Discount for Lack of Marketability
Job Aid for IRS Valuation Professionals
DISCLAIMER

All rights reserved. No part of this work covered by the copyrights herein may be reproduced or copied in any form or by any means—graphically, electronically, or mechanically, including photocopying, audio/video recording, or information storage and retrieval of any kind—without the express written permission of the Consultants’ Training Institute™ (CTI™), the National Association of Certified Valuators and Analysts™ (NACVA™), the Institute of Business Appraisers™ (IBA™), and the presenter.

The information contained in this presentation is only intended for general purposes.

It is designed to provide authoritative and accurate information about the subject covered. It is sold with the understanding that the copyright holder is not engaged in rendering legal, accounting, or other professional service or advice. If legal or other expert advice is required, the services of an appropriate professional person should be sought.

The material may not be applicable or suitable for the reader’s specific needs or circumstances. Readers/viewers may not use this information as a substitute for consultation with qualified professionals in the subject matter presented here.

Although information contained in this publication has been carefully compiled from sources believed to be reliable, the accuracy of the information is not guaranteed. It is neither intended nor should it be construed as either legal, accounting, and/or tax advice, nor as an opinion provided by the Consultants’ Training Institute (CTI), the National Association of Certified Valuators and Analysts (NACVA), the Institute of Business Appraisers (IBA), the presenter, or the presenter’s firm.

The authors specifically disclaim any personal liability, loss, or risk incurred as a consequence of the use, either directly or indirectly, of any information or advice given in these materials. The instructor’s opinion may not reflect those of the CTI, NACVA, IBA, their policies, other instructors, or materials.

Each occurrence and the facts of each occurrence are different. Changes in facts and/or policy terms may result in conclusions different than those stated herein. It is not intended to reflect the opinions or positions of the authors and instructors in relation to any specific case, but, rather, to be illustrative for educational purposes. The user is cautioned that this course is not all inclusive.

© 2016 National Association of Certified Valuators and Analysts (NACVA). All rights reserved. • 5217 South State Street, Suite 400, SLC, UT, 84107.

The Consultants’ Training Institute (CTI) is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors. State boards of accountancy have final authority on the acceptance of individual courses for CPE credit. Complaints regarding registered sponsors may be submitted through its web site: learningmarket.org.
Discount for Lack of Marketability: Job Aid for IRS Valuation Professionals

Robert J. Grossman, CPA/ABV, CVA, ASA, MST, CBA
Melissa Bizyak, CPA/ABV, CVA, ASA, MST, CBA
Overview of the Job Aid

- Dated September 25, 2009
- Released to the public July 2011
What Is the Job Aid?

- A toolkit for IRS Valuation Analysts to use when considering Discounts for Lack of Marketability
Who Crafted the Job Aid?

- **IRS Engineering/Valuation Program DLOM Team**
  - **Mike Gregory, ASA, AVA**
    - Engineering Territory Manager
    - Issue Champion
  - **Sue Kurzweil, CPA, ASA**
    - National Business Valuation Issue Coordinator
    - Project Manager
  - **Jeff Myers, ASA, AVA**
    - Engineering Team Manager
    - Team Member
  - **Laura Goldberg, AVA**
    - Engineer
    - Team Member
  - **Ernie DeRosa, AVA**
    - Financial Analyst
    - Team Member
  - **James McCann, ASA**
    - Financial Analyst
    - Team Member
  - **Aberdeen Sabo**
    - Estate Tax Attorney
    - Advisor
Disclaimer

- Section E, *Evaluation and Recommendations*, should always be read in conjunction with Section D, *Summary of Approaches to DLOM*

- While certain of the studies reviewed may indicate larger discounts, such discounts are not appropriate in all facts in circumstances
Disclaimer

Valuation Analyst must:

• Have clear understanding of the facts and circumstances of each interest to be valued

• Use professional judgment in choosing DLOM

• Apply a reasonableness test

• Get behind the data rather than using summary statistics
Structure of the Job Aid

7 Sections

- Executive Summary
- Introduction
- General Marketability Discount Information
- Summary of Approaches to DLOM
- Evaluation and Recommendations
- Summary and Conclusions
- Bibliography
Purpose of the Job Aid

- “…to provide a background and context for the Discount for Lack of Marketability as such is commonly applied in business valuation analyses and reports.”

- Not a “cookbook” approach to evaluating Discount for Lack of Marketability

- “…the establishment of a Discount for Lack of Marketability is a factually intensive endeavor that is heavily dependent upon the experience and capability of the valuator.”
Steps to the Project

- Defined DLOM
- Differentiated DLOM from DLOL and DLOC
- Reviewed long-standing methodologies
- Explored recent models in professional journals
- Discussed methods’ pros and cons/strengths and weaknesses
- Looked for elements of reconciliation between models
- Developed pro forma IDR\s and audit techniques
GENERAL MARKETABILITY DISCOUNT INFORMATION
Introduction

- Purpose – to assist the IRS valuation analysts in their “examination of” and the “independent determination of” DLOM
Marketability vs. Liquidity

Marketability: “...the ability to convert property to cash at minimal cost...with a high degree of certainty of realizing the anticipated amount of proceeds.”

- “The fact of Salability”

Liquidity: “The ability to quickly convert property to cash or pay a liability.”

- “How fast the sale can occur at the current price”

---

General DLOM Info

- A primary concern during this price reduction [DLOM] is that, over the uncertain time frame required to complete the sale, the final sale price becomes less certain, and with it, a decline in value is quite possible.
General DLOM Info

Propriety of DLOM

• DLOM is appropriate when the subject interest is non-marketable, yet the prior steps in the valuation process result in a marketable value

• DLOM is not appropriate if the prior valuation process has already taken marketability concerns into consideration
General DLOM Info

Propriety of DLOM

- DLOM is applied after the minority interest discount or control premium where such is appropriate to a valuation problem

- DLOM should be determined on its own factors and not combined with other discounts
General DLOM Info

Three Clarifying Examples

- If an asset is liquid, it is marketable
- If it is non-marketable, it is illiquid
- Being illiquid does not necessarily equate to being non-marketable – the asset may still be sellable, but not quickly or without loss of value
Factors Influencing Marketability

- **Subject Company Factors** (Modeled after Mandelbaum)
  - Value of subject corporation’s privately-traded securities vs. its publicly-traded securities (or if the subject corporation does not have stock that is traded both publicly and privately, the cost of a similar corporation’s public and private stock)
  - Dividend-paying (or distribution) ability and history
  - Dividend yield
Factors Influencing Marketability

- **Subject Company Factors**
  (Modeled after Mandelbaum)
  
  - Attractiveness of subject business
  - Attractiveness of subject industry
  - Prospects for a sale or public offering of the company
  - Number of identifiable buyers
  - Attributes of controlling shareholder, if any
Factors Influencing Marketability

- Subject **Company** Factors
  (Modeled after *Mandelbaum*)

  - Availability of access to information or reliability of that information
  - Management
  - Earnings levels
  - Revenue levels
Factors Influencing Marketability

- **Subject Company Factors**
  (Modeled after *Mandelbaum*)

  - Book-to-market-value ratios
  - Information requirements
  - Ownership concentration effects
  - Financial condition
Factors Influencing Marketability

Subject Company Factors
(Modeled after Mandelbaum)

• Percent of shares held by insiders
• Percent of shares held by institutions
• Percent of independent directors
• Listing on a major exchange
• Active vs. passive investors
Factors Influencing Marketability

- **Subject Company Factors**
  (Modeled after Mandelbaum)

  - Registration costs
  - Availability of hedging opportunities
  - Market capitalization rank
  - Business risk

Factors Influencing Marketability

- **Subject Interest Factors**
  - Restrictive transfer provisions
  - Length of restriction period
  - Length of expected holding period
  - Offering size as percent of total shares outstanding
Factors Influencing Marketability

- **Subject Interest Factors**
  - Registered vs. unregistered
  - General economic condition
  - Prevailing stock market conditions
  - Volatility of stock

Mandelbaum v. Commissioner

- Decision authored by U.S. Tax Court Judge David Laro

- Seemingly combined elements of risk commonly considered within the constraint of building a discount rate, along with other parts of the valuation, with those required to be considered in developing DLOM

- Nothing in the Job Aid addresses how to avoid the double-counting of investment risk in different parts of the business valuation process
Mandelbaum v. Commissioner

- Judge Laro’s finding was that little consideration was given to the hypothetical “willing seller” in the definition of fair market value under Revenue Ruling 59-60 in determining DLOM.

- Although the willing seller must be considered, the focus on the willing seller should not be of detriment of the willing buyer as a way to attack the DLOM.
Minority v. Controlling Interest

- “…it is generally agreed the DLOM of a controlling interest is less than that for a minority interest.”

- Job Aid does not elaborate on any measurable means to compare controlling-interest vs. minority-interest DLOM

- “General DLOM Information” section includes a “Sample Initial Information Document Request” listing 17 specific items to be requested before a reviewer begins an examination
SUMMARY OF APPROACHES TO DLOM
4 Categories of Approaches

- Benchmark study approaches
- Security-based approaches
- Analytical approaches
- Other approaches
Job Aid Provides

- Background/summary of each approach
- Areas of focus by the IRS
- Strengths and weaknesses of each approach
- Court opinions regarding each approach
# Benchmark Study Approaches

<table>
<thead>
<tr>
<th>Approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Court Opinion</th>
</tr>
</thead>
</table>
| **Restricted Stock Studies** | • Stock is identical to freely traded counter-part, except for duration of resale restriction  
• One of few areas where concentrated research produced actual numerical values  
• Historically accepted by Tax Court                                                                 | • Rely on historical market data – may not reflect current market conditions  
• Change in holding period for restricted stocks  
• Reliance on averages of restricted stock studies                                                                 | • Court has rejected using average results in favor of detailed comparisons |

Discount for Lack of Marketability: Job Aid for IRS Valuation Professionals
© 2016 National Association of Certified Valuators and Analysts™ (NACVA®). All rights reserved.
## Benchmark Study Approaches

<table>
<thead>
<tr>
<th>Approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Court Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-IPO Studies</td>
<td>• Empirical evidence, market data</td>
<td>• Often too much time elapses between pre-IPO transaction and public offering</td>
<td>• Rejected by court in <em>McCord</em> case</td>
</tr>
<tr>
<td></td>
<td>• Broad time coverage</td>
<td>• Pre-IPO companies evolve rapidly</td>
<td>• Dr. Mukesh Bajaj as leading government expert</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Data includes only companies with successful IPOs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tend to be underpriced</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Usually involve related-party transactions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Frequently inflate DLOM</td>
<td></td>
</tr>
</tbody>
</table>
## Benchmark Study Approaches

<table>
<thead>
<tr>
<th>Approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Court Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMV Opinions Study</td>
<td>• Two-step approach</td>
<td>• FMV has not shown that block size is a reliable proxy for quantifying DLOM</td>
<td>• Court is in favor of using more detailed analysis of transactions instead of using average results</td>
</tr>
<tr>
<td></td>
<td>• 475 transactions (now 597)</td>
<td>• Steps in FMV analysis are interrelated and corrupted by each other</td>
<td>• Many critiques of the study in Job Aid (not necessarily from courts)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Discounts in FMV database are discounts on particular offerings</td>
<td></td>
</tr>
</tbody>
</table>
## Benchmark Study Approaches

<table>
<thead>
<tr>
<th>Approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Court Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Stock Equivalent Analysis</td>
<td>• Accounts for additional discount applicable to private companies having less marketability than restricted stock of public companies</td>
<td>• New approach, has not had significant exposure in courts</td>
<td>• Has not been vetted yet by court</td>
</tr>
</tbody>
</table>
## Benchmark Study Approaches

<table>
<thead>
<tr>
<th>Approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Court Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandelbaum Factors</td>
<td>• Raises importance of skilled application of benchmark studies</td>
<td>• Difficult to obtain sufficient information to analyze and opine on all factors</td>
<td>• Helpful guide to determining the DLOM</td>
</tr>
</tbody>
</table>
## Security-Based Approaches (Option Pricing Models)

<table>
<thead>
<tr>
<th>Approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Court Opinion</th>
</tr>
</thead>
</table>
| Long-term Equity Anticipation Securities (LEAPS) | • Twice the number of transactions as the restricted stock studies  
• LEAPS can be found that are valuation-date specific  
• Data can be segmented by industry | • Owner of privately held company can’t hedge investment (LEAPS considered put option)  
• Appraiser would have to adjust LEAPS-based discount for private company considerations | • Have not been vetted yet by court |
# Security-Based Approaches (Option Pricing Models)

<table>
<thead>
<tr>
<th>Approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Court Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longstaff Study</td>
<td>• Can be easily implemented in Excel</td>
<td>• Assumes investor has perfect market timing</td>
<td>• Has not been vetted yet by court</td>
</tr>
<tr>
<td></td>
<td>• Provides benchmark maximum estimate on DLOM</td>
<td>• Assumes investor has trading restrictions that prevent security from being sold at optimal time</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Produces estimate of upper boundary for DLOM</td>
<td></td>
</tr>
</tbody>
</table>
Security-Based Approaches (Option Pricing Models)

<table>
<thead>
<tr>
<th>Approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Court Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaffe Study</td>
<td>• Easily implemented into Excel</td>
<td>• Considered a minimum DLOM</td>
<td>• Has not been vetted yet by court</td>
</tr>
<tr>
<td></td>
<td>• Based on European put option Black-Scholes Formula</td>
<td>• Owner of privately held company stock does not have opportunity to hedge investment</td>
<td></td>
</tr>
</tbody>
</table>
## Analytical Approaches

<table>
<thead>
<tr>
<th>Approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Court Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wruck Analysis</td>
<td>• Has a clearly defined hypothesis</td>
<td>• Data selection based on data availability rather than logical selection methods</td>
<td>• Has not been vetted by the court</td>
</tr>
<tr>
<td></td>
<td>• Isolates DLOM from other factors</td>
<td>• Measure point is day after announcement date-inflates discount amounts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Analysis logically supports DLOM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

© 2016 National Association of Certified Valuators and Analysts™ (NACVA®). All rights reserved.
## Analytical Approaches

<table>
<thead>
<tr>
<th>Approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Court Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hertzel &amp; Smith Study</td>
<td>• More complete in analysis than Wruck&lt;br&gt;• Determines seven variables affecting discounts&lt;br&gt;• Primarily made up of smaller companies</td>
<td>• Poor sample selection&lt;br&gt;• Inability to determine registration status of many companies&lt;br&gt;• Measurement date 10 days after announcement</td>
<td>• Courts have not opined on this study</td>
</tr>
</tbody>
</table>
## Analytical Approaches

<table>
<thead>
<tr>
<th>Approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Court Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bajaj, Denis, Ferris &amp; Sarin Study</td>
<td>• Concentrates primarily on companies traded over-the-counter</td>
<td>• Low coefficient of determination generated by regression model</td>
<td>• No court has accepted Bajaj’s 7.23% estimate as proper DLOM at face value</td>
</tr>
<tr>
<td></td>
<td>• Five discount parameters</td>
<td>• Data errors in sample</td>
<td>• Court has used Bajaj’s data to select DLOM based on summary results, arriving at 20%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Bajaj himself has been inconsistent in application of approach</td>
<td></td>
</tr>
</tbody>
</table>
## Other Approaches

<table>
<thead>
<tr>
<th>Approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Court Opinion</th>
</tr>
</thead>
</table>
| Quantitative Marketability Discount Model (QMDM) | • Quantitative basis  
• Uses specific factors to conclude a DLOM from matrix | • Arbitrary/subjective estimation of factors  
• Matrix increases number of “opinions” | • QMDM has been criticized in court but not rejected |
# Other Approaches

<table>
<thead>
<tr>
<th>Approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Court Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partnership Profiles</td>
<td>• Provide single combined discount (DLOC &amp; DLOM)</td>
<td>• RELPs not representative or comparable to subject interests being valued</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Includes descriptive factors to help identify comparables</td>
<td>• Inconsistent FMV standard</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Shrinking pool of RELPs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• NAV attributed to RELP re-sales might have been management estimates</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Limited value to entities with substantial real property assets</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Referenced in a variety of court cases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sometimes questioned due to elements of both DLOC and DLOM inherent in study</td>
<td></td>
</tr>
</tbody>
</table>
Discount for Lack of Marketability: Job Aid for IRS Valuation Professionals

EVALUATION AND RECOMMENDATIONS
Evaluation & Recommendations

Reviewer

• The Job Aid instructs the reviewer to consider the taxpayer’s or appraiser’s arguments for the approach or approaches chosen and for the numerical result decided upon.

□ Preparation and submission of a full valuation report prepared in accordance with professional standards is the best position for a taxpayer to overcome an IRS challenge.
Evaluation & Recommendations

Reviewer

- DLOM is a question of fact. Therefore, the burden of proof falls upon the taxpayer.

- Taxpayers have an opportunity to provide additional explanatory information to defend their discounts in the event of a challenge.
Reviewer determining own DLOM

- Reviewer should ask “under the prevailing facts and circumstances and considering the nature of the interest to be valued, why is the DLOM not zero?”

- By enumerating the factors that would lead to a conclusion that a DLOM is appropriate, the reviewer will be building a framework to substantiate the DLOM’s reasonableness.
Evaluation & Recommendations

- Dealing with marketability discounts in a report review under certain specific situations (5 addressed)
  - Use of pre-IPO studies to support DLOM
  - Use of simple average or median from restricted stock studies
  - Use of analytical study results without getting behind the data
  - Use study results not supported by market data
  - Reliance solely on court decisions
Evaluation & Recommendations

- Dealing with marketability discounts in a report review under certain specific situations (5 addressed)
  - Valuators will avoid these five situations if adhering to valuation professional standards
“Prepackaged” and “canned” responses to IRS DLOM positions:

• Valuation practitioners should make their own determinations and assessments

• Preconceived conclusions by the reviewer challenges the idea of open discussion for issue resolution
Evaluation & Recommendations

- **Sources Available to Valuation Analysts**
  
  - FMV Restricted Stock Study database
    www.fmv.com/index.php?C=Restricted_Stock_Study
  
  - Valuation Advisors Pre-IPO databases
    www.bvmarketdata.com
Evaluation & Recommendations

Sources Available to Valuation Analysts

- Criticisms of FMV database by Job Aid
  - FMV’s model is flawed, insofar as the explanation of the DLOMs on the restricted stock transactions in their database
  - Valuators cannot confidently rely on FMV’s model when determining DLOMs on restricted stocks, much less on interests in private equity
  - Neither FMV’s model nor multivariate regression analysis can be applied to FMV’s database to confidently determine the DLOM on private equity