CONTENTS

THE EDITOR'S COLUMN
James H. Schilit, ASA, CBA, CFA .................................................. 166

HOW PUBLIC GUIDELINE COMPANIES REPRESENT "CONTROL" VALUE FOR A PRIVATE COMPANY
Eric W. Nath, ASA ........................................................................ 167

A Practical Methodology for Determining Premiums and Discounts
Rand M. Curtiss, ASA, CBA .......................................................... 172

Pricing of Employee Options in Pre-IPO Venture Capital Backed Companies
Bradley A. Fowler, JD, ASA and Edward C. Fowler, ASA, CFA .......... 180

The U.S. Economy on a Roll: Check It Out on the Internet
Jan Davis Tudor, M.L.I.S. ................................................................. 183

From the Chairman
Robert F. Howard, ASA ............................................................... 187

Letters to the Editor ....................................................................... 188
Advancements to AM and ASA ....................................................... 191
Classified Ads ............................................................................... 192
The Business Valuation Committee ................................................ 196
JAMES H. SCHILT, ASA, CBA, CFA

You will not devour it as fast as “Midnight in the Garden of Good and Evil” or “Into Thin Air,” but newly-published “BUSINESS VALUATIONS Advanced Topics” by Larry Kasper, CPA, CVA, is worth your reading. As stated in the Preface, the “book critically examines many common practices and assumptions currently accepted by traditional business appraisers in view of logical precedents.” The book points out that there is no small stock premium and, as the market is efficient, stocks are priced at the control price in all but the strategically motivated transactions. Kasper reviews the arguments of Eric Nath and the traditional position rebuttals of Chris Mercer and Mike Bolotsky. (All three of whom have had their articles published in Business Valuation Review). “In conclusion, Nath’s article represents modern financial theory. To deny his position is simply to deny the efficient market hypothesis in even its semi-strong form,” states Kasper.

The author has some of the same troubles with betas that your Editor has. Studies show that betas do not seem to be stable over time, and size ratios of book-to-market value provide a better explanation of a firm’s stock behavior than betas. Moreover, a company with little or negative correlation with the market will have a low or negative beta. A company may have a low beta, but should command a high rate of return because it is risky which would not be reflected in the beta. In a portfolio, unique risk can be diversified away but not a single investment in a privately-held company.

While Kasper puts emphasis on the conceptual foundations of valuation with a substantial number of mathematical proofs, he also covers practical matters and their meanings, such as fair market value, premiums and discounts, CAPM, debt-free valuations, valuations for tax purposes, and trial strategy. We found each chapter rather unique with ideas not found in the conventional texts. As the author states, “Some of the conclusions and approaches are controversial, but hopefully the logic will convince the reader of their correctness.” The book is available from Greenwood Publishing Group (800-225-5800) at a price of $69.50.

In speaking about conventional wisdom, it is often stated that the capitalization rate derived from the Capital Asset Pricing Model is for valuing minority holdings. This probably results from the fact that the Ibbotson and Associates data regarding common stock return are based upon publicly-traded minority shares. While this is true, the stock market could just as well be trading control blocks. The return realized from holding a stock is the sum of the dividends received and the gain or loss at the end of the period. This would be the same whether the stock represents minority or control. Moreover, if you hold to the Nath hypotheses, valuation models based upon stock market data produce a control value and not a minority value in almost all instances.
How Public Guideline Companies Represent “Control” Value for a Private Company

by ERIC W. NATH, ASA

Until 1990 the prevailing wisdom in valuing private company interests was the 3-levels-of-value model. In June of 1990 I wrote an article critical of this model, which was followed by much debate. It has been brought to my attention that if one is intent on criticizing the status quo it is necessary to suggest a superior solution. Thus, this final installment in a series.

I prefer to value private interests based on a structure which recognizes that there are only two fundamental types of sellers in a private company: 1) control sellers, and 2) non-control sellers. In the real world there is no “as-if-freely-tradable” minority interest seller in a private company because, after all, the company is private. The two fundamental types of private sellers epitomize the two basic starting points in appraising any private company interest.

Establishing a valid and defensible starting point for an appraisal is now of critical importance in view of ASA’s recently promulgated business valuation standard on discounts and premiums. This new standard provides that no discount or premium may be applied unless the base value is defined and the conceptual basis underlying the base value to which discounts or premiums are applied is specified. From a legal perspective it is also becoming imperative to correctly define the starting point as courts have begun admonishing appraisers to consider the point of view of the seller and not just the buyer.

Buyers, and/or the markets in which they operate, are a direct function of the types of interest which might be sold, not vice versa. It is only after the appraiser has specified which one of the two basic types of private company sellers are being considered that the buyer can be identified or hypothesized, and a potential transaction evaluated. The types of buyers available to the two basic types of sellers are discussed next.

Potential buyers available to a 100% controlling owner

The owner of a 100% controlling interest may have a number of options for maximizing the value of his or her investment. Owners of larger companies may be able to access the public market through an IPO. But even if the public market is not available most companies can be sold in the mergers and acquisitions marketplace or the business brokerage marketplace. Alternatively, the company may be liquidated by the control owner.

1. One of the most fundamental jobs of the appraiser in deriving fair market value for a 100% controlling owner is to determine which course of action will tend to maximize value for such an owner. This is because the approach which tends to maximize value will be the approach the seller will use in presenting the company to the relevant marketplace.
2. Analyzed in this way it is clear that “control value” is determined by the approach which will tend to maximize value for a control seller. Control value is not necessarily the price a control buyer will pay! This is a very important distinction because, as we have seen so vividly in recent years, public investors will often pay much higher prices for a company than will buyers in the M&A or asset markets.

Potential buyers available to the non-controlling owner

A seller of a non-controlling private interest might look to other shareholders, a possible
redemption by the company, or potentially an outside, independent third party. But often there will simply be no buyer whatever, either because the investment is unattractive, there are restrictions on transfer, or both.

**After buyers and sellers have been correctly aligned a proper valuation is possible**

A. Valuation of the 100% control seller’s position, or enterprise value, may be accomplished directly through analysis of the three primary types of buyers available to the control owner: the public through an IPO, M&A market buyers, or asset buyers in a liquidation.

B. Valuation of a minority seller’s position may be accomplished either directly or indirectly:
   1. directly - based upon prior transactions, capitalizing net income or dividends if there is a reasonable basis for doing so, or through a discounted future benefits model, and,
   2. indirectly - through valuation of the company as a whole (i.e. the 100% control seller’s enterprise value), then applying appropriate discounts for lack of control (“DLOC”), lack of marketability (“DLOM”), lack of liquidity (“DLOL”) and possibly other discounts.

Notice in this structure that guideline public companies are used to value a minority interest in a private company only through the indirect approach, even though public securities are comprised of minority interests. This structure therefore correctly incorporates the fact that a private minority non-controlling shareholder has no more ability to access the public market than he or she does the mergers and acquisitions market, or the market for assets in a liquidation. From this reasoning it also logically follows that if the public guideline company method maximizes value for the control seller, then valuation of the related private minority interest based on such public market value will necessarily require the application of discounts for both lack of control and lack of liquidity/marketability.

**Advantages of the 2-level structure**

1. Correctly recognizes the basic fact that only the control seller(s) in a private company has/have the ability to access the public market.

2. Avoids overvaluation of private controlling interests, which almost invariably happens when a control premium is applied to value based on (typically astronomical) public market valuation data.

3. Avoids overvaluation of private minority interests based on the erroneous idea that only one discount (for lack of marketability) can possibly be applied to indications of value from the public market.

4. Provides a systematic, logical and supportable way to satisfy the requirements of the new ASA standard on discounts and premiums, as well as the increasingly rigorous requirements of the courts to consider the point of view of the seller and not just the buyer. The same cannot be said for the 3-levels of value model.

5. Eliminates unnecessary complexity. Helps focus the analysis away from excessively hypothetical and theoretical approaches. Brings the analysis of value back down to the fundamentals of the willing seller and willing buyer by effectively modeling how investors respond to real-world investment opportunities. The same cannot be said for the 3-levels of value model.

6. Eliminates arguments about whether the public market indicates minority value, control value or something in between. There is no agonizing about where you are on the “value elevator”
when the public market is trading above the mergers and acquisitions market - it is only important to determine which of these markets will maximize value for the controlling owner.

7. Works under all market conditions. Whether the public market indicates a higher or lower value than the M&A market is a low-stress question of fact, not a theoretical conundrum for the appraiser. If an industry sector exists where the M&A market trades at or above the public market, the structure still functions smoothly for both private control and private minority positions.

8. Avoids the irreconcilable problem of taking huge and unsupportable ("Bold") DLOMs off of high public stock value indicators, but small DLOCs/DLOMs off low M&A market value indicators to obtain the same private minority interest value.

9. Avoids the problem of trying to derive a "real" value for a private interest using a hypothetical, logically impossible, base value.  

10. Provides an honest, logical way to not incorporate public company data into an appraisal when it is obvious the subject company could not possibly go public.

11. Resolves confusion and internal inconsistencies in business valuation courses by aligning the discussion of public companies with "enterprise level" attributes (which are only available to the private control seller) rather than "shareholder level" attributes (which apply to private minority sellers).

12. Bonus: does not conflict with Revenue Ruling 59-60. Revenue Ruling 59-60 requires only that the public market be considered in the valuation of a company's securities. It does not specify how the public market information is to be applied.

Disadvantages of the 2-Level structure

We have very inadequate market data regarding the value of control (or discounts for lack thereof) in private companies. Acquisition premium data from the public market appears to measure very little of the control component we seek, and is almost totally irrelevant when translated into a private company setting in any case. Lack of empirical evidence regarding the value of control has been cited as a flaw in this structure. The counter argument, of course, is that it is an even worse problem in the 3-levels of value model which is further burdened with so many other flaws not found in this structure. And, simply because we don't have acceptable data now doesn't mean some bright researcher can't develop it.

Conclusion

In summary, the versatility which is introduced into the appraisal process as a consequence of eliminating the erroneous "as if freely tradable" level of value is striking. Focusing instead on the two basic types of sellers which actually exist in private companies solves many sticky problems. It also highlights the continuing need to better understand the value of control in a private company setting; we are still nowhere near understanding this issue.

Endnotes

1. The three levels of value were assumed to be: the "non-marketable minority" level, the "as-if-freely-tradable" minority interest level, and the "controlling interest" level. The "as-if-freely-tradable" minority level was presumed to be derived from public stock market data, whereas the control level was presumed to be obtained through application of a control premium, based upon control premium studies, to the "as-if-freely-tradable" minority level.


4. It should be noted that although there are two basic types of sellers there can be many "shades of gray." A small interest might control a company. A small interest might also have a great deal of liquidity depending upon buy-sell agreements and other factors. On the other hand large majority blocks may occasionally have less than full control or may have almost no control at all. Furthermore, a 100% controlling interest may be fully marketable and rapidly liquid, or be thoroughly locked in, depending upon the specific circumstances. These are individual factors which are simply variations on the basic theme presented here.

5. Consideration should be given to the fact that control sellers generally cannot sell very much of their holdings in an IPO, and it may take several years to fully liquidate their investment. Should some discount be applied to the portion which would not be immediately salable in a hypothetical IPO? Perhaps.

6. A prototype of this approach is contained in Mr. Mercer's book, *Quantifying Marketability Discounts*, Peabody Publishing, LLC, 1997. This model is applicable as a "direct" minority valuation approach because the future cash-out value for the interest is discounted to the present at a rate which takes into account all risks, including the non-controlling nature of the investment. In this respect I believe Mr. Mercer's model does not just quantify lack of marketability, because the exit at the end of the time period could be through any of a number of methods, including IPO, an M&A sale, liquidation, redemption or sale to another shareholder.

7. Note that in applying two or more discounts there is no hypothetical interim value which would generate either a "marketable minority" value, or a "non marketable control" value depending on the order in which the adjustments might be applied. The discounts are simply combined multiplicatively to generate a single adjustment to correctly derive an indication of the fair market value of the minority interest. In other words, the discounts are inextricably intertwined and cannot be disassociated from each other in a private company.

8. Distinction between lack of marketability and lack of liquidity: Since there is no organized market for private interests all such interests suffer from lack of liquidity to some extent. In many cases, however, private interests also suffer from lack of marketability because of restrictions or prohibitions on transfer in the formation documents.

9. Even when appropriately and substantially adjusted for size and other factors, the resulting value indicator for private companies based on the public guideline method is still often well above the mergers and acquisitions market value indicator.

10. The "as-if-freely-tradable" minority value in a private company is logically impossible since, by definition, there cannot exist "as-if-freely-tradable" interests in a private company. Section 6.5 of ASA's *Principals of Appraisal Practice and Code of Ethics* states that "a hypothetical appraisal is an appraisal based on assumed conditions which are contrary to fact..." ("as-if-freely-tradable" private interests are certainly contrary to fact since they cannot really exist). According to Section 6.5, a hypothetical appraisal must be labeled "hypothetical" and the conditions which were assumed contrary to fact must be set forth. If a "hypothetical" value forms the base from which the value of a subject interest is derived, how can the end result not also be "hypothetical?" To my knowledge even the most ardent proponents of the 3-level model acknowledge that the "as-if-freely-tradable" level of
value is hypothetical. Therefore, it must surely be necessary to label an appraisal based upon the 3-level model a "hypothetical appraisal" in accordance with Section 6.5.


12. The problems with lack of control in a private company versus a public company can be worse by many orders of magnitude. When this is combined with the fact that acquisition premiums paid for public companies today are almost always strategic in nature it becomes clear why the so-called "control premium studies" are useless for assisting in the estimation of fair market value for a subject private company.

Eric Nath is principal owner of Eric Nath & Associates.
He is the Immediate Past President of the San Francisco chapter of the American Society of Appraisers and is a member of ASA's Business Valuation Committee. He is also Vice President and a Director of the Business Valuation Roundtable of San Francisco.
Dear Editor:

I would like to commend Chris Mercer for his erudite, comprehensive and useful new book, Quantifying Marketability Discounts (Peabody Publishing, LLC, 1997). It is an excellent reference for those of us dealing with private minority interests. With the greatest respect, however, there are a couple of areas I believe deserve some comment.

1. In my opinion, the quantitative marketability discount model quantifies more than just the diminution in value related to lack of marketability. Through the discount rate it simultaneously quantifies the diminution in value related to lack of control during the period of time the minority owner suffers from lack of marketability. I discuss this briefly in my article in this issue of Business Valuation Review.

2. In his book Mr. Mercer concedes that: "It is not uncommon, for example, to find publicly traded companies whose minority interest shares are trading at prices that exceed (and even far exceed) any rational valuation for the entire company." He asks: "Do occasional exceptions invalidate the general (3-levels of value) model?" (pp. 157-158). It seems obvious that the argument should be reversed: the vast majority of public companies are not taken over because their trading prices are close to or above their merger and acquisition value, and it is only the rare exception to this rule which results in a company actually being acquired.

3. In his book Mr. Mercer characterizes both "marketable minority interest" value and "controlling interest" value as "enterprise levels of value." This is a giant step toward recognizing that public guideline company analysis gives a control value indication for a private company. I hesitate to say it, but this is coming awfully close to validating the new valuation structure I propose in this issue of the Business Valuation Review.

Eric W. Nath, ASA
Eric Nath & Associates
San Francisco, California