Business Valuation Theory: A Practical Perspective

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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."

AHAJOKES.COM

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

- $$\text{Value} = \frac{\text{Cash Flow}}{(\text{Risk} - \text{growth})}$$

- 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

back | new calculation | download | email

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

Ticker	FCN	HURN	CRAI	XPRT	NCI
Company Name	FTI Consulting, Inc.	Huron Consulting Group Inc.	CRA International,Inc.	LECG Corporation	Navigant Consulting, Inc.
Size Premium	0.00%	0.00%	0.00%	0.00%	0.00%
Weekly Standard Deviation	5.75%	6.34%	5.59%	9.06%	6.82%
Levered Beta	0.43	0.81	0.49	1.39	0.90
Correlation Coefficient (R)	0.22	0.38	0.26	0.45	0.39
Total Beta	1.95	2.15	1.90	3.07	2.31
Total Cost of Equity	**15.98%**	**17.24%**	**15.64%**	**23.06%**	**18.26%**
Company Specific Risk Premium	**9.57%**	**8.41%**	**8.85%**	**10.59%**	**8.92%**

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

	Company	Jim (Deceased)	Jeff
Pre-Death Value of Operations	$10,000,000		
Value of Stock	$10,000,000	$5,000,000	$5,000,00
Life Insurance Proceeds	$6,000,000		
Repurchase Liability	-$5,000,000		
Post Life Insurance Value	**$11,000,000**	**$0**	**$11,000,0**

Example (continued)

Proceeds Are a Company Asset

	Company	Jim (Deceased)	Jeff
Pre-Death Value of Operations	$10,000,000		
Life Insurance Proceeds	$6,000,000		
Value of Stock	$16,000,000	$8,000,000	$8,000,00
Repurchase Liability	-$8,000,000		
Post Life Insurance Value	**$8,000,000**	**$0**	**$8,000,0(**

Example (continued)

Comparison of Outcomes

		Amount of Payment to Jim's Estate	Value of Company to Jeff
Pre-Death Value of Operations	$10,000,000		
Proceeds Not a Company Asset		$5,000,000	$11,000,00
Proceeds Are a Company Asset		$8,000,000	$8,000,00

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