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New Survey Spotlights Current Practices and Continuing Questions in Determining DLOM

An exclusive survey by the *BVWire*™ on the current methods for calculating the discount for lack of marketability (DLOM) showed an increasing sophistication among business appraisers, particularly in their understanding and appreciation for the factual, legal, and empirical underpinnings of any DLOM conclusion. The survey's record response (more than any other *BVWire* e-poll to date) demonstrates the continuing and keen interest in this "hot" topic of BV practice—a topic that will be on center at the University of San Diego School of Law's Advanced Tax and Valuation Conference October 9th.

The write-in responses also revealed some persistent confusion and need for consensus regarding terminology (marketability vs. liquidity, for instance) and application of DLOM methodologies. Given these questions and concerns, we asked Charles River Associates (www.crai.com) experts Arthur Rosenbloom (Senior Consultant, New York) and Bala Dharan, (Vice President, Boston)—who helped craft the survey questions—for their additional insights and overview in interpreting the results.

Differentiating marketability from minority risks. Before delving into the specific methodologies, the survey strongly confirmed that business appraisers separate discounts for lack of marketability and discounts for lack of control—the overwhelming response (98.8%) was to quantify each discount separately. "No one who is competent aggregates them into one discount anymore," said one participant. Another participant noted that the two discounts "are not additive and represent different considerations: level of cash flow and control vs. liquidity." Still another observed: "DLOM and DLOC must be derived separately, if at all possible."

However, one respondent commented that all shares of a private company lack marketability and only some represent a minority interest. "Thus, they are two separate issues." At the same time, the issues can overlap, because "a minority interest may be more difficult to sell and thus may increase" the illiquidity of the investment.

Still another respondent suggested that combining discounts "depends on the comparables available." In the case of a real estate holding company (FLP or LLC), for instance, one respondent noted that aggregation was appropriate given the availability of data from sources such as the Partnership Spectrum Studies. Similarly, another respondent quantifies the discounts separately for equity interests in operating concerns, but when valuing interests in investment-oriented entities such as FLPs and LLCs, "we tend to aggregate a combined discount due to the nature of the data available."

Is *Mandelbaum* the starting point? Next, the survey examined respondents' application of *Mandelbaum v. Comm'r*, T.C. Memo 1995-255 (1995). In this seminal opinion for the U.S. Tax Court, Judge David Laro expressed some frustration with all the "charts, graphs, factual data, testimony, and expert opinions" that the parties presented to prove value, including the critical marketability discount:

> We are not bound by precise appraisal formulas. As the Court has previously observed, the valuation of property is an inexact science, and,

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Executive Editor: Sherrye Henry Jr.
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> if not settled by the parties, must be resolved by the judiciary by way of 'Solomon-like' pronouncements. As typically occurs in a case of valuation, the parties primarily rely on their experts' testimony and reports to support [their] contrary positions on the valuation issue. Expert testimony sometimes aids the Court in determining valuation. Other times, it does not. (Citations omitted)

"Having found limited refuge in the opinions of either expert," the court proceeded to determine the value of the marketability discount based on the following 10 criteria:

1. Private vs. public sales of the stock
2. Financial statement analysis
3. Dividend policy
4. Nature of the company: its history, industry position, economic outlook
5. Company management
6. Amount of control in the transferred shares
7. Restrictions on transferability
8. Holding period for the stock
9. Company's redemption policy
10. Costs associated with a public offering

These criteria have since become known as the Mandelbaum factors, and for many appraisers, the case now serves as the starting point for any DLOM analysis. In fact, the vast majority of survey respondents (83.3%) said that they "routinely" considered the 10 factors in determining DLOM. Many are wary of citing the case itself, however, presumably for fear of crossing the line into legal practice. "I prefer not to cite or rely on a specific case as the source of valuation," said one. Similarly: "We don't discuss and list them as 'Mandelbaum' factors, [since] these factors are simply a reflection of sound valuation process."

Another said, "I don't consider the Mandelbaum factors specifically," but include them in the overall valuation analysis. Others objected to applying the factors in a "linear" or "cookbook, check-the-box" fashion. "I consider all relevant facts and circumstances in determining a discount," said one. "Some are included in Mandelbaum, many are not."

"The Mandelbaum factors are considered throughout the report, in the development of expected cash flows and discount rate. The [factors] are not specific to the DLOM," one commentator cautioned. "Adjusting the DLOM for many of the Mandelbaum factors would be double counting."

CRA experts weigh in. "On the other hand," say Rosenbloom and Dharan, "not all of the Mandelbaum factors are relevant for cash flow forecasts or for cost of capital, so these factors will still need to be considered for DLOM estimation." Moreover, although application of the Tax Court case is not yet standard practice among all survey respondents (and, as a Memorandum Decision, is not binding on other Tax Court judges or federal jurisdictions), "the written comments show that even the ones who don't explicitly consider the Mandelbaum factors do so implicitly in many instances."

The most frequently applied factors. When asked which of the 10 Mandelbaum factors respondents most often employ, the vast majority (98.6%) looked to the restrictions on transferability, followed by dividend policy (87.3%), amount of control in the transferred shares (81.7%), the nature of the company (78.9%) and its redemption policy (77.5%), and the holding period for the stock (74.6%). More than two-thirds (69%) review the company's management, and slightly more than half (56.3%) consider private versus public sales of the stock. Less than half (40.8%) look at the costs associated with a public offering.

Although it's not surprising that most respondents consider transfer restrictions first among the factors, the second highest—dividend policy—was unexpected. Presumably, dividends are a relevant source of liquidity, say Rosenbloom and Dharan. However, "The strong emphasis on dividend policy raises interesting questions about the estimation of DLOM for ownership interests in pass-through entities such as REITs," which frequently pass-through dividends equal to 95% or more of earnings.

The costs associated with a public offering is the least-reviewed factor, "presumably because the cost of floatation studies, much favored by the IRS, have not always fared well under judicial scrutiny," say the CRA experts. "However, these costs are sometimes cited by restricted stock studies as a factor supporting the existing of a DLOM." Note also that in the survey's next set of questions, the restricted stock studies emerged as the primary source for DLOM determinations.

Finding a method amidst DLOM madness. The survey identified the following four commonly accepted and applied methodologies for calculating marketability discounts:

1. *Restricted stock studies*: Comparing the price of restricted shares in a public company versus their unrestricted counterparts; e.g., *The FMV Restricted Stock Study™*, Management Planning, Inc. Study, and Liquistat Database study.

2. *IPO studies*: Comparing the price of a share before and after an Initial Public Offering (IPO); e.g., the Robert W. Baird studies, Willamette Management Associates studies, and *Valuation Advisors' Lack of Marketability Discount Study*.

3. *Discounted cash flows models*: e.g., the Quantitative Marketability Discount Model (QMDM) and the Tabak model.

4. *Options valuation models*: Valuing the restriction on marketability using an options valuation or risk management framework (e.g., the Chaffe, Longstaff, LEAP, Finnerty, and NICE models).

In addition, there's a Bajaj-type analysis, which follows Dr. Mukesh Bajaj's study of restricted stock transactions in "Firm Value and Marketability Discounts" (as discussed in *Estate of McCord v. Comm'r*, 2003 U.S. Tax Ct. LEXIS 16). However, the Bajaj analysis does not seem to have gained much traction among the judiciary or legal and appraisal communities. (Indeed, no respondent mentioned this method, despite the survey's offer of a fifth, "other" category for write-in responses.)

Nearly 90% of survey respondents use restricted stock studies to calculate a marketability discount in their standard practice, and just over half (56%) apply IPO studies. "These are very high percentages, and show the enduring popularity of these two 'traditional' methods'," say Rosenbloom and Dharan, especially when compared to the more "recent" methods. In particular, less than a fifth of survey respondents said they use the DCF (19%) and options pricings methods (16.7%). However, Rosenbloom and Dharan also note that although relatively few survey participants ticked off the options valuation method, at least three cited LEAPS or Black Sholes in the "other" category.

An area still rife with questions. The final survey question asked respondents to describe the facts and circumstances that might lead them to select one DLOM method over another. This provoked over 40 responses, most of them interesting and several quite strong. The following responses were included:

- "Why not use the most reliable [sources] and reconcile the results, rather than choose one over the others?"
- "You have to consider all of [the methods] and see the resulting range of discounts before deciding the answer."
- "We use studies of minority interests (restricted stock and IPO) when valuing minority shares, and studies of whole company sales (Koeplin, Sarin, and Shapiro) when valuing 100% ownership interests."
- "In our report we discuss all of the above and sometimes others. This provides a range of value and then we discuss what we think is an appropriate discount given all the facts of the subject company."
- "Use of the restricted stock studies seems…to be like trying to fit a square peg into a round hole. Use of the IPO studies seems…to be equating the shares of a small private company, with no intention or ability to ever go public, with companies that have a much different outlook," including more sophisticated management.
- "IPO Studies generally provide large discounts that are not supported by the intuitive factors related to the valued company. QMDM and [options] models are not supported by the general BV community."
- "For operating companies with distributions," however, "QMDM comes into play."
- "We generally place the most weight on restricted stock studies, and then use QMDM as a verification model to support the magnitude of the percentage."
- "IPO studies have been discredited and QMDM has not been accepted by courts."
- "I'm still not sold on the validity of QMDM."
- "Too much noise in the IPO studies. QMDM too mechanical. Option models pretty new but under consideration."

"By the way, an options model assumes that there is actually a counterparty who would take the risk of a non-publicly traded security," observed one respondent. "Nowhere in the literature or in our firm's experience can I find any reference to or evidence of such market participants. Perhaps the advocates of the various options models can explain, [but] I don't believe they can, and therefore I [consider] all options models invalid for DLOM calculations unless massive adjustments are incorporated into such models. I have never seen any such adjustments…that were supportable."

Finally, "The appraisal industry is rife with the misuse of statistical analysis," said one particular passionate commentator. "First, there are no valid statistics to rely on for unregistered securities." The two common databases, BizComps and Pratt's Stats, contain as much variability within as there are companies without. "There is simply no data-based way to compute a defensible discount when there are not active markets, no market data, and almost no transaction taking place between unrelated parties."

As a result, this respondent uses "a heuristic methodology to derive an appraiser's PROBABLE fair market value should a [private, non-marketable] security ever be sold. In lieu thereof, we attempt to develop a believable opinion as to where the value would lie. We look at the Mandelbaum factors, and others, and estimate the impact of each to the whole. We know that [the subject interests] are not worth zero, and the maximum value would be fair value with no discount. With heuristics we attempt to develop a believable opinion as to where the value would lie within these limits. It takes experience, not sophomoric statistical analysis of non statistics, to make this judgment."

But this begs the question of how to defend such an approach against a *Daubert* challenge, say Rosenbloom and Dharan. Indeed, as the survey illustrates, many of the more common methodologies for determining marketability discounts are still under heightened scrutiny by valuation analysts, attorneys, and the courts. Questions, comments, and concerns will continue to highlight the issue and hopefully lead to clarity, if not some gathering consensus among practitioners.