FMV Restricted Stock Study Not So Relevant

Date: February 7, 2012 2:21 PM
Author: Front Desk
Source: BV Insight
Permalink: http://bit.ly/zf7RQD

Valuation practitioners commonly rely upon the FMV Restricted Stock Study Database to quantify the discount for lack of marketability. The FMV Restricted Stock Study Database is a database of approximately 596 restricted stock study transactions (as of December 31, 2010). A restricted stock is a privately placed stock that is temporarily restricted from public resale pursuant to SEC Rule 144. These securities typically trade at a discount from the value of their freely traded shares. The discount is believed to provide a proxy for the compensation required by market participants for lack of marketability. Accordingly, valuation practitioners commonly utilize the FMV Restricted Stock Study Database to quantify the discount for lack of marketability in the appraisal of a closely held company. This analysis typically involves a tailored search of the database for comparable transactions using metrics that are considered to impact the observed discounts such as the restriction period, revenue, market value, profitability, and dividends (among others). Practically speaking, this form of analysis is relatively straightforward. However, from a theoretical perspective, this type of analysis is subject to several problems. These problems include:

1. The underlying companies in the FMV Database are generally unrepresentative of American business.

2. The underlying companies in the FMV Database are primarily unprofitable, non-dividend paying firms with substantial risk.

3. The most relevant transaction data for quantifying the marketability discount for a private business (i.e. the 2 year holding period restriction data) is limited and dated.

4. The majority of transactions are subject to registration rights, which increase the marketability of those transactions.

These issues are discussed further below.

Unrepresentative Companies

The first major issue with the FMV Database is that the underlying companies are generally unrepresentative of American business. For example, the table below summarizes the top 10 SIC Codes within the FMV Database.
As one can see, nearly 40% of the database is represented by 10 SIC Codes. More importantly, these SIC Codes are primarily concentrated within very risky sectors of the U.S. economy, including prepackaged

software, pharmaceutical preparation, biological products, and oil/natural gas exploration. Consequently, nearly any sample of transactions derived from this database will be heavily weighted by these risky firms. Presumably, the observed discounts will be influenced by the high level of risk affecting these sectors.
Unprofitable, Non-Dividend Paying, Risky Firms

The second issue with the FMV Database is that many of the underlying companies are unprofitable, non-dividend paying firms with substantial risk. For example, the table below summarizes the distribution of profitable and unprofitable firms (as measured by EBITDA) in the FMV Database.

As one can see, more than 55% of the companies in the database are unprofitable firms. More importantly, almost 92% (not shown above) of the transactions in the database do not pay dividends. Both empirical and theoretical research indicates that profitability and dividend yields, in particular, impact the magnitude of the marketability discount. For example, REITS, which distribute most of their income in the form of dividends, have some of the lowest discounts in the FMV Database. Moreover, theoretical models, such as Option Pricing Models and the Quantitative Marketability Discount Model, suggest that firms that distribute the majority of their income in the form of dividends should have very low, if any, discounts for lack of marketability. Therefore, relying upon a database primarily composed of non-dividend paying securities to value dividend paying firms (which represent most privately held firms) is problematic.
Small Sample of Relevant Data

A third issue with the database is that the most relevant two year holding period restriction data is limited and/or dated. The table below summarizes the allocation of transactions based upon holding period:
The table shows that approximately 41% of the database is classified in the most relevant 2 -year holding period restriction. Conversely, approximately 59% of the database is classified in the less relevant 1 year and 6 month holding periods. Therefore, the workable sample of relevant transactions is much less than the 596 transactions reported in the database. Moreover, the relevance of these 2 year holding period transactions is questioned because this data is very old (i.e. all data is prior to 1997). In particular, in order for these transactions to be relevant, the appraiser must adjust the information for items such as inflation and differences in macroeconomic conditions.

Registration Rights

Another issue with the FMV Database is that many transactions include registration rights or do not indicate whether registration rights were included as a part of the transaction. Registration rights increase the marketability of the restricted shares because they typically provide a mechanism for the shareholders to register the shares prior to termination of the holding period restrictions. Only those transactions not subject to registration rights provide the most relevant discount information to a privately held business. The table below summarizes the distribution of transactions based upon registration rights:

As one can see, only 39% of the transactions in the database are not subject to registration rights. Conversely, approximately 61% of the transactions in the database either (a) had registration rights (b) did not clearly indicate whether registration rights existed or (c) did not report the information whatsoever.

Conclusion

When we consider all of this information in aggregate it becomes clear that the FMV Database does not have a large sample of relevant data to quantify a discount for lack of marketability for the normal private business. For example, most appraisers would agree that the most relevant data for the average, profitable operating business would include only (a) profitable companies (as measured by EBITDA) (b) subject to a 2 year holding period, and (c) not subject to any form of registration rights. Based upon this criterion alone, the database of 596 transactions is quickly reduced to only 96 transactions. Careful analysis of this sample, however reveals that many firms either (a) do not pay dividends or (b) are classified in SIC codes largely unrepresentative of America business. For example, if we exclude non-dividend paying firms, REITS, and state-commercial banks, the sample of 96 transactions is reduced to only 8 transactions (two of which are negative discount transactions). Consequently, the substantial majority of transactions in the FMV Database are not comparable to the typical privately held firm. Presumably, therefore, the raw discount information obtained from this source is not very useful unless the appraiser makes adjustments for factors such as (a) risk (b) profitability (c) holding period restriction (d) dividend yield, and (e) registration rights, among other factors. Unfortunately, however, appraisers do not have solid empirical data to confidently quantify the adjustments for these factors. As a result, appraisers must make relatively subjective adjustments to the median discounts reported in these databases, even after the databases have been filtered for “comparability.” In the authors opinion, these adjustment are usually more subjective that the inputs for alternative models such as the Quantitative Marketability Discount Model or Option Pricing Models.

- Joshua B. Angell, Valuation Analyst at Moore, Ellrich & Neal, P.A.
Distributed by Viestly