Beyond the Valuation Black Box

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Agenda

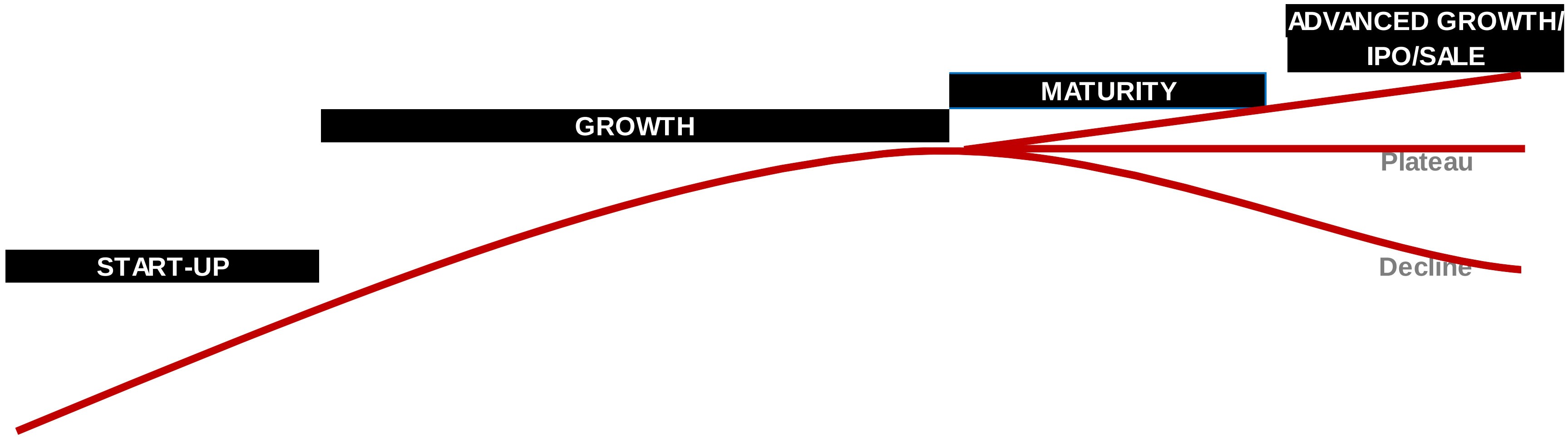
- **Background**
  - Valuation Philosophies / “Making Your Case”
    - World of Ranges, Art vs. Science, and Importance of the Story
  - Background of **Project Example**
- **Engagement Foundation – *What, Why, and When***
- **Valuation Approaches**
  - Starting Point
  - Income Approach
  - Market Approach
  - Other Considerations
- ***Appendices:***
  - *Speaker Background / Contact Information*
  - *Bibliography*

Background

Background

- Perspective is important – understanding the genesis of our observations
- Our focus – valuations expected to be challenged by “another side”
- Primary clients – middle market to larger companies, both public and private

Stages of Development and Valuation Needs



	Start-Up	Growth	Growth	Maturity
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 →

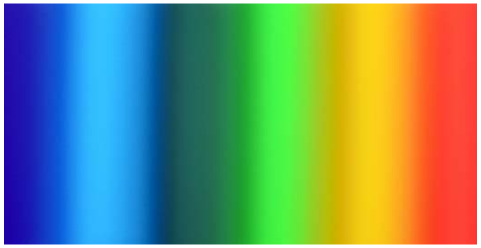
Valuation-Specific Considerations

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

Valuation Needs At All Stages

- Disputes/Litigation
- Estate and Gift Tax

Background



- **We operate in a world of <u>RANGES</u>**
- **Key is that the range is supportable (considering both qualitative and quantitative factors)**

Situation	**Typical Value "Case" Client Wants to Make** ***High vs. Low Value***
Selling your company	High
Buying a company	Low
Buying out a partner / shareholder	Low
409A stock option valuation	Low
Purchase price allocations	Usually ↓ intangibles; ↑ goodwill
Impairment testing	Depends
Tax	Depends
Disputes / litigation	Depends

Background

- Valuation is as much an art as a science

- The “story” behind a valuation is critical
- It’s not just spreadsheets and models!

PROJECT EXAMPLE

Project Example Background

- Bar/restaurant
- Several investors in the business
  - **Client** – manager (firm which handles day to day operations)
  - Management Company ("ABC Company") – restaurant investment firm which receives a management fee for accounting, consulting, and other services
  - Third party investors ("XYZ Investors")
- Client interested in buying out other investors
- Assisted with valuation which followed terms of unique buy-sell agreement

Engagement Foundation

- **Defining Key Aspects of the Engagement**
  - Important / basic aspects not to overlook
  - Impacts valuation and ability to make your value "case"

WHAT | **WHY** | **WHEN**

WHAT

- **Understand WHAT you are valuing**
  - Definition – assets vs. equity (or enterprise value) related to a business
  - For businesses – size and characteristics of the subject interest p. 11
    - 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)
  - Other

WHAT

Levels of Value

Synergistic (Strategic) Value

Controlling Interest Value

Levels for potential acquisition

Control Premium

Minority Discount

Marketable Minority Interest Value - as if freely trade on an active public market

Discount for Lack Of Marketability

Non-Marketable Minority Interest

Typical level for transfers of small interests in private companies; also for stock option valuations

PROJECT EXAMPLE

Engagement Foundation
"What, Why, and When"

Assets	Liabilities / Equity
Current Assets Cash Accounts Receivable Inventory Other Current Assets	**Current Liabilities (Non-Interest Bearing)** Accounts Payable Accrued Expenses Income Taxes Payable Other Current Liabilities **Net working capital**
Fixed Assets Building Improvements Equipment	**Long-Term Liabilities (Non-Interest Bearing)** **Interest Bearing Debt** (includes current and long-term debt)
Other Assets	**Shareholders' Equity**
★ **Intangible Assets / Goodwill**	

Typical subject of valuation for partner/shareholder buy-out

Enterprise Value/ Invested Capital

Value to All Providers of Capital

Total Assets

Purchase price per buy-sell agreement = Company Business (Total Assets) minus Managers' IP

Starting definition for project example – per buy-sell agreement

Buy-sell agreement also references certain IP values ★

WHY

- **Understand WHY you are doing the valuation**
  - Purpose
  - Reviewers of the valuation?
  - Who will the valuation impact?
  - Premise of value p. 14

Project Example Comments

WHY

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"*

WHEN

- **Date of Valuation for Project**
  - "Technical" considerations related to information able to be considered
  - Company-specific and market events

Project Example Comments

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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 <u>All</u> Valuations**
  - Importance of understanding, incorporating, and documenting the “story behind the numbers”
  - Playing devil’s advocate – from the onset of an engagement
  - Consideration of as many approaches/methodologies/benchmarks as possible

PROJECT EXAMPLE

Project Framework

$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	% ownership			
To ABC Owners/Management Company				
To XYZ Owners				
Total Purchase Price				

4. High Level Reasonableness Check: Implied IRR of value considering historical investments

Income Approach

- **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 is extended
  - Typically represents a "most likely" scenario
  - 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
  - "Story" related to the build-up of revenue, profitability, capital expenditures, and other key assumptions

- **Discount Rate**
  - Methodologies:
    - Capital Asset Pricing Model ("CAPM")
    - Weighted Average Cost of Capital ("WACC")
    - Build-Up Method
    - Venture capital rates (by stage of development) for start-up/early stage companies
  - Key – risk of forecast must match discount rate

- **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)

PROJECT EXAMPLE

Income Approach

Discounted Cash Flow Model

Detailed "story" behind each line item

$000's

		12/1 to 12/31 2014	For the fiscal years ending December 31 2015	2016	2017	2018
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**				

PROJECT EXAMPLE

Income Approach
Discount Rate

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%**

Ranges of rates applicable for companies in different stages/industries

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 project example)
  - Pratt's Stats (used in project example)
  - Merger Stat; BizComps

- **Transaction considerations and limitations**
  - Transaction should be between unrelated parties
  - Information on transaction can be very 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 or 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

PROJECT EXAMPLE

Similar Transactions Method

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

All Transactions	MVIC / Sales	MVIC / Gross Profit	MVIC / EBITDA	Net Sales	Gross Profit	EBITDA	Gross Profit	EBITDA
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%

PROJECT EXAMPLE

Similar Transactions Method

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 (Brew ers) Ltd.	Deckers Restaurants Ltd, Tw o Gastro Pubs	As of April 4, 2012, Tw o Gastro Pubs of Deckers Restaurants Ltd w as acquired by JW Lees & Co. Brew ers Ltd. Tw o Gastro Pubs of Deckers Restaurants Ltd comprises tw o 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 ow ns and operates 'The Bishop', 'Lordship Lane', 'East Dulw ich', and 'London SE22' pub. The company w as 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

PROJECT EXAMPLE

Similar Transactions Method

Adjusted Historical Financial Data – For Multiples Application

	For the 12 mos. ended 11/30/2014
Revenue	$2,575
Cost of goods sold	617
Gross profit	1,957
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**

PROJECT EXAMPLE

Similar Transactions Method

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	0.80	3.00	2.0	2.5
Trailing twelve months adjusted financial data		$2,575	$1,957	$527	$592	$592
Invested capital values		$1,159	$1,566	$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**	

- Reliance on Pratt's Stats transactions – due to greater similarity of targets in terms of size and operations to the Client. Based on the Client's size (larger/superior to comps) and profitability (proximate to average/median, we selected multiples close to third quartile levels.
- Did not rely on Capital IQ transactions (limited in number; locations outside the U.S.) – but did note that the selected revenue multiple was in the Capital IQ range.

Conclusions

$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			

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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**

Client's Next Steps/Results Following the Valuation

4. High Level Reasonableness Check: Implied IRR of value considering historical investments

PROJECT EXAMPLE

Unique Consideration – Valuation of IP

- In lieu of ownership, an acquirer can obtain comparable rights to use a subject asset through a license from a hypothetical third party owner
- Similar to a franchisee licensing IP from franchisor

Based on examining the difference between value estimated under two sets of projections:

- Value of the business <u>with the IP in place</u>
- Value of the business with all assets in place <u>except</u> the IP

$000's	Value of Managers' IP	Weighting	Weighted Values
Relief-From-Royalty Method	$449	50.0%	$224
With-and-Without Method			
Market Approach	394	25.0%	98
Income Approach	378	25.0%	94
Weighted value		100.0%	$417
Rounded			**$420**

<u>Reasonableness checks:</u>

% of Total Asset value	28.0%	
Total Asset value conclusion	$1,502	
% of implied total intangible asset / goodwill value		
Total asset value	$1,502	
less: Tangible assets	428	
Implied total intangible assets and goodw	$1,074	
Managers' IP as % of total intangible assets and goodwill	39.1%	Assessed to be reasonable since remaining % would relate to other intangible assets (alcohol license, work force, location-related and other goodwill)

Other Engagement Considerations
(Not Related to Project Example)

- **Another variation of the Market Approach – based on *multiples from publicly traded companies*** p. 32

- **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)

Example

Other Engagement Considerations
Public Comps Comparison for Multiples Selection

$ millions	Subject Company	Comp #1	Comp #2	Comp #3	Comp #4	Comp #5	Comp #6	Addl. Comps -->
Size								
Revenue	$102	$70	$212	$389	$285	$202	$108	
Ranking based on size (1 = Largest)	***12***	***13***	***8***	***2***	***3***	***9***	***11***	
Growth								
Revenue growth								
3 year CAGR	49.4%	15.7%	31.3%	42.3%	8.4%	19.9%	22.1%	
Ranking based on profitability (1 = Highest Growth)	***3***	***11***	***7***	***5***	***12***	***10***	***9***	
Latest FYE one year growth	61.8%	3.5%	34.7%	28.9%	7.9%	9.6%	9.2%	
Ranking based on profitability (1 = Highest Growth)	***2***	***12***	***6***	***7***	***11***	***9***	***10***	
Profitability								
EBITDA margin								
Expected -- FYE +1	-6.7%	-7.7%	-2.8%	7.1%	17.4%	7.4%	2.3%	
Ranking based on profitability (1 = Most Profitable)	***12***	***13***	***11***	***7***	***3***	***6***	***9***	
Expected -- FYE + 2	2.4%	-3.1%	3.3%	10.4%	20.6%	9.2%	4.0%	
Ranking based on profitability (1 = Most Profitable)	***12***	***13***	***11***	***6***	***3***	***7***	***9***	
Trailing Twelve Months	-20.4%	-24.9%	-17.1%	-13.9%	5.1%	-6.8%	-7.7%	
Ranking based on profitability (1 = Most Profitable)	***11***	***12***	***10***	***9***	***3***	***6***	***8***	

Closing

- **Key Takeaways – all important to making your value “case”**
  - Importance of the story both at a high level and in developing model-specific assumptions
  - Don’t forget the basics – what / why / when
  - Use of multiple approaches and benchmarks to support a valuation

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Q & A

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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 high technology, service companies, consumer products, manufacturing, financial services, and telecommunications. 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, Business Valuation Review Training Council
- Executive Committee Member, ProVisors Middle Market Affinity Group; Member of PA1 and Silicon Valley Women's Affinity Group
- Member, Fair Value Forum
- Strategic Partner, Strategic Alliances Resources Network

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