

# Voting Stock and Nonvoting Stock: Allocating Equity Value

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*Business valuations performed for gift tax or estate tax purposes often involve the valuation of companies that are capitalized with both voting stock and nonvoting stock. In these situations, the analyst should perform two additional procedures that would not be required if the company was capitalized with only one class of stock: the analyst must (1) estimate a premium for voting rights (or a discount for lack of voting rights) and (2) allocate value between the company's voting stock and nonvoting stock. This discussion addresses the second additional procedure. Specifically, this discussion presents two methods that the valuation analyst can use to allocate value between a company's voting stock and nonvoting stock. This discussion also explores the strengths and weaknesses of those two equity allocation methods.*

## INTRODUCTION

Valuation analysts are often asked to value ownership interests in closely held companies for gift tax or estate tax planning purposes. Sometimes, the company that is the valuation subject is capitalized with two kinds of equity:

1. Equity that has the right to vote
2. Equity that has a relatively limited right (or no right) to vote

In these situations, the valuation analyst may have to allocate value between a voting ownership interest and a nonvoting ownership interest.

When multiple owners each own a different number of the company's shares or a different class of shares, it is possible that the sum of all of the multiple owners' shares times each share's value will not equal the total equity value (except perhaps in a takeover transaction).

The sum of all of the multiple owners' shares times each share's value may not equal the total equity value as a result of the application of valu-

ation discounts (1) for lack of control and (2) for lack of marketability. Another reason for this result is the application of a valuation discount for the lack of voting rights.

Compared to the valuation discounts for lack of control and/or for lack of marketability, the size of the valuation discount for the lack of voting rights is typically not as large.

The application of a discount to reflect the difference in value between a share of stock that has the right to vote and a share of stock that does not have such a right is encountered with some regularity by valuation analysts.

This issue is particularly relevant when a block of shares, the value of which is already known, is disaggregated between two classes of stock.

As an illustrative example of equity allocation, let's assume the following:

1. An investor acquired 100 voting shares and 900 nonvoting shares in Company One for \$5,000.
2. Each voting share costs 5 percent more than each nonvoting share.



Given these fact, how much did the investor pay for each nonvoting share?

In another situation, after recognizing valuation adjustments for lack of control and lack of marketability, the fair market value at a noncontrolling, nonmarketable level of value of all of the total 20,000 voting and nonvoting shares of equity of Company Two is \$100,000.

Further, let's assume the following:

1. An investor holds 100 voting shares and 900 nonvoting shares of Company Two stock.
2. Each voting share is worth 5 percent more per share than each nonvoting share.

Given these facts, how much is each of the investor's nonvoting shares worth?

To answer the questions posed in the illustrative fact set, the valuation analyst should first select a method to allocate equity value between multiple classes of stock. The analyst should next allocate the subject company equity value using the selected allocation method.

This discussion presents two methods that the valuation analyst can use to allocate the total equity value between the voting stock and the nonvoting stock in a corporation. This discussion also presents an explanation of the strengths and weaknesses of these two equity allocation methods.

The two equity allocation methods that are discussed herein are the most common allocation methods used by valuation analysts. In addition, there are other, infrequently used, equity allocation methods available to analysts.

However, since other total equity allocation methods are typically not applied in practice, they are not included in this discussion.

## DISCOUNT FOR LACK OF VOTING RIGHTS (VOTING RIGHTS PREMIUM)

Closely held companies are often capitalized with multiple classes of stock. One common ownership structure is a closely held corporation that is capitalized with a small number of voting shares and a large number of nonvoting shares.

This ownership structure is commonly recommended by estate planners because it enables the senior owners (e.g., the parents) to transfer large economic interests in a closely held company to the next generation (e.g., the children) without giving up control of the business enterprise.

The company voting stock and nonvoting stock are often identical except for the difference in voting rights granted to each class of stock.

When nonvoting stock is the subject of a valuation assignment, the relative difference in value between the voting stock and nonvoting stock is quantified. This is usually accomplished by one of the following two procedures:

1. Estimating the value of the company's nonvoting stock and applying a premium for voting rights (PVR)
2. Estimating the value of the company's voting stock and applying a discount for lack of voting rights (DLVR)

This discussion assumes that the valuation analyst has already selected an appropriate DLVR/PVR. One way to estimate the DLVR/PVR is to analyze the trading price of the shares of publicly traded companies.

The purpose of this discussion is to describe two methods of allocating total equity value between voting shares and nonvoting shares of a closely held company after the analysis of the size of the DLVR/PVR has been completed.

However, to put the equity allocation method in context, the next section of this discussion presents a high level overview of the following:

1. The various DLVR/PVR empirical studies
2. The rationale for selecting a particular DLVR/PVR

## OVERVIEW OF THE ISSUE

Intuitively, a share of stock that has more favorable economic attributes has a higher fair market value than a share of stock with less favorable economic attributes.

As explained below, having the right to vote is better than not having that right:

Empirical evidence indicates that the stock market price for publicly traded voting common shares is generally greater than the stock market price for comparable publicly traded nonvoting shares. Empirical evidence also indicates that the stock market price for supervoting common stock is generally greater than the stock market price for otherwise comparable normal voting common stock. These empirical data indicate that the shareholders pay a price premium for voting privileges related to the common shares of a public corporation. And, these empirical data also indicate that shareholders will extract a price discount for the lack of voting privileges related to the common shares of a public corporation.<sup>1</sup>

Willamette Management Associates and others have studied this price difference and published the results of their studies. One such study is our DLVR/PVR study published in 2006.

Our DLVR/PVR study analyzed publicly traded company stock as of:

1. December 31, 1994, and
2. December 31, 1999.

The study concluded that the median DLVR was 1.5 percent as of December 31, 1994, and 2.7 percent as of December 31, 1999. Furthermore, our DLVR/PVR study found that, “At least with regard to the corporate attributes considered in the Willamette Management Associates study, there was inconclusive evidence as to the factors that predict/influence the size of the DLVR/PVR.”<sup>2</sup>

After selecting the appropriate DLVR/PVR, the valuation analyst needs to decide how to make the valuation adjustment. There is more than one method available to apply the discount. There are reasons for selecting one allocation method over another allocation method.

This next section presents two methods that valuation analysts can apply in order to allocate the market value of equity (MVE) for an ownership block of the subject company between (1) the block’s voting stock and (2) the block’s nonvoting stock. Thereafter, the strengths and weaknesses of each equity allocation method are presented.

## THE EQUITY VALUE ALLOCATION METHODS

The following formulas present two equity allocation methods that valuation analysts can apply to allocate MVE between voting stock and nonvoting stock. While there are other methods for allocating total equity value, these are two methods that are commonly used by valuation analysts.

For purposes of this discussion, one equity allocation method is referred to as the “sequential method,” and the other equity allocation method is referred to as the “share method.”

### The Sequential Method

$$\begin{aligned} & \text{MVE} \\ & \textit{divided by} \\ & \text{the number of total voting and nonvoting} \\ & \text{common shares outstanding} \\ & \textit{equals} \\ & \text{MVE per share (voting)} \\ & \textit{less} \\ & \text{selected discount for lack of voting rights}^3 \\ & \textit{equals} \\ & \text{MVE per share (nonvoting)} \end{aligned}$$

### The Share Method

$$\begin{aligned} & \textit{Step One} \\ & \text{The number of voting shares outstanding} \\ & \textit{times} \\ & \text{one plus the selected voting premium} \\ & \textit{equals} \\ & \text{the number of adjusted voting shares} \\ & \textit{Step Two} \\ & \text{The number of adjusted voting shares} \\ & \text{(from step one)} \\ & \textit{plus} \\ & \text{the number of nonvoting shares outstanding} \\ & \textit{equals} \\ & \text{the total number of adjusted shares} \end{aligned}$$

Step Three  
MVE  
*divided by*  
the total number of adjusted shares  
(from step two)  
*equals*  
MVE per nonvoting share  
*times*  
one plus the selected voting premium  
*equals*  
MVE per voting share

The sequential method and the share method yield different values per share.

### An Illustrative Example

To illustrate the difference in these formulas, let's consider a hypothetical company with voting stock and nonvoting stock. And, let's allocate the MVE between the two classes of stock using both (1) the sequential method and (2) the share method.

Let's consider the example of Company One that was introduced earlier. Let's assume the following:

1. The valuation analyst estimated the MVE to be \$5,000.
2. The valuation analyst estimated the premium for voting rights to be 5 percent (which, as discussed in endnote 5 is mathematically equivalent to a discount for lack of voting rights of 4.76%).
3. There are 100 voting shares outstanding.
4. There are 900 nonvoting shares outstanding.

Finally, let's assume that the owner of that block of shares that is worth \$5,000 is going to donate 8 percent of the shares: 8 voting shares and 72 nonvoting shares (collectively, the "subject interest").

Under either equity allocation method, the difference in value per share between each voting share and each nonvoting share is \$0.24.

When applying the sequential method in this example, the value of the voting stock is \$5.00 per share (i.e., \$5,000 divided by 1,000). And, the value of the nonvoting stock is \$4.76 per share (i.e., \$5.00 x (1 - 4.76%)). Based on the sequential method, the value of the subject interest is \$382.86.

When applying the share method in this example, the formula to estimate the value per share of the voting stock is: \$4.98 times 1.05. Therefore, the value of the voting stock is \$5.22 per share.

The formula to estimate the value per share of the nonvoting stock is: \$5,000 / (900 + (100 x 1.05%)). The value of the nonvoting stock based on this formula is \$4.98 per share.

Based on the share method, the value of the subject interest is \$400.00.

The subject interest value using the share method is approximately 4.6 percent greater than the value of the subject interest using the sequential method.

## STRENGTHS AND WEAKNESSES OF THE SEQUENTIAL METHOD

There are many good reasons to use the sequential method. The strengths of the sequential method include the following:

1. It is perhaps the most popular allocation method used by valuation analysts.
2. It produces credible results.
3. It has been accepted by the Internal Revenue Service.
4. It is easy to perform (the formula is simple).
5. It is easy to explain.

One supposed weakness of this equity allocation method is that the total value of the voting stock plus the total value of the nonvoting stock does not equal the MVE.

For example, applying the sequential method in the illustrative example previously discussed, the total value of all nonvoting shares and voting shares equals \$4,786 (\$5.00 x 100 shares + \$4.76 x 900 shares).

You may recall from the above example that the valuation analyst previously estimated the MVE to be \$5,000.

A valuation analyst who has applied the sequential method may explain that value hasn't disappeared. The reduction in value due to the choice of allocation method is similar to the reduction in value that occurs from applying (1) a discount for lack of ownership control or (2) a discount for lack of marketability.

In a typical transaction involving an acquisition of all of the shares of the company, those valuation discounts are not applied.

Based on these strengths and weaknesses, valuation analysts will typically use the sequential method for at least three reasons.

First, valuation analysts will use the sequential method because it is a generally accepted method and there is no compelling reason to use another method. Supporters of this equity allocation method will argue (to put it plainly) that, if the allocation method isn't broke, don't fix it.

The valuation analyst is not compelled to stop using the sequential method by any of the following:

1. Business valuation literature
2. Business valuation educational courses
3. Court cases

In fact, if a valuation analyst applies a less popular equity allocation method in a litigation context, then he or she may be exposed to a *Daubert* challenge.

The second reason to use the sequential method is the belief that the MVE of a company that is capitalized with both voting stock and nonvoting stock is worth less than a company that is capitalized with only voting stock. This is an implicit assumption of the sequential method.

The valuation analyst may explain that the MVE is lower because any discounts previously applied do not completely capture all of the valuation characteristics of the block of voting and nonvoting shares.

On the other hand, the share method assumes that discounts applied before arriving at the MVE capture the ownership characteristics of multiple classes of stock.

Third, under the sequential method the value per share of the voting stock equals the estimated MVE divided by the company's total shares outstanding. This is a common structure in a transaction in which all of the company's voting and nonvoting shares are acquired.

For example, the value of the voting stock using the sequential method is \$5.00 per share using the facts outlined earlier in this discussion.

If there was only one class of stock—that is if every share was a voting share—then the value per share of the voting stock would be \$5.00.

## THE STRENGTHS AND WEAKNESSES OF THE SHARE METHOD

Many of the sequential method strengths don't apply to the share method. Consider the following:

1. The share method is not easy to explain.
2. The share method is more difficult than the sequential method to perform (the formula is relatively complicated).
3. The share method is used less frequently than the sequential method.

In addition, the concluded price per share of the voting stock is greater than the price per share that would be calculated by dividing MVE by the total number of shares.

On the other hand, the share method addresses the singular supposed weakness of the sequential method—that is, (1) the total value of the voting stock plus (2) the total value of the nonvoting stock does equal (3) the total MVE in the share method.

This supposed strength of the share method relative to the sequential method is an important reason why analysts use this equity allocation method over another equity allocation method.

The prior section of this discussion stated that if a valuation analyst believes that the MVE when disaggregated between two classes of stock is worth less than the total MVE, then that valuation analyst should use the sequential method.

The opposite relationship is also true. That is, if a valuation analyst believes that the MVE is the same regardless of the makeup of the shares (in the context that is discussed herein), then that valuation analyst should use the share method.

Let's consider an example to illustrate this point. Let's consider that an investor owns 100 voting shares in Company Three that are worth \$5,000. In a tax-free reorganization, each share of voting stock receives nine shares of nonvoting stock.

Immediately after the reorganization, the investor owns 100 voting shares and 900 nonvoting shares. Each voting share is worth five percent more per share than each nonvoting share.

How much is each nonvoting share worth immediately after the reorganization?

If the sequential method was applied, the reorganization makes value disappear. Under the share method, the value of the "pie" does not change regardless of how it is sliced.

In the examples presented in this discussion, the sum of the parts using the sequential method is clearly less than the value of the whole. And, the sum of the parts using the share method equals the whole. This is a supposed advantage of the share method relative to the sequential method.

Proponents of the share method also argue that the trading price of voting and nonvoting stock

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## “The equity allocation method selected by the valuation analyst may result in materially different conclusions of value for the subject interest.”

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on public markets support the application of the share method more than the sequential method.

For example, let’s consider one of the companies in the 2006 Willamette Management Associates DLVR/PVR study: Aaron Rents (RNT). As of December 31, 1999, the price per share of the RNT voting stock and nonvoting

stock was \$18.25 and \$17.75, respectively.

As of December 31, 1999, the aggregate market value of the voting stock (MV-V) and nonvoting stock (MV-NV) was \$69.888 million and \$285.403 million, respectively.

Both Bloomberg and CapitalIQ reported the RNT MVE at \$355.291 million as of the same date. That MVE is exactly equal to—and calculated based on—the value of the voting stock plus the value of the nonvoting stock.

This result suggests that stock market participants believe that MV-NV plus MV-V equals MVE.

The choice of allocation method often comes down to whether the sum of the parts must equal the whole for the purpose of that particular valuation assignment.

## EMPIRICAL STUDIES AND EQUITY ALLOCATION METHOD

The method that the valuation analyst uses to estimate the DLVR/PVR may also influence the selection of an allocation method. Valuation analysts should make sure that the choice of allocation method is consistent with the empirical study that was used to estimate the DLVR/PVR.

In the Willamette Management Associates DLVR/PVR study, for example, the DLVR/PVR is calculated by reference to stock price per share of voting common stock compared to the stock price per share of nonvoting common stock.

It was previously demonstrated that for publicly traded companies that are capitalized with both nonvoting stock and voting stock, stock market participants value the components of a company’s equity using the MV-NV plus MV-V equals MVE formula.

If the DLVR/PVR is estimated based on the price per share of the voting stock compared to the price

per share of the nonvoting stock, and the study does not calculate or rely on the subject company unallocated MVE or the total combined shares outstanding (voting plus nonvoting), then the share method may make the most sense.

If the DLVR/PVR is instead calculated by reference to the MVE and the total shares to which the MVE is to be allocated, then the sequential method may make the most sense.

Valuation analysts should consider how the selected DLVR/PVR is related to the selected allocation method and the purpose of the valuation assignment.

## SUMMARY AND CONCLUSION

Although there are other methods to allocate a subject company MVE between two classes of stock, the share method and the sequential method discussed herein provide two reasonable alternatives for the valuation analyst.

Allocating value between two classes of stock is often an important procedure in valuations performed for gift tax purposes or estate tax purposes. The equity allocation method selected by the valuation analyst may result in materially different conclusions of value for the subject interest.

Therefore, valuation analyst should only allocate value between multiple classes of stock after carefully considering the following:

1. The possible equity allocation methods
2. The strengths and weaknesses of those equity allocation methods.

### Notes:

1. Timothy J. Meinhart, “Willamette Management Associates Discount for Lack of Voting Rights Study for Estate Planning/Estate Tax Valuations,” *Insights*, Special Issue 2006.
2. *Ibid.*: 50.
3. The discount for lack of voting rights is calculated as  $1 - (1/(1 + \text{premium for voting rights}))$ . For example, a selected premium for voting rights of 5% equates to a discount for lack of voting rights of 4.76% (calculated as  $1 - (1/(1.05))$ ).

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