Valuation: Looking Behind the Curtain

Presentation to the Institute of Management Accountants, Diablo Valley Chapter

March 23, 2015

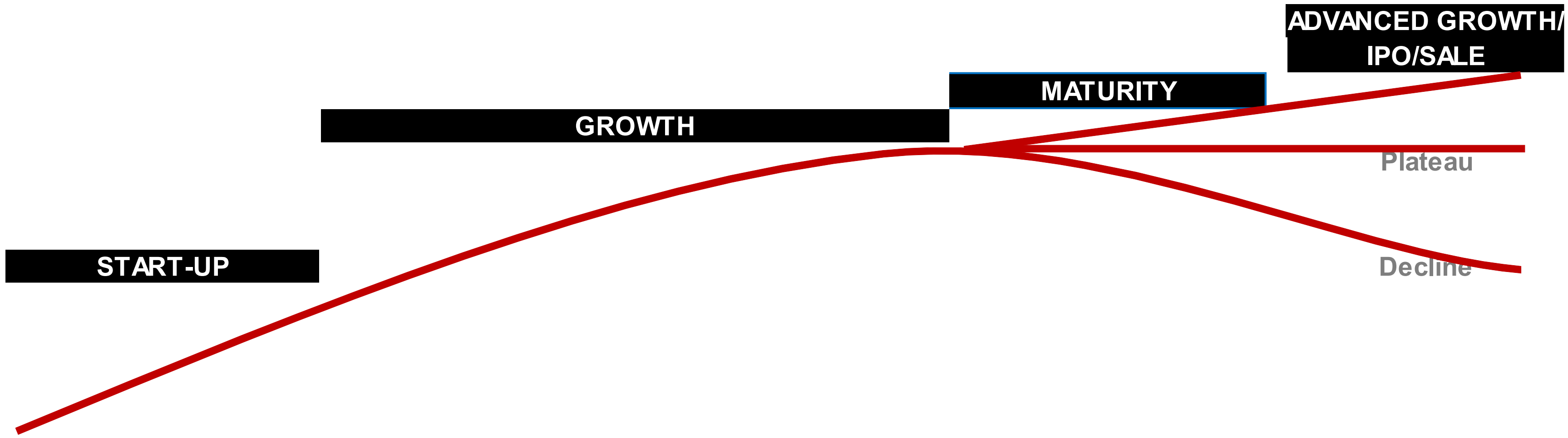
Josette Ferrer, Managing Director
Clairent Advisors LLC

Agenda

- **Background**
  - Stages of Development and Valuation Needs
  - Case Study Background
- **Defining the engagement – *What, Why, and When***
- **Valuation Approaches**
  - Starting Point
  - Income Approach
  - Market Approach
  - Other Considerations
- ***Appendices:***
  - *Speaker Background/Contact Information*
  - *Bibliography*

Stages of Development and Valuation Needs

Stages of Development and Valuation Needs



Focus	- Proof of concept - Establish demand	*Rapid Expansion* - Revenue growth	*High Growth* - Quality of growth - Breakeven	- Infrastructure -- processes, productivity, efficiency, profitability
Risks	- Business failure	- Competition	- Lack of/low quality growth - Lagging profit margins	- Status quo manage-ment/transition; stagnation

Valuation Needs

- Negotiating with investors →
- 409A/ASC 718 →
- Acquisitions -- Business Combinations/ Purchase Price Allocations →
- Impairment →

Valuation-Specific Considerations

"Big Four" audit require-ments/SEC considerations →

Valuation Needs At All Stages

- Disputes/Litigation
- Estate and Gift Tax

Stages of Development and Valuation Needs

Valuation Service Drivers and Examples – "Why"

- **Financial Reporting**
  - Purchase price allocations related to business combinations
  - Impairment testing related to goodwill and long-lived assets
  - Stock options and equity grants
  - Financial instruments

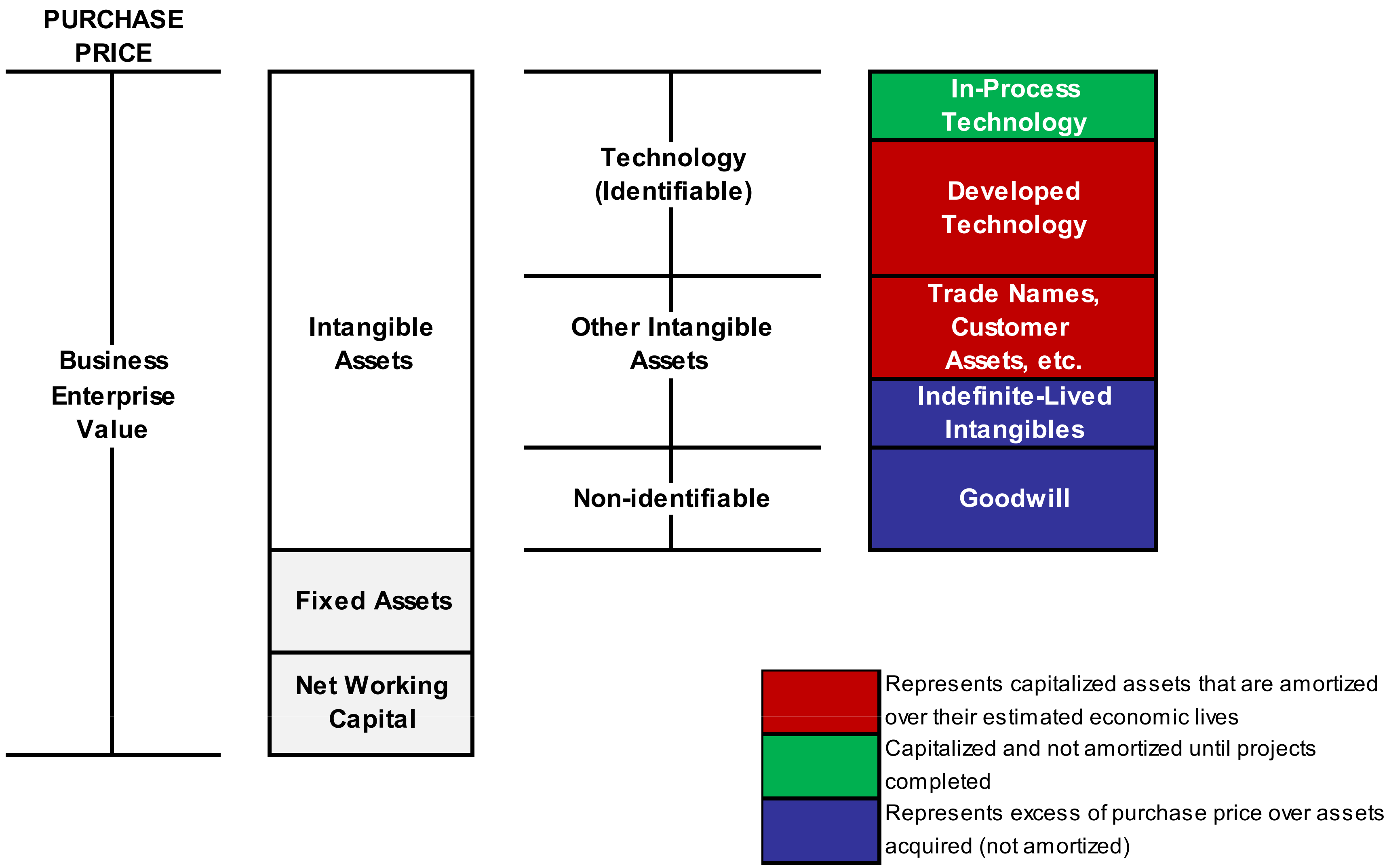
- **Tax Planning and Reporting**
  - Valuations for domestic and international tax planning – including legal entities, taxable reorganizations, asset transfers, net operating loss limitations and built-in gains, conversions of C-corporations to S-Corporations

- **Corporate Reorganization and Bankruptcy**
  - Determination of post-bankruptcy company reorganization values
  - Fresh start accounting valuations

- **Disputes/Litigation Support**
  - Shareholder and contract disputes (e.g., partner/shareholder buy-outs)
  - Damage calculations
  - Patent infringement

Stages of Development and Valuation Needs

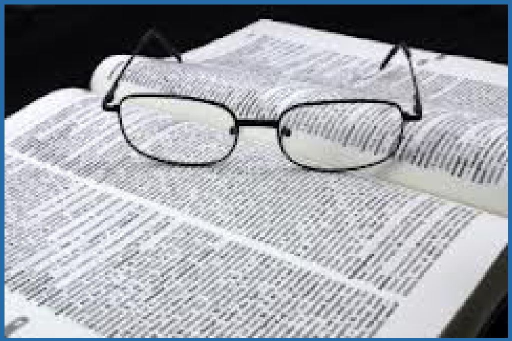
Purchase Price Allocation Framework (Valuation of Intangible Assets – ASC 805)



CLAIRENT ADVISORS
VALUATION AND TRANSACTION SPECIALISTS

Case Study Background

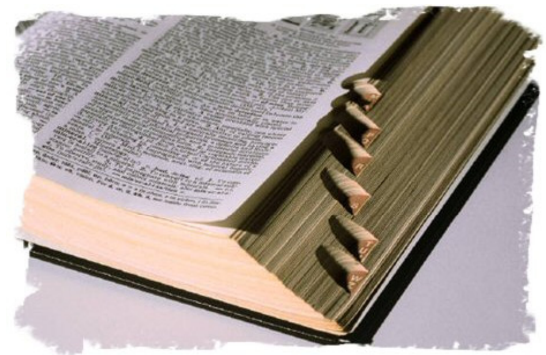
CLAIRENT ADVISORS
VALUATION AND TRANSACTION SPECIALISTS



Defining the Engagement

Defining the Engagement
"What, Why, and When"

- **Understand WHAT you are valuing** p.9-10
  - Definition – assets vs. equity in a business
  - For businesses – size and characteristics of the subject interest
    - Control vs. minority
    - Marketability considerations
    - "Value chain"
      - Control (e.g., entire business)
      - Non-marketable, minority (e.g., shares of publicly traded businesses)
      - Non-marketable minority (e.g., small interest in closely held businesses)



- **Understand WHY you are doing the valuation** p. 4,11
- **Understand WHEN the valuation is relevant – date of value**

Defining the Engagement

"What" – Types of Business Interests and Assets

Business Entities and Interests

- Closely held companies
- Partial interests
- Family limited partnership and limited liability company interests
- Business operations, including subsidiaries, divisions, profit centers, and reporting units

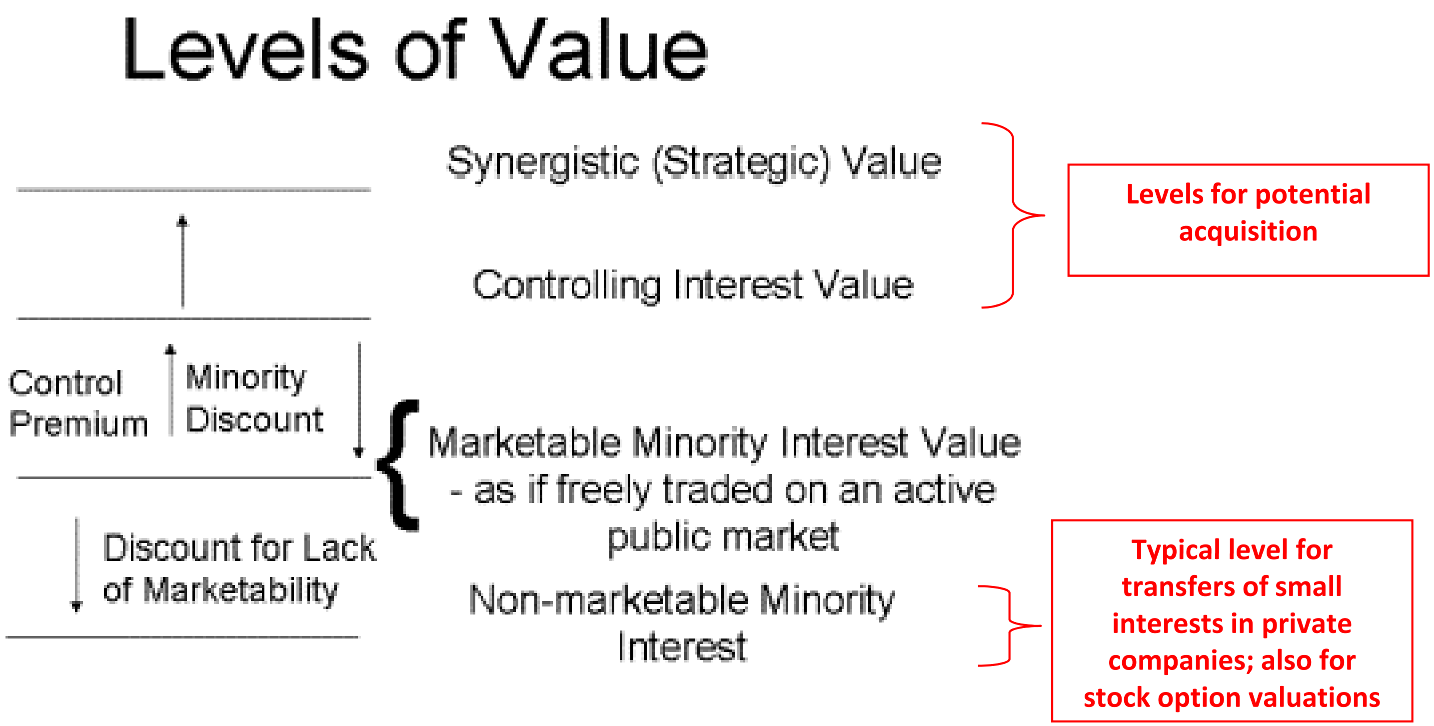
Financial Assets

- Preferred stock and debt instruments
- Options and warrants
- Investment portfolios, including private equity, venture capital, and hedge funds

Tangible & Intangible Assets

- **Buildings and machinery and equipment**
- **Intellectual property**
  - Patents
  - Trademarks and trade names
  - Copyrights
  - Trade secrets
- **Other intangible assets**
  - Proprietary technology
  - In-process research and development
  - Customer lists/relationships
  - Contract rights
  - Covenants-not-to-compete
  - Others

Defining the Engagement
"What" – Value Chain



"Why" considers the valuation service drivers on page 4

Sample Premises of Value:

- **Fair Market Value**
  - *"Price at which an entity would change hands between a willing buyer and a willing seller when neither is acting under compulsion and when both have reasonable knowledge of the relevant facts as of the date of valuation"*

- **Fair Value -- financial reporting definition**
  - *"Price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date"*
  - SFAS 157 concepts: exit price, principal market, levels of value

- **Investment / Strategic Value**
  - *"Specific value of an investment to a particular investor or class of investors based on individual investment requirements; distinguished from [fair] market value which is impersonal and detached"*

Valuation Approaches

Valuation Approaches & Considerations – Starting Point

INCOME APPROACH

- Present value of future economic benefits
- Discount cash flows to present value at a rate of return that incorporates risks associated with the particular investment

MARKET APPROACH

- Comparison of subject property to recently priced property (sale, license, transactions, etc.) that is similar and for which price information is available
- Two methodologies for a business:
  - Public company market multiples method
  - Similar transactions method

COST APPROACH

- Values an asset by the cost to reconstruct or replace it
- For a business – measures the value of a company through an appraisal of individual assets of the business (current, fixed, and intangible)

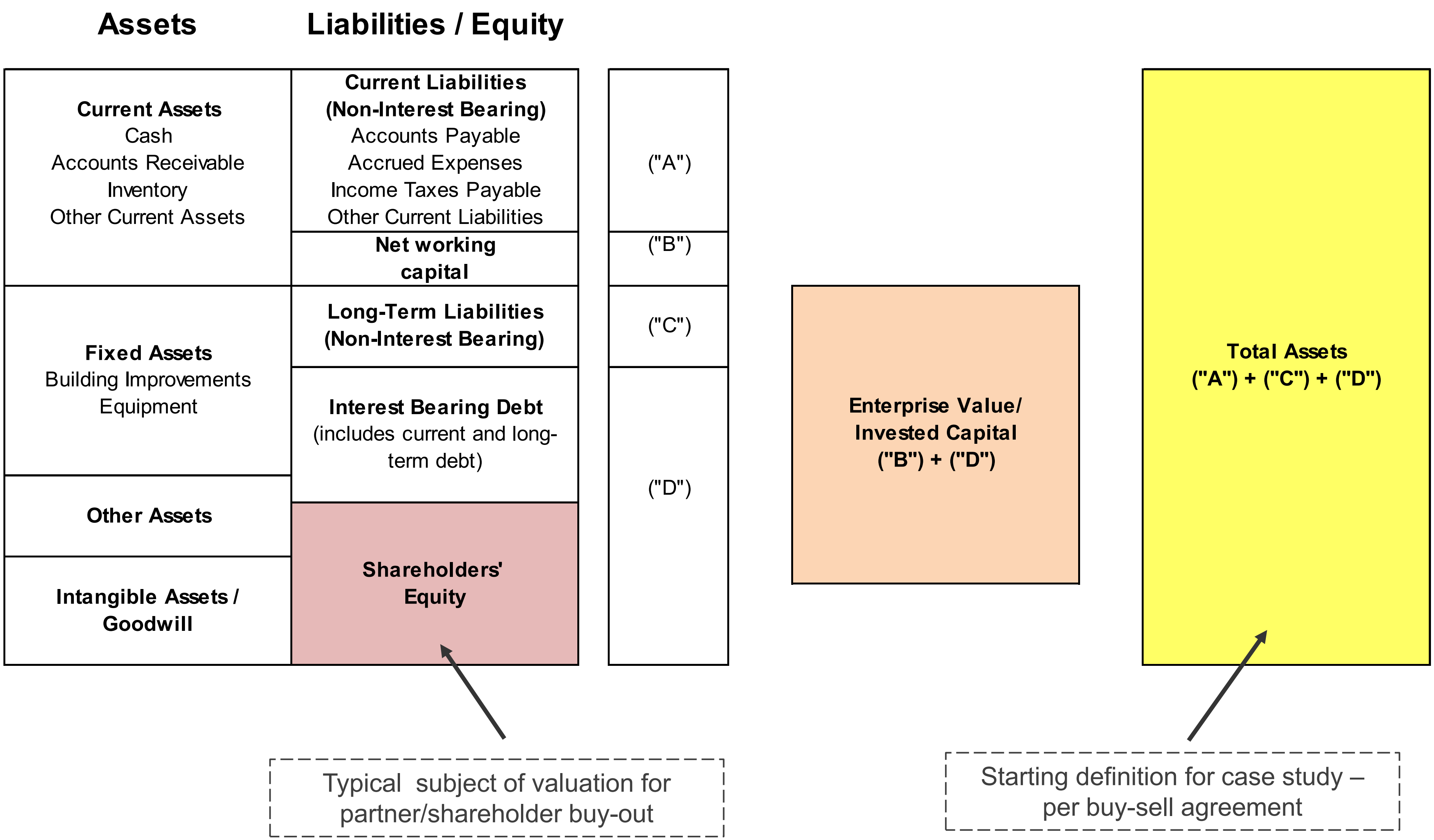
- **Best Practices – Common for All Valuations**
  - Importance of understanding, incorporating, and documenting the “story behind the numbers”
  - Playing devil’s advocate – from the outset of an engagement
  - Consideration of as many approaches/methodologies/benchmarks as possible

Project Framework – Case Study

$000's

		Similar Transactions Method		
		Identified Transactions	Broker Input	Income Approach
1. Valuation of "Company Business", before Adjustment Related to Managers' IP				
Total Asset value				
Weighting				
Weighted values				
Sum of weighted values from approaches				
2. Valuation of Managers' IP				
Value of IP				
3. Purchase Price Calculation				
Company Business value				
less: Value of Managers' IP				
Adjusted Company Business value				
Calculation of Purchase Price				
To ABC Owners/Management Company				
To XYZ Owners				
Total Purchase Price				

Project Framework – Case Study



- **Discounted Cash Flow Method**
  - Uses a multi-period cash flow and a discount rate to determine value
- **Key Assumptions**
  - Forecast
  - Discount rate
  - Terminal value

Income Approach *(continued)*

- **Forecast**
  - Five years is the typical starting point –> for companies exhibiting high and/or volatile growth, the period may be extended
  - Typically represents a “most likely case”
  - For some projects, it may make sense to consider multiple cash flow scenarios – upside, downside, etc.
    - Expected cash flows = probability-weighted average of possible outcomes

- **Discount Rate**
  - Methodologies:
    - Capital Asset Pricing Model (“CAPM”)
    - Weighted Average Cost of Capital (“WACC”)
    - Build-Up Method

- **Terminal Value**
  - Represents value after the forecast period
  - Two methodologies often considered:
    - Gordon Growth Method = Terminal year cash flow / (Discount rate – long-term growth)
    - Exit multiple (theoretically inconsistent; combines Market Approach and Income Approach concepts)

Income Approach – Case Study
Discounted Cash Flow Model

	$000's		12/1 to 12/31 2014	2015	2016	2017	2018
				For the fiscal years ending December 31			
1)	Revenue						
2)	Cost of goods sold						
	Gross profit						
3)	Adjusted operating expenses (excluding depreciation)						
	Adjusted EBITDA						
4)	Depreciation and amortization						
	Adjusted EBIT						
5)	Income tax expense (benefit)						
	Net income						
6)	less: Capital expenditures						
4)	plus: Depreciation						
7)	plus / less: Change in debt-free net working capital						
	Subtotal, cash flows						
8)	Partial period adjustment						
	Cash flows		$17	$282	$265	$258	$231
9)	Period		0.04	0.58	1.58	2.58	3.58
10)	Discount rate / present value factor	23.0%	0.991	0.886	0.720	0.586	0.476
	Present value of after-tax cash flow		$16	$250	$191	$151	$110
	Sum of discounted cash flows		$718				
11)	plus: Present value of residual value		533				
	Invested capital value		1,251				
	plus: Benefit associated with Company's status as a pass-through entity		200				
	plus: Current non-interest bearing liabilities		95				
12)	plus: Long-term non-interest bearing liabilities		0				
	Indicated Total Asset value		**$1,546**				

Income Approach – Case Study
Discount Rate – Build-Up Method

INDUSTRY -- BETA & CAPITALIZATION Ticker	Company Name	Beta Levered	Market Value Equity	Interest Bearing Debt	Other (Pf Stk, Etc.)	Tax Rate	Unlevered Beta
Selected beta / capitalization		**0.71**	100.0%	0.0%	0.0%	39.9%	0.71

SUBJECT COMPANY	Unlevered Beta	Equity Market Value	Interest Bearing Debt	Other (Pf Stk, etc.)	Tax Rate	Beta Levered
Selected capital structure	0.71	100.0%	0.0%	0.0%	39.9%	0.71

COST OF EQUITY

Capital Asset Pricing Model		Rf + (Rm*B) + SSP + e
Where:		
Rf =	Risk Free Rate	2.62%
Rm =	Equity Risk Premium	6.00%
B =	Beta	0.71
SSP =	Small stock premium	12.12%
e =	Other Premiums	3.50%
Cost of Equity		**22.5%**

WEIGHTED AVERAGE COST OF CAPITAL

Equity as a percent of total capital	100.0%
Debt as a percent of total capital	0.0%
Average cost of debt	8.7%
After tax cost of debt (tax rate as above)	5.2%
Cost of equity	22.5%
Weighted Average Cost of Capital ("WACC")	22.5%
Concluded WACC	**23.0%**

Market Approach – Similar Transactions Method

- **Considers data from transactions involving entire companies or controlling interests**
  - Includes public buyer or seller transactions
  - Includes private-to-private transactions
  - Results in a control value

- **Common transaction databases**
  - S&P Capital IQ (used in case study)
  - Pratt's Stats (used in case study)
  - Merger Stat; BizComps
- **Transaction considerations and limitations**
  - Transaction should be between unrelated parties
  - Information on transaction can be limited (e.g., purchase price and target company financial data); rationale behind transaction not known

Market Approach – Similar Transactions Method *(continued)*

- ***Multiple x Subject Company Financial Data = Value***

- **Common multiples:**
  - Enterprise Value / Invested Capital Multiples
    - Enterprise Value = Equity Value + Debt/Preferred Securities – Cash
  - EV / Revenue
  - EV / EBITDA

- Need to adjust for differences between market transactions and subject company – considering:
  - Size, product mix/diversification, growth, profitability, other company-specific factors

- Need to adjust **financial data** to which multiples are applied to:
  - Normalized results (excluding non-recurring items)
  - Depending on project purpose, may need to adjust for normalized owner salaries, non-operating/non-business (owner-personal) expenses

Similar Transactions Method – Case Study

Excerpts from Pratt's Stats

$'s

			Transaction Price and Multiples				Target Company Financial Data				
										% of Sales	
Trans. Number	Sale Date	Business Description	MVIC Price	MVIC / Sales	MVIC / Gross Profit	MVIC / EBITDA	Net Sales	Gross Profit	EBITDA	Gross Profit	EBITDA
30944	12/9/2013	Neighborhood Bar	$900,000	0.54	0.83	3.07	$1,667,808	$1,085,737	$292,724	65.1%	17.6%
18358	6/28/2011	Bar	$700,000	0.47	0.59	2.33	$1,500,000	$1,180,000	$300,000	78.7%	20.0%

Measures of Central Tendency for Transactions	MVIC / Sales	MVIC / Gross Profit	MVIC / EBITDA	Net Sales	Gross Profit	EBITDA	% of Sales Gross Profit	% of Sales EBITDA
All Transactions								
High	0.84	1.74	7.13	$1,667,808	$1,180,000	$300,000	81.7%	36.7%
Third Quartile	0.48	0.83	3.27	1,092,056	655,891	182,674	74.0%	25.7%
Average	0.40	0.67	2.43	793,874	511,246	141,959	64.1%	20.4%
Median	0.42	0.59	1.76	798,375	524,941	111,832	65.7%	22.6%
First Quartile	0.30	0.45	1.64	369,438	247,618	80,448	55.5%	12.1%
Low	0.08	0.12	0.33	250,000	74,000	43,733	28.5%	6.1%

Similar Transactions Method – Case Study

Excerpts from S&P Capital IQ

$000's

Close Date	Buyer	Target	Target Description	Total Enterprise Value	Revenue	Total EV/ Revenue
4/4/2012	JW Lees & Co (Brewers) Ltd.	Deckers Restaurants Ltd, Two Gastro Pubs	As of April 4, 2012, Two Gastro Pubs of Deckers Restaurants Ltd was acquired by JW Lees & Co. Brewers Ltd. Two Gastro Pubs of Deckers Restaurants Ltd comprises two The Plough & Flail Pub and Restaurant; and The Rope & Anchor. The pubs are located in Mobberley and Dunham Massey, United Kingdom.	$1,588	$3,969	0.40
4/1/2009	The Capital Pub Company PLC	Terisco Limited	Terisco Limited owns and operates 'The Bishop', 'Lordship Lane', 'East Dulwich', and 'London SE22' pub. The company was incorporated in 2004 and is based in Southall, United Kingdom. As of April 1, 2009, Terisco Limited operates as a subsidiary of The Capital Pub Company PLC.	$1,088	$1,886	0.58

Adjusted Historical Financial Data – For Multiples Application

$000's	For the 12 mos. ended 11/30/2014
Revenue	[redacted]
Cost of goods sold	[redacted]
Gross profit	[redacted]
Operating expenses	
Unadjusted operating expenses	1,574
Adjustments	**145**
Subtotal	1,430
Adjusted EBITDA	**527**
Depreciation and amortization	54
Adjusted EBIT	**474**
Broker's Adjusted Cash Flow	
Adjusted EBITDA	**$527**
plus: One working owner's salary	**65**
Broker's adjusted cash flow	**$592**

Similar Transactions Method – Case Study

Conclusion

$000's

		Identified Transactions			Broker Input	
		IC to Revenue	IC to Gross Profit	IC to EBITDA	IC to Adjusted Cash Flows	
					Range of Multiples	
Selected multiples		0.45		3.00	2.0	2.5
Trailing twelve months adjusted financial data		$2,575		$527	$592	$592
Invested capital values		$1,159		$1,582	$1,185	$1,481
Average invested capital value	$1,436				$1,333	
plus: Current non-interest bearing liabilities	95				95	
plus: Long-term non-interest bearing liabilities	0				0	
Indicated total asset value	**$1,531**				**$1,428**	

Conclusions – Case Study

$000's

			Similar Transactions Method		
			Identified Transactions	Broker Input	Income Approach
1. Valuation of "Company Business", before Adjustment Related to Managers' IP					
Total Asset value			$1,531	$1,428	$1,546
Weighting			33.3%	33.3%	33.3%
Weighted values			$510	$476	$515
Sum of weighted values from approaches		$1,502			
2. Valuation of Managers' IP					
Value of IP		$420			
3. Purchase Price Calculation					
Company Business value		$1,502			
less: Value of Managers' IP		(420)			
Adjusted Company Business value		1,082			
Calculation of Purchase Price					
To ABC Owners/Management Company	20.0%	**$216**			
To XYZ Owners	40.0%	**433**			
Total Purchase Price		**$649**			

Other Engagement Considerations
(Not Case Study-Specific))

- **Another variation of the Market Approach – based on *multiples from publicly traded companies***

- **Discount for Lack of Marketability**
  - Applied to minority value of an equity interest in a closely-held company to reflect the lack of a recognized market for the equity, as well as the fact that the equity interest may not readily be transferable

- **Discount for Lack of Control**
  - Considers that the pro rata value of a controlling interest may exceed the pro rata value of a noncontrolling interest in a business enterprise that reflects the power of control -- often associated with takeovers of public companies
  - Often not applied to Income Approach value indications (economic, pro rata value similar in both a control vs. noncontrolling situation; SEC/other guidance on this)
  - Discount typically applied to Similar Transaction indications (to derive a non-controlling interest for valuing partial interests in privately held companies)

CLAIRENT ADVISORS
VALUATION AND TRANSACTION SPECIALISTS

Q & A

Speaker Background / Contact Information

Josette Ferrer
Managing Director

jferrer@clairent.com
Direct: 415 658 5589
Mobile: 415 272 5191

201 Spear Street, Suite 1100
San Francisco, CA 94105

www.clairent.com

Current Responsibilities

Josette Ferrer is the founder and a Managing Director of Clairent Advisors. Since 1993, Josette has been assisting clients with the valuation of closely held businesses and business interests, intangible assets, intellectual property, stock options, debt instruments, capital equipment / fixed assets, and other assets.

Experience

Prior to founding Clairent Advisors in 2010, Josette was the U.S. Practice Leader of Marsh's Valuation Services Group (formerly Kroll's Valuation Services Practice). Her career includes serving as the Managing Director in charge of the San Francisco Valuation Services Group of WTAS, Inc. ("WTAS“, now operating as Andersen Tax), a former subsidiary of HSBC Group. At WTAS, Josette's responsibilities included developing and overseeing all technical, operational, marketing functions for the SF valuation team. Prior to WTAS, Josette was a director with Huron Consulting Group and a senior manager at Arthur Andersen LLP.

While Josette has extensive experience serving clients in many industries, areas of specialty include telecommunications, high technology, service companies, consumer products, manufacturing, and financial services. Her clients have ranged from small, emerging businesses to Fortune 500 companies. Josette has been a guest speaker for a wide variety of forums, including Financial Executives International/FEI, the Institute of Management Accountants/IMA, the Practicing Law Institute/PLI, CalCPA, the San Francisco and Contra Costa Bar Associations, Santa Clara University, BIOCOM, and various venture capital roundtables.

Education and Affiliations

- B.S. in Business Administration, University of California, Berkeley
- Board Member, SF Chapter, Financial Executives International
- Member, Fair Value Forum
- Corporate Affiliate, Finance Scholars Group
- Strategic Partner, Strategic Alliances Resources Network
- Executive Committee Member, ProVisors SF3 Group

Bibliography

- Damodaran, Aswath. “The Dark Side of Valuation”, *FT Press*, July 9, 2009.
- “On the Front Lines of Business Valuation Issues; What You Need to Know”, *Grant Thornton,* May 19, 2011.
- “Understand Your Business Stage and Prepare For Advanced Growth”, *Shirlaws Coaching,* March 18, 2015.
- “Valuation Throughout a Business Lifecycle”, *Acclaro,* March 11, 2010.