

# UNDERSTANDING THE LARGEST VALUATION DISCOUNT

A Closer Look at Marketability Discounts

Z. Christopher Mercer, ASA, CFA, ABAR



Excerpted from [ValuationSpeak.com](https://www.valuationspeak.com)

# Understanding the Largest Valuation Discount #1: The Marketability Discount

[valuationspeak.com/qmdm/understanding-the-largest-valuation-discount-1-the-marketability-discount/](http://valuationspeak.com/qmdm/understanding-the-largest-valuation-discount-1-the-marketability-discount/)

## A New Series

During the 2012 calendar year, individuals can gift, or give away, as much as \$5.12 million and pay no federal gift taxes on the gifts, although this amount is reduced by the amount of any taxable gifts made in prior years. In the absence of a Congressional change in the law, however, the gift tax exemption will be reduced to \$1 million on January 1, 2013.

I wrote a [recent post on this topic](#) and [Mercer Capital](#) prepared an [interesting article](#), as well. These articles, and the changing gift and estate tax landscape, provide an excellent backdrop for a new series for this blog, [ValuationSpeak.com](#).

We have written a series of posts on two timeless and important topics, [buy-sell agreements](#) and [statutory fair value](#) in the recent past. In the current tax environment, a series investigating the marketability discount is both important and timely.



## The Marketability Discount Defined

The **marketability discount**, also called the **discount for lack of marketability**, or **DLOM**, is perhaps the largest and potentially most controversial valuation discount normally considered by business appraisers.

The [International Glossary](#) and the [ASA Business Valuation Standards](#), defines a “Marketability Discount” and “Discount for Lack of Marketability” as:

*An amount or percentage deducted from the value of an ownership interest to reflect the relative absence of marketability.*

The [International Glossary](#) defines “Marketability” as:

*The ability to quickly convert property to cash at minimal cost.*

The [ASA Business Valuation Standards](#) define “Marketability” as follows to amplify the definition in the [International Glossary](#):

*The capability and ease of transfer or salability of an asset, business, business ownership interest, security or intangible asset.*

## Marketability Discounts in Perspective

The [ASA Business Valuation Standards](#) provide important guidance regarding our consideration of the marketability discount in BVS-VII Valuation Discounts and Premiums, Para. II:

- A. A discount has no meaning until the conceptual basis underlying the base value to which is applied is defined.
- B. A premium has no meaning until the conceptual basis underlying the base value to which it is applied is defined.
- C. A discount or premium is warranted when characteristics affecting the value of the subject interest differ sufficiently from those inherent in the base value to which the discount or premium is applied.
- D. A discount or premium quantifies an adjustment to account for differences in characteristics affecting the value of the subject interest relative to the base value to which it is applied.

The definitions and standards references above can be placed in perspective in the conceptual levels of value charts below. The traditional levels of value chart, with three levels, is presented at left. The chart at the right reflects a growing consensus of business appraisers regarding a convergence between the marketable minority and financial control levels of value. In both charts, the marketability discount is that discount that converts a marketable minority value at the enterprise level into a nonmarketable minority value at the shareholder level.



For a detailed discussion of the levels of value charts, see the entire series of posts discussing the conceptual levels of value and their interrelationships in the [Statutory Fair Value Category](#) of this blog. Also, see the detailed discussion in my book (with coauthor [Travis Harms](#)) [Business Valuation: An Integrated Theory Second Edition](#). If you haven't done so already, let me suggest that you add the book to your library and read it. It is short (272 pages) and insightful (according to its reviewers!).

### Marketability Discounts: The Coming Series

Many readers know that I wrote a book in 1997 entitled *Quantifying Marketability Discounts* (now, see [Business Valuation: An Integrated Theory Second Edition](#)). That book introduced the [Quantitative Marketability Discount Model \(aka QMDM\)](#), a shareholder-level discounted cash flow model, as a means of developing discounts for lack of marketability. This series on marketability discounts is not a series about the QMDM.

This series is intended to examine the concept of marketability discounts, how they are derived, popular valuation methods for determining a discount, as well as how the Tax Court has treated marketability discounts over time. While the content of this series will evolve, topics to be addressed include:

- What is a marketability discount?
- What is the base from which a marketability discount is to be taken?
- How can marketability discounts be measured and assessed?
- What research and studies are available to help in understanding and quantifying marketability discounts? In addressing this question, we hope to write about a variety of articles and studies, both from the past and the present.
- What are the elements that make up or determine the extent of marketability discounts?
- What is the *Discount for Lack of Marketability Job Aid for IRS Valuation Professionals*, and of what significance is it to appraisers and users of appraisal reports?

- In the words of the *Discount for Lack of Marketability Job Aid for IRS Valuation Professionals* ([available here](#)), what are the factors affecting marketability, or the lack thereof, and how can they be assessed?
- What valuation methods are appropriate for developing marketability discounts?
- What treatment has the Tax Court accorded to marketability discounts over time?

If readers pose additional questions, we will try to address them in the context of future posts in the series. We hope that this series on marketability discounts will raise the level of informed discussion on this important topic.

# Understanding the Largest Valuation Discount #2: What is a Marketability Discount (DLOM)?

[valuationspeak.com/qmdm/understanding-the-largest-valuation-discount-2-what-is-a-marketability-discount-dlom/](https://www.valuationspeak.com/qmdm/understanding-the-largest-valuation-discount-2-what-is-a-marketability-discount-dlom/)

## The Basic Question

The objective of many business appraisals is to determine a valuation conclusion at the nonmarketable minority level of value. We saw in the [first post](#) in this series on discounts for lack of marketability that the marketability discount is a conceptual discount that moves value from an enterprise level to a shareholder level.

It is well and good to understand the conceptual nature of a marketability discount. However, business appraisers must normally reach an actual conclusion regarding the appropriate marketability discount in each business valuation report.

So the basic question is:



*How can appraisers determine the appropriate marketability discount for each valuation situation?*

This is a critical question since the discount for lack of marketability is the single largest valuation adjustment factor in most minority interest appraisals.

## Marketability Discount Ratios

From the International Glossary and the [ASA Business Valuation Standards](#):

**Marketability Discount (Discount for Lack of Marketability).** An amount or percentage deducted from the value of an ownership interest to reflect the relative absence of marketability.

That's a nice definition and suggests that a marketability discount is a discount from something. In the [first post](#), we learned that it is a discount from the conceptual marketable minority, or as-if-freely-tradable, level of value. We see the conceptual discount in the levels of value chart below.



The marketability discount is normally expressed as a percentage to reflect the difference between two prices, the freely marketable price, which for closely held businesses is a hypothetical construct since by definition there is no market for their shares, and a nonmarketable price.

We can use a bit of math, where MD is the marketability discount, MM is a marketable minority value, and NMM is a nonmarketable minority value. And assume that the Value(MM) equals \$1.00 and that the Value(NMM) equals \$0.75. For the moment, let's not worry about where the indicated values come from.

$$MD = (1 - \text{Value(NMM)} / \text{Value(MM)})$$

The reason we use the expression "one minus" is to express the discount in a positive light. The ratio of Value(NMM) to Value(MM), given the specified values, would be 75% (i.e., \$0.75/\$1.00). The discount in this case is 100% of the Value(MM), or \$1.00, minus the 75% ratio of the two prices, or 25%.

### Valuation Ratios

If this seems obvious and so basic as to be trivial, it is not. The marketability discount is the result of a ratio between two prices. So the question becomes, does the marketability discount reflect a "valuation ratio," which is also a defined term.

**Valuation Ratio.** A fraction in which a value or prices serves as the numerator and financial, operating, or physical data serves as the denominator.

Examples of valuation ratios include Market Value of Total Capital to Sales, or to EBITDA (earnings before interest, taxes, depreciation, and amortization), or Market Value of Equity to Net Income. These valuation ratios are expressed familiarly as:

**MVTC / Sales**

**MVTC / EBITDA**

**MVE / Net Income**

In each case, a value (MVTC or MVE) serves as the numerator of the fraction and a financial factor (Sales, EBITDA, or Net Income) serves as the denominator. Business appraisers and users of business appraisals are familiar with these ratios. For example, companies in an industry may be selling in a normal range of 6x to 8x EBITDA, or the price/earnings multiple of a public company may be 15x.

If we know a multiple, e.g., from the appropriate market, it means something when placed in relationship to a financial factor. If you know a financial factor, it means something when placed in relationship to a (market) multiple.

## **Marketability Discount Ratios Are Not Valuation Ratios**

We can work with the basic equation of a marketability discount from above with a bit of simple algebra.

$$\mathbf{MD = (1 - Value(NMM) / Value(MM))}$$

Switching the factors around,

$$\mathbf{Value(NMM) / Value(MM) = (1 - MD)}$$

And then,

$$\mathbf{Value(NMM) = Value(MM) \times (1 - MD)}$$

The nonmarketable value, which is the desired result of many appraisals, is a function of the marketable value times a ratio, which is not a valuation ratio. The marketability discount reflects a ratio of two prices. In and of itself, a discount for lack of marketability provides no valuation information whatsoever.

## **Back to the Basic Question**

So the question remains, given the central objective of arriving at credible nonmarketable minority values, how do we determine MD, or the marketability discount, or the discount for lack of marketability, or the DLOM (all interchangeable terms)? We will investigate this question in-depth as this series on marketability discounts continues.

# Understanding the Largest Valuation Discount #3: Enterprise vs. Shareholder Level (after DLOM) Values

In a tax environment where significant gifts need to be made and substantial value needs to be transferred, the topic of valuation discounts rises to the forefront.

Valuation discounts are not magical or mysterious. They relate to differences between businesses at the level of the enterprise and interests in those businesses from the viewpoint of shareholders, owners or investors.

In this continuing series, we are investigating the marketability discount, or discount for lack of marketability (DLOM), which is typically the largest valuation discount in most minority interest appraisals.



## What is the Value of a Business?

There is little disagreement that the value of a business enterprise, today, is represented by the (present) value of all future benefits (cash flows) to be derived from that business, into perpetuity, discounted to the present at a discount rate reflective of the risks associated with achieving them. The discounted cash flow model (DCF) is summarized in the first value expression below and is used to describe this definition conceptually.

The value of a business assumes that the business will exist and generate cash flows *into perpetuity*.

The DCF model can be summarized in the form of the [Gordon Model](#), which is shown at the right side of the figure above. This summary form of the DCF model holds true if all expected cash flows are reinvested in the business at the discount rate,  $r$ , or alternatively, are distributed to shareholders, and those expected cash flows grow into perpetuity at the (long-term) growth rate,  $g$ .

$$V_0 = \left[ \frac{CF_0(1+g)}{(1+r)^1} + \frac{CF_0(1+g)^2}{(1+r)^2} + \dots + \frac{CF_0(1+g)^f}{(1+r)^f} \right] = \frac{CF_1}{r-g}$$

The discounted cash flow model can be expressed in a two stage form, where the analyst develops a forecast for a finite period of years, and then determines a terminal value, which represents the present value of all remaining cash flows of the business at the end of the finite forecast period. The algebraic expression for this model can be shown as:

$$V_0 = \left[ \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \frac{CF_3}{(1+r)^3} + \dots + \frac{CF_f}{(1+r)^f} \right] + \left[ \frac{CF_{f+1}/(r-g)}{(1+r)^f} \right]$$

**Present Value of Interim Cash Flows (PVICF)** Using this portion of the basic DCF model, the analyst is not constrained by the requirement of constantly growing cash flows during the finite forecast period ending with Year  $f$ . This part of the equation is the present value of interim cash flows through the finite forecast period ending with Year  $f$ , or PVICF.

**Present Value of the Terminal Value (PVTV)** Using the Gordon Model, all cash flows are capitalized after Year  $f$ , assuming cash flows are growing from that point at the constant rate of  $g$ . This portion of the equation therefore represents the present value of  $CF_{f+1} = CF_f \times (1 + g)$

The two-stage DCF model is helpful when companies are starting up, when they are experiencing significant change at the valuation date, or when they are cyclical in nature. The basic idea of this model is that the analyst can capture the



value-impact of near-term cash flows, which may vary significantly from longer-term cash flows, and then determine a terminal value at the end of the finite forecast period when cash flows are expected to have stabilized.

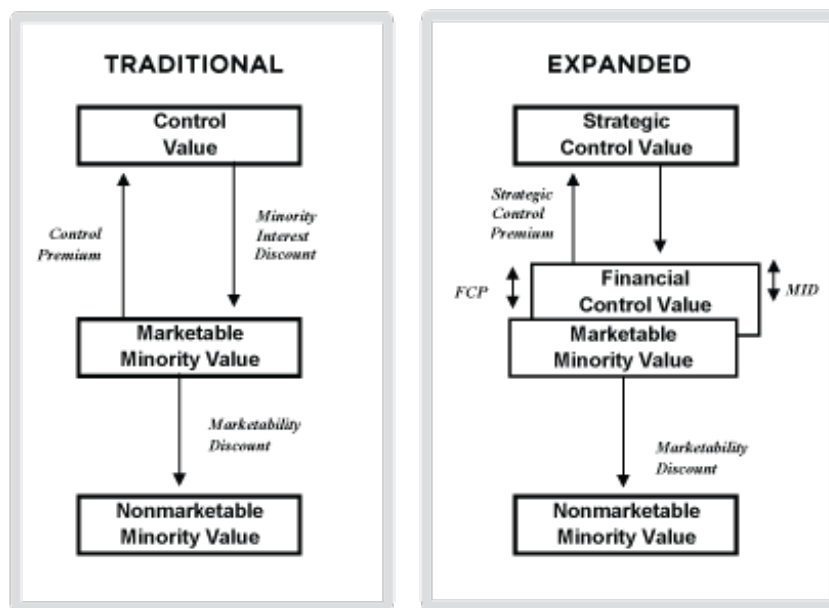
## Normalized Cash Flows and the Base Value for Marketability Discounts

The cash flows employed in the DCF model (or the Gordon Model) are typically assumed to be the normalized cash flows of the business enterprise. Normalization adjustments are made to account for non-recurring items impacting the income statement, the impact of balance sheet adjustments on the income statement, and discretionary expenses of controlling shareholders. Discretionary expenses would include above-market owner compensation, preferential charitable gifts, and compensation paid to non-working owners.

For a more detailed discussion of normalization adjustments and the rationale for their use, see [this post](#) or Chapter 4 of *Business Valuation: An Integrated Theory Second Edition* (Mercer and Harms.)

The normalized cash flows of a business, when capitalized using the Gordon Model or when the DCF method is employed, are generally assumed to produce value indications at the marketable minority or financial control level of value. In other words, these methods develop base values at the enterprise level of value, and they are appropriate base values for which to deduct, or to consider, appropriate marketability discounts. Remember the Standards guidance in previous posts suggesting that no discount has any meaning unless the base value from which it is to be taken has been clearly specified.

### THE LEVELS OF VALUE



The base value from which marketability discounts are considered is the marketable minority level of value, which is reflected in the charts above. This level of value is an enterprise level of value. By enterprise level, we mean that the cash flows of the enterprise have been considered in arriving at this level.

The discount for lack of marketability (DLOM) is the adjustment that appraisers use to "move" from this enterprise level of value to the nonmarketable minority level of value.

## Next Steps in the Series

In the next post in this series on understanding the largest valuation discount, we will examine the conceptual nature of the nonmarketable minority level of value, which is a shareholder level of value. By shareholder level, we mean that only the portion of enterprise cash flows that can reasonably be expected to be received by an owner or potential investor will be considered. For a variety of reasons that we will discuss in more detail, the shareholder-level cash flows may be less than those attributable to the enterprise. They may also be subject to certain risks that are in addition to the risks of the enterprise.

When we understand the relationships between enterprise level base values and shareholder level values, we can begin to analyze the factors that might cause those values to be different. The term introduced in the [IRS Job Aid](#) is “factors influencing marketability.”

When we understand the differences between enterprise and shareholder level values and the reasons for those differences, we can then look at specific factors in individual valuation situations and assess which factors are important and, hopefully, their valuation impact through the development of the appropriate marketability discount in each case.

# Understanding the Largest Valuation Discount #4: A Pit Stop to Look at the Map

[valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-4-a-pit-stop-to-look-at-the-map/](https://www.valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-4-a-pit-stop-to-look-at-the-map/)

## Where Have We Been So Far in the Series?

The first three posts in this series on **Understanding the Largest Valuation Discount** have been as follows:

- [#1: The Marketability Discount](#)
- [#2: What is a Marketability Discount \(DLOM\)?](#)
- [#3: Enterprise vs. Shareholder Level \(After DLOM\) Values](#)

The third post might have been titled “Establishing the Base Value From Which the Marketability Discount is Taken.” At this point, we have a basic understanding of what the marketability discount is, at least in words. One primary objective of this series is to develop an appropriate perspective on the largest valuation discount so that we can examine the various valuation methods used by appraisers in their determination.



## The Next Three Posts

Before we begin to study actual valuation methods, we need to examine the discount for lack of marketability in the context of the two major valuation approaches that are typically employed in developing them – the Income Approach and the Market Approach (the Asset Approach is almost never used to estimate the value of illiquid interests). We will also discuss what prevailing business valuation standards suggest regarding DLOMs on a conceptual basis before we even begin to consider actual numbers, prices or discounts.

Therefore the next three posts will be:

- [#5: The Income Approach for Developing Marketability Discounts](#)
- [#6: The Market Approach for Developing Marketability Discounts](#)
- [#7: Business Valuation Standards and the Marketability Discount](#)

As background, there are three general approaches to valuation, the Income Approach, the Market Approach, and the Asset Approach. According to the International Glossary and the ASA Business Valuation Standards, these terms are defined as follows:

- **Income (Income-Based) Approach.** A general way of determining a value indication of a business, business ownership interest, security, or intangible asset by using one or more methods that **convert anticipated economic benefits into a present single amount.**
- **Market (Market-Based) Approach.** A general way of determining a value indication of a business, business ownership interest, security, or intangible asset by using one or more methods that **compare the subject to similar business, business ownership interests, securities or intangible assets that have been sold.**
- **Asset (Asset-Based) Approach.** A general way of determining a value indication of a business, business ownership interest, security, or intangible asset by using one or more methods based on the value of the assets net of liabilities.

The Income Approach includes methods like the capitalization of earnings or the discounted cash flow method, and mathematical models like the [Black Scholes Option Pricing Model](#). The Market Approach includes methods like comparisons with guideline transactions such as restricted stock studies, pre-IPO studies and others.

Most appraisals of minority interests conducted by qualified appraisers and which might include consideration of marketability discounts are conducted under one or more sets of business valuation standards, including the [Uniform Standards of Professional Appraisal Practice](#).

### **Where We Go From There**

Lest any readers grow impatient, we will still not be ready to discuss specific methods for developing marketability discounts. Before beginning the discussion of DLOM valuation methods or studies related to such methods, we will provide an overview of a recent publication of the Internal Revenue Service, [IRS DLOM Job Aid](#).

The IRS DLOM Job Aid provides an overview and discussion of numerous valuation methods. We will summarize this overview as a starting point. However, the IRS DLOM Job Aid also provides a listing and discussion of numerous “factors influencing marketability.”

The factors influencing marketability were developed based on a review of numerous articles and studies pertaining to marketability discounts and represent a consensus listing of many of the factors that influence the magnitude of marketability discounts in specific valuation situations. We will develop this list of factors for closer examination.

So there will be four or perhaps six more background posts before we begin to analyze and discuss specific valuation methods for determining marketability discounts. **The wait will be worthwhile.** Only if we have a framework within which to discuss and to compare and contrast the methods, including their relative strengths and weaknesses, can we hope for a productive dialogue. Mere opinions or wishes or preferences will not contribute to the discussion.

Marketability discounts applicable in the valuation of business interests and securities should be discussed in the context of the valuation approaches and methods within which they are developed and within the context of the business valuation standards that govern most business appraisals.

# Understanding the Largest Valuation Discount #5: The Income Approach to Marketability Discounts (DLOMs)

[valuationspeak.com/qmdm/understanding-the-largest-valuation-discount-5-the-income-approach-to-marketability-discounts-dloms/](http://www.valuationspeak.com/qmdm/understanding-the-largest-valuation-discount-5-the-income-approach-to-marketability-discounts-dloms/)

## Introduction

The [first four posts](#) in this series introduced the marketability discount, or discount for lack of marketability, and set the direction for the next several posts. This post addresses the marketability discount in the context of the income approach to valuation. The next post will discuss the market approach.

Many appraisers do not think of valuation approaches when valuing minority interests in businesses. Such interests are often referred to as “partial interests.” For example, as we learn in Procedural Guideline, or PG-2 — Valuation of Partial Ownership Interests (Para IV.A) in the [ASA Business Valuation Standards](#):

*Appraisers should consider all three approaches to value (asset-based, income and market) when valuing partial interests. If an approach is excluded in an assignment the appraiser should explain the reason for such exclusion in the appraisal report.*

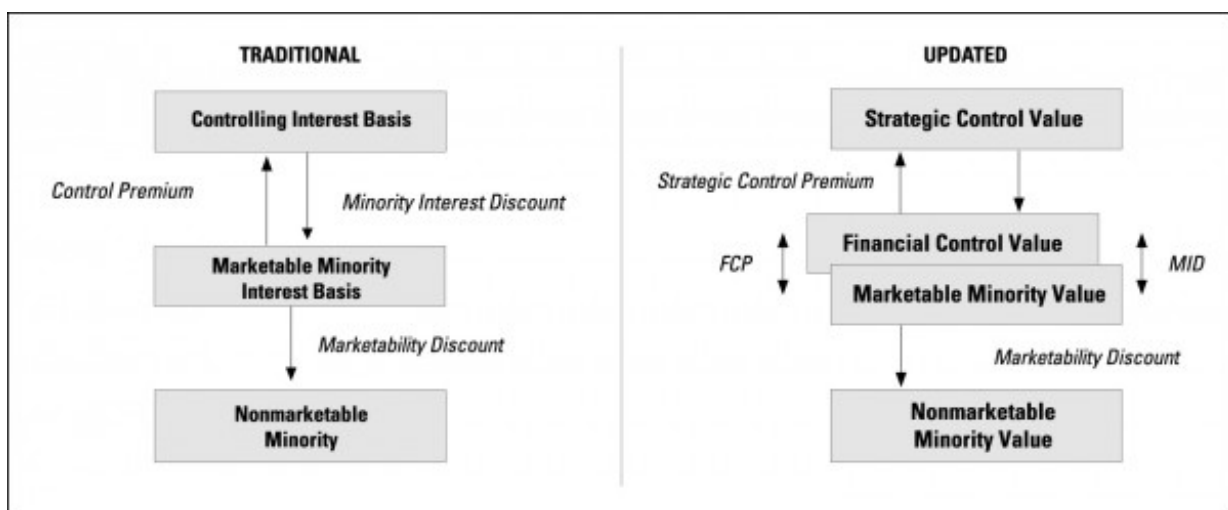


This post regarding the income approach to marketability discounts is long and somewhat theoretical. In fact, it clocks in at almost 2,500 words which I know is a blogging sin; however, the topic demands it. Therefore, you might want to print this post rather than read it on screen.

Forewarned is forearmed. Here we go.

## The Nonmarketable Minority Level of Value

It wouldn't be proper to begin a discussion of the nonmarketable minority level of value without presenting the Levels of Value chart.



The first equation below introduces conceptual math describing the shareholder – or nonmarketable minority – level of value — expressed in the context of the Gordon Model. The expression is imperfect because, unlike the valuation of businesses, which is a perpetuity concept (i.e., the expected cash flows go on forever), minority investments are

typically made with finite investment horizons. We deal with this below.

The terms in the conceptual definition of value at the nonmarketable minority level are defined:

$$V_{sh} = \frac{CF_{sh}}{R_{hp} - G_v}$$

- $V_{sh}$  is the value of minority equity interest of an enterprise that lacks an active market for its shares, from the viewpoint of the owner of the interest. Note, at this level, the minority interest, like all publicly traded minority interests, lack power, or control over the affairs of an enterprise. Appraisers typically develop indications of value at this level by subtracting a marketability discount from a marketable minority interest value. We will explore how appraisers do this in detail in future posts.
- $CF_{sh}$  is the portion of the enterprise cash flow expected to be received pro rata by the shareholders, including both interim distributions and any expected terminal value.  $CF_{sh}$  is a symbolic notation to describe all expected interim cash flows and any expected terminal value at the end of the holding period for the investment. In other words, the equation cannot be literally used to determine the value of a nonmarketable minority business interest. Actual notation for the two stage, shareholder level DCF model can be shown as follows:

$$V_0 = \left( \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \frac{CF_3}{(1+r)^3} + \dots + \frac{CF_f}{(1+r)^f} \right) + \left( \frac{CF_{f+1}/(r-g)}{(1+r)^f} \right)$$

Present Value of Interim Cash Flows (PVICF) Using this portion of the basic DCF model, the analyst is not constrained by the requirement of constantly growing cash flows during the finite forecast period ending with Year  $f$ . This part of the equation is the present value of interim cash flows through the finite forecast period ending with Year  $f$ , or PVICF.

Present Value of the Terminal Value (PVTV) Using the Gordon Model, all cash flows are capitalized after Year  $f$ , assuming cash flows are growing from that point at the constant rate of  $g$ . This portion of the equation therefore represents the present value of  $CF_{f+1} = CF_f \times (1 + g)$

The left portion of the equation represents the present value of interim cash flows (PVICF) for a finite expected holding period ending in year  $f$ . The right portion of the equation represents the present value of the terminal value (PVTV), which is, for purposes of this discussion, the marketable minority (enterprise) value at the end of year  $f$ . Rational investors do not enter into a minority investment absent the expectation of achieving the objective of the investment, which is an enterprise value at some point, even an indeterminable point, in the future.

- $R_{hp}$  is the discount rate of the minority investor in a nonmarketable equity security for the expected holding period, or the *required holding period return*. Logic suggests that  $R_{hp}$  will be equal to or greater than  $R_{mm}$ . It makes sense that a minority shareholder's investment is exposed to risks that are incremental to those of the entire business. This incremental required return can be stated symbolically as in the next equation, where HPP is the indicated *holding period premium*. What we are suggesting is that the required holding period return is the sum of the enterprise discount rate and the holding period premium. Note that if HPP is equal to zero, meaning there are no holding period risks, as with a liquid, publicly traded security, then  $R_{hp}$  is equal to  $R_{mm}$ .
- $G_v$  is the *expected growth rate in value* of the enterprise, which yields the terminal value of the enterprise at the end of the expected holding period. The objective of every investor (dare I be absolute here?) is to sell his or her investment at an enterprise level and to receive the benefits of the risks that were endured during the holding period for the investment.

$$R_{hp} = R_{mm} + HPP$$

**Tennis??** is the second statement of this premise and I repeat it because it is so important.

If we work with the Gordon Model, we can see that for a publicly traded security, the expected growth rate in value is equal to  $R_{mm}$  less the dividend yield. If not all enterprise cash flows are distributed to, or invested for the benefit of, the minority shareholders (if, for example, above-market compensation is paid to a controlling shareholder), then  $G_v$  will be less than  $R_{mm}$  (adjusted for the dividend yield).

The same result will occur if a company's expected reinvestment rate is less than its discount rate (e.g., as with the accumulation of low-yielding cash assets, vacation homes, or other assets providing no yield or a yield less than the discount rate).

For a more in-depth discussion of this issue, see Z. Christopher Mercer and Travis W. Harms, "Marketability Discount Analysis at a Fork in the Road," *Business Valuation Review*, Vol. 20, No. 4 (2001): pp. 21-22.

### Enterprise Value vs. Shareholder Value

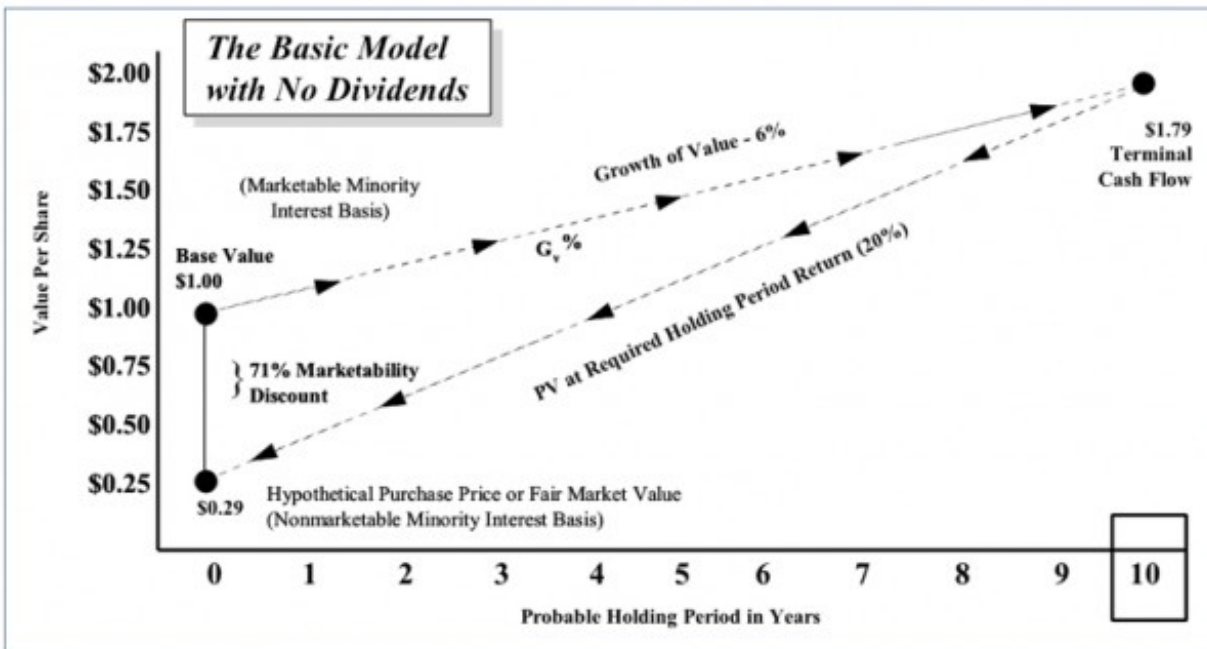
Enterprise valuation is a perpetuity concept. Value today is the present value of all expected cash flows attributable to an enterprise discounted to the present at an appropriate discount rate.

In contrast, shareholder level values depend on expected holding periods. Investors expect finite holding periods, even if the precise holding period is not known or knowable. The expected growth in value is the means of estimating the future exit value of the investment.

Assume for a moment that the appropriate discount rate is 16% and expected growth in earnings (long term) is 6%. Assume that the expected earnings per share are \$0.10 per share. Applying the Gordon Model, the marketable minority value is therefore \$1.00 per share ( $\$0.10 / (16\% - 6\%)$ ).

Now assume that, contrary to the assumptions of the Gordon Model, that there are no distributions to minority shareholders, perhaps as a result of non prorata distributions to a controlling shareholder (e.g., above-market compensation).

Expected growth in value will be 6%, since there will be no reinvestment. Now assume that the expected holding period for nonmarketable investment is exactly 10 years, and that the minority investor's discount is 20% (HPP is equal to 4%). The minority investor's present value (and the implied marketability discount) can be illustrated graphically.



Value grows from the current value of \$1.00 per share to \$1.79 per share at the end of 10 years ( $\$1.00 \times (1 + 6)^{10}$ ). The present value of the expected future value of \$1.79 per share is \$0.29 per share ( $\$1.79 / (1 + 20\%)^{10}$ ). The implied

marketability discount of 71% is determined by these two values, or  $MD = (1 - \$0.29/\$1.00)$ ,

Obviously, the purpose of this example is not to illustrate that all marketability discounts should be 71%. An examination of the various restricted stock studies in future posts will show, however, that discounts of this magnitude are within the realm of observation. Such examination will also show that very small DLOMs, or even positive discounts (i.e., premiums) are also possible. The purpose of our discussion is to understand why such variations occur and how, as appraisers, we can differentiate between them in different valuation or investment situations.

### **Conceptual Model to Describe the Nonmarketable Minority Level of Value**

We now have a conceptual model to describe the nonmarketable minority level of value. The model anticipates that the appraiser will initially develop an indication of value at the marketable minority level. In so doing, we will have developed a thorough understanding of the expected enterprise cash flows, their expected growth, and their risks. Grounded in this analysis, the appraiser can then assess the expected benefits to be derived by the minority shareholder of the enterprise. We will further develop this conceptual model in future posts in the context of our discussion of methods for determining discounts for lack of marketability.

Relying on the framework presented in the discussion above, we can analyze the conceptual differences between the marketable minority and nonmarketable minority levels of value. The nonmarketable minority value, or value to the shareholder ( $V_{sh}$ ), will be less than  $V_{mm}$  if, all else equal, one or more of the following conditions hold:

- *CF<sub>sh</sub> is less than CF<sub>e(mm)</sub>*. The expected shareholder cash flows will be less than the expected enterprise cash flows if the enterprise cash flows are either reinvested in the business or distributed on a non-pro rata basis to certain shareholders. Recall that the benchmark marketable minority value is determined under the assumption that all cash flows are paid out to shareholders pro rata or reinvested in the enterprise to achieve a return equal to the discount rate. After this determination is made, the appraiser then estimates  $CF_{sh}$ , which may be less than or substantially less than the cash flow of the enterprise ( $CF_{e(mm)}$ ).
- *G<sub>v</sub> is less than R<sub>mm</sub>*. The expected growth rate in value is a function of the expected growth rate of core earnings, and the effect of reinvestment of enterprise cash flows. If the reinvestment rate is equal to the discount rate, then,  $G_v$  will be equal to the discount rate, or  $R_{mm}$  (adjusted for dividend yield). To the extent that cash flows are not reinvested in the enterprise or are reinvested suboptimally (at rates less than the discount rate), then  $G_v$  will be less than  $R_{mm}$ , resulting in a lower expected terminal value and lower nonmarketable minority value. Note that the expectation of suboptimal reinvestment, and the accompanying reduction of expected growth in value impacts both controlling and noncontrolling shareholders. The difference between the two situations is that the controlling shareholder can change the reinvestment and/or distribution policies in order to maximize value while the noncontrolling shareholder cannot make those changes. Said another way, the value, today, of a business to a controlling shareholder can exceed the value of the expected business plan.
- *R<sub>hp</sub> is greater than R<sub>mm</sub>*. Few observers question that the owner of an illiquid asset bears greater risk than the owner of an otherwise identical asset with an active, public market. This should have been obvious to appraisers years ago (Mercer included) based on the restricted stock studies and their observed discounts on average. If the restricted shares were identical in all respects save restrictions (for a period of time) under Rule 144, the only reason for discounts to market prices of freely traded shares relates to perceived incremental risk over the time horizon until restricted shares become marketable. We have given a name to the compensation necessary for an investor to accept this incremental risk – the holding period premium, or HPP. HPP accounts for numerous risks, including the potential for a long and indeterminate holding period and many other risks that flow from the holding period or from the factual situation in any valuation. Other things being equal, greater risk implies lower value.

Using an income approach (i.e., discounted cash flow in symbolic form), we have examined certain circumstances under which the nonmarketable minority value will be less than the marketable minority value. Said another way, we have described certain circumstances under which the appropriate discount for lack of marketability, or DLOM, would be greater than zero.

Asset will see in future posts, the appropriate marketability discount for specific valuation situations can be estimated using valuation methods under either the income approach or the market approach.

### **The Marketability Discount**



The marketability discount (MD) that investors demand when purchasing nonmarketable minority interests in enterprises is defined:

This equation confirms that if the shareholder level value ( $V_{sh}$ ) is equal to the marketable minority value ( $V_{mm}$ ) there is no marketability discount.

Frequently, owners of nonmarketable securities anticipate each potential source of diminished value:

$$MD = 1 - \frac{V_{sh}}{V_{mm}}$$

1. Cash flow to the shareholder ( $CF_{sh}$ ) less than that of the enterprise ( $CF_{e(mm)}$ );
2. Expected growth in value less than the discount rate (adjusted for dividend yield); and,
3. Incremental risks associated with illiquidity during the expected holding period.

In such cases, the appropriate marketability discounts can be quite large. In other cases, however, as with fully distributing entities, or in cases where the expected growth rate in value is relatively high and holding period risks are not large, the appropriate marketability discounts can be quite small.

Conceptually, no portion of the marketability discount is attributable to not possessing the prerogatives of control. The marketability discount reflects, rather, differences between the expected cash flows of the enterprise and those to shareholders, expected growth in value less than the underlying discount rate, and holding period risk in excess of the risks associated with the enterprise.

Note that the minority investor in a public company has no more direct control over the enterprise than does the minority investor in a private company. However, the public minority shareholder does have an element of *personal control* that the private minority shareholder lacks. He has the ability to sell his investment and receive cash in three days through the public securities markets at the marketable minority level (the present value of all expected cash flows of the enterprise).

### So, What Does All This Mean?

The conceptual logic regarding the income approach is difficult to refute. What can cause expected cash flows to minority shareholders to be less than the expected cash flows of the enterprise? What can cause the expected growth in value, from the minority shareholder's perspective, to be less than the expected growth in value for the enterprise from the viewpoint of a purchaser today? What factors create additional risks for minority shareholders, in addition to the need to bear the risks of the enterprise?

The answers to these questions lie in a myriad of factors influencing marketability, many of which were summarized in the [IRS DLOM Job Aid](#). With the background laid for future discussion, we move in the next post to a discussion of the market approach when valuing illiquid minority interests, to be followed by an overview of the *IRS DLOM Job Aid*, first, providing an overview, and then, focusing on the factors influencing marketability.

We will then take a look at the marketability discount, again conceptually, from the viewpoint of valuation standards.

With our growing base of knowledge and understanding, we will then begin to examine the various methods used by appraisers to develop marketability discounts, analyzing them in light of the conceptual understanding we are developing as this series continues.

**Obtain a proposal of valuation services for your company, partnership, or bank.**

[Obtain Proposal »](#)

# Understanding the Largest Valuation Discount #6: The Market Approach to Developing Marketability Discounts

[valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-6-the-market-approach-to-developing-marketability-discounts/](https://www.valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-6-the-market-approach-to-developing-marketability-discounts/)

In the [fifth post in this series](#) on “Understanding the Largest Valuation Discount,” a generalized overview of the use of the income approach was developed. This sixth post in the series addresses the market approach for developing marketability discounts, or discounts for lack of marketability (DLOM).

This post is developed in three parts:

- Background information precedent to the discussion of the market approach for developing DLOMs.
- The conceptual application of the market approach at enterprise levels of value.
- The conceptual application of the market approach for developing marketability discounts to derive value indications at the nonmarketable minority level of value.



The discussion in the first two parts is necessary to fully understand the conceptual overview developed in the third part.

## Background Precedent to the Discussion

The market approach to valuing a business, business ownership interest, intangible asset or security is described in the [ASA Business Valuation Standards](#) (“the ASABVS”) as:

*The market approach is a general way of determining a value indication of a business, business ownership interest, security or intangible asset by using one or more methods that compare the subject to similar businesses, business ownership interests, securities or intangible assets that have been sold.*

Too often in business valuation, we fail to specify precisely what we are talking about before engaging in debate. To be clear:

- This series of posts is addressing the marketability discount applicable to the value of businesses at the **marketable minority level of value**. The level of value from which the marketability discount is taken is an enterprise level of value based on 100% of the available cash flows of the enterprise. These cash flows are, by definition, normalized to that of a well-run, publicly traded equivalent. If it were not so, then the resulting value indication would not be at the marketable minority level (“as-if freely traded”) level of value.
- The resulting valuation indication is of an illiquid minority interest in the subject enterprise, which is described as the **nonmarketable minority level of value**.

The two bolded terms, marketable minority and nonmarketable minority, are not defined terms, but appraisers use them in virtually every appraisal. They are described conceptually in the levels of value charts.



The marketability discount is clearly shown, at least conceptually, in both charts above. It is, as indicated, the discount that takes an enterprise value indication at the marketable minority level of value to the shareholder level, or to the nonmarketable minority level of value.

We have discussed these concepts in earlier posts in the series. However, it is important to be crystal clear what we are talking about as we develop a conceptual background for the use of the market approach to developing marketability discounts.

### The Market Approach: Marketable Minority and Above

The market approach to valuing businesses, business ownership interests, securities or intangible assets was defined above. The key to the market approach is that we look to “the markets” for similar business interests to develop “guidelines” for the valuation of particular subject interests.

[BVS V of the ASABVS](#), “Market Approach to Business Valuation,” goes on to indicate examples of methods under the market approach such as the Guideline Public Company Method and the Guideline Transaction Method, which are the subject of two Statements on ASA Business Valuation Standards (of the same names).

When valuing businesses, the use of the market approach is straightforward, at least conceptually:

- Marketable Minority.** At the marketable minority level, we examine transactions in the shares of “comparable” publicly traded companies to develop guideline valuation ratios for application to a subject business. After developing a group of publicly traded “guideline companies,” the analyst will make appropriate comparisons and adjustments and apply valuation ratios like Price/Net Income (the P/E ratio), Market Value of Total Capital (MVTC) to Sales, or to Earnings Before Taxes, Depreciation, and Amortization (EBITDA), or to another level of the income statement. The end result of the application of such ratios to the normalized earnings of a subject business is a value indication at the marketable minority level of value.
- Financial Control.** At the financial control level of value, appraisers have a choice, depending on the availability of data. They can develop groups of “comparable” transactions in the sales of controlling interests of companies. Based on relevant comparisons with a subject controlling interest, the analyst may apply valuation ratios directly from the guideline group of transactions to the subject business. The result, if the transactions are considered to be “financial” transactions, is at the financial control level of value. In the alternative, analysts can make indirect comparisons of valuation ratios from publicly traded groups of guideline companies because there is a growing understanding that the financial control and marketable minority levels of value are conceptually similar in magnitude (hence their co-location in the chart on the right above).
- Strategic Control.** Analysts can develop value indications under the market approach at the strategic control level of value either directly or indirectly. In the direct method, comparisons are made with comparable transactions which are deemed to have occurred at the strategic control level. In the indirect method, value indications are developed by the application of appropriate (strategic or synergistic) control premiums to value indications at the marketable minority level of value (or the financial control level of value). Appraisers should apply control premiums with great caution. Control premiums are not economic drivers and mask often widely

different underlying economics (i.e., valuation ratios) for otherwise seemingly similar transactions.

For a more detailed discussion of the concepts above, see three posts in another series on this blog on statutory fair value [here](#) and [here](#) and [here](#).

### The Market Approach: Nonmarketable Minority Level

The market approach is based on relevant comparisons of a subject entity's valuation parameters with valuation ratios developed from transactions in the relevant markets for the interest. The previous two sections outline the application of the market approach at the enterprise levels of value, including the marketable minority, the financial control and the strategic control levels.

To develop marketability discounts, or said another way, to value interests at the nonmarketable minority level of value, the market approach can be used directly or indirectly.

- **Direct Application.** Referring to the levels of value charts above, we can develop value indications at the nonmarketable minority level by making appropriate valuation comparisons with transactions in illiquid securities of the business being considered in the appraisal. Appraisers always inquire about transactions in shares of subject companies. However, transactions in illiquid interests of private companies do not reflect an active market and should be used with caution. Quite often these transactions may reflect a lack of information or compulsion on the part of sellers (or buyers), and may not therefore be reflective of fair market value, which is the standard of value applicable in many, if not most, valuation requirements.
- **Indirect Application.** Realizing the inadequacies of the direct application of the market approach for the valuation of illiquid securities, appraisers began to turn to indirect methods. Indirect methods include the examination of transactions of illiquid securities in the public markets. It was observed that shares of publicly traded companies bearing legal or other restrictions on marketability tended to transact at discounts to publicly traded shares of the same companies that bore no similar restrictions. Analysts can develop groups of transactions in the shares of similar (to the subject company), publicly traded (but otherwise illiquid) companies, and make appropriate comparisons with valuation ratios from those transactions with the subject interest.



The [SEC Institutional Investor Study](#) was published in the early 1970s and reflected transactions in restricted shares of public companies occurring in the latter 1960s. In the ensuing years, a number of other studies of restricted stock transactions were published. By the 1980s, appraisers were engaging in what is now called “benchmark analysis” to develop marketability discounts. Comparisons were made with the averages of restricted stock studies and averages from the studies, or selections of discounts around the averages, were often applied by appraisers to marketable minority indications of value in the development of nonmarketable minority indications of value.

Beginning in the 1980s, as studies of restricted stock transactions of public companies continued to be performed, analysts, including [John Emory](#), then at [Robert W. Baird & Co.](#), began to investigate transactions in private companies occurring in the months prior to their initial public offerings. These studies came to be called “pre-IPO studies.” The pre-IPO studies were also used in the employment of benchmark analysis to develop marketability discounts indirectly.

Over time, a number of restricted stock studies were conducted and transactional data became available from them ([here](#) and [here](#) among others). In addition, the pre-IPO markets were analyzed in more depth and [pre-IPO transactional data bases](#) emerged. More recently, transactions in [LEAPS](#), or long-term equity anticipation securities, have been examined. With the development of these transactional data bases, appraisers gained the ability to employ the market approach indirectly but with, hopefully, more precision than with benchmark analysis.

We will examine specific data bases and indirect market approach methods for developing marketability discounts in future posts in this series. We only mention them now to position them as methods under the market approach.

### Wrapping Up and Looking Ahead

We have now developed a conceptual overview of the market approach for developing the largest valuation discount, the marketability discount. [Post four](#) in the series provided a roadmap calling for the conceptual discussion of the

[income approach in post five](#) and the present conceptual discussion of the market approach.

The next post will, as promised, will address “Business Valuation Standards and the Marketability Discount.” In upcoming posts, we will consider the income approach and the market approach for developing DLOMs through the filter of prevailing business appraisal standards, including the [Uniform Standards of Professional Appraisal Practice](#) and the [ASA Business Valuation Standards](#). References to other sets of business appraisal standards may also be considered.

Then, as indicated in the roadmap post:

*Lest any readers grow impatient, we will still not be ready to discuss specific methods for developing marketability discounts. Before beginning the discussion of DLOM valuation methods or studies related to such methods, we will provide an overview of a recent publication of the Internal Revenue Service, [IRS DLOM Job Aid](#).*

This series was just mentioned in the [BVWire](#). I hope it continues to generate interest among users of appraisal reports as well as business appraisers. The series is designed to avoid piecemeal discussion of the largest valuation discount. It will, hopefully, develop into the most comprehensive examination of the marketability discount to date.

# Understanding the Largest Valuation Discount #7: An Introduction to Marketability Discounts and Business Valuation Standards

[valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-7-an-introduction-to-marketability-discounts-and-business-valuation-standards/](https://www.valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-7-an-introduction-to-marketability-discounts-and-business-valuation-standards/)

This post introduces the topic of Business Valuation Standards and how they inform the discussion of marketability discounts. Given the amount of information to cover, we've broken the information related to business valuation standards into several posts:

- #7: An Introduction to Marketability Discounts and Business Valuation Standards
- #8: Business Valuation Standards: Valuation Methods Under the Asset Approach
- #9: Business Valuation Standards: Valuation Methods Under the Market Approach
- #10: Business Valuation Standards: Valuation Methods Under the Income Approach
- #11: Business Valuation Standards: Additional Factors in Developing DLOMs
- #12: Business Valuation Standards & DLOM Conclusion



In this post, we introduce the standards of the major business valuation professional associations and then discuss how the standards define a marketability discount as well as the concept and application of discounts and premiums. We end this post with an introduction to the three basic valuation approaches: asset, market, and income.

## Prevailing Business Valuation Standards

In the United States, business appraisal standards from four appraisal organizations provide guidance for business appraisers. These standards include:

- Standards 9 and 10 (pertaining to Business Appraisal, Development and Reporting, respectively) and Standard 3 (pertaining to Appraisal Review, Development and Reporting) of the [Uniform Standards of Professional Appraisal Practice](#) (USPAP). USPAP is promulgated by [The Appraisal Foundation](#), which first published standards in 1987.
- [ASA Business Valuation Standards](#) (ASABVS). These standards are published by the [Business Valuation Committee](#) of the [American Society of Appraisers](#). The ASA Business Valuation Standards have evolved since the publication of the first standards in 1992. The latest version of the standards was published in 2009.
- [Professional Standards](#) of the [National Association of Certified Valuators and Analysts](#) (NACVA). These standards reflect a merging of the business appraisal standards of the NACVA and the [Institute of Business Appraisers](#) that occurred in June 2011.
- [Statement on Standards for Valuation Services 1: Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset](#). SSVS-1 was published by the [American Institute of Certified Public Accountants](#) in 2007.

A fifth set of North American valuation standards is published by the [Canadian Institute of Chartered Business Valuators](#) (CICBV) ([Practice Standards](#) and [Practice Bulletins](#)). Finally, the [International Valuation Standards Council](#) (IVSC) publishes the [International Valuation Standards 2011](#).

I served on the Standards Subcommittee of the Business Valuation Committee of the American Society of Appraisers for many years and was its chair at the time of the publication of the last major revision of the ASA Business Valuation Standards in 2009. I currently serve on the [Professional Board](#) of the IVSC.

Our analysis of marketability discounts in the context of prevailing business appraisal standards will focus on the four sets of standards promulgated by the major business appraisal organizations in the United States. The Professional Standards of NACVA are stated to be in parity with SSVS-1 and are very high level. The Uniform Standards of Professional Appraisal Practice have two short standards directly applicable to business appraisal. We will address these standards specifically as the discussion continues. The initial discussion, however, will focus on the ASABVS and SSVS-1.

### **Business, Business Ownership Interest, Security and Intangible Asset**

The ASA Business Valuation Standards evolved to pertain to standards relating to the valuation of a “business, business ownership interest, security, or intangible asset.” Over time, we realized that the standards should relate not only to the appraisal of businesses, but to pieces of businesses as well. The discount for lack of marketability is that valuation discount that “moves” from a value indication at the marketable minority level (or financial control level), which is a value indication for a business, to the nonmarketable minority level of value. This latter level is a valuation at the level of the shareholder and reflects value indications of business ownership interests or securities.

The point is, prevailing business appraisal standards relate specifically to the valuation of business ownership interests and securities as well as to the development of marketability discounts applied in the process of valuing them.

### **Marketability Discount in the Standards**

The Glossaries of the ASA Business Valuation Standards, SSVS-1 and the Professional Standards of NACVA are similar, if not identical. According to the [Glossary](#) of the ASA Business Valuation Standards, the Discount for Lack of Marketability is defined as:

*An amount or percentage deducted from the value of an ownership interest to reflect the relative absence of marketability.*

Marketability is further defined as:

*The ability to quickly convert property to cash at minimal cost.*

*and,*

*The capability and ease of transfer or saleability of an asset, business, business ownership interest, security or intangible asset.*

BVS-VII Valuation Discounts and Premiums of the ASA Business Valuation Standards (ASABVS) discusses certain concepts of valuation discounts and premiums (for ease of reference I will refer to page numbers, rather than paragraphs):

#### ***II. The Concepts of Discounts and Premiums (ASABVS, p. 16)***

*A discount [or premium] has no meaning until the conceptual basis underlying the base value to which it is applied is defined.*

*A discount or premium is warranted when characteristics affecting the value of the subject interest differ from those inherent in the base value to which the discount or premium is applied.*

*A discount or premium quantifies an adjustment to account for differences in characteristics affecting the*

| *value of the subject interest relative to the base value to which it is compared.*

The base value from which a marketability discount is taken is typically the marketable minority level of value. SSVS-1 uses a different term for the same concept. Pre-adjustment Value is defined in its Glossary of Additional Terms (SSVS-1, p. 53) as:

| *The value arrived at prior to the application, if appropriate, of valuation discounts or premiums.*

In any event, it should be clear that an appraiser must reach a conclusion of value that is clearly defined prior to the application of a marketability discount. We will see later that when the income approach is used, analysts may develop value indications at both the marketable minority level and at the nonmarketable minority level and determine the marketability discount as the difference. Nevertheless, the base value has to be defined.

BVS-VII goes further to discuss the application of discounts and premiums.

### ***III. The Application of Discounts and Premiums (ASABVS, p. 16) [emphasis added below]***

*The purpose, applicable standard of value, or other circumstances of an appraisal may indicate the need to account for differences between the base value and the value of the subject interest. If so, appropriate discounts or premiums should be applied.*

*The **base value** to which the discount or premium is applied must be **specified and defined**.*

*Each **discount** or premium to be applied to the base value must be **defined**.*

*The primary **reasons why** each selected discount or premium applies to the appraised interest **must be stated**.*

*The **evidence** considered in deriving the discount or premium must be **specified**.*

*The appraiser's **reasoning** in arriving at a conclusion regarding the size of any discount or premium applied must be **explained**.*

SSVS-1 addresses valuation adjustments more succinctly, but the message is the same (SSVS-1, p. 28) [emphasis added]

*63. This section should (a) **identify** each valuation adjustment considered and determined to be applicable, for example, discount for lack of marketability, (b) **describe the rationale** for using the adjustment and the **factors considered** in selecting the amount or percentage used, and (c) **describe the pre-adjustment value** to which the adjustment was applied (paragraph 40).*

Both the ASABVS and SSVS-1 call for specificity of analysis, the discussion of evidence, and an explanation of the reasoning behind any concluded marketability discount (or any discount or premium). Vague, unsupported conclusions of opinion regarding a DLDM are simply not in conformity with business appraisal standards.

## **Valuation Approaches**

There are three basic approaches to valuation, the asset approach, the market approach, and the income approach. Appraisers normally consider each of the three approaches in enterprise valuations. SSVS-1, which applies not only to businesses, but to business ownership interests, securities and intangible assets, states this need for consideration (SSVS-1, p. 16):



*31. In developing the valuation, the valuation analyst should consider the three most common valuation approaches:*

*32. The valuation analyst should use the valuation approaches and methods that are appropriate for the valuation engagement. General guidance on the use of approaches and methods appears in paragraphs 33-41, but detailed guidance on specific valuation approaches and methods and their applicability is outside the scope of this Statement.*

Most valuation analysts do, in fact, consider all three valuation approaches when they develop valuations of enterprises. What about when marketability discounts are being developed? The ASABVS provide guidance on this question in its Procedural Guidelines (PG). In PG-2 — Valuation of Partial Ownership Interests, we find this specific guidance (ASABVS, p.47):

*Appraisers should consider all three approaches to value (asset-based, income and market) when valuing partial interests. If an approach is excluded in an assignment the appraiser should explain the reason for such exclusion in the appraisal report.*

This is interesting guidance, because many appraisers do not really consider or discuss the valuation approaches under which the methods used to develop marketability discounts fall. However, every method used to develop marketability discounts can be classified under either the asset approach, the market approach, or the income approach (or a hybrid).

Our next post will discuss valuation methods under the asset approach.

# Understanding the Largest Valuation Discount #8: Marketability Discounts – BV Standards: Valuation Methods Under the Asset Approach

[valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-8-marketability-discounts-bv-standards-valuation-methods-under-the-asset-approach/](https://www.valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-8-marketability-discounts-bv-standards-valuation-methods-under-the-asset-approach/)

In the [previous post](#), we discussed the prevailing business valuation standards and introduced the three basic valuation approaches: the asset approach, the market approach, and the income approach.

In this post, we turn our attention to the Asset Approach.

## Valuation Methods Under the Asset Approach

The asset approach (and cost approach for intangible assets) is discussed in paragraphs 34-35 of SSVS-1 (p. 18). The statement makes it clear that the guidance applies to the valuation of a business, business ownership interest, security or intangible asset.

Guidance for the asset approach in the Business Valuation Standards of the American Society of Appraisers (ASABVS) is found in BVS-III Asset-Based Approach to Business Valuation (ASABVS, p. 9). This guidance also is clear in that it applies to the valuation of a business, business ownership interest, security or intangible asset. However, it does state the following: “Valuations of *particular interests* in an enterprise may or may not require the use of the asset-based approach.” (ASABVS, p. 9).

The standards suggest consideration of all three approaches when developing marketability discounts, including the asset approach. I am not aware of any traditional method for determining marketability discounts that fall under the asset approach. Nevertheless, the guidance of PG-2 suggests that we think about the applicability of the asset approach when valuing minority interests.

Our next post will discuss valuation methods under the market approach.



# Understanding the Largest Valuation Discount #9: Marketability Discounts – BV Standards: Valuation Methods Under the Market Approach

[valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-9-marketability-discounts-bv-standards-valuation-methods-under-the-market-approach/](https://www.valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-9-marketability-discounts-bv-standards-valuation-methods-under-the-market-approach/)

We continue our discussion of business valuation standards as they related to marketability discounts with a discussion of valuation methods under the market approach.

## Valuation Methods Under the Market Approach

The AICPA's [Statement on Standards for Valuation Services \(SSVS\)-1](#) (p. 18) notes three frequently used valuation methods under the market approach that relate to the appraisal of businesses, business ownership interests, securities and intangible assets, including the Guideline Public Company Method, the Guideline (Company) Transactions Method, and guideline sales of interests in the subject entity (such as business ownership interests or securities).

The [Business Valuation Standards of the American Society of Appraisers \(ASABVS\)](#) has, in addition to BVS-V Market Approach to Business Valuation, two Statements on Business Valuation Standards (SBVS) that contain guidance on the use of the methods mentioned in SSVS-1. Specifically, the ASABVS has:

- SBVS- 1 Guideline Public Company Method (ASABVS, pp. 33-34). SBVS-1 addresses the use of transactions in the securities of public companies to provide valuation guidelines for the appraisal of subject businesses, business interests, securities or intangible assets.
- SBVS- 2 Guideline Transactions Method (ASABVS, pp. 35-36). SBVS-2 addresses not only transactions in comparable, or guideline, companies in the private (or public) mergers and acquisitions markets where whole companies (or controlling interests in them) are sold. SBVS-2 also addresses the consideration of transactions in interests of subject companies being valued as a basis for valuation guidelines.

SBVS-1 and SBVS-2 are similar in structure and guidance, even though they relate to different markets. For purposes of this discussion, we focus on SBVS-1 Guideline Public Company Method.

This Statement is of particular importance in our ongoing discussion of developing marketability discounts. In particular, readers should keep in mind the following methods as we discuss the requirements of SBVS-1:

- Using restricted stock data bases regarding guideline transactions in public companies.
- Using pre-IPO transaction data bases regarding companies that were privately owned but engaged in initial public offerings (IPOs).
- Using LEAPs (long-term equity anticipation securities) transactions data bases regarding limited transactions in the shares of public companies.
- Using any other data bases where comparisons might be made between the transactions in them and illiquid or restricted shares of a subject enterprise.

All the above valuation methods fall under the guidance of SBVS-1. Transactions like the above can provide objective, empirical data for deriving valuation ratios for use in the valuation of businesses, business ownership interests,



securities or intangible assets.

## Conceptual Framework for Guideline Transactions

Quotations below are from SBVS-1 and refer to ASABVS (pp. 33-34). Emphasis in the quotations is added.

*The development of valuation ratios from guideline public companies should be considered in the valuation of businesses, business ownership interests, securities and intangible assets **to the extent that adequate and relevant information is available.***

Guideline transactions should be considered if “adequate and relevant” information is available. There are perhaps [15 thousand public companies in the United States](#), of which about one-third are traded on the major stock exchanges and the remainder are traded in some form of over-the-counter market. It can be difficult, even with this large number of public companies, to find with appropriate similarities to a subject enterprise as to provide “adequate and relevant” information.

*Guideline public companies are companies with shares traded in the public securities markets that **provide a reasonable basis for comparison** to the investment characteristics of the company (or other interest) being valued. **Ideal guideline companies are in the same industry** as the subject company; however, if there is insufficient market evidence available in that industry, it may be necessary to select other companies having an **underlying similarity to the subject company in terms of relevant investment characteristics such as markets, products, growth, cyclical variability, and other relevant factors.***

Guideline companies should provide a reasonable basis for comparison in relationship to a subject guideline company. It makes little sense to use [FedEx](#), with some \$43 billion in annual revenue, as a “guideline company” for Intercity Bicycle Express Company, a company with a dispatcher and a dozen bike riders who carry documents between law firms and other businesses. In this example, FedEx so dwarfs Intercity in size and scope of operations as to be irrelevant.

In the event that identical, or even directly similar companies cannot be found, it may be appropriate to use other bases of comparison, for example, based on similarities in markets, products, growth, cyclical, or other factors. Quite often, it is not possible to find sufficiently comparable companies for reasonable use of the guideline public company method [or for the guideline transactions method].

## Search for and Selection of Guideline Companies

It is necessary to engage in a thorough and objective search for guideline public companies. The search procedure must include criteria for screening and selecting companies to be used as guidelines. Ideally, the search criteria will be outlined and the companies that are excluded or included can be examined in light of the criteria. Search criteria can include line of business, size, profitability, business models, and others.

## Financial Data of Guideline Public Companies

SBVS-1 states that analysts must obtain and analyze financial and operating data on selected guideline companies if it is available. In today’s world substantial financial and operating data is available on virtually every public company.

The guidance suggests examining adjustments to the financial data of the guideline public companies to minimize differences in accounting treatments. For example, if the industry standard for inventory accounting is LIFO and two companies in a selected group prepare their financials on a FIFO basis, it may be appropriate to adjust the income statements and balance sheets of the two companies with different accounting treatment.

Finally, the guidance of SBVS-1 states that unusual or nonrecurring items in the public company financial statements should be examined and adjusted, if appropriate. Even in today’s world of financial information availability ([YahooFinance](#), [GoogleFinance](#), [SEC Edgar](#), and other data bases), it can be difficult to satisfy the guidance of SBVS-

1.

## Valuation Ratios Derived from Guideline Public Companies

Typically, valuation ratios are developed from groups of guideline public companies and a median, or typical ratio is applied to the corresponding valuation metric (sales, EBITDA, net income, etc.) of a subject company. Guidance from SBVS-1 regarding the use of valuation ratios includes:

*Comparisons are made through the use of valuation ratios. The computation and use of such ratios should provide **meaningful insight** about the value of the subject company, considering all relevant factors. Accordingly, care should be exercised with respect to issues such as:*

- 1. The **selection of the underlying data** used to compute the valuation ratios*
- 2. The selection of the **time periods** and/or the **averaging methods** used for the underlying data*
- 3. The computation of the valuation ratios, which may be derived by relating prices of the guideline public companies to the appropriate underlying financial, operating, or physical data of the respective guideline companies*
- 4. **The timing of the price data used in the valuation ratios (in relationship to the effective date of the appraisal)***
- 5. How the valuation ratios were selected and applied to the subject's underlying data*

The actual selection and computation of valuation ratios is important. SSVS-1 does not provide as much detail in its treatment of the market approach, its focus is on comparability (see SSVS-1, pp. 18-19). SSVS-1 calls for the valuation analyst to conduct appropriate qualitative and quantitative comparisons. In addition, the analyst is asked to examine whether the pricing of transactions represents arm's length negotiations. And finally, SSVS-1 requires, like SBVS-1 above, that the analyst should consider: "The dates and, consequently, the relevance of the market data".

The American Society of Appraiser's Procedural Guidelines (PG-2 Valuation of Partial Ownership Interests in the ASABVS (p. 45)) provides limited guidance for methods under the market approach:

*Market data on transaction in similar market, if any. Potentially similar markets might include private placements in publicly or privately syndicated entities (including restricted stock transactions, pre-IPO transactions, and transactions in publicly traded limited partnerships) or tenants-in-common arrangements, etc.*

We will keep this guidance in mind in our examination of valuation methods for developing DLOMs that fall under the market approach.

Our next post covers valuation methods under the income approach.

# Understanding the Largest Valuation Discount #10: Marketability Discounts – BV Standards: Valuation Methods Under the Income Approach

[valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-10-marketability-discounts-bv-standards-valuation-methods-under-the-income-approach/](https://www.valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-10-marketability-discounts-bv-standards-valuation-methods-under-the-income-approach/)

Continuing on in our series on business valuation standards and marketability discounts, we discuss valuation methods under the income approach.

## Valuation Methods Under the Income Approach

The AICPA's [Statement on Standards for Valuation Services \(SSVS\)](#)-1 provides high level guidance regarding the income approach to valuation at its paragraphs 33-34 (SSVS-1, pp. 16-18).

BVS-IV Income Approach to Business Valuation of the [Business Valuation Standards of the American Society of Appraisers \(ASABVS\)](#) provides the initial guidance from the ASABVS (pp. 10-11). The guidance of this standard is general in nature and is applicable to businesses and interests in them. However, there is little direct guidance regarding the valuation of illiquid interests in the ASABVS. This guidance was added in Procedural Guideline 2 (PG-2 Valuation of Partial Ownership Interests).

The general guidance of BVS-IV pertains both to businesses and to business interests. It is high level in nature. We know that valuation methods under the income approach include both methods that capitalize earnings and those that discount future earnings to the present.



*A. Anticipated benefits, as used in the income approach, are expressed in monetary terms. Anticipated benefits may be reasonably represented by such items as dividends or distributions, or various forms of earnings or cash flow. B. Anticipated benefits should be estimated by considering such items as the nature, capital structure and historical performance of the related business entity, the expected future outlook for the business entity and relevant industries, and relevant economic factors.*

Expected future benefits are either capitalized (at an appropriate capitalization factor that considers expected growth) or forecasted (including expected growth) and discounted to the present (at a discount rate reflective of the risks associated with their receipt).

Valuation methods for determining marketability discounts falling under the income approach include:

- Any shareholder-level discounted cash flow method, in general
- The QMDM, or Quantitative Marketability Discount Model
- The Nonmarketable Investment Company Evaluation Model (NICE)
- Option pricing models
- Any other methods that make explicit or implicit forecasts of future cash flows or dividends and discount them back to the present at a risk-appropriate discount rate

PG-2 Valuation of Partial Ownership Interests provides additional advice on the use of income methods to develop marketability discounts, including guidance regarding expected economic benefits (i.e., expected cash flows to partial, or minority, interests), the required rate of return for investing in the subject interest, and the expected holding period for an investment in the subject interest. This section focuses only on expected cash flows, risk and the expected holding period. In a later section, we will outline additional factors for consideration in the valuation of partial ownership interests found in PG-2.

### Expected Holding Period

Every investment has an expected investment horizon. That horizon may be short, or long-term, but it is the horizon over which the investor reasonably expects to obtain the expected return from the investment.

Investments are made in the face of uncertainty. Holding periods are often not known with any degree of certainty. Nevertheless, investors do make investments in illiquid investments based upon their reasoned, and hopefully reasonable, assessments of the future. Investments are made without knowledge of the future, but they are made. What any investor knows is that, in the final analysis, the return on an investment will be what it turns out to be. That will be less than expectations, matching expectations, or exceeding expectations.

Procedural Guidelines in the ASABVS suggest certain procedures that may be used in the conduct of valuation engagements, but they are not binding portions of the standards. However, PG-2 does reflect the best-thinking of the American Society of Appraisers on the topic of valuing partial ownership interests to date. PG-2 does provide a roadmap for compliance with [Uniform Standards of Professional Appraisal Practice](#) (USPAP) Standards Rule 9-4(d).

Regarding the expected holding period for partial ownership interests, PG-2 enumerates a number of factors that appraisers (and investors) might consider in the process of developing a discounted cash flow model, including (ASABVS, pp. 45-46):

*a. The extent to which the expected holding period may be uncertain. b. Defined expiration or termination dates contained in the governing documents, or other external factors, that may precipitate a foreseeable liquidation or sale of the underlying entity. c. Analysis of the age, health and other characteristics of the other owners and/or key managers, which could provide information about the possible timing of a sale or liquidation by the controlling owner(s). d. The history of transactions (if any) involving partial (or possibly controlling) interests of the subject enterprise or asset, including recapitalizations or stock repurchases that have provided liquidity to shareholders. e. The potential market for similar enterprises or assets (e.g., is the industry consolidating?). f. The emerging attractiveness of the entity for equity offering, sale, merger or acquisition. g. Provisions in the governing documents or buy-sell agreements, or under law or regulation either prohibiting, restricting or allowing transfer of the subject interest. h. Rights and powers attributable to the subject interest that may enable a sale of the subject entity, asset or the interest itself, against the will of the other owners. i. Historical actions of management and/or the directorate, which may provide information about their policy and intentions regarding eventual sale of the entity or asset, or receptivity to a potential sale or repurchase of partial interests. j. The existence, depth and functioning of markets that might be available for interests similar to the subject interest. k. The appropriateness of considering a range of expected holding periods and exit possibilities.*

The expected holding period may not be known with certainty, but it can be analyzed. Reasonable expectations may call for a relatively short expected holding period, a relatively long one, or something in-between. Regardless, the valuation analyst employing discounted cash flow models to estimate the value of illiquid securities is called upon to analyze and reach a conclusion regarding the expected holding period.

This guidance amplifies guidance from the Uniform Standards of Professional Appraisal Practice that has been in the USPAP standards since 2006. Standards Rule 9-4(d) states (and the comment is part of the standard) (USPAP, p. U-74):

*An appraiser must, when necessary for credible assignment results, analyze the effect on value, if any, of the extent to which the interest appraised contains elements of ownership control and is marketable and/or liquid.*

*Comment: An appraiser must analyze factors such as holding period, interim benefits, and the difficulty and cost of marketing the subject interest.*

*Equity interests in a business enterprise are not necessarily worth the pro rata share of the business enterprise interest value as a whole. Also, the value of the business enterprise is not necessarily a direct mathematical extension of the value of the fractional interests. The degree of control, marketability and/or liquidity or lack thereof depends on a broad variety of facts and circumstances that must be analyzed when applicable.*

In other words, USPAP Standards Rule 9-4(d) says that, if necessary for credible results, an appraiser must consider the expected holding period of a minority investment, as well as its expected interim benefits and the risks associated with achieving them.

### **Expected Economic Benefits**

Expected economic benefits are the driving factor for almost any investment. Expected benefits from the viewpoint of owners of a business interest or security come from anticipated dividends or distributions, as well as a terminal cash flow when the investment is expected to be sold or liquidated. PG-2 outlines the following factors for consideration with expected economic benefits (ASABVS, p. 46):

*a. Expected interim dividends or distributions to the interest, which may differ from the expected benefits (cash flows) generated by the entity or asset as a whole. Interest-level benefits may be affected by such factors as:*

*(1) The history of dividends or distributions, including both timing and amounts. (2) Current or expected future distribution policy. (3) Preferential dividend claims. (4) Enterprise-level and/or interest-level tax characteristics. (5) The outlook for one-time and/or irregular dividends or distributions. (6) Circumstances with controlling owners that may increase (or decrease) the likelihood of future interim benefits.*

*b. The expected terminal cash flow at the end of the expected holding period(s), which may be a function of such factors as:*

*(1) Possible future transactions involving the enterprise or asset as a whole, or transactions in the subject interest itself. (2) Current (valuation date) value and expected growth in value of the enterprise or asset to the end of the expected holding period(s). (3) Growth in value may be a function of expected earnings retention (distribution policy) and the amount of and effectiveness of expected reinvestment in the entity or asset.*

For income-producing business interests, it would appear that some analysis of expected economic benefits and the expected holding period (or range of holding periods) should be considered if the above standards are to be observed.

### **Required Return for Investing in Partial Ownership Interest**

The required return for investing in a partial ownership interest of a business is the discount rate that considers the risks associated with the investment, other than the risks already accounted for in the valuation of the enterprise as a whole. Factors included in the assessment of the appropriate required return include, according to PG-2 (ASABVS, p. 47):

*a. The expected length and uncertainty of the holding period. b. The likelihood of dividends or distributions (i.e., expected distribution policy). c. The costs of due diligence efforts required to acquire the subject partial interest. d. The costs of monitoring the investment over the expected holding period, including issues related to the expected receipt of timely and reliable information concerning the investment. e. Required returns on similar investments or investments with similar investment specific liquidity and holding period characteristics. f. The risk of tax liabilities from pass-through profits without guaranteed tax distributions in entities such as limited liability companies, Subchapter S corporations or partnerships. g. The difficulty and cost of marketing*



*the subject interest. h. The risk of involuntary dilution when no preemptive rights are provided in the articles of incorporation or bylaws of a corporation. i. The degree of control conveyed by the subject interest.*

This post finishes our discussion of the three basic valuation approaches and the methods under them. The next post in this series on business valuation standards as they relate to marketability discounts examines additional factors in developing DLOMs.

# Understanding the Largest Valuation Discount #11: Marketability Discounts – BV Standards: Additional Factors in Developing DLOMs

[valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-11-marketability-discounts-bv-standards-additional-factors-in-developing-dloms/](https://www.valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-11-marketability-discounts-bv-standards-additional-factors-in-developing-dloms/)

The [Uniform Standards of Professional Appraisal Practice](#) (USPAP) Standards Rule 9-4(c) outlines a number of factors that should be considered when valuing illiquid minority interests (USPAP, p. U-74):

*An appraiser must, when necessary for credible assignment results, analyze the effect on value, if any, of buy-sell and option agreements, investment letter stock restrictions, restrictive corporate charter or partnership agreement clauses, and similar features or factors that may influence value.*



Procedural Guideline 2 (PG-2) of the [Business Valuation Standards of the American Society of Appraisers](#) outlines a number of factors that may be appropriate in the valuation of partial ownership interests. We have previously examined a portion of the factors in the discussion of the valuation methods under the income approach of expected economic benefits, the expected holding period and the required return, or discount applicable to future benefits. These factors include the following:

- The purpose and definition of the valuation engagement in accordance with BVS – I General Requirements for Developing a Business Valuation, including the applicable standard (type) and premise of value.
- Factors related to the underlying enterprise or asset, including: 1. The value of the underlying enterprise or asset, if applicable. 2. Enterprise-level or asset level tax effects, if relevant.
- Provisions in the organizational and governance documents that affect the rights, restrictions, marketability and liquidity of the subject interest. Documents to consider may include partnership agreements, articles of incorporation, bylaws, operating agreements, buy-sell agreements, investment letter stock restrictions, option agreements, lock-up requirements or others that may be relevant.
- Applicable laws and regulations. Business examples include statutory rights to demand dissolution of a corporation under state law, restrictions on transfer pursuant to SEC Rule 144, and many others. An asset example is the right to partition.
- The existing ownership structure and configuration.
- Access to, availability of, and reliability of information regarding the underlying asset or entity.
- The relevant pool of potential buyers, if any.
- Ownership-level tax effects, if relevant.
- Prior transactions in the subject interest, entity or asset, and their relevance to a given assignment.
- Interaction of the factors listed above, and their cumulative impact on the degree of control, marketability and liquidity of the subject interest.

Many users of appraisal reports are not aware that prevailing business valuation standards call for such in-depth analysis in the determination of marketability discounts as has been discussed in this series.

# Understanding the Largest Valuation Discount #12: Marketability Discounts – BV Standards & DLOM Conclusion

[valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-12-marketability-discounts-bv-standards-dlom-conclusion/](https://www.valuationspeak.com/valuation-theory-and-integrated-theory-of-business-valuation/understanding-the-largest-valuation-discount-12-marketability-discounts-bv-standards-dlom-conclusion/)

This post concludes our discussion of the prevailing business valuation standards and the marketability discount.

Prevailing business valuation standards agree on the following:

- The base value (pre-adjustment value) to which a marketability discount is applied must be defined and specified.
- The reasons for any concluded marketability discount must be enumerated.
- The data or empirical evidence relied upon in reaching a conclusion regarding a marketability discount must be identified and it must be relevant and reliable.
- Methods for developing marketability discounts under the market approach should follow guidance found in the [Business Valuation Standards of the American Society of Appraisers \(ASABVS\)](#) and in the [AICPA's Statement on Standards for Valuation Services \(SSVS\)-1](#) (and other standards, as well).
- Methods for developing marketability discounts under the income approach should follow guidance found in ASABVS and SSVS-1 (and other standards, as well).
- In general, many appraisers and users of valuation reports are not aware of the degree to which prevailing business valuation standards call for analysis and consideration in the development of DLOMs.



The next posts in this series on understanding the largest valuation discount will examine the [IRS DLOM Job Aid](#).

From this examination, we will identify the “factors influencing marketability” that are discussed in the aid and use those factors, together with the review of business valuation standards, to develop as comprehensive list of factors influencing marketability as possible.

The IRS DLOM Job Aid also provides a list of valuation methods that are frequently employed by appraisers. We will use that list as the base list for discussing individual valuation methods in this series. Relevant questions will include:

- Does this valuation method appear to comply with relevant business valuation standards?
- Does this valuation method enable us to consider the various factors influencing marketability?
- Does this valuation method enable appraisers to develop marketability discounts such that the conclusions can be tested for reasonableness?