**Editor’s Column:**

“Levels of value” chart to be updated to reflect difference in restricted stock versus private stock

The public stock market has become much more liquid in the last decade. At the same time, the SEC has loosened restriction on trading of restricted stocks under Rule 144, thus lowering the discounts relative to their freely traded counterparts.

**Gap in relative DLOM widens**

None of this has benefited the liquidity of stocks of closely held companies. Thus, the gap in discounts for lack of marketability for closely held stocks versus the discount for lack of marketability for restricted stocks of public companies has widened significantly in the last decade.

In an article in this issue, Espen Robak of FMV Opinions analyzes the traditional levels of value chart and a new and improved version, based on his previous article in Business Valuation Update (August 2002). The new article, "Liquidity and Levels of Value: A New Theoretical Framework" provides the research and rationale behind changing the levels of value chart, so that it can better reflect new market realities and the latest research.

In order to draw attention to this phenomenon, Jay Fishman and I decided to break into two parts the discount for lack of marketability in the “Levels of Value” chart in the 2005 edition of Continu ed to page 6...

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**Guest Article:**

Liquidity and levels of value: A new theoretical framework

*By Espen Robak, CFA*

The author provides an illustration of the use of restricted stock studies in a two-step process to estimate the discount for lack of marketability for a closely held stock. An analyst can modify this framework to fit the available data. — SP

If valuation experts were carpenters, valuation theory and valuation models would be our hammers and saws; the empirical data we employ, our nails and lumber. The quality of our work depends at least as much on the quality of the material inputs as on the skill with which we wield the tools. The valuation methods we use are merely the tools we use to connect the valuation problem with the available evidence—and no amount of skill can turn weak evidence into a quality product.

The chief requirement of any theory is that it must fit the data. In 2002, in an article in Shannon Pratt’s Business Valuation Update, I introduced the

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1 Espen Robak, “Marketability Discounts: Using Four Measures of Risk and Adjusting for Relative Liquidity,” Shannon Pratt’s Business Valuation Update, August 2002. The article introduced, for the first time, the concepts of the restricted stock equivalent discount and the private equity discount increment.
Liquidity and levels of value: A new theoretical framework
...continued from front page

method we now use at FMV Opinions for determining marketability discounts. This article—the first in a series of three—will provide a better theoretical framework for the same method, including a revised “levels of value” chart. The second article in the series will describe the results of the latest extension of The FMV Restricted Stock Study™ (data through 2003 will be released soon on www.BVMarketdata.com). Finally, the third article in the series will apply the framework and the empirical data to real-world examples.

Why do we need to change?

Why even change the levels of value chart? Why not stick to the simple tried-and-true valuation framework we have used all along: control, marketable minority, and non-marketable minority? These levels are theoretically appealing and have done much to enhance our understanding of securities valuation. But if we recognize that the empirical market data is what drives our analysis, our analysis must be shaped to fit the best available evidence. And that means recognizing exactly what the traditional restricted stock analysis does and does not accomplish.

This is why I propose changing the levels of value chart: to better reflect what we have learned from our research on restricted stock transactions. Our research has led us to two important realizations.

1. Private equity is less liquid than most restricted stock.

   The first realization is that private equity is significantly and systematically less liquid than most (but not all) issues of restricted stock. As Shannon Pratt himself points out:

   Restricted stocks, by definition, are stocks of companies that already have established public markets. When the restrictions are lifted, an active public market will be available to the owners of the shares. Private companies enjoy no such market or imminently prospective market. Therefore, it is reasonable to expect that the discount for lack of marketability for minority shares of private companies would be greater than that for restricted stocks.

   Dr. Pratt also provides a persuasive argument in his editorial in this issue that the gap between the public equity and private equity levels of value has widened to some extent over the past couple of decades. This should serve as further impetus for this change.

2. Large-block transactions in restricted stock are akin to private equity.

   The second realization is that for a sub-sample of restricted stock transactions—large-block transactions relative to shares outstanding—the above does not hold. Restricted stock is subject to Rule 144, under which the stock can be sold in the market only slowly according to the volume limits of the rule. Thus, very large blocks of restricted stock are much less marketable than small blocks. In fact, large blocks are so much less liquid that they are akin to private equity. Stated differently, the dribble-out provisions of Rule 144 make it so difficult and time-consuming to sell such blocks in the market that the most attractive solution, in most cases, would be a private sale.

The levels of value framework

The traditional levels-of-value chart is

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Liquidity and levels of value: A new theoretical framework  
...continued

presented in Exhibit 1, along with a proposed new chart. The marketable minority value of an operating company is the most easily measurable, based on direct observation of capitalization multiples (or discount rates) of public companies similar to the subject company.

But how can we get from the marketable minority level of value where public entities (our guideline companies) trade to a more proper level of value for private stock? Since most restricted stock issues are more liquid than private stock, the only way to accurately measure the full marketability discount is through first measuring the restricted stock equivalent discount and then determining the private company increment to the discount. Thus, in this article, I will refer to the following four levels of value (Exhibit 1):

1. **Control.** The control level is the level of value that an investor would have to pay to purchase either all of or a controlling interest in a company. Alternatively, for asset-holding entities, this level of value typically applies to the adjusted net asset value of the subject company.

2. **Public Equity Equivalent.** Also known as the marketable minority interest level, this is the level of value at which public companies trade. Often, this value is determined directly through public company earnings multiples.

3. **Restricted Stock Equivalent.** Once we have determined the appropriate public equity equivalent value for a subject company, we can ask ourselves: “all else being equal, if this company were instead a public company issuing (a small block of) restricted stock, what discount from the public price would it issue the restricted stock at?” The difference between the restricted stock equivalent and the public equity equivalent levels of value is defined herein as the restricted stock equivalent discount and is directly observable by analyzing data from various restricted stock studies.

4. **Private Equity.** Also known as the non-marketable minority interest level, this is the appropriate level of value for most minority investments in private companies. The difference between the private equity equivalent and the restricted stock equivalent levels of value is defined in the chart as the private equity discount increment and can be estimated by analyzing data on transactions in large blocks of restricted stock and by comparing discounts for large blocks with discounts for small blocks.

This framework compels us to put together a more detailed two-pronged analysis of the marketability discount. We have to analyze the data this way because there is not sufficient empirical evidence to make a direct observation of the entire difference between the public and private equity levels of value.

It should be noted that the above framework is itself a simplified one.

The restricted stock equivalent discount

The main factors driving the restricted stock equivalent discount, as I have noted before, are the financial risk characteristics of the firm issuing the restricted securities. Our research indicates that the SIC Code of the issuing firm does not impact the discount much, with only a few exceptions to this rule. Therefore, I do not recommend giving much weight to the industry of the firm when determining the restricted stock equivalent discount. The table in Exhibit 2 provides a firm characteristic comparison between high-discount transactions and low-discount transactions. The sample is divided into five levels.

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**Exhibit 1: Levels of Value - Old and New**

<table>
<thead>
<tr>
<th>Traditional Chart</th>
<th>Alternative Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Level</strong></td>
<td><strong>Control Level</strong></td>
</tr>
<tr>
<td>** Marketable Minority**</td>
<td><strong>Public Equity Equivalent</strong></td>
</tr>
<tr>
<td>** Non-Marketable Minority Level**</td>
<td><strong>Restricted Stock Equivalent</strong></td>
</tr>
</tbody>
</table>

**EXHIBIT I: LEVELS OF VALUE - OLD AND NEW**

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5 The same two-step analysis also applies for adherents of the “Nath hypothesis” where market multiples are assumed to reflect control values. In that case, the same analysis could apply to get from the public to private equity levels of value, and then an additional lack-of-control discount could be applied to get to the non-controlling level.


7 The only exceptions to this rule found in The FMV Restricted Stock Study of restricted stock transactions are financial companies (which have below-average discounts) and certain classes of technology companies (which have above-average discounts). This is discussed, with reference to the Lappo case, in Espen Robak, “The Current State of Marketability Discounts,” ACTEC Journal, Vol. 30, No. 2, Fall 2004.
Liquidity and levels of value: A new theoretical framework
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quintiles, based on the distribution of the restricted stock discount, and medians are computed for each group across all parameters.

As shown, both market value and total assets decrease, and the volatility increases, as the discount increases. Higher volatility (higher risk), as also reflected in lower firm size, tends to increase the discount. I recommend using parameters from the following lists when determining the restricted stock equivalent discount:

The discount is negatively correlated with:

1. the aggregate market value of the entity as represented by its publicly traded price;
2. the absolute dollar level of the entity’s revenues;
3. the earnings and net profit margin of the entity;
4. the dividend payout ratio of the entity;
5. the total assets of the entity;
6. the book value of shareholders’ equity of the entity;
7. the entity’s stock price per share;
8. the trading volume of the entity’s stock; and
9. the block size, in absolute dollar value.

Also, the discount is positively correlated with:

1. the block size, described as a percent of the total ownership;
2. the subject stock’s volatility, expressed as the annualized standard deviation of the continuously compounded return on the stock; and
3. the subject entity’s market-to-book ratio, as measured by the subject entity’s market value divided by the subject entity’s book value of shareholders’ equity.

There are, of course, numerous ways to do this, and we expect that among users of The FMV Restricted Stock Study™, there will be as many methods for determining the restricted stock equivalent discount as there are analysts applying the data. Nevertheless, the following describes the way we do this at FMV Opinions.

In a first, preliminary look at the discount, the financial characteristics of the subject private company are analyzed to see in which quintile it belongs with respect to the following variables: market value, revenues, total assets, book value of equity, the market-to-book ratio, net income, net profit margin, and dividend yield. The median discounts for these quintiles are determined and the weighted average of the indications computed. Weights to apply to each financial risk factor are based on our analysis of which factors are the most important determinants of the restricted stock discount in The FMV Restricted Stock Study™.

Second, several separate analyses are performed on sub-samples of the transactions to establish guideline groups of companies that are the most comparable to the private company being appraised. These guideline groups are usually constructed—using four variables considered to be the key financial risk characteristics that affect the discount: (1) market value, (2) market-to-book ratio, (3) net profit margin, and (4) dividends—as follows:

- Each transaction in the study is analyzed to see if the issuing entity was an exact or close match with the subject company across the four key variables. For this purpose, an “exact match” on any particular variable means that the company in the study is in the same quintile as the subject company for that variable, and a “close match” means that the company in the study is in the same, or an adjacent, quintile.
- Next, two sub-samples of companies are constructed, one with companies that are exact matches on all four key variables, and one with companies that are exact matches on three of the four key variables.
- Then, these two sub-samples are further divided into small-block and large-block transactions. (For these purposes, all blocks of more than 20 percent of the shares outstanding are classified as large.) Since the goal in this first step is to determine the restricted stock equivalent discount for the subject company, we base this part of the analysis on the small-block transactions.
- Similar sub-samples, also divided into small-block and large-block samples, are constructed of the close matches.

The mean and median discounts from these eight guideline company samples (especially the four small-block samples: two with close matches and two with exact matches), when combined with the weighted average discount indication already determined, provide a relatively precise estimate of the restricted stock equivalent discount. If our private subject company was a public company issuing restricted stock, this is the discount at which we would expect it to sell those shares. But, according to our framework, this is only half the answer.

Why are large block transactions so important?
The variables important to the restricted stock equivalent discount are primarily indicators of financial risk. However,
Liquidity and levels of value: A new theoretical framework
...continued

our database also provides data on variables that are directly associated with the expected holding period for the restricted stock sold in each private placement: the block size. This data is particularly important to the valuation of private companies.

Restricted shares are subject to the provisions of Rule 144, which govern their resale. The history and current status of these provisions are discussed elsewhere, but following is a brief synopsis:

- Restricted stock has to be held for an initial holding period, and then slowly “dribbled out” in the public markets according to the volume limit provisions of Rule 144.
- The volume limits allow resale, quarterly, of the greater of one percent of total shares outstanding or the average weekly trading volume for the four weeks before each such sale.
- Thus, under the dribble-out provisions, a block of 20 percent or more would take up to five years to resell, assuming (1) that it was held by just one owner, (2) that the holder of the block was deemed an affiliate under Rule 144 and, thus, unable to avail himself of the provisions of Rule 144(k), and (3) that the trading volume of the stock was low enough that one percent of total shares outstanding was the most that the buyer could hope to sell.

As I have pointed out before, this suggests that the discount should increase with increasing block size. And in fact, the discount is strongly correlated with the size of the block sold in the private placement, as shown in Exhibit 3.

The data clearly shows that the discount increases with longer expected holding periods, especially at the top end of the range (where Rule 144(k) does generally not apply). The discounts for the top decile and top quintile (blocks greater than 16 percent) are significantly above average.

But, for our analysis of the private equity discount increment, we are looking for the absolutely least-liquid restricted stock transactions. We are looking, in other words, for those blocks so large that the holder would tend to view them as private equity. The preferred method for liquidating any such position would be a private sale, rather than the—unfeasibly slow—dribble-out process. We have, therefore, also analyzed the largest of the large-block transactions in greater detail (see Exhibit 4).

This analysis indicates that the most illiquid large blocks—i.e., those that are most similar to private equity—have median marketability discounts more than 25 percentage-points greater than the average discount in the FMV Restricted Stock Study™ (around 20 percent). This result has profound implications for the valuation of privately held stock.

Private equity discount increment
After we determine the restricted stock equivalent discount, the next step is to determine the appropriate private equity discount increment, which takes us from the restricted stock equivalent level of value all the way to the private equity (non-marketable minority) level of value. As Dr. Pratt points out, the stock of a privately held company is inherently less liquid and should have, on average, a greater lack of marketability discount than otherwise identical publicly traded firms issuing restricted stock. The question is: how much greater should the discount be?

The increment is based on our analysis of very illiquid large-block samples, compared with an otherwise comparable sub-sample of much more liquid small blocks. Since the large blocks of restricted stock in the database tend to be issued by entities that are somewhat smaller than the average, I focus on smaller entities in this analysis. I also eliminate from the large-block samples and the small-block “control” sample all stocks with very high levels of stock price volatility. The results are shown in Exhibit 5. The control sample, with block sizes less than 10 percent, market values less than $40 million, and volatility less than 150 percent, has a median lack of marketability discount of 23.9 percent. I look at transactions

<table>
<thead>
<tr>
<th>Percent Shares Placed</th>
<th>Discount</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>More than 35%</td>
<td>48.8%</td>
</tr>
<tr>
<td>More than 30%</td>
<td>48.8%</td>
</tr>
<tr>
<td>More than 25%</td>
<td>48.8%</td>
</tr>
<tr>
<td>More than 20%</td>
<td>48.8%</td>
</tr>
</tbody>
</table>

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Liquidity and levels of value: A new theoretical framework
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EXHIBIT 5: DISCOUNTS INCREMENT FOR LARGE-BLOCK TRANSACTIONS
OVER COMPARABLE SMALL-BLOCK TRANSACTIONS

<table>
<thead>
<tr>
<th></th>
<th>All Transactions</th>
<th>Without Reg. Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Mean</td>
</tr>
<tr>
<td>Control Group:*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large-Block Data:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 35%</td>
<td>48.2%</td>
<td>45.2%</td>
</tr>
<tr>
<td>More than 30%</td>
<td>40.9%</td>
<td>41.5%</td>
</tr>
<tr>
<td>More than 25%</td>
<td>40.9%</td>
<td>38.0%</td>
</tr>
<tr>
<td>More than 20%</td>
<td>35.9%</td>
<td>32.4%</td>
</tr>
</tbody>
</table>

Table: Transaction data on restricted stock of small companies with moderate volatility.
* Control group comprises only transactions where less than 10% of company stock was sold.

With and without registration rights (which may mitigate the lack of marketability for certain large blocks).

In our analyses at FMV Opinions, this analysis produces two adjustment factors:

1. Additive (determined as the difference in the median discount between the large-block and small-block samples). The additive adjustment factors range from 16.0 percent to 25.0 percent.
2. Multiplicative (determined as the fraction of the median discount of the large-block samples over the median discount of the comparable small-block sample, minus one). The multiplicative adjustment factors range from 0.7 to 1.0 times.

Applying this range of adjustment factors to the restricted stock equivalent discount yields the private equity discount increment.

Putting it all together

To provide an example of how the mechanics of the analysis work: assume that the restricted stock equivalent discount of a particular subject company has already been determined to equal 30 percent (which would put it very close to the median for the 4th quintile in our database). Exhibit 6 provides a range of possible private equity discount increments for this company.

Assuming there were no reasons to divert much from the average indication, this would yield a total marketability discount for this particular company of 52 percent (30 percent plus 22 percent).

When we “put this all together” at FMV Opinions a few years ago and began using the analysis in our client work, we (and our clients) quickly realized two things: (1) this method provides vastly superior support for our concluded discounts and (2) the discounts taken are on average significantly higher now than before we implemented this change.

Finally, we also recognize with humility that this is far from a perfect method. Presumably, the readers of Shannon Pratt’s Business Valuation Update® and the many subscribers to The FMV Restricted Stock Study™ can provide additional insights and develop new ways of analyzing the data that can lead to even better methods. Also, future extensions of our research will likely lead to further developments.

As mentioned at the outset of this article, the second article in this series will provide some preliminary results from our yet-to-be-released 2003 update. And the third article will provide real-world applications of the method. Until then, stay tuned. BVU

EXHIBIT 6: RANGE OF PRIVATE EQUITY DISCOUNT INCREMENTS—EXAMPLE

<table>
<thead>
<tr>
<th></th>
<th>Lo</th>
<th>Mid</th>
<th>Hi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additive</td>
<td>16.0%</td>
<td>20.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Multiplicative</td>
<td>21.0%</td>
<td>24.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Average</td>
<td>18.5%</td>
<td>22.0%</td>
<td>27.5%</td>
</tr>
</tbody>
</table>

“Levels of value” chart to be updated to reflect difference in restricted stock versus private stock
...continued from front page

Guide to Business Valuations into two parts:

1. The restricted stock equivalent discount, and
2. An incremental discount for a privately held stock.

The resulting chart is shown as Exhibit 1.

Public stock market more liquid

There have been several developments that have made the public stock markets in the United States more liquid in recent years.

Reduced settlement time. The settlement time has been reduced from five working days to three working days.

Reduced commissions. The rise of the discount broker (e.g., Charles Schwab, Ameritrade) has significantly reduced trading costs.

Reduced spreads. The change from the fractional quotation system to the decimal quotation system has significantly reduced the spreads between bid and ask prices.

Rise of derivatives. The increased use of derivative securities (e.g., puts, calls and more sophisticated derivatives) has increased the liquidity in the public stock markets.

SEC loosens Rule 144 restrictions

The SEC has made the trading of restricted stock more liquid, resulting in reduced discounts.

Pre 1990: The SEC required a minimum two-year holding period for restricted stocks, plus registration with the SEC when restricted stock was sold as a block. Discounts on trades in restricted stocks averaged about 35% from the late 1960s until 1990.

1990: The SEC dropped the registration requirement for trades in re-

Continued to next page...
“Levels of value” chart to be updated to reflect difference in restricted stock versus private stock


continued

stricted stocks. Average discounts dropped to the mid-20s.

1997: The SEC lowered the minimum holding period for restricted stocks from two years to one year. Average discounts for restricted stocks since 1997 have been in the low 20s or even teens.

No impact on private stock liquidity
In the meantime, none of this increased liquidity in the public stock markets in general, or in the market for restricted stocks, has had any impact on the lack of marketability for closely held stocks. Therefore, the gap in discounts for lack of marketability for closely held stocks relative to restricted stocks of public companies has widened considerably.

This widening disparity between the lack of marketability of closely held stocks and the lack of marketability of restricted stock of public companies is what caused Jay Fishman and myself to add an intermediate level, “value of restricted stock of public company,” below the “publicly traded equivalent value,” as shown in Exhibit 1.

Using restricted stocks for DLOM
The technique for using restricted stock data to estimate the discount for lack of marketability for closely held stocks involves a two-step process:

1. Get to restricted stock equivalent. Identify stocks from the FMV Restricted Stock Database that have characteristics similar to the subject (e.g., size, profitability, distributions). From these guideline transactions, derive a restricted stock equivalent discount.

2. Add private stock increment. Add an incremental discount to account for the difference between the restricted stock lack of marketability and the closely held stock lack of marketability. This increment would be based on factors such as lack of prospects for a liquidity event (e.g., public offering, sale

Continued to next page...

EXHIBIT 1: “LEVELS OF VALUE” IN TERMS OF CHARACTERISTICS OF OWNERSHIP

<table>
<thead>
<tr>
<th>Value Level</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>$12.00 per share</td>
<td>Synergistic (Strategic) Value</td>
</tr>
<tr>
<td>$10.00 per share</td>
<td>Value of control shares $</td>
</tr>
<tr>
<td>$8.00 per share</td>
<td>“Publicly traded equivalent value” or “Stock Market value” of minority shares if freely traded</td>
</tr>
<tr>
<td>$6.00 per share</td>
<td>Value of restricted stock of public company</td>
</tr>
<tr>
<td>$4.40 per share</td>
<td>Value of non-marketable minority (lack of control) shares</td>
</tr>
</tbody>
</table>

Notes:

a Control shares in a privately held company may also be subject to some discount for lack of marketability, but usually not nearly as much as minority shares.

b Minority and marketability discounts normally are multiplicative rather than additive. That is, they are taken in sequence:

- $10.00 Control Value
- $2.00 Less: Minority interest discount (.20 x $10.00)
- $8.00 Marketable minority value
- $3.60 Less lack of Marketability discount (.45 x 8.00)
- $4.40 Per-share value of non-marketable minority shares
of company, stock redemption), lack of ability to hypothecate the closely held stock, lack of pool of prospective buyers, and restrictions on transfer.

The quantification of the differential discount would be based on the differential between small-block restricted stock discounts and large-block restricted stock discounts. Several studies have shown that large blocks of restricted stock tend to sell at bigger discounts than smaller blocks of restricted stocks. This differential is dramatically demonstrated in Exhibit 2. The widely-quoted Silber study of restricted stock discounts also identifies this phenomenon. See also Espen Robak’s article on “Liquidity and Levels of Value” on the front page of this issue.

**Large blocks akin to private stock**

The reasons for the larger discounts for larger blocks relative to shares outstanding are two-fold:

1. Fewer prospects in the pool of potential buyers and
2. Longer period to feed out into the public market under the SEC “dribble-out rule.”

These characteristics of lack of pool of potential buyers and long prospective holding period make larger blocks of restricted stock more similar to any size block of closely held stock.

**Two-step process**

This two-step process was first introduced in an article by Espen Robak in the August 2002 Business Valuation Update and is more fully illustrated in Mr. Robak’s article in the current issue. Readers who would like to obtain a complimentary copy of that article may do so by emailing me at shannonp@bvresources.com or telephoning our customer service desk toll free at (888) BUS-BVALU [287-8258.]

The only body of evidence to quantify the differential is theSilber study of restricted stock discounts. The widely quoted Silber study of stock discounts also identifies this phenomenon. See also Espen Robak’s article on “Liquidity and Levels of Value” on the front page of this issue.

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**EXHIBIT 2: DISCOUNTS FOR RESTRICTED STOCK BY SIZE OF BLOCK**

<table>
<thead>
<tr>
<th>Block Size</th>
<th>Discount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than 35%</td>
<td>0%</td>
</tr>
<tr>
<td>Greater than 30%</td>
<td>10%</td>
</tr>
<tr>
<td>Greater than 25%</td>
<td>20%</td>
</tr>
<tr>
<td>Greater than 20%</td>
<td>30%</td>
</tr>
<tr>
<td>Lower than 20%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Source: The FMV Restricted Stock Stock Study Database is available on-line at BVMarketData.com.

**EXHIBIT 3: VALUATION ADVISORS’ LACK OF MARKETABILITY DISCOUNT STUDY™ MEDIAN LACK OF MARKETABILITY DISCOUNT BY PRE-IPO TIMEFRAME AND BY IPO YEAR**

<table>
<thead>
<tr>
<th>IPO Year</th>
<th>0-3 Months</th>
<th>4-6 Months</th>
<th>7-9 Months</th>
<th>10-12 Months</th>
<th>1-2 Years</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>30.8%</td>
<td>54.2%</td>
<td>75.0%</td>
<td>76.9%</td>
<td>82.2%</td>
<td>693</td>
</tr>
<tr>
<td>2000</td>
<td>28.7%</td>
<td>45.1%</td>
<td>61.5%</td>
<td>68.9%</td>
<td>76.6%</td>
<td>653</td>
</tr>
<tr>
<td>2001</td>
<td>14.7%</td>
<td>33.2%</td>
<td>33.4%</td>
<td>52.1%</td>
<td>51.6%</td>
<td>115</td>
</tr>
<tr>
<td>2002</td>
<td>6.2%</td>
<td>17.3%</td>
<td>21.9%</td>
<td>39.5%</td>
<td>55.0%</td>
<td>81</td>
</tr>
<tr>
<td>2003</td>
<td>28.8%</td>
<td>22.3%</td>
<td>38.4%</td>
<td>39.7%</td>
<td>61.4%</td>
<td>1,665</td>
</tr>
</tbody>
</table>

5 yr. median:

- 1999: 28.6%
- 2000: 46.4%
- 2001: 61.0%
- 2002: 68.9%
- 2003: 75.0%

(1) Median is based on between 9 and 18 data points and may not be statistically significant
(2) The count indicates the number of transactions where stock or options were issued prior to an IPO for IPOs in the given year -- it is not the IPO count
Pre-IPO Timeframe = IPO date - Transaction date
(3) 5-year median is based on total transactions over the 5-year period

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Key words: Partnership dissolution, Accounting, Liquidation, Winding up, Farm and ranch operations

One of the issues in this case was whether the trial court correctly valued a partnership interest.

Marvin Pankratz sought judicial dissolution and winding up of Pankratz Farms, Inc. and Pankratz Brothers, a partnership, claiming, among other things, breach of the partnership agreement, breach of fiduciary duty and the duty of good faith and fair dealing, minority oppression, conversion, and fraud.

He also requested a final accounting and imposition of a constructive trust. Following completion of a limited accounting, the trial court determined that although grounds existed for the dissolution of the partnership, liquidation of the partnership was not in the best interests of the individual partners. It therefore ordered Marvin to sell his interest back to the partnership for $135,566, payable in annual amortized installments over 15 years.

Holding and rationale on appeal
On appeal, the Supreme Court of Montana held that the trial court should have ordered the partnership dissolved and should have required liquidation of the partnership assets through a forced sale, and distribution of the net surplus in cash to the partners. The court also noted that “when an action for an accounting is being used to wind up a partnership’s affairs, the court is obligated to provide ‘for a full accounting of the partnership assets and obligations and distribution of any remaining assets or liabilities to the partners in accordance with their interests in the partnership.'” Accordingly, the court instructed that it would be necessary, upon remand, for the trial court to provide a full accounting of the partnership’s affairs. The court added that the trial court did not have to conduct an entirely new accounting, but could build off of the accountings already performed.

“Levels of value” chart to be updated to reflect difference in restricted stock versus private stock

...continued

tify the total discount for lack of marketability for closely held stocks is the group of pre-IPO studies. These compare the price of a transaction in a stock when the company was private to the initial public offering (IPO) price.

Whenever a company has an IPO, it must disclose all transactions in the stock during the three years prior to the IPO. This enables a direct comparison of the price when the company was private to the price as a public company.

Pre-IPO Studies used in Gallo case
The pre-IPO studies were first introduced in the U.S. Tax Court over 20 years ago in the Estate of Gallo. Since then there have been three independent series of such studies:

1. The Willamette Management Associates studies
2. The John Emory studies
3. The Valuation Advisors studies.

The Valuation Advisors studies, available at BVMarketData.com, encompass the most transactions (over 2,200) and have the most information for each transaction. The last five years’ results of the Valuation Advisors transactions are summarized in Exhibit 3.

Select companies with similar statistics
My favorite way to use the Valuation Advisors Database as guidance for quantifying the discount for lack of marketability for a private stock is to select transactions in companies with characteristics most comparable to the subject company. These characteristics could be, for example, size and operating profit. This is what I did recently in the Okerlund case. As a result of increased liquidity in the public markets and the loosening of SEC regulations on restricted stock trades, the gap between discounts for lack of marketability for restricted stocks and stocks of private companies has significantly widened in recent years. Exhibit 1, a proposed revised Levels of Value chart, is an attempt to call attention to this phenomenon.

When restricted stock data are used to quantify a discount for lack of marketability for a closely held stock, a closely held stock increment must be added. The differential discount between large and small blocks of restricted stock is a good way to quantify this increment.

Best wishes,

Shannon Pratt

P.S. Jay and I solicit reader feedback on this revised Levels of Value chart. Send your comments by email to shannonp@bvresources.com.
Goodwill at issue in appellate court’s reluctant affirmation


**Key words:**
- Marital dissolution
- Capitalization of earnings method
- Excess earnings method
- Discounted future earnings method
- Goodwill
- Intrinsic value
- Intangibles
- Medical practice

**Experts:**
- Dr. Ward Zimmerman (for wife)
- Janet Shrader, CPA (for husband)

One issue in this marital dissolution was the value of husband’s medical practice. Prior to trial, the court requested that both parties submit a list of two experts and that, from the lists, the court would select an expert to value the practice. Wife submitted two names, whereas husband submitted none. The court determined that Dr. Ward Zimmerman would be a qualified expert and requested that he value the practice. After the valuation report was submitted to the court, husband complained that the valuation was inaccurate and that he intended to call his own expert, Janet Shrader, CPA, during the trial.

**Valuation evidence**

Zimmerman’s report contained four valuations based on two methods applied to two scenarios to value the medical practice. The scenarios differed on how the husband’s salary was treated. Zimmerman first valued the practice using the capitalization of earnings method and treated husband’s salary as a business expense. This resulted in a value of $654,776. Excluding husband’s salary resulted in a value of $1,824,434. Zimmerman then valued the practice using the discounted future earnings method and treated husband’s salary as a business expense. This resulted in a value of $743,608. Excluding husband’s salary resulted in a value of $1,994,921.

Shrader’s report concluded the value of the practice to be $140,000. Shrader used the capitalization of earnings method and arrived at a value of $515,000. She then used the excess earnings method and arrived at a value of $460,000. Shrader also concluded that the value of the practice included an intangible that was worth $300,000. The intangible reflected the goodwill of the practice. She assigned 85% of the intangible to professional and personal goodwill. The balance, 15%, was assigned to the goodwill as a business entity. The personal goodwill was then subtracted from the equally weighted valuation methods, arriving at a value of $220,000. Shrader then applied a 35% discount for lack of marketability, resulting in a final value of $140,000 for the medical practice.

**Holding and rationale**

The trial court concluded the proper valuation method was the capitalization of earnings method. The court adopted Zimmerman’s lowest value of $654,776. The court noted that the salary deduction was reasonable but that no marketability discount should be applied because, “[T]here is no evidence that a sale of the practice is necessary or foreseeable.”

The court of appeals affirmed the trial court’s valuation of the medical practice but noted that in Virginia the courts look at intrinsic value for distribution purposes and that, “The intrinsic value of an asset may include goodwill.” The court also noted that, “[A]s a matter of law, goodwill attributable to personal characteristics is considered separate property and goodwill attributable to the business entity is considered marital property.” However, “[Shrader] did not testify that [Zimmerman’s] method of valuation, which excluded husband’s salary, failed to deduct husband’s personal goodwill from the value of the medical practice.” Thus the court held that, “the present record does not allow us to conclude that Zimmerman’s valuation method was insufficient as a matter of law.”

**Editor’s note:** The appeals court seemed to be hinting that Shrader’s failure to point out the pertinent flaws in Zimmerman’s report left them no choice but to affirm the trial court’s ruling. For more information about the importance of the trial court record during the appeals process, see page 15. BVU

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**Zimmerman’s Valuation**

<table>
<thead>
<tr>
<th>Method</th>
<th>Husband’s salary included</th>
<th>Husband’s salary excluded</th>
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</thead>
<tbody>
<tr>
<td>Capitalization of earnings</td>
<td>$654,776</td>
<td>$1,824,434</td>
</tr>
<tr>
<td>Discounted future earnings</td>
<td>$743,608</td>
<td>$1,994,921</td>
</tr>
</tbody>
</table>

**BJU**

**Shannon Pratt’s Business Valuation Update®**

**October 2004**
One issue in this marital dissolution was the value of husband’s minority interest in a logging company. Husband acquired 102.23 shares of Allen & Gibbons Logging, Inc., a closely held logging company, during the marriage. The shares were subject to a stock transfer agreement that allowed the company to repurchase the stock, at a value which was adjusted every year, if the shareholder attempted to sell. The agreement stripped all voting rights from the shares effectively depriving husband of any control.

Valuation evidence
Both parties submitted expert testimony. Both parties agreed that the shares had a value of $3,100 per share assuming a controlling interest with voting power.

Wife’s expert, Brock Parthemer, used a minority discount and arrived at $2,404 per share. Husband’s expert, Charles Chappel, did not conduct a separate valuation but did criticize Parthemer’s use of the asset valuation method. Chappel testified that because husband owned a minority interest and had no voting control—giving him no access to the assets—it was inappropriate to use the asset approach. Chappel further opined that the proper valuation would have been predicated on the actual economic rights that a willing buyer would acquire. He indicated that the preferred method would be to value the cash flow resulting from the application of the stock transfer agreement and combine it with the value of a possible future liquidation.

Sam Barker testified that the cash flow resulting from the stock purchase agreement had a fair market value of between $39,000 and $52,000 less costs and fees. Using Barker’s valuation, Chappel valued the economic rights that a willing buyer would receive at between $60,000 and $75,000.

Holding and rationale
The trial court found that Chappel’s analysis was more appropriate because it took into account economic realities. The court valued the interest at $70,000 or $684.73 a share. The court of appeals affirmed the trial court as to the valuation issue.

**Goodwill ‘implicit’ in capitalization of excess earnings method**


**Key words:**
- Marital dissolution, Goodwill, Capitalization of excess earnings method, Risk factor, Insurance agency

The issue in this marital dissolution was the value of husband’s insurance agency. The trial court held that the insurance agency was worth $300,000 as of the date of separation. The trial court arrived at this amount using wife’s expert’s capitalization of excess earnings method.

Wife argued on appeal that the trial court erred in not including goodwill in its valuation. The court of appeals dismissed that argument stating, “This Court has stated that the capitalization of excess earnings method is a valid approach to valuing the goodwill of a business.”

The court of appeals further defined the method:

[The capitalization of excess earnings method determines fair market value by calculating a company’s excess earnings (also known as goodwill) and adding that value to the total value of the company’s tangible assets. In this case, the value of the agency’s tangible assets was not available and thus, the fair market value of the agency was based solely on the value of the agency’s excess earnings (also known as goodwill). Affirming the trial court as to the valuation issue, the court noted that the capitalization of excess earnings method “implicitly” includes the value of a business’ goodwill.

**SP comment:** Good decision in that it recognizes correctly that goodwill is implicitly included in the excess earnings method of valuation.
Dissenting shareholder, Warrants, Fair value, Breach of contract, Black-Scholes pricing model, Damages

Experts:
Robert A. Mackie (for himself)
Gregory Morris, CPA Ernst & Young LLP (for Mackie)

The valuation issue in this case focused on the damages caused by defendant’s disregard for the contracted “perpetual” term for warrants owned by plaintiff. Defendant was merging with the company in which the warrants were associated. Instead of respecting the obligation created by the unusual “perpetual” term of the warrants, defendant disregarded it and froze the value of the warrants at the time of the merger. Publicity of the defendant’s intention depressed the value of the warrants prior to the merger creating damages. This suit followed.

Valuation evidence
Robert A. Mackie, the plaintiff, testified as an expert on his own behalf. Mackie used the Black-Scholes pricing model to value the warrants. He concluded that without taking into account any proration of the underlying stock, the value was $2.32 a warrant. However, he calculated that if proration was considered, the value would be $1.69. Mackie noted that the reason the warrants were trading at only $.50 was that the value had been artificially depressed due to the actions of the defendant, who announced that after the merger the warrants could only be redeemed for $.50. Mackie stated that the warrants should have been trading at about half of the value of the associated stock.

Mackie also testified that his conclusions were in line with a valuation report conducted by Gregory Morris, CPA Ernst & Young LLP, which was read into the record during trial. Mackie also supported his findings by stating they were in line with all of his experience in valuing warrants and were consistent with his own proprietary models. The defense did not present any expert testimony.

Holding and rationale
The district court ruled that there was a breach in the implied agreement that these be “perpetual” warrants. The court ruled that in calculating the value proration needed to be taken into account. The court noted that the defense presented no rebuttal testimony to plaintiff’s expert. The court then valued the warrants at $1.96. The court also awarded pre-judgment interest.

Editor’s note: It is surprising that the court allowed the plaintiff to testify as his own expert. It is even more surprising that the court allowed his own “proprietary models” to be used to support his conclusions. These models are not available for peer review and thus seem to fail the evidentiary requirements in Daubert.

Continued to next page...
Court labels experts as unexperienced, revalues company itself  
*continued from previous page*

The experts took the undiscounted 20% interest of $5,304,000 and applied a 40% minority discount and a 45% discount for lack of marketability. Estate’s experts based their minority discount percentage on a general reading of valuation texts. The discount for lack of marketability was based on four factors: (1) TPC had no interest in going public; (2) the absence of sales for prior 10 years; (3) the inability of an existing stockholder to gain control by purchasing the estate’s 20% interest; and (4) inability for the potential buyer of the 20% interest to force a liquidation of the company.

**IRS estimation of value**

Brian C. Becker, the Commissioner’s expert, determined that the date-of-death value for the 20% interest was $32.4 million. In his valuation, Becker used two methods; the discounted cash flow (DCF) method and the comparable public company method.

Under the comparable public company method, the Commissioner’s expert identified 11 companies that were appropriate comparables. Those guidelines required that the company be under SIC codes #2731 (Books: Publishing, or Publishing and Printing) or #2741 (Miscellaneous Publishing) and that they had positive cashflows for 1995-1997.

Becker took reported financial information for each company and created four ratios: stock price to net income, stock price to cashflow, stock market value to tangible and intangible assets and stock price to revenue. He calculated the median ratio for the comparables and applied the medians to TPC’s averages over a 5 year period.

Under the DCF method, Becker used a 2.4% annual income growth rate and applied that to the actual net cashflow over a 5 year period. He then added $68 million of nonoperating assets, resulting in a value of $32,393,000.

Becker stated that he did not apply a minority discount because a minority interest is inherent when using DCF.

**Holding and rationale**

The court criticized both experts for their lack of experience and for the general credibility of their valuations. The court reordered the company noting that the correct valuation, “[S]hould be based on a capitalization of TPC’s estimated sustainable net income for 1998-2002 calculated as an average of TPC’s 1993-97 income with an additional $10 million per year in expenditures relating to projected Internet—and technology-related expenditures.” The court also added $68 million of nonoperating assets.

The court also adjusted the estate’s expert’s capitalization rate, noting that the Internet and management presented no risk. See Exhibit 2.

The court then applied a 15% minority discount and a 30% discount for lack of marketability to the 20% interest resulting in a value of $13,535,240 or $27.75 a share. The court did not assess an accuracy-related penalty as was requested by the Commissioner. A comparison of the different valuations is presented in Exhibit 3.

**SP comment:** I never cease to be amazed at the inexperience and lack of credibility of experts presented to the Tax Court by attorneys for both the taxpayer and the IRS. Readers have permission to copy this article for distribution to attorneys in an effort to improve business valuation practice before the Tax Court.

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**EXHIBIT 1: ESTATE’S CAPITALIZATION RATE CALCULATION**

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk-free rate of return</td>
<td>6</td>
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<tr>
<td>Corporate Equity risk</td>
<td>7.8</td>
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<tr>
<td>Small stock risk</td>
<td>4.7</td>
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<td>Internet and management risk</td>
<td>12</td>
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<tr>
<td>Total capitalization rate</td>
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**EXHIBIT 2: COURT’S CALCULATION**

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<th>Risk Factors</th>
<th>Percentage</th>
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</thead>
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<td>Risk-free rate of return</td>
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<tr>
<td>Corporate Equity risk</td>
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<td>Internet and management risk</td>
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<tr>
<td>Total capitalization rate</td>
<td>18.50%</td>
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**EXHIBIT 3: VALUATIONS COMPARED**

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<tr>
<th>Party</th>
<th>Value of 20% interest</th>
<th>Value per share</th>
</tr>
</thead>
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<tr>
<td>Estate</td>
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</tr>
<tr>
<td>Commissioner</td>
<td>$32,393,000</td>
<td>$66.45</td>
</tr>
<tr>
<td>Court</td>
<td>$13,535,240</td>
<td>$27.75</td>
</tr>
</tbody>
</table>
FLPs disregarded—
2036(a)(1) applied once again!

By Owen G. Fiore, Editorial Advisory Board Member


Key words: 
Estate tax, Fair market value, Section 2036(a)(1), Bona fide sale exception

This appeal to the 3rd Circuit from the Tax Court, Estate of Theodore Thompson v. Commissioner, T.C. Memo. 2002-246, is another of the ongoing litigation efforts of IRS to destroy Family Limited Partnerships (FLPs) as an estate planning plan. If successful generally, this would be adverse to the use of business valuation appraisers in FLP situations because the use of IRC Sec. 2036(a) in essence eliminates the entity and thus the entity equity interest-basis valuation discounts developed from acceptable valuation methodology.

The issue before the Third Circuit

The case involved the application of Section 2036(a)(1)(the IRS raising on brief 2036(a)(2) being disregarded by the appellate court), namely whether the decedent, in establishing two FLPs, retained lifetime control and enjoyment of the transferred assets, via an implied agreement or understanding, such that the asset value at date of death (not the FLP interests) would be includable in the decedent’s estate.

Further, the question was raised as to whether 2036(a) should be inapplicable on the ground that the transfers of assets to the FLPs were “bona fide sales for full and adequate consideration in money or money’s worth” and thus excluded from 2036(a) consideration. Essentially, Theodore Thompson, age 95, transferred most of his assets to two FLPs, one for each of his children and their children, in exchange for pro-rata limited partnership interests. The value conclusion of the estate’s appraiser (Thompson died a couple of years later) was that his limited partnership interests should be on an Net Asset Value (NAV) basis with a 40% combined marketability and lack of control discount.

Insufficient retained assets

The Tax Court determined that 2036(a)(1) applied, and thus that no discount from NAV was permissible, and the 3rd Circuit affirmed the Tax Court, noting that there was not error in interpreting the law and no clear error in the Tax Court’s factual analysis and determination. Once again, as in Harper, T.C. Memo. 2002-121, Estate of Reichardt, 114 T.C. 144, and several other cases, “bad facts” contributed to the court’s determination that, in substance, a testamentary plan was involved (especially with the Texas “Fortress Plan” marketing program as adopted by the decedent and his family), which is just what 2036(a) is designed to thwart in the sense of its public policy.

As the 3rd Circuit stated, “substance and not form” guides our analysis (fn 16). Plus, see McNichol v. Commissioner, 265 F.2d 667(1959), pointing out that the existence of formal legal structures which prevent de jure retention of benefits of the transferred property does not preclude an implicit retention of such benefits.

The Tax Court had found that the 95-year-old decedent did not retain sufficient assets to support himself, that his children obtained assurances that decedent would be able to (and in fact did) withdraw assets from the FLPs to continue cash gift programs to his family, and that, if decedent ran short of funds to take care of himself, the FLPs would provide the “infusion” of money to cover his expenses, and indeed this occurred.

Thus, under the “bad facts” cases, as cited above, Thompson qualifies as another one. So, it appears clear that 2036(a)(1) properly was applied; but then there is the “bona fide sale” exception to 2036(a), given some “legs” by Church, W.D. TX, 1/18/2000, aff’d w/o pub. op., 268 F.3d1063(5th Cir. 2001), Stone, T.C. Memo. 2003-309, and, of course, the recent 5th Circuit reversal of the Texas District Court in Kimbell, 371 F.3d 257(2004).

The Thompson court not only referred to its own precedent on this issue in the Estate of D’Ambrosio v. Commissioner, 101 F.3d 309 (1996), but also pointed out the differences between the cited cases and the Thompson case. Essentially, what the Thompson court determined was that the facts evidenced a solely testamentary plan, promoted by the Fortress Plan group, and thus that the “bona fide sale” exception does not apply, without however stating that it cannot apply in other better fact situations.

What does this say to tax advisors and appraisers? I believe this is a challenge to all advisors, including appraisers, that the use of pass-through entities must be real, multi-purposed, and filled with the appropriate documentation and operational monitoring that our clients should expect of advisors that are competent, communicative and careful. BVU
A basic review of the appeals process for the appraiser

By Travis J. Bryan, Legal and Court Case Editor, and Noah J. Gordon, Esquire, Associate Editor

This article is an overview of the appeals process for appraisers. However, it should be noted that each jurisdiction has its own rules as to which cases can be appealed, and each jurisdiction has its own appellate rules and procedures. Those rules and procedures may differ substantially from the examples presented here. A key point for the appraiser to keep in mind is that the appellate court will base its decision on the record developed at trial, along with its review of the law as it applies to that record. Therefore, it is critical for the appraiser to present at trial the most comprehensive and persuasive valuation possible; an appeal does not afford a second chance to get the valuation right. — SP

Sometimes, even the most experienced appraiser can feel lost in the process of an appeal. The client and the attorney must endure the appellate procedure, attempting to produce a favorable result, while the appraiser waits to hear if his/her report has withstood yet another judicial assault. Or, sometimes it is difficult to understand why an appeals court has ruled the way it has, or why one’s valuation has not prevailed.

Appellate procedure

A trial court may issue orders on various preliminary matters before trial, or may issue orders or make decisions during trial. After a trial is concluded, the judge will issue a final judgment.

Appeals as of right from final judgment

Ordinarily, a final judgment is required before an appeal can be filed. In the federal courts and in almost every state, an appeal "as of right" may be taken from final judgment, usually to an intermediate court of appeals. Some types of cases, e.g., small claims cases, are not appealable, usually because they involve small amounts of money or minor (e.g., traffic) offenses.

Most states have intermediate courts, and appeals typically go to these. However, in those jurisdictions where there is no intermediate court of appeals, the appeal that may be taken as "of right" will be go to the state's highest court. In multi-tiered systems of review (those with more than one appellate court) the highest court usually exercises what is known as "discretionary" review. In the federal system, the District Court is the trial court, the Court of Appeals is the intermediate court, and the U.S. Supreme Court is the highest court, or "court of last resort." The differences between state and federal appellate procedures and rules are elaborated below.

Discretionary interlocutory appeals

In very limited circumstances, an appeal can be filed prior to a final judgment. These appeals, known as interlocutory appeals, are granted by the discretion of the appellate court, but are granted only rarely in situations that require immediate resolution.

Some states permit immediate appeals from preliminary trial court orders (in the hopes of avoiding a full-blown trial). In other instances, review may be granted immediately on what the granting court perceives as an important question of law. For example, interlocutory appeals are sometimes granted in conjunction with orders involving injunctions, receiverships, admiralty cases, attachment, a motion for a new trial, or other situations where irreparable harm may occur to the appellant, also sometimes referred to as the petitioner, if no appellate decision is rendered.

Once an appeal has been filed, the court will obtain the record, request briefs, and depending on the jurisdiction, oral arguments. After the briefs have been read and oral arguments heard, the appellate court, generally consisting of a three-member panel, will issue a written opinion. After a written opinion has been filed, at least in a multi-tiered system of review, a party can appeal that decision and the process may begin again.

The role of the trial court record

The predominant model of appeal in the U.S. is a review by the appellate court of the record to determine whether some mistake was made during trial, so that it may correct any error that affected the trial's outcome. The record is made up of various elements of the proceedings in the trial court. It includes the pleadings (complaint, answer), pre-trial motions, a transcript of any testimony, motions made by the attorneys, objections, and the judge's rulings.

The record must be filed with the appellate court, and serves to preserve claimed points of error, as well as to frame the facts of the case. If the record does not contain certain facts, opinions, or analyses that the appraiser wants included in its valuation, they will not be available to the appellate court, and they cannot be added on appeal.

Although it is the attorney's responsibility to make timely objections at trial, for example, where the court has ruled that certain evidence should not be admitted and the attorney believes the court has erred in its ruling, the appraiser can help his or her client's cause by establishing as full a record as possible and necessary to provide a reviewing court with a comprehensive understanding of the valuation's assumptions, methodologies, and conclusions.

Petitioner vs. respondent

When a case is at trial, the parties are

Continued to next page...
A basic review of the appeals process for the appraiser
...continued from previous page

known as "plaintiff(s)" (the party that initiated the complaint) and "defendant(s)" (the party who is responding to the complaint). On appeal, the court tracks the parties differently, depending on the jurisdiction. Generally, the party that petitions for an appeal is the petitioner and the responding party is the respondent. However, some jurisdictions label the appealing party the appellant and the responding party the appellee. The labeling is important because some courts label parties only by these designations, and, thus, the outcome of the case depends on proper identification of the party.

Standards of review
There are many different standards of review that vary from jurisdiction and procedural posture. The following are a few examples of some standards of review, but they should not be considered exhaustive. Generally, the standard of review will depend upon the alleged wrong committed by the trial court.

1. Clearly erroneous.

The trial court judge in a non-jury trial is considered the fact-finder. In an attempt to avoid a second trial, appellate courts generally defer to the trial courts on issues of weight of evidence, credibility of witnesses, etc.

This aspect of the trial court's opinion is generally left intact because the credibility of a witness is hard to determine from a transcript or from the record. The judicial system has determined that it is a judgment call and that trial judges are in a far better position to make the correct choice.

A finding of fact will be set aside only if it is "clearly erroneous." According to the Supreme Court, a finding of fact is clearly erroneous when "although there is evidence to support it, the reviewing court on the entire evidence is left with the definite and firm conviction that a mistake has been committed."1

It is important for an appraiser, who serves as an expert or witness at trial, to understand the "clearly erroneous" standard of review, and to, therefore, keep in mind that the impression he or she makes as to credibility will likely be the one that is retained on appeal. Therefore, although it is important for the appraiser to give an independent valuation, the appraiser should do so only within the bounds of credibility and plausibility.

Courts will generally look unfavorably at valuations that are either too optimistic or pessimistic, and giving a valuation that is out of line with reality may taint the appraiser's credibility, and, therefore, the appeal. As the Supreme Court has stated: "[W]hen a trial judge's finding is based on his decision to credit the testimony of one of two or more witnesses, each of whom has told a coherent and facially plausible story that is not contradicted by extrinsic evidence, that finding, if not internally inconsistent, can virtually never be clear error."2

2. Abuse of discretion.

If the appeal is one where the party is asking the appellate court to look at the trial court judge's discretionary rulings on evidence presented at trial, but to conclude a different outcome based on that evidence, then the standard of review is generally very high. The appeals court views all the facts in a light most favorable to the losing party. The trial court, which has exercised its discretion, is subject to the abuse of discretion standard of review, meaning that the judgment will be reversed only if the judge was clearly wrong.

However, if the appeal is from a directed verdict or a summary judgment, then the court will view the evidence in the light most favorable to the losing party because that party has yet to have the benefit of a trial. A directed verdict is where the court directs entry of a verdict without allowing a jury to consider the case, because, as a matter of law, there can only be one verdict. Summary judgment is a procedural device that disposes of a controversy without trial when there is no dispute as to either material fact or inferences to be drawn from undisputed facts, or if only a question of law is involved.

3. De novo.

If the appeal is one where the issue is of an interpretation of law, then generally the court uses a much lower standard of review, i.e., the court is less restrained in overturning the trial court. When the facts are settled and only a legal question is presented, the court is able to look at the matter from the same position of the trial judge. Such review is called de novo. A de novo review is when the court reviews every aspect of the trial court's ruling as though it were trying the case anew. However, the petitioner must still overcome the fact that at least one judge has ruled against them already. That fact does not easily escape the appellate judges.

State vs. federal
Most legal disputes requiring valuation arise under state law. Marital dissolution, minority oppression, state tax disputes, are just a few examples of state law issues, the appeals of which are exhausted at the state supreme court absent any federal issue.

After a trial is held and a final ruling is entered, the losing party can appeal the case to the next level. As touched on earlier, usually the next level has mandatory review. Mandatory review means

EXHIBIT 1: GENERIC STATE COURT
STATE SUPREME COURT
COURT OF APPEALS
TRIAL COURT

EXHIBIT 2: U.S. FEDERAL COURTS
U.S. SUPREME COURT
U.S. COURT OF APPEALS
U.S. DISTRICT COURT

Continued to next page...
The Handbook of Business Valuation and Intellectual Property Analysis

A new book edited by Robert Reilly and Robert Schweihs – the two authors of the very successful *Valuing Intangible Assets*

*The Handbook of Business Valuation and Intellectual Property Analysis* is a great resource, written by a panel of authors that are highly experienced and well regarded.
“The Equity Risk Premium” by Roger J. Grabowski and David W. King. The two authors discuss variations in the equity risk premium resulting from the time frame used to measure it, and provide what they consider to be a reasonable estimate of the range that the equity risk premium should fall into.

“The Discount for Lack of Control and Ownership Control Premium—A Matter of Economics, Not Averages” by M. Mark Lee. Lee explores some outlying factors for applying a discount for lack of control, or its reciprocal, a premium for a controlling interest.

“Valuation of C Corporations Having Built-In Gains” by Jacob P. Roosma. Roosma takes the reader through multiple hypothetical situations involving a 100 percent ownership in a C corporation and the implications that the BIG (Built-In Gains) tax liability has on its valuation.

“The S Corporation Economic Adjustment” by Daniel R. Van Vleet. This chapter presents a mathematical model to properly adjust an S corporation's valuation to reflect its tax benefit. Van Vleet suggests a mathematical framework to calculate SEA (S corporation Economic Adjustment), which in turn forges SEAM, which is the S corporation Equity Adjustment Multiple.

“Applying the Income Approach to S Corporation and Other Pass-Through Entity Valuations” by Roger J. Grabowski and William P. McFadden. This chapter explores three approaches to valuing S corporations.

“S Corporation ESOP Valuation Issues” by David Ackerman and Susan E. Gould. With the passing of the Small Business Job Protection Act of 1996, employee benefit plans became eligible to be shareholders in an S corporation. This Act opened many avenues for utilizing ESOPs but also contained many roadblocks and areas for abuse. This chapter discusses subsequent legislation, advantages and disadvantage of the S corporation election for ESOPs, and valuation issues that arise within.

“The Valuation of Family Limited Partnerships” by Alex W. Howard and William H. Frazier. FLPs are frequently used as an estate planning vehicle, and this chapter discusses this and some of the legislative action that has been enacted to thwart abusive behavior.

“Fairness Opinions: Common Errors and Omissions” by Gilbert E. Matthews. Matthews dissects fairness opinions and the errors he has seen most frequently, including mathematical errors, misapplication of methodology, and outdated fairness opinions.

“Valuing a Canadian Business for a U.S. Purchaser: Canadian Laws to Be Considered” by Richard M. Wise and Sheri-Anne Doyle. More U.S. companies acquire Canadian-based companies than any other foreign-based companies. With this lucrative market, the need for U.S. appraisers to be aware of Canadian laws has increased. This chapter provides a brief overview of Canadian laws that will help appraisers in such engagements.

“Sports Team Valuation and Sports Venue Feasibility” by Roger J. Grabowski, Jack Huber, and Robert Canton. This chapter covers the four major sports leagues and the unique valuation issues that an appraiser may face in valuing sports teams. These unique issues include understanding the sometimes opposing objectives of owners: winning vs. profitability.
“Health Care Entity Valuation” by Charles A. Wilhoite. In this chapter, Wilhoite covers the three basic valuation approaches, and how to apply them in the realm of health care valuation. He also covers some industry-specific valuation issues that may arise during an appraisal.

“Three Peas in the Business Valuation Pod: The Resource-Based View of the Firm, Value Creation, and Strategy” by Warren D. Miller. Miller suggest in this chapter that appraisers review the subject company’s competitive edge or business structure, as compared to its industry, to fundamentally understand how the company generates value.

“Differences between Economic Damages Analysis and Business Valuation” by Michael K. Dunbar and Michael Joseph Wagner. This chapter reviews some of the fundamental differences in calculating economic damages as compared to traditional valuation tactics.

“Intellectual Property Income Projections: Approaches and Methods” by Jacquelyn Dal Santo. The income approach and its use of future income streams is the most common method to estimating the value/damages/transfer price of intellectual property. In this chapter, Dal Santo provides both quantitative and qualitative methods to projecting the income stream of intellectual property.

“Intellectual Property Discount Rates and Capitalization Rates” by Timothy J. Meinhart. Meinhart discusses the estimation and application of discount and capitalization rates in intellectual property analysis. He stresses understanding three key differences between the utilization of discount and capitalization rates for intellectual property analysis and business enterprise analysis.

“Intellectual Property Life Estimation Approaches and Methods” by Pamela J. Garland. The useful life of intellectual property is a key driver to its underlying value. The Remaining Useful Life (RUL) estimation is important not only in valuation but in assessing economic damages and transfer price analysis. This chapter shows the need for, and the method for, estimating the RUL in intellectual property analysis.

“Intellectual Property Residual Value Analysis” by Robert F. Reilly. As discussed in previous chapters, intellectual property analysis uses a finite remaining useful life (RUL). This chapter discusses the residual value, which is an economic income/loss that falls outside of this finite time period.

“Intellectual Property Ad Volorem Case Study” by Pamela J. Garland, and “Licensing of Intellectual Property Case Study” by James G. Rabe both provide illustrative case studies in intellectual property analysis, each exploring a unique set of events and applying the proper applications.

“Transfer Price Considerations in Estimating Fair Market Value” by Kenneth R. Button and Jerrie V. Mirga. When valuing a subsidiary or a branch of a larger corporation under the umbrella of fair market value, the entity needs to be valued on a stand-alone basis. However, transfer prices are frequently not set on this basis and warrant further consideration by the analyst. This chapter provides methods for discovering non arm’s-length transactions and methods for adjustments.

“Intangible Asset Intercompany Transfer Pricing Analyses” by Thomas J. Millon Jr. Millon addresses the types of intercompany transfers of intangible assets that occur and methods to valuing an arm’s-length transfer price for such intangible assets. “Transfer Pricing Case Study” also by Millon, provides an illustration of the analysis for estimating an arm’s-length royalty rate and an arm’s-length allocation for certain trademarks for intercompany transfer pricing purposes.

“Research Techniques for an Intellectual Property Economic Analysis” by Victoria A. Platt. This chapter focuses on the types of data that are required for intellectual property valuation, damages, or transfer price analysis, and provides tips on how and where to extract that data. This chapter includes an exhaustive list of resources that is extremely useful in data collection.

“Intellectual Property Economic Damages Case Study” by Terry G. Whitehead and Dennis M. Mandell. This chapter provides the fourth and final case study of this book on valuing the economic damages incurred by an infringement of the subject company’s trade secret.
that the losing party will have its case reviewed as a matter of right.

After the first appeal, which in the vast majority of jurisdictions is usually mandatory, an appeal to the next level becomes discretionary. If the appeal is a discretionary appeal, then the court does not have to hear the case and can deny review.

Generally a denial of review is looked at as an affirmation of the lower courts decision, but it has been held that no inference should be made from a denial of review. If review is denied, the case is done. See Exhibit 1 for an example of a state court of appeals organization.

However, there are other issues that are governed by federal law. Federal tax (income, gift, estate), bankruptcy, and intellectual property are federal issues that are handled in the federal judicial system, where the highest level of appeal is the U.S. Supreme Court.

The federal appeal process is similar in that the first level of appeal in the District Court is mandatory. The Supreme Court, however, has discretionary appeal, allowing it to accept only a very small number of cases in relation to the numbers seeking appeals. The Supreme Court has also noted that its denial of a writ of certiorari, the Latin termed still used for the court granting review and usually abbreviated to “cert.,” has no bearing as to the substance of the appeal. See Exhibit 2 for the federal appeals organization.

It is also important to note that in each system, state and federal, there are different areas of law that can start in their own specialized court. One example is tax law on the federal level, and probate on the state level. These specialized courts have their own appellate structure that is unique to each jurisdiction. We explore federal tax, as an example of a special area that often requires valuations.

**Tax appeals**

The process of a tax appeal can be the exception to the normal course of a federal appeal. After exhausting the administrative remedies provided by the Internal Revenue Service and the Treasury Department, a taxpayer has multiple alternatives, as Exhibit 3 demonstrates. The most popular choice is tax court. The taxpayer can avoid paying the tax up front and has her or his case heard by an experienced judge. However, there is no jury, and, statistically, the taxpayer loses in tax court more often than by using the other two choices. Tax Court decisions are appealable to the Court of Appeals of the taxpayer’s jurisdiction.

If the taxpayer has the funds, she can pay the tax and then sue for a refund in U.S. District Court. In this scenario, the taxpayer can receive a jury trial in a location near them by a judge who does not hear many tax cases. This court is appealable to its respective court of appeals.

The other option is for the taxpayer to pay the tax and then sue in the U.S. Claims Court for a refund. This is the least used choice. This court has jurisdiction over very specific topics, including patent and tax cases. The Claims Court is appealable to the Federal Circuit Court of Appeals, formerly known as the Court of Claims.

**Conclusion**

Although an appraiser’s understanding of the minutiae of judicial appeals is unnecessary, appraisers should be familiar with the basics of appellate procedures and rules, and how they can vary from jurisdiction to jurisdiction. When preparing to present valuation evidence or opinion at trial, the appraiser should understand the impact of the record he or she will help create if an appeal is taken, and should prepare for the trial as though an appeal will be taken.

This means that the appraiser’s evidence and opinion must be expressed thoroughly and cogently, but within the bounds of plausibility, and that the appraiser should strive to be as credible as possible.
The estimation of the cost of capital for a closely held business is fraught with controversy. Many valuation analysts believe there is safety and comfort in using data sources that are widely recognized. These data sources are indeed helpful, but analysts should thoroughly understand how the data are derived, what choices there are in selecting such data, and what the strengths and weaknesses of the data are. This is Part One of a three-part article that takes an in-depth look at all the components of the Weighted Average Cost of Capital (WACC) and provides guidance for choosing the right components in any given valuation. On the surface, the WACC calculations seem straightforward and familiar, but a closer look—a look behind the curtain, as it were—reveals numerous choices and approaches. It’s time to look behind the curtain.

**Choices, choices and more choices**

In calculating the WACC of a closely held company, the analyst must make choices in five major categories that correspond to the variables of the basic WACC formula. See Exhibit 1 for definitions of these and other variables used in calculating WACC. We know that the WACC formula, excluding preferred stock, is as follows:

\[
WACC = W_d \times k_{dpt}(1 – \text{tax rate}) + W_e \times k_e
\]

We also know that \(k_e\) (cost of equity capital) for a small to medium-sized closely held company is usually derived by using either the Modified Capital Asset Pricing Model (MCAPM) or the Build-Up Model (BUM). Let’s focus on MCAPM first. When MCAPM is used, the WACC equation is expanded as follows:

\[
WACC = [W_d \times k_{dpt}(1 – \text{tax rate})] + [W_e \times (R_f + B (RP_m + RP_s + RP_u))]
\]

For the BUM we have:

\[
WACC = [W_d \times k_{dpt}(1 – \text{tax rate})] + [W_e \times (R_f + RP_m + RP_p + RP_i)]
\]

Under both equations, the analyst must make decisions on nine categories that have a direct influence on the WACC and thus value. The difference is that beta is used in the MCAPM, and some analysts use an industry risk premium in the BUM. There is nothing new here in terms of the categories. However, there is plenty new in the choices to determine the amount that goes into each category. Those choices are the main focus of this article. Again, look at Exhibit 1 for definitions of these WACC categories.

These equations and the categories that make them up are fairly simple to use. However, as often is the case in valuation, the devil is in the details.

Equity market risk premiums based on historical stock market return data are widely accepted and relied upon by the valuation community. The most prominent publisher of such data is Ibbotson Associates. Standard & Poor’s also prepares a well known analysis that relies on historical data to calculate the small company risk premiums that it publishes in its Risk Premium Report. Ibbotson and Chen have developed a supply side analysis of equity risk premium based on fundamental market data. We will address the differences between the use of Ibbotson’s and Standard & Poor’s data for \(RP_m\) and \(RP_e\), the new supply side equity risk premium, and taxes in part two of this article. In part three we will...
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...continued

focus on beta, the cost of debt, specific company risk, and the weights in the WACC. For now, we continue with an analysis of Ibbotson data as they pertain to $R_f$, $R_{Ps}$ and $R_{Pi}$.

**Horizons and returns**

First we’ll look at an easy category, $R_f$. Most analysts use the return on a U.S. 20-year treasury bond, which is a 30-year bond with 20 years remaining till maturity. Why 20 years instead of, say, five years or even 30 days? Twenty years is what Ibbotson Associates, in their annual *Valuation Edition Yearbook*, use to calculate the long-horizon equity risk premium, $R_{Pm}$. Analysts prefer to stay consistent with Ibbotson’s use of the data. Furthermore, the 20-year investment term is the most similar to the long-term investment horizon of a closely held company. Remember, under fair market value, the horizon may be that of the investment, not the investor.

Does it make a difference whether we use an $R_f$ for 20 years (long-term), five years (intermediate-term) or 30 days (short-term)? Let’s take a look. Consider the following calculations that use treasury rates as of May 3, 2004. The equity risk premiums for long, intermediate and short horizon risk premiums, presented in *Exhibit 2*, are from the last page of Ibbotson Associates’ *SBBI Valuation Edition 2004 Yearbook*.

We have heard from some analysts that the time period doesn’t matter because, while the five-year bond and the thirty-day bill have lower yield rates than a twenty-year bond, it is offset by a higher historical $R_{Pm}$. As can be seen in *Exhibit 2*, this is only partially true. Currently, there are much larger differences in the treasury yield rates for the three different horizon periods than the values for $R_{Pm}$ for those same periods. This is due to the yield curve on treasury securities and the impact of investor horizon risk on the five-year and 20-year bonds versus the 30-day bill.

The returns shown in *Exhibit 2*, using BUM or CAPM with a beta of 1.2 or .8, indicate that the differences due to the selection of the time horizon can have an impact. For example, the returns using a twenty-year bond rate and risk premium are 1.1% to 1.4% higher than the returns using a five-year bond rate and risk premium and 1.6% to 2.0% higher than the returns using a thirty-day bill rate and risk premium. We believe this example illustrates the importance of using long-term risk-free rates and the 20-year long horizon risk premium using Ibbotson data.

**Size risk premiums**

Now let’s look at a more difficult category, $R_{Ps}$. Did you know that there are 10 primary choices here? And that the range of those choices is approximately 2% to 10%? With such a range of potential choices, an analyst must be able to explain and support his or her selected assumption. The choices for $R_{Ps}$ are all “in excess of CAPM” rate differentials as defined by Ibbotson. This means that they believe that the difference between the predicted return using CAPM and the actual return must be attributable to differences in size. The size premium is different from the small stock risk premium, which is not beta-adjusted and is simply the arithmetic return on small stocks less the arithmetic return on the market.

The size premium can be adjusted to reflect the type of beta calculation for the underlying portfolio of companies. The question then becomes over what period is beta best approximated? Ibbotson provides data for betas calculated on an annual basis and on a monthly basis. Ibbotson also calculates betas that reflect the lag of market events on smaller company stocks (sum betas).

Assuming you agree that a beta-adjusted method is correct, the 10 choices for the size premium ($R_{Ps}$) are those presented in *Exhibit 3*.

So, which one do you use? Well, unfortunately, the answer is “it depends.” First we explain what each one is; then

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*Exhibit 2: Differences in Equity Risk Premiums Based on Length of Investment*

<table>
<thead>
<tr>
<th></th>
<th>Twenty-Year Bond</th>
<th>Five-Year Bond</th>
<th>Thirty-Day Bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treasury rate</td>
<td>5.30%</td>
<td>3.60%</td>
<td>0.80%</td>
</tr>
<tr>
<td>$R_{Pm}$</td>
<td>7.20%</td>
<td>7.60%</td>
<td>8.60%</td>
</tr>
<tr>
<td>Assumed Beta</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Assumed Beta</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>BUM return</td>
<td>12.50%</td>
<td>11.20%</td>
<td>9.40%</td>
</tr>
<tr>
<td>CAPM return (1.2)</td>
<td>13.90%</td>
<td>12.80%</td>
<td>11.20%</td>
</tr>
<tr>
<td>CAPM return (0.8)</td>
<td>11.10%</td>
<td>9.70%</td>
<td>7.70%</td>
</tr>
</tbody>
</table>

*Exhibit 3: Ten Choices for $R_{Ps}$ Size Premium*

1. 10th decile monthly beta S&P
2. 10th decile annual beta S&P
3. 10th decile sum beta S&P
4. 10A monthly beta S&P
5. 10B monthly beta S&P
6. Micro-cap annual beta S&P
7. Micro-cap monthly beta S&P
8. Micro-cap sum beta S&P
9. 10th decile monthly beta NYSE
10. Micro-cap monthly beta NYSE

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*5 Ibid.*
we narrow down the choices to four and present their strengths and weaknesses. Ultimately, we leave the decision to you.

Tenth decile annual beta means that the expected return is calculated with an annual beta. The 10th decile monthly beta is based on monthly betas. Sum beta is a lagged beta, which reflects the theory that the impact of events on smaller companies may lag the marketplace as a whole. As such, the beta in the expected return is adjusted accordingly. If a sum beta RPs is used, then sum betas may need to be used in the CAPM, and these are not always readily available. Given this fact, as well as the fact that monthly betas are more readily available than annual betas, we’ll eliminate annual betas and sum betas.

Eight of the possible choices for RPs are based on data from S&P. Only two choices are based on data from the NYSE. However, the differences are not that material. For the 10th decile monthly beta and the micro-cap monthly beta, the NYSE based risk premiums are only 0.42 and 0.41 percentage points higher, respectively, than the S&P based size premiums. As a percentage difference, the NYSE based risk premiums are only 6.6% and 10.2% higher, respectively.

And then there were four (size premium choices)

That leaves us with just four choices based on data from S&P: 10th decile monthly beta, microcap quintile, 10A and 10B.

1. NYSE deciles

Ibbotson slices the New York Stock Exchange (NYSE) into 10 deciles. In the past, this was the extent of the database and included around 180 to 190 companies in each decile for current periods. In 2001, they started to include companies of similar size from the American Stock Exchange (AMEX) and the National Association of Securities Dealers Automated Quotation System (NASDAQ). This raised the number of companies in the 10th decile to 1,724 in 2003.6 Obviously, the other deciles increased as well, but there was a greater impact on the 10th decile, which is the area many valuation analysts view as aligned more with the closely held companies they value.

2. Microcap quintile

Before this increase in the number of companies in the 10th decile, many analysts used the microcap quintile, which is just a fancy term for the ninth and 10th deciles combined. The rationale was that the microcap quintile had more companies—thus more data points, and greater reliability. We’ve also heard analysts say they used the microcap quintile because of “fallen angels,” which are companies that were larger in the past or are still fairly large but have fallen on hard times and dropped into the 10th decile. With the addition of the AMEX and NASDAQ companies in 2001, many analysts shifted to the 10th decile, which now had greater reliability that resulted from such a tremendous increase in the number of companies.

3. 10A and 10B

In 2001, Ibbotson went to 10A and 10B. The 2004 Yearbook indicates that there are 1,158 companies in the 10B decile and 554 companies in the 10A decile for the period ending 2003.7 This caused quite a commotion in the valuation community. Were we in Emerald City?

Not so fast! Again, let’s look behind the curtain. Sure, there were 1,724 companies in the tenth decile in 2003.8 However, let’s look at Exhibit 4, which shows the total number of companies in the 10th decile by a specific year by decade going back to 1926, the starting point for Ibbotson’s calculation of the long-term equity risk premium.9

If there were only 52 companies in the 10th decile in 1926, this means that if you split the decile in half, there were approximately 26 companies in 10B.

Let’s see. It does get better, but not by much. In 1930 there were 72 companies in the 10th decile and 36 in 10B, assuming an even split. Jumping ahead to 1960, the numbers are 109 and 54. Is this enough to give comfort? The bottom line here is that it may not be until 1970 that we get enough companies to find the comfort we are seeking. By the way, we are not going to address the topic of whether you should look at returns from 1926 or a shorter period, say 1960 or so. That’s a topic for another part of this article.

Do you still want to rely upon 10B? Maybe not. However, is 10A, 10B or just 10 much better? Is the starting point of 52 companies for 10 so much better than 26 companies for 10B? Each analyst must decide this and choose what he or she can best defend. Obviously, using the microcap or 10A size group will increase the number of companies.

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6 Ibid., 132.
7 Ibid., 130
8 There is no explanation of why 1,724 companies are listed on page 132 and 1,712 companies on page 130 of Ibbotson Associates’ Stocks, Bonds, Bills, and Inflation, Valuation Edition 2004 Yearbook.

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but will also put you in a size category that may be too large as compared to the closely held company being valued. If you use 10B, the companies may be more similar in size, but you have the potential problem of fewer data in the earlier years and less reliability. Well, at least we narrowed it down to four choices. Good luck.

**Using Ibbotson industry risk premiums—CAPM in a Build-Up wrapper**

You can’t ignore the man behind the curtain since his name is not the Wizard but beta. First and most importantly, you cannot blindly apply the industry risk premiums (RPi) as published in Ibbotson’s *SBBI Valuation Edition Yearbook*. When we use the industry risk premium information, we must use it with care. Its use is based on answering several questions, including:

1) How many observations are there?
2) What’s the validity of the SIC Code?
3) Does it make sense?
4) Is it CAPM in a Build-Up wrapper?

Ibbotson’s criteria for inclusion as a separate industry risk premium are that there must be five or more observations. Many industries only have a few observations; others have hundreds. Obviously, all other things being equal, the greater the number of observations, the greater the reliability of the data.

Currently there are risk premiums for two- and three-digit SIC codes, but not four digits. The number of digits in the SIC code can result in large variations. For example, the difference between the RPi for SIC 17, Construction – Special Trade Contractors, and SIC 171, Plumbing, Heating and Air-Conditioning is almost 7%. Also, one is positive and one is negative.

The most important criterion is whether it makes sense or not. Some values for RPi, just look strange. Let’s take the restaurant industry. The Ibbotson data shows that this industry is less risky than the market as a whole. Well, maybe that’s true for larger chains, but many local or regional restaurants we have been involved with were pretty risky. I doubt that a local or regional restaurant is less risky than the market as a whole. A single restaurant would also probably have a different risk profile than the companies that make up the SIC code in the Ibbotson data.

The use of Ibbotson industry risk premiums is nothing more than a form of CAPM disguised as Build-Up model. The RPi is calculated as follows: $RP_i = (RI_i \times ERP) - ERP$ where ERP is the equity risk premium of the market as a whole, the same ERP we use in CAPM. The RIi is the risk index for a specific industry and is based on betas. As such, using the RPi means relying on betas. One of the reasons often given by practitioners for using the Build-Up model vs. the CAPM is that they cannot find relevant betas or they don’t believe in beta. Those that take that position need to be aware that they are still relying on beta when using the RPi in the Build-Up method for calculating discount rates. Again, it is a form of CAPM in a Build-Up wrapper.

We will continue the discussion of cost of capital categories and controversies in Part Two of this three-part article. **BVU**

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We invite you to send news, calendar items or questions for inclusion in *News Update, Calendar Update* or the Reader/Editor Exchange departments.

Please email items to **AlinaN@BVResources.com**, mail them to BVU Editorial, 7412 S.W. Beaverton-Hillsdale Hwy, Suite 106, Portland, OR 97225, or fax them to the Managing Editor at (503) 291-7955.

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**COST OF CAPITAL**

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<thead>
<tr>
<th>Arithmetic mean equity risk premium¹</th>
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<tr>
<td><strong>Treasury yields</strong>¹</td>
<td><strong>S&amp;P 500</strong></td>
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<tr>
<td>30-day:</td>
<td>1.36%</td>
</tr>
<tr>
<td>5-year:</td>
<td>3.32%</td>
</tr>
<tr>
<td>20-year:</td>
<td>4.92%</td>
</tr>
<tr>
<td>“Supply side” arithmetic mean equity risk premium⁴</td>
<td></td>
</tr>
<tr>
<td>Micro-Cap size premium</td>
<td></td>
</tr>
<tr>
<td>S&amp;P 500 Benchmark⁵</td>
<td>4.01%</td>
</tr>
<tr>
<td>Micro-Cap size premium</td>
<td></td>
</tr>
<tr>
<td>NYSE Benchmark⁵</td>
<td>4.42%</td>
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<tr>
<td>10th-decile-size premium</td>
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<tr>
<td>S&amp;P 500 Benchmark⁵</td>
<td>6.34%</td>
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<tr>
<td>10th-decile-size premium</td>
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<td>NYSE Benchmark⁵</td>
<td>6.76%</td>
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<tr>
<td>Prime lending rate:⁴</td>
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<tr>
<td>Dow Jones 20-bond yield:⁴</td>
<td>4.90%</td>
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<tr>
<td>Barron’s intermediate-grade bonds:⁴</td>
<td>6.50%</td>
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<tr>
<td>High yield estimate:¹</td>
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<tr>
<td>Mean 5.50%</td>
<td>Median 6.06%</td>
</tr>
<tr>
<td>Dow Jones Industrials P/E ratios:⁵</td>
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<tr>
<td>On current earnings:</td>
<td>17.81</td>
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<td>On ’04 operating earnings est.:</td>
<td>15.8</td>
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<tr>
<td>On ’05 operating earnings est.:</td>
<td>14.4</td>
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<tr>
<td>Long-term inflation estimate:⁷</td>
<td>2.50%</td>
</tr>
<tr>
<td>Long-term rate of growth GDP:⁷</td>
<td>3.50%</td>
</tr>
</tbody>
</table>

² Expected risk premia for equities from *Stocks, Bonds, Bills, and Inflation*: Valuation Edition 2004 Yearbook (Chicago: Ibbotson Associates, 2004. Used with permission. All rights reserved.) We highly recommend that analysts using Ibbotson data for cost of capital have the current year’s book and thoroughly understand the derivation of the numbers used.
³ Editor suggests adjusting downward by 1.25% to get current equity risk premium. See November 2003 BVU pg 1.
⁵ From Financial Analysts Journal.
⁶ “Supply Side” arithmetic mean equity risk premium.
⁷ Barron’s, August 23, 2004.
SPECIAL REPORT

Conference Coverage:

IBA conference heats up Las Vegas

By Angelina McKedy, Staff Writer

The Institute of Business Appraisers held its 2004 annual conference on June 8th at the Paris Hotel in Las Vegas, Nevada. The conference consisted of three days of general sessions in the morning with four breakout tracks in the afternoon. We are including summaries of some of the sessions. The full texts of the presentations with the symbol are available at BVLibrary.com™.

- CORRELATION VS. COINTEGRATION: HOW (MIS)GUIDING ARE YOUR GLCs?

Miriam Ratkovicova
Deloitte & Touche LLP
Cleveland, OH

The focus of Ratkovicova’s presentation was the use of a statistical approach to choosing guideline companies. She discussed the basic methodology behind the guideline company method and the typical selection process for guideline companies. Ratkovicova suggests that you ensure that the stock prices of your GLCs are integrated.

- VALUATION OF PASS-THROUGH ENTITIES

Chris Treharne, ASA,
MCBA, BVAL
Gebraltar Business Appraisals, Inc.
Longmont, CO

Nancy J. Fannon CPA/ABV,
MCBA, BVAL
Fannon Valuation Group, LLC
Portland, ME

Jim Hitchner, CPA/ABV, ASA
The Financial Valuation Group
Atlanta, GA

This presentation was very similar to the presentation given by Treharne, Fannon and Hitchner at the 2003 AICPA National Business Valuation Conference in Arizona. (See the April 2004 BVUpdate®) The three presenters once again touched on four major tax court decisions in the pass-through entity area (Gross, Wall, Adams & Heck), and the need for the business valuation community to come to a consensus on valuation of S corporations. The minority model that was unveiled at the AICPA conference in 2003 was shown to the IRS and Treasury Department in January 2004, and was a key element of this presentation as well.

- VALUATION FOR M&A: BUILDING VALUE IN PRIVATE COMPANIES

Frank C. Evans CBA, ASA,
CPA/ABV
Smith, Evans and Carrier
Pittsburg, PA

Many of the different facets of merger and acquisition deals were discussed in this compelling session by Frank Evans. He keyed upon the predominant use of the invested capital model over the equity model in mergers.

He also suggested that two standards of value be computed: Fair Market Value and Investment Value. Evans states, "Both should be computed so that the buyer can set what acquisition premium they are willing to pay."

He also takes note that there is a distinction between a good company and a good investment. He moved on to discuss some of the common seller and buyer motives and reasons for merger and acquisitions failures. Two reasons for such failures are that either synergies are exaggerated or there is a failure to consider first-year negative synergies. With synergies playing such an important role in M & As, Evans defined synergy, reviewed its sources, and explained how to assess synergies. The last part of his presentation was on deal structure and the differences in asset deals vs. stock deals from both the seller's and the buyer's points of view.

Continued to next page...
IBA 2004 Conference  
...continued from previous page

THE ANALYSIS AND CRITIQUE OF THE BUSINESS APPRAISAL REPORT AND CROSS-EXAMINATION OF THE APPRAISAL EXPERT

Carole S. Gailor, Esq.  
Gailor, Wallis & Associates, PLLC  
Raleigh, NC

For anyone involved in litigation support, this session was exceptional. Gailor took appraisers through a valuation engagement through the eyes of a lawyer, giving tips and pointing out pitfalls.

When looking for a business valuation expert, she requires quality business valuation education (particularly programs where peer review reports are necessary), post education experience, and adherence to accepted professional standards. She also discussed the eight worst report-writing errors, called, "Death By a Thousand Cuts." The following is a list of these errors as discussed by Gailor:

1. Hedge Words & Equivocations (not taking a position)  
2. Generalities (e.g., "In general", "Commonly recognized")  
3. Absolutes (e.g., "Obvious," "Conclusively" or "Self-evident")  
4. Assumption & Presumptions  
5. Plagiarism  
6. Mathematical and Computation Errors (this is your job, so it should be error-free)  
7. Errors in Application of Methodology  
8. Reliance on Valuation Software

In addition to this list of errors, she developed "The 10 Scariest Cross-Examination Questions." With each question, she solicited answers from the audience and then went through bad, better and best scenarios for each answer. This view from the lawyer's perspective puts a spotlight on areas where a business valuation professional providing expert testimony may falter, and gives the expert pointers on how to prepare for such situations in the future.

FORENSIC ACCOUNTING

Mark S. Gottlieb, CPA, CVA, DABFA, MS-TAXATION  
MSG  
Great Neck, NY

This interesting session, presented by Mark Gottlieb, provided a detailed explanation of forensic accounting. In light of recent events, the need for a second tier of due diligence, beyond auditing, has been created, and this is where forensic accounting comes into play. The four phases of forensic accounting are recognition and planning, evidence/data collection, evidence/data evaluation and communication. Each of these phases requires significant steps that Gottlieb detailed. Forensic accounting may be necessary when an appraiser fears that financial statements are not accurately reflected.

Gottlieb discussed the use of the direct method and indirect method of forensic accounting to uncover unreported income. The direct method follows many of the traditional auditing procedures. If the direct method does not produce anything material, but you still have reasonable assurance that unreported income exists, he suggests using the indirect method. The indirect method looks more at the source and use of funds, including looking at the lifestyle of the individual or owner, unreported non-operating assets, changes in balance sheets, and reconstructing gross taxable receipts. He ended his presentation with several tips for business valuators who may find themselves in the situation where they need to use forensic accounting methods.

MEASURING HOLDING PERIOD AND IDENTIFYING APPROPRIATE DISCOUNTS FOR LACK OF MARKETABILITY

Ashok B. Abbott  
Business Valuation LLC  
Morgantown, WV

In this presentation, Ashok Abbott discussed some of the aspects and differences between marketability and liquidity. Abbott breaks marketability into two categories: liquid-marketable and illiquid-marketable.

According to Abbott, at least one Tax Court judge has asked for which measurement (liquid or illiquid marketable) discount was taken; the assumption is that more and more judges are going to be asking. He suggests looking at the Bid/Ask spread as a measure of liquidity. Abbott also infers that liquidity and the price of a stock have a direct relationship, meaning that as liquidity goes up, so does the price of the stock, and, as liquidity goes down, the price of the stock goes down. He also provided multiple illustrations of the effect holding periods have on the discount for lack of liquidity.

THE FASB 141 & 142 VALUATION REPORT AND RECENT DEVELOPMENTS

Chris M. Mellen & Patrice L. Riela  
Delphi Valuation Advisors, Inc.  
Sharon, MA

This dual speaker presentation looked at FASB 141 & 142 from two perspectives. The first perspective, presented by Chris Mellen, looked at the background and history of the standards and broke down the definitions and the effects they have on valuation engagements. Mellen explained that the un-
derlying reason for the standards is that there has been a trend for increasingly recognizing intangible assets, and that the Financial Accounting Standards Board is moving towards International Financial Accounting.

SFAS 142 states that goodwill and intangibles with indefinite lives are no longer amortizable, where SFAS 141 sets the standard of separation of intangible assets from goodwill. Mellen presented an acronym as a basis for identifying this separation: SLERT: You ask, "Can the asset be Sold, Licensed, Exchanged, Rented or Transferred?" If you answer "yes" to any of the SLERT categories, then the asset needs to be separated out from goodwill.

The second half of the program, presented by Patrice Riela, went through a sample SFAS 142 Valuation Report. Riela went through the entire process of the report, from choosing the proper valuation approach to developing rates of return to, finally, the conclusion of value. The sample valuation report provided the practical application to many of the concepts discussed by Chris Mellen. **BVU**

**Shannon Pratt:** I’m going to ask you this question, how should minority interest values be developed if all one has is acquisition transactions [including financial statements and price paid]?

**Mark Lee:** OK, but can I also use a direct capitalization approach?

**SP:** If you have historical statements. Unless the company was followed by enough analysts to have forecasts in the public market, you don’t have any forecasts. In any case, you don’t have forecasts for very many years, so if you’re going to use a capitalization-of-anything procedure in conjunction with the guideline transaction methods, it would have to be historically based.

**ML:** You can take a look at acquisition value, but unless you know what’s in the mind of the buyer, at the time those acquisitions were paid, it’s very, very difficult to use those numbers, because you don’t know if the buyer is capitalizing the company as it exists, or on anticipated bases that are not revealed in your comparable. What the buyer is looking at is some sort of reconstructed financial statements, perhaps some sort of reconstructed cash flow.

**SP:** Now, will you agree with me that the Mergerstat data, the control premium studies, of which we have almost 4,000 transactions since 1998—and they are all takeovers of control of public companies—and in the database that we have online, we have five valuation multiples computed, and then enough data to compute several more multiples? We have the Pratt’s Stats® database, which is takeovers of private companies. Would you agree with me that there is less synergy involved in the Pratt’s Stats® type of companies than in the Mergerstat type of companies?

**ML:** The answer is probably yes, but you’d have to identify the buyer. By the way, just to let you know, even though I said something against not knowing enough about acquisition premiums... I think acquisition multiples are a very good benchmark to look at in regard to a discounted cash flow and current market multiples, for the same industry.

**SP:** Now, Mark, you hit on something there—the multiples are much more important than the premiums.

**ML:** Absolutely.

**SP:** And that’s what I want to get to—I thought we’d never get there in this conversation—that the multiples are more important to look at than the percentage premiums paid, and the database has the multiples, it is called the Control Premium Study, but it has the multiples. **BVU**
Improvements to BVMarketData<sup>sm</sup> enhance usability of valuation databases

By Paul Heidt and Adam Manson, Staff Writers

Over the past year, the increase in transactions and the improvements to Pratt’s Stats<sup>TM</sup> and the other database products, as well as several new features, continue to make the BVMarketData<sup>sm</sup> Web site a valuable research tool.

**Number of transactions increased**

The data in each of the six databases, as well as their corresponding Frequently Asked Questions (FAQ) pages, are updated throughout the year. There are currently a total of over 21,600 transactions (both guideline company and discount/premium transactions) at the Web site, which is an increase of over 3,000 transactions from this time last year.

The Pratt’s Stats<sup>TM</sup> database, which is updated on a monthly basis, now has over 6,240 transactions covering more than 640 different four-digit Standard Industrial Classification (SIC) codes. The private transactions contained in the database have a median revenue of $1,811,154 and a median selling price of $1,898,924. The details of the other guideline company databases are outlined in Exhibit 1.

**Find a broker feature added**

A new feature, the Find A Broker search engine, has been added to BVMarketData<sup>sm</sup>. This free referral database allows for business sellers to locate a business intermediary by their name, geographic area, or specialization in a particular industry. The broker search results provide the intermediaries’ name, firm, detailed contact information, association memberships, professional designations, and specialties.

In order for a business intermediary to appear in the Find A Broker search engine, they will need to register for free at BVMarketData<sup>sm</sup>. Once the broker has registered, they will receive a login and password, with which they can change or update their profile when necessary.

**Industry research added**

We have also partnered with First Research, Inc. to offer our customers the Industry Profile reports. The Industry Profile reports provide detailed information, by SIC code, to business appraisers for their industry analysis in the valuation report. Some of the key sections of the First Research Industry Profiles reports include: critical issues, quarterly industry update, industry overview, credit and business risk issues, business trends, and industry forecast.

**Pratt’s Stats<sup>TM</sup> research findings**

With the large number of data-rich transactions, the different databases can be used as a valuable research tool and an easy way to present data graphically to a client. For the purpose of this article, we will use the Pratt’s Stats<sup>TM</sup> database as the focal point of our research.

**Days on market**

One of the data points contained in Pratt’s Stats<sup>TM</sup> is the Sale Initiation Date field, which details when the company was initially listed for sale. This data point is solely available through transactions submitted by business intermediaries and is not available through SEC filings. This data point can be used to show the relationship between the revenues of a company and the length of the period (in days) the company is on the market. Based on the research, which can be seen in Exhibit 2, there is a positive correlation between the revenues of the company and the period of time in which the company is listed for sale.

**Valuation multiples trends**

Other research can be performed on the trends of valuation multiples over a given time period. While the online Pratt’s Stats<sup>TM</sup> database contains ten valuation multiples, we focused on four Market Value of Invested Capital (MVIC) multiples and charted these

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**EXHIBIT 1: SUMMARY OF GUIDELINE COMPANY DATABASES AT BVMARKETDATAsm**

<table>
<thead>
<tr>
<th>Database</th>
<th>Type of Company</th>
<th>Number of Deals</th>
<th>4-Digit SIC Codes</th>
<th>Median Revenue</th>
<th>Median Selling Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pratt’s Stats™ Private</td>
<td>Private</td>
<td>6243</td>
<td>642</td>
<td>$1,811,154</td>
<td>$1,898,924</td>
</tr>
<tr>
<td>BIZCOMPS© Private</td>
<td>Private</td>
<td>7449</td>
<td>422</td>
<td>$350,000</td>
<td>$125,000</td>
</tr>
<tr>
<td>Public Stats™ Public</td>
<td>Public</td>
<td>1057</td>
<td>312</td>
<td>$38,429,530</td>
<td>$68,765,000</td>
</tr>
<tr>
<td>Mergerstat®/Shannon Pratt’s Control Premium Study™</td>
<td>Public</td>
<td>4101</td>
<td>606</td>
<td>$91,000,000</td>
<td>$117,000,000</td>
</tr>
</tbody>
</table>

Note: The data is as of 08/26/2004
EXHIBIT 3: PRATT’S STAT™ MEDIAN VALUATION MULTIPLES BY YEAR

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MVIC/Net Sales</td>
<td>0.75</td>
<td>0.72</td>
<td>0.73</td>
<td>0.71</td>
<td>0.73</td>
<td>0.59</td>
<td>0.54</td>
<td>0.57</td>
<td>0.59</td>
</tr>
<tr>
<td>MVIC/Discretionary Earnings</td>
<td>3.47</td>
<td>2.69</td>
<td>2.54</td>
<td>1.96</td>
<td>2.43</td>
<td>2.03</td>
<td>2.82</td>
<td>2.35</td>
<td>2.09</td>
</tr>
</tbody>
</table>

The data is as of 8/26/2004

EXHIBIT 2: MEDIAN DAYS ON MARKET BY REVENUE DECILE SOURCE: PRATT’S STATS™
Improvements to *BVMarketData*™ and Application of *Pratt’s Stats*™ Data
...continued

over the past nine years. While the multiples of MVIC to Net Sales and MVIC to Discretionary Earnings stayed fairly constant, as can be seen in Exhibit 3, the other two multiples, MVIC to EBIT and MVIC to EBITDA, have had a consistent downward trend and bottomed out in 2002. Based on numbers in 2003 and 2004 (to date), it can be predicted that multiples may be increasing in the coming years.

Exhibit 4 presents the median MVIC to Net Sales sorted by industry and organized by year. The subsequent graph, Exhibit 5, looks at the median industry MVIC to EBITDA by year. The significance of these charts lies in their depiction of what a buyer is ultimately willing to pay, along with the assumption of liabilities, for a firm relative to their Net Sales and EBITDA. In essence, one can chart the value placed on firms within a given industry and determine, historically, the trends in multiples, as well as forecasting future predictions.

One of the most noticeable trends illustrated within Exhibit 4 is that of the Transportation, Communication, Electric, Gas & Sanitary industry. In 1996, this industry was trading at the highest valuation multiple of 1.32, but experienced a sharp drop in 1997. In 1998, this industry’s valuation multiple increased, yet it proceeded on a steady decline until 2003. The trends shown for this industry in Exhibit 4, especially the great decline from 1996 to 1997 and later from 1998 to 1999, are closely mirrored when compared to the median MVIC to EBITDA multiples in Exhibit 5.

The Wholesale and Retail Trade industries have experienced similar trends over the last nine years. Between a support line of 0.3 and a resistance line of 0.54 in Exhibit 4, both industries have remained relatively consistent in their valuation multiples. This could lend possible insight into the values placed on firms within these industries in the near future. The multiples of this industry remain both low and consistent when MVIC to EBITDA is presented in Exhibit 5; both remain steady with the exception of the two industries experiencing a slightly greater downturn in 1998 to 2001.

Prior to 2004, both the Manufacturing and Service industries experienced their peak MVIC to Net Sales ratio in 2000, and subsequently fell to their most depressed points in 2002. Despite this, 2003 and 2004 (to date) has been optimistic for both industries, seeing two consecutive years of increasing multiples. This has been most notable for Manufacturing, which climbed from 0.75 to 1.24 in merely one year’s time; nearly a 60% increase. The rise in Manufacturing may be predictive of these firms’ selling values in 2005. Despite trading at the second highest MVIC to Net Sales multiple in 2004 (to date), the Services industry experienced rather low MVIC to EBITDA multiples. In fact, Services held the second lowest multiple in Exhibit 5 at 4.37; just slightly above Retail Trade.
Ninety-one percent of our readers are interested or very interested in the Legal & Court Case Update department (see Exhibit 1). The Guest Article department came in a close second, with 90%. The Editor’s Column and Special Report departments were tied for third and fourth, with 86%. Within the Legal & Court Case Update department, 71% of our readers read the Gift, Estate, and Income Tax cases the most. The next most read cases are Marital Dissolution and Shareholder Dispute cases.

Topics of interest
Many readers are interested in having articles and Editor’s Columns devoted to the treatment of discounts and premia, S corp valuations, FLPs, valuing small businesses, divorce valuations, and cost of capital.

On the question of what topic our readers would want researched for a week by someone on their staff, the topics chosen closely matched those that readers are interested in having covered by articles and Editor’s Columns. Additional topics included: inexpensive sources of market data; guideline company data; key person discounts; choosing an appropriate DLOM; and best practices for creating valuation reports.

We found that in answer to our question about other departments or features readers would like to see added, many of our readers are satisfied with the format as is. Others would like to see departments or features on topics such as marketing and pricing of appraisal services; small business valuation; and practice tips, e.g., how to prepare a winning valuation report.

Reader credentials, experience, and affiliations
Seventy-five percent of our readers are CPAs, 37% are CVAs, and 36% are CPA/ABVs (see Exhibit 2). Twenty-eight percent have 5 to 10 years of experience in the business valuation field, 27% have 10 to 15 years of experience, and 24% have 20 or more years of experience (see Exhibit 3). A majority of our readers belong to the AICPA (66%). Other organizations our readers belong to are the IBA (48%), the NACVA (41%), and the ASA (36%).

Other publications
It should come as no surprise that our readers are well-read and do not rely on BVUpdate alone to keep up with the profession. The other mostly read publications are Business Valuation Review and CPA Expert. Other publications range from Accounting Today to the Tax Adviser to Willamette Insights, among many.

BVUpdate is doing a good job
Most of our readers plan to renew their subscriptions. Also, most of the readers feel that BVUpdate is a valuable, up-to-date resource. We are most gratified to be able to reprint some of the following testimonials: “a must-have for business appraisers;” “BVUpdate is the most efficient way to keep up with current events;” “I love it but I don’t want to...”
my expert witness competitors to know about it;” “BVUpdate is a comprehensive and understandable valuation reference that provides the reader with a considerable amount of information on a timely basis to keep us informed and educated in our practice.”

Of course, we are not perfect. Readers would like to see more data that is specific to certain industries, data regarding royalty rates and valuation of intangibles, critiques of expert witness valuation reports, and other information and services included in BVUpdate. Naturally, we will try to accommodate as many of your requests and suggestions as we can in upcoming issues. Thanks again to our overwhelmingly loyal readers. BVU

There appears to be no consensus in the valuation community over whether “tax-affecting” or “tax-effecting” is the more appropriate term. Here at Business Valuation Resources, we experienced a bit of confusion ourselves. We cleared up the issue internally, however, and would like to share our discovery with our readers in the hope of setting a standard in the profession.

To grasp the distinction requires not only an understanding of the dictionary definitions of “affect” and “effect,” but also an understanding of the underlying valuation concept. The verb “effect” means “to cause to come into being,” “to bring about often by surmounting obstacles,” or “to put into operation.” If used with earnings, as in effecting earnings, it means to cause the earnings to come into being. Obviously, that is impossible, as the earnings already exist. Tax-effecting earnings would mean that, by considering tax implications, the analyst is bringing about or creating earnings, which is clearly not true and simply not possible.

The verb “affect,” on the other hand, means “to produce an effect upon” or “to produce a material influence upon or alteration in.” If used with earnings, as in affecting earnings, it means to produce an effect on the earnings or to materially influence or alter them. This is exactly what happens in the procedure called tax-affecting. The analyst alters the earnings to account for tax considerations.

The end result is a tax “effect,” properly used as a noun, but not as a verb, in this instance. The earnings themselves, however, have been affected, not effected.

Tanya Hanson
Former Associate Editor
Business Valuation Resources
Portland, OR
Valuation Survey of Construction Companies

Released in 2004 by ZweigWhite, this is the third edition of the Valuation Survey of Construction Companies. In the compilation of this survey, data were collected from a nationwide sample of general building, heavy and highway, specialty, and residential building contractors. Data are based on a total of 66 valuations completed during the past five years. The purpose of the Valuation Survey is to collect and document information on privately held construction company valuation practices and the relative values of various firms.

Companies compared along three value ratios

The initial chapter shows an overview of the survey data and the participating contractors. The survey was compiled between 1999 and 2003 using predominantly Private C and S corporation ownership formations (85% of total) with a revenue range of $84,578 to $1,423,000,000. To make comparisons among these companies, which are quite diverse in terms of size and profitability, ZweigWhite has summarized their value data in three value ratios: value/book value, value/gross revenue, and value/profit; the significance of each is noted.

The comparative data for all three valuation ratios is broken out by 10 separate variables: construction type, ratio of field staff to office staff, percentage of the work the company self-performs, why the valuation was conducted, whether the valuation was on a minority or controlling interest, gross revenue projection at the time of the valuation, profit projection at the time of the valuation, EBITDA projection at the time of the valuation, valuation method (i.e., formula or appraisal), and the year of the valuation.

Delving deeper into the specifics of valuation formulas, Chapter Four lists the actual valuation formulas reported by survey participants. ZweigWhite groups the formulas by those based on book value, those based on profits, and those that are a combination of the previously stated factors. The formulas are accompanied by the ownership type of each company and whether or not the company had an ESOP at the time.

Rule of thumb formulas

ZweigWhite proceeds by laying forth one of the driving factors for the Valuation Survey of Construction Companies: to discover a “rule-of-thumb formula, based on empirical data, that would enable a company owner to quickly and with some confidence determine a rough value for any company.”

This is achieved through four distinct formulas, which are referred to as Z-values. The statistically derived Z-values have the potential to enable comparisons between different companies and between multiple valuations of the same company by different practitioners. Z-values can be adjusted upward or downward, depending on specific variables, to take into account the effects of the variables as indicated by the survey results. The Z-values are one of the survey’s most useful and notable products, but can be subject to the shortcomings inherent in any formula (they may lack pertinent factors that should be considered in determining value). The remainder of the book is comprised of case studies of each of the 66 valuations analyzed in the survey, with some confidential information omitted.

Incorporated into the projections is a Fixed Asset Planning system that enables you to dispose of assets, determine the amount of purchases needed to meet future growth, and finance purchases while automatically keeping track of estimated depreciation.

Numerous valuation methods

In valuation, you are able to use 29 different methods, including methods under Asset, Income, and Market approaches. The income approach allows you to use up to six different earnings bases (EBT, FCF, etc.), as well as computing the Capitalization of Earnings and the Discounted Future Value. The software handles up to 10 years of financial statements and automatically computes business ratios and common size financial statements using the RMA format.

In preparing projections, you have the flexibility to control the growth assumptions for every line item, while the “real-time monitor” of key financial data and ratios updates you on the impact of every change.

Moneysoft issues valuation software


Corporate Valuation Professional has the authority to support a diverse range of business decisions; from selling, merging, purchasing or divesting a business, to taking a company’s shares public, establishing values as part of a divorce proceeding, and determining the need for life insurance (to merely name a few).

For each entered company, this software handles up to 10 years of financial statements and automatically computes business ratios and common size financial statements using the RMA format.

In preparing projections, you have the flexibility to control the growth assumptions for every line item, while the “real-time monitor” of key financial data and ratios updates you on the impact of every change.

Numerous valuation methods

In valuation, you are able to use 29 different methods, including methods under Asset, Income, and Market approaches. The income approach allows you to use up to six different earnings bases (EBT, FCF, etc.), as well as computing the Capitalization of Earnings and the Discounted Future Value.
ValueNomics Research, Inc., in its 2004 California Business Trial Lawyer Survey recently performed a research study of business trial lawyer’s opinions on a variety of valuation issues. The purpose of the study was to gather information to assist trial lawyers and valuation professionals with how certain issues are perceived in the market.

Method
ValueNomics mailed a detailed survey to about 2,000 randomly selected business trial lawyers out of a population of 8,000. The overall response rate was 1.5%.

Findings
The following are the study’s key findings, some somewhat surprising:

- Most important qualities of an expert were experience (1st) and track record (2nd)
- The survey found that 36% of respondents prefer a local independent valuation firm when selecting their expert
- Valuation firms were the first choice, whereas national accounting firms were the choice of only 3% of the respondents
- Past experience with the expert, and referral from a peer ranked respectively as the first and second most important principles for selecting a firm. Fees ranked least important
- The expert’s independence and objectivity are the two least important factors to respondent attorneys selecting an expert
- Only 29% believe their expert met their expectations
- 1 in 5 have experience with an expert that received zero weight for their valuation opinion
- 60% believe that accounting firms should not perform valuation services for their clients for whom they perform “any” kind of attestation functions. Attestation engagements include audit, review and compilation services

For more information, contact Gary Jones, CEO of ValueNomics Research, Inc., at (408)-257-8521 x12; email gjones@valuenomics.com; or visit www.valuenomics.com.

**SP Comment:** This shows that a lot of education still needs be done with attorneys. I was especially surprised that they ranked independence and objectivity as the two least important factors! **BVU**
Johnson joins Valuation Analysts

Linda Johnson has joined Valuation Analysts, LLC, where she will be responsible for providing valuation and consulting services to the firm’s business clients.

Johnson has over fifteen years of prior public accounting, auditing and consulting experience, and was an Associate Partner and Business Valuation Manager for Whalen & Company, CPA’s.

Valuation Analysts, LLC is a Columbus, Ohio-based firm specializing in valuation and litigation consulting services.

Linda Johnson can be contacted at ljohnson@valuation-analysts.com, or, for more information, contact Brian Russell at Valuation Analysts, 2545 Farmers Drive, Suite 370, Columbus, OH, Phone: (614) 336-1950, Fax: (614) 336-3994, E-mail: info@valuation-analysts.com.

BVU

Pfeffer joins Schultz Chaipel

Michael D. Pfeffer has joined Schultz Chaipel & Co., L.L.P.’s Fort Myers, Florida office as Senior Valuation and Litigation Support Analyst. Michael will be devoting his time equally between valuation and litigation support in such matters as marital dissolution and dissenting shareholder actions. Formerly with Clifton Gunderson, LLP, Michael has many years of experience in these areas. He can be reached at Schultz Chaipel & Co., L.L.P., 12660 World Plaza Lane, Fort Myers, FL 33907, Phone: (239) 939-5333, Fax: (239) 939-4682, E-mail: mpeffer@swflcpa.com.

BVU

SEC valuation expert job now posted online

In the June 2004 BVUPdate, we announced that the SEC’s Office of Chief Accountant, headed by Don Nicolaisen, is looking for a valuation expert to handle the ever-increasing material dealing with Fair Value financial reporting. As mentioned previously, the individual would be located in Washington, DC. Individuals interested in being considered for the appointment may now go to http://jobsearch.usajobs.opm.gov/ for an application.

BVU

CALENDAR UPDATE

2004

October 7-9
ASA Advanced BV Conference
San Antonio, Texas—Marriott River Center
(800) ASA-VALU
www.appraisers.org

October 7-9
Practice Valuation Study Group
Scottsdale, Ariz.—Hyatt Regency Scottsdale Resort at Gainey Ranch
(503) 223-4357
www.dentalsales.com

October 20-23
28th Annual ICBC Conference
Chicago, Ill.—Palmer House Hilton
(877) ICBC.org [422-2674]
www.icbc.org

November 7-9
2004 AICPA Business Valuation Conference
Orlando, Fla.—JW Marriott Grand Lakes
(888) 777-7077
www.aicpa.org

November 7-13
IBBA 40th Conference
Fort Worth, Texas—Renaissance Worthington
(888) 686-IBBA (4222)
www.ibba.org

December 13-14
The 10th M&A Advisor Conference and Expo
New York, N.Y.—New York Athletic Club
(877) 99-MERGE (996-3743)
www.maadvisor.com/conference

FORTHCOMING APPEARANCES
BY SHANNON PRATT

October 7
Advanced ASA BV Conference
San Antonio, Texas

October 21
ABA Family Law Conference
Milwaukee, Wis.

October 22
28th Annual ICBC Conference
Chicago, Ill.

October 28
AM&AA
Atlanta, Ga.

November 3-6
BV203N with John Barton & Doug Twitchell

2005

May 8 – 11, 2005
CFA's Institute (formerly AIMR)'s 2005 Annual Conference
Philadelphia, Pa.—The Westin Philadelphia Hotel
800-247-8132
www.cfainstitute.org

June 1 – 4, 2005
NACVA’s 12th Annual Valuation Conference
Philadelphia, PA – The Loews Philadelphia Hotel
800-677-2009
www.nacva.com

June 12-15, 2005
2005 IBA National Business Valuation Conference
Buena Vista, Fla.—The Contemporary Hotel
(800) 299-4130
www.go-iba.org

BVU

BV 203N CLASS CHANGES

The ASA’s BV 203N class that was originally going to be offered September 30–October 3, 2004 is now going to be offered between November 3 and 6, 2004 at the same location in Philadelphia, PA. Joining the instructors of this class - Shannon Pratt and John Barton - will be Doug Twitchell of Business Valuation Resources. Doug will answer questions regarding the use of the transaction databases available at BVMarketdata.com™. Jay Fishman will not be available to teach this class.