15 to 35 percent. As noted above, the discount realized on these shares can be entirely attributed to the risk associated with owning shares having a defined period of restriction.

Regression analyses of these studies show that the length of the holding period and the observed price volatility are both significant and positively correlated to the magnitude of the discount. These empirical studies are limited, only encapsulating data for transactions in which the holding period ranged from six months to two years. When supporting a DLOM for shares having a range of volatilities and holding periods, it is necessary to apply a quantitative approach. Use of empirical studies should be limited and only aid to corroborate quantitative determinations of DLOM.

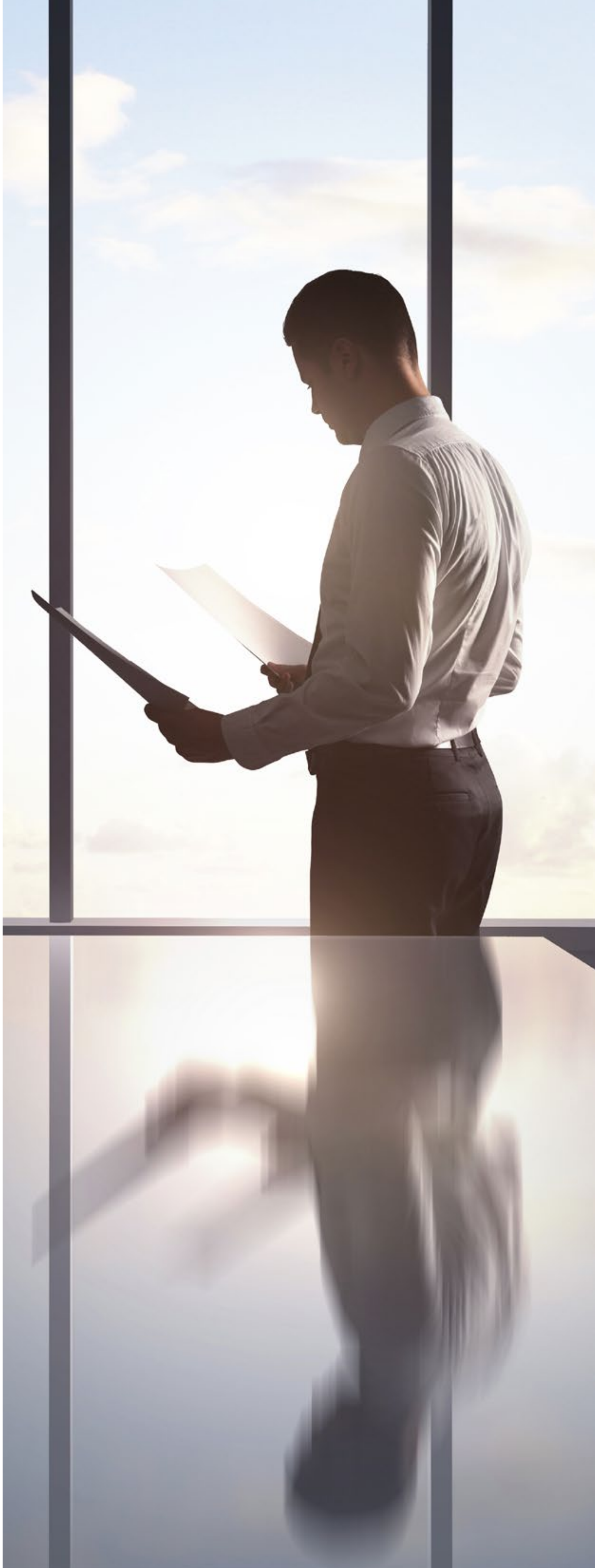
In fact, the SEC has stated, "It is not enough to simply cite the average marketability discount used by your investment banker or to highlight that the amount of the discount used falls within a broad range you noted in an academic study."

Discounts for lack of marketability can significantly influence an RSA's fair value determination and corresponding compensation expense. Use of properly supported discounts is acceptable and commonly accepted. However, derivation of supportable discounts necessitates the use of quantitative methods, as those solely predicated on empirical studies are commonly deemed unacceptable.

COMMON QUANTITATIVE METHODS

Cost of Carry (Collared Strategy)

This approach assumes that the discount for illiquidity is equivalent to the opportunity cost attributed to a hypothetical sale of the subject shares (absent restrictions) and redeployment of capital proceeds in alternative investments. Under this assumption, the value of the DLOM is simply equal to the risk-free rate of return compounded annually, commensurate with the holding period of the restricted shares. Although this calculation is easy to understand, it tends to have limited utility. This method ignores the effect of volatility in assuming the holding shares carry the same risk as the holding treasuries used in establishing the risk-free rate of return. The DLOM conclusion on this approach understates the discount observed in the empirical studies. Use of this approach should be limited to shares having low price volatility and long-term restrictions.



Chaffe Protective Put Method

This model assumes the illiquidity discount is equal to the cost of an at-market put option, having a contractual term equal to the duration of the mandatory post-vest holding period (Chaffe 1993), and based on the premise that the put, once exercised, will yield 100 percent liquidity. However, an at-the-money put provides more value than just liquidity; it also provides a lower bound for the share price, eliciting some criticism of this method. The model does produce liquidity discounts that are consistent with the observations of DLOM from empirical studies when valuing shares with moderate or low price volatility.

Longstaff Model

This model was developed to address some of the shortcomings of the protective put model. It centers the cost of illiquidity on the end of holding period value of a look-back option. A look-back option allows the holder to sell the underlying stock at the peak price during the restriction period. This model estimates the maximum opportunity cost resulting from selling restrictions (Longstaff 1995). Although this model eliminates the drawbacks of the Chaffe method, it assumes the shareholder possesses the perfect market timing necessary to sell the subject shares at their peak price during the holding period. As such, the Longstaff model tends to overstate the DLOM. This model tends to provide an upper bound for DLOM and in our experience is not often used as the sole quantitative approach.

Finnerty

The Finnerty model assumes the cost of illiquidity is equal to the cost of an Asian Put Option (Average Strike Price Option) having a strike price equal to the average stock price observed during the option term. The use of an Average Strike Price Option eliminates the assumption of perfect market timing inherent in the Longstaff model, as well as the limitations integral with the Chaffe method. However, this approach when regressed against the qualitative studies tends to understate the discount for lower volatility stocks. By virtue of addressing common complaints associated with the quantitative models cited above, the Finnerty model is commonly used in practice to develop the illiquidity discount for post-vest holding restrictions on high-volatility stocks.

SUMMARY

Based on the current regulatory environment in which a strong corporate governance mandate is in the crosshairs of regulators, proxy advisors, investors and the general public, we have seen increased use of post-vesting mandatory holding requirements and clawback terms.

Companies and executives adopting these compensation plans can benefit. Effectively structured post-vest holding periods further bolster executive retention, and company reported compensation expenses can potentially be reduced with proper consideration of discounts for lack of marketability. Properly structured compensation plans and rigorous application of appropriate valuation methodologies will further enhance these results.

Chief among these considerations is determining the appropriate discount for lack of marketability. When determining the appropriate methodology for quantifying DLOM, companies need to be cognizant of accounting and regulatory requirements. DLOMs predicated solely on qualitative considerations of empirical studies are insufficient.

Significant valuation expertise is necessary to properly quantify a defensible DLOM. As the range of discounts derived from readily available transactions varies significantly, DLOM conclusions can have a significant influence on fair value determinations and reported compensation expense.

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