Business Valuation Theory: A Practical Perspective

Idaho Society of CPAs
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Learning Objectives:

- Need for and hidden benefits of a valuation
- Three approaches to valuation (by way of a detailed example)
- Discounts
- Valuations during the “Great Recession of 2009”
- Common errors in business valuation
- Business valuation controversies
- Buy-Sell DISagreements
- Appraiser penalties
- Question and Answer session
Why Value a Business? (Top 10)

- 10 - Marital dissolution
- 9 - Business disputes (Shareholder buyout)
- 8 - Estate tax filing
- 7 - Estate planning
- 6 - Estate gift tax filing
Why Value your Business? (Top 10)

- 5 – Employee stock ownership plan (ESOP) and Employee stock options
- 4 - Buy-Sell Agreement
- 3 – Purchase or sale of business (Fairness opinion)
- 2 - Financing
Why Value a Business? (Top 10)

- First Nine: All required – Event driven
- Last reason: Not required. But, benefits can be profound.
  - To gain insights on how to increase company value.
What is Involved in a Business Valuation?

- Business background/history
- Economic outlook
- Industry/competition outlook
- Nature of the business:
  - Management
  - Products/services
  - Operations
  - Marketing/distribution
What is Involved in a Business Valuation? (continued)

- Financial analysis
  - Trends and Ratios
    - Comparison within the company over time
    - Comparison across the industry
  - Expectations for the future:
    - Earnings/dividend paying capacity
What is Value?

- The present worth of future benefits.
- A matter of opinion – judgment is involved.
- Buyer rarely buys what the seller thinks he is selling.
- In actuality, buyers want only one thing – future cash flow.

“Our employees are our greatest asset. I say we sell them.”
Business Owners Should be Asking:

- 1 – Cash flow: How do I increase cash flow?
- 2 – Risk: How do I mitigate risk to that cash flow?
- 3 – Growth: How do I increase the company’s growth rate?
Basic Valuation Model

- Value = ___Cash Flow___
  (Risk – growth)

- However, an action that increases cash flow and growth may also increase risk.
How is Value Determined?

- Three General Approaches:
  - Market approach
    - Merger and acquisition method
    - Guideline publicly traded company method
  - Income approach
    - Discounted cash flow (DCF) method
    - Income capitalization method
  - Asset approach
    - Asset accumulation method (Adjusted book value)
- Practical example
Minority Interest Discount

- Discounts for Lack of Control (DLOC)
  - BVR/Mergerstat CPS

- Issues
  - FMV v. Investment/strategic value
  - Negative premiums
  - Poorly performing companies v. efficient/effectively run companies
  - Swing vote considerations
  - Are publicly-traded stock shares really minority interest positions?
    - Why don’t more takeovers occur?
    - Under the GPTCM, do we add a control premium?
  - Did you also make controlling interest cash flow adjustments
Marketability Discount

- Discount for lack of marketability (DLOM)
  - Restricted stock studies
    - Timeline issues
  - Pre-IPO studies
    - Investor perspectives
    - Likelihood of liquidity event
  - Mandelbaum factors
- Quantifying Marketability Discount Model (QMDM)
  - Sensitivities
- Other methods
  - Option analyses and/or LEAPS
    - Gaining some recent traction
Marketability Discount: Mandelbaum Factors

- Financial statement analysis
- Dividend policy
- Amount of voting control
- Restrictions
- Holding period
- Put rights
- Presence of potential buyers
- Size of block
- Prospect of IPO or outright sale
- Information access and reliability
Marketability Discount: QMDM

- Expected holding period
- Projected interim cash flows (dividend yield)
- Growth in value until liquidity event
- Premium or discount upon exit
- Discount rate
The “Great Recession” of 2008 - 2009

- Income approach - Cost of Capital:
  - What risk-free rate should be used?
  - What equity risk premium (ERP) is appropriate?
  - What is the appropriate D/E ratio to be used in a world that is de-leveraging?
  - What is the hypothetical credit rating and interest rate for the assumed debt that willing buyers would be willing to obtain?
  - Book value of debt v. market value of debt
The “Great Recession” of 2008 - 2009

- Market approach
  - Not many transactions during “Great Recession”
    - What are the appropriate multiples?
A Hodgepodge of Potential Errors/Issues

General items:
- Hypothetical buyer AND seller
- Advocacy
- 1+1= 3
- Incorrect standard of value
- Incorrect level of value
- Overly dependent upon “Rules of Thumb”
A Hodgepodge of Potential Errors/Issues (continued)

General items:
- Failure to consider non-recurring, unusual events (losses, gains)
- Failure to consider certain assets
  - Excess assets
  - Non-operating assets
  - Work-in-progress
- Consider subsequent events?
  - Damages v. Lost Profits
A Hodgepodge of Potential Errors/Issues (continued)

Income Approach:

- Mismatch discount rate with projections
- Capitalization rate v. discount rate
- Growth rate: Local hardware store overtaking Home Depot
A Hodgepodge of Potential Errors/Issues (continued)

Guideline publicly-traded company:

- Poor guidelines
- Failure to make adjustments to guidelines
- Mismatched time periods
- Just use the mean or median multiple with no analysis
Business Valuation Controversies

- S-corporation/LLC/Partnership valuations
  - Tax-affect earnings v. No tax-affect earnings
- Capital gains tax
  - Today v. Expected trading in future
- How good must the guidelines be?
  - Joyce C. Hall v. Commissioner
  - Greeting cards v. Beer, hamburgers, cosmetics, computers, etc.
- Personal v. professional goodwill
  - Stewart v. Stewart
Business Valuation Controversies

Discount rates

- Betas
  - OLS v. sum beta v. Adjusted beta
- Equity risk premium
  - Historical v. supply-side v. forward-looking
- Size premium
  - Duff & Phelps v. Ibbotson v. Neither
Business Valuation Controversies

Discount rates

- Company-specific risk
  - Subjective factor models v. BPM/BPC
    - No data v. empirical data
## Butler Pinkerton Calculator Screenshot

Risk Free Rate: 3.70%
Equity Risk Premium: 6.30%
Effective Date: 4/22/2009 (157 weeks)

<table>
<thead>
<tr>
<th>Ticker</th>
<th>FCN</th>
<th>HURN</th>
<th>CRAI</th>
<th>XPRT</th>
<th>NCI</th>
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</thead>
<tbody>
<tr>
<td>Size Premium</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
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<tr>
<td>Weekly Standard Deviation</td>
<td>5.75%</td>
<td>6.34%</td>
<td>5.59%</td>
<td>9.06%</td>
<td>6.82%</td>
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<tr>
<td>Levered Beta</td>
<td>0.43</td>
<td>0.81</td>
<td>0.49</td>
<td>1.39</td>
<td>0.90</td>
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<tr>
<td>Correlation Coefficient (R)</td>
<td>0.22</td>
<td>0.38</td>
<td>0.26</td>
<td>0.45</td>
<td>0.39</td>
</tr>
<tr>
<td>Total Beta</td>
<td>1.95</td>
<td>2.15</td>
<td>1.90</td>
<td>3.07</td>
<td>2.31</td>
</tr>
<tr>
<td>Total Cost of Equity</td>
<td>15.98%</td>
<td>17.24%</td>
<td>15.64%</td>
<td>23.06%</td>
<td>18.26%</td>
</tr>
<tr>
<td>Company Specific Risk Premium</td>
<td>9.57%</td>
<td>8.41%</td>
<td>8.85%</td>
<td>10.59%</td>
<td>8.92%</td>
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</tbody>
</table>
BV Controversies: The BUM is Problematic

- Double counting size risk and industry risk?
  - Both based on actual returns compared to expected returns based on beta
- Size risk and CSR risk are next to impossible to separate
  - Is a company *risky* because it is *small* or is it *small* because it is *risky*?
  - Yes and Yes!
- Is there a liquidity premium in the size premium?
  - Highly likely
- Is there a liquidity premium in the industry risk premium?
  - Likely
- Industry risk premium may include questionable guidelines
- After you get through the gauntlet above; You still have to completely guess at the CSRP!
Buy-Sell Agreements: Potential Revenue Enhancement

- Fixed price agreements
- Formula agreements
- Process agreements
  - Single appraiser (recommended) v. Multiple appraisers
  - Value now (recommended) v. Value at trigger event
Buy-Sell DISagreement

- The sole instructions to the appraisers rendering any valuation shall be as follows:
  - a) **Primary** reliance shall be on the income approach.
  - b) The income approach, to the extent used, shall give major consideration to normal current net operating income capitalized using a level perpetuity formula at the prime (base) rate on corporate loans at large U.S. money center commercial banks as published in the western edition of the Wall Street Journal most recently preceding the date of withdrawal.
  - c) No discount or premium shall be made based on the fact that the Withdrawing Member’s interest in the Company may be minority or majority interest.
Problems: Subjective and Out-of-Date

- What does “primary reliance” mean?
- What does “major consideration” mean?
- What does “normal” current net operating income mean?
- Prime rate in 1996 (when written) = 8.50%
- Prime rate in Nov 2009 = 3.25%
  - Is the formula out of date?
- Why are we valuing a risky income stream at a risk-free rate?
- Can we take a marketability discount?
Required Elements (From Appraisal Perspective):

- Standard of value
- Level of value
- The "as of" date
- Qualifications of appraiser
- Appraisal standards
- Funding mechanism
Life Insurance Dilemma

- Business with 2 Owners (50% each)
- Buy-Sell states the company will buy the stock of either @ FMV in event of death
- Company pays the premiums for term life policy on each with $6 million face.
Life Insurance Dilemma (continued)

- Appraiser (properly) adds back insurance premium for deceased owner as non-recurring expense
- Appraisal indicates FMV of $10 million for ongoing operations on date of death
- But who owns the policy?
## Example (continued)

Proceeds Not a Company Asset

<table>
<thead>
<tr>
<th></th>
<th>Company</th>
<th>Jim (Deceased)</th>
<th>Jeff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Death Value of Operations</td>
<td>$10,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of Stock</td>
<td>$10,000,000</td>
<td>$5,000,000</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>Life Insurance Proceeds</td>
<td>$6,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repurchase Liability</td>
<td>-$5,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Life Insurance Value</td>
<td>$11,000,000</td>
<td>$0</td>
<td>$11,000,000</td>
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## Example (continued)

Proceeds Are a Company Asset

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<table>
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<tr>
<th>Comparison of Outcomes</th>
<th>Amount of Payment to Jim's Estate</th>
<th>Value of Company to Jeff</th>
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Recommendations:

- Get the Buy-Sell Agreement
  - Read it
  - Review it with client, other shareholders and advisors
  - Make recommendations if problematic
  - Better now than in litigation later
- Appraisers can be very helpful in the initial draft of the agreement
IRC Section 6662: Client Penalties

- Client penalties for undervaluation on estate and gift tax returns:
  - Opinion/Final: Penalty/tax due:
    - > 65% 0%
    - >40%<65% (Substantial) 20%
    - <40% (Gross) 40%
2006 Pension Protection Act: Appraiser Penalties

- Penalty will cost you the lesser of:
  - The greater of 10% of the underpayment, or
  - 125% of the gross income received by the appraiser

- May incur sanctions under Treasury Department Circular No. 230
  - Censure
  - Suspension
  - Disbarment from practice before IRS
Questions and Answers