




BDO CONSULTING

## 2704 REGULATIONS AND COMMON ERRORS IN BV

VALUATION & BUSINESS ANALYTICS



## BDO CONSULTING SPEAKERS



**Joshua Lefcowitz**  
 CPA/ABV/CFP, CVA, CFE, ASA  
 BDO Consulting Managing  
 Director  
 Valuation & Business Analytics

Direct: 412-281-1013  
[jlefcowitz@bdo.com](mailto:jlefcowitz@bdo.com)

Joshua Lefcowitz is Managing Director of BDO Consulting's Valuation & Business Analytics Practice in the firm's Pittsburgh office. Mr. Lefcowitz has more than 15 years of public accounting experience providing dispute advisory, forensic accounting, and valuation services for a wide array of purposes. Mr. Lefcowitz has performed business valuations, as well as valuation services related to intangible assets, purchase price allocations, intellectual property, oil and natural gas rights in Marcellus Shale formation, and goodwill impairment testing.

He has significant experience serving clients across a range of industry sectors, including oil and gas, healthcare, manufacturing, retail, professional services, technology, biotechnology, wholesale distribution, and advertising.

Mr. Lefcowitz is a Certified Public Accountant in Pennsylvania and is Accredited in Business Valuation and Certified in Financial Forensics. He also holds designations as an Accredited Senior Appraiser, Certified Valuation Analyst and Certified Fraud Examiner.

Mr. Lefcowitz has been qualified as an expert witness in multiple state courts within the Commonwealth of Pennsylvania.

## BDO CONSULTING SPEAKERS



Tami Bolder  
CPA/ABV, ASA, MBA, DBA

Senior Manager  
BDO Consulting

Direct: 440-394-6161  
tbolder@bdo.com

Dr. Tami Bolder is a Senior Manager in the Cleveland office of BDO Consulting, supporting the Valuation and Business Analytics practice. She has over 12 years of experience performing business valuations for various purposes including estate and income tax planning, litigation, and marital dissolutions as well as providing litigation services for multiple purposes such as wrongful death, fraud, and breach-of-contract cases.

Prior to joining BDO, Dr. Bolder worked at SS&G Parkland Consulting LLC providing valuation and litigation consulting services and prior to that, she served as a member of the New Ventures Consulting Group of Cap Gemini Ernst & Young in Cleveland.

Dr. Bolder is a Certified Public Accountant in Ohio and is Accredited in Business Valuation. She also holds a designation as an Accredited Senior Appraiser.

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## NOTE:

All examples are for illustrative purposes only.

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## AGENDA

- Provide an overview of the proposed regulations;
- Discuss issues related to the regulations and their applicability for valuations;
- Discuss the current status of the regulations; and
- Provide a discussion of common errors found in business valuation reports

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## PROPOSED §2704 REGULATIONS

- Enacted in 1990 as part of Chapter 14 (e.g., §§ 2701- 2704)
- Purpose was to counter perceived abuses
  - Perception that taxpayers utilize restrictions in governing documents to artificially reduce asset values through valuation discounts.
- §2704 attempts to negate the potential for undervaluing the assets by removing the effect of these provisions in intra-family transfers of interests in the entities.

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## PROPOSED §2704 REGULATIONS

- Proposed regulations were issued on August 2, 2016.
- Effective date is when final regulations are issued except the disregarded restriction portion will be effective 30 days after the final regulations are issued.
- Hearing on proposed regulations held December 1, 2016.
- IRS has received over 3,000 comments
- Treasury official has stated it was not intent to eliminate lack of control and marketability discounts

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## PROPOSED §2704 REGULATIONS

### Three-Year Rule

- Under §2704(a) transfers to family members resulting in a restriction or elimination of the right to force liquidation of the entity that occur within three years of the transferor's death are treated as if they occurred at death.
  - Impact: The value of transferred interest would be included the transferor's taxable estate.
  - Only applies to controlled entities where the family held control before and after the transfer and it only applies if the transferor held sufficient interest to transfer the liquidation right.
- §2701 defines control as holding 50 percent of the vote or value of stock for a corporation or at least 50 percent of either the capital or profits interests or having the ability to cause liquidation of the entity for a partnership or limited liability company.

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## PROPOSED §2704 REGULATIONS

### Applicable Restrictions

- Certain "applicable restrictions" would be disregarded under §2704(b) when determining the transfer tax value of transferred interests if the family controls the entity immediately before transfer.
- §2704(b)(2) defines applicable restrictions as restrictions which limit the entity's ability to liquidate; and either:
  - Restriction lapses after transfer; or
  - Restriction can be removed by family after transfer
- Exceptions:
  - Commercially reasonable restriction
  - Restrictions imposed by federal or state law (but only under certain conditions)

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## PROPOSED §2704 REGULATIONS

### Disregarded Restrictions

- Proposed regulations create a new category of restrictions that would be disregarded contained in §25.2704-3.
- Disregarded restrictions include restrictions that:
  - Limit the ability of the holder of the interest to liquidate the interest
  - Limit the liquidation proceeds to an amount that is less than a minimum value
  - Defer the payment of liquidation proceeds more than six months after notice of liquidation
  - Permit the payment of the liquidation proceeds on a put in any manner other than in cash or other property (except certain notes)

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## EXAMPLE TRANSACTION FOR ILLUSTRATIVE PURPOSES:

	Pre 2704 Regulations	Anticipated Post 2704 Reg. (w/ Marketability)	Anticipated Post 2704 Reg. (w/o Marketability)
Value of Business	\$20,000,000	\$20,000,000	\$20,000,000
Percent Transferred	40%	40%	40%
Value Before Discounts	\$8,000,000	\$8,000,000	\$8,000,000
Discounts			
Lack of Marketability	20%	10%	-
Lack of Control	20%	-	-
Total Net Discount	36%	10%	0%
Analysis			
Value Before Discounts	\$8,000,000	\$8,000,000	\$8,000,000
Total Net Discounts	36%	10%	0%
Total Discount	\$2,880,000	\$800,000	\$0
Value After Discounts	\$5,120,000	\$7,200,000	\$8,000,000
Estate Tax Liability			
Value After Discounts	\$5,120,000	\$7,200,000	\$8,000,000
Estate & Gift Tax Exemption*	(\$5,450,000)	(\$5,450,000)	(\$5,450,000)
Taxable Estate	-	\$1,750,000	\$2,550,000
Estate Tax Rate	40%	40%	40%
Estate Tax Liability	\$0	\$700,000	\$1,020,000

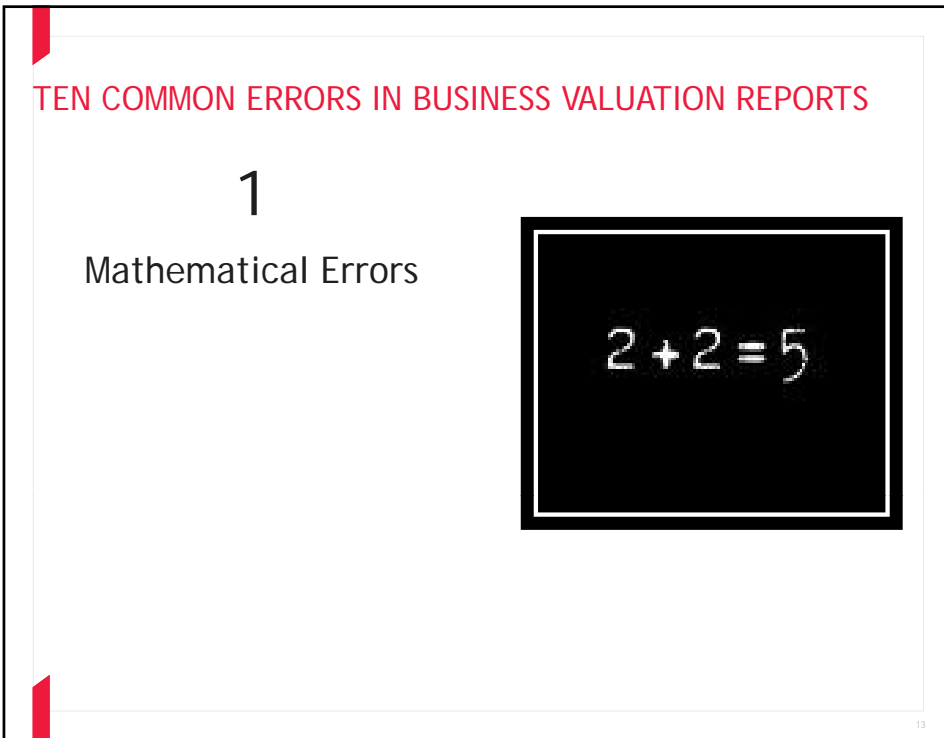
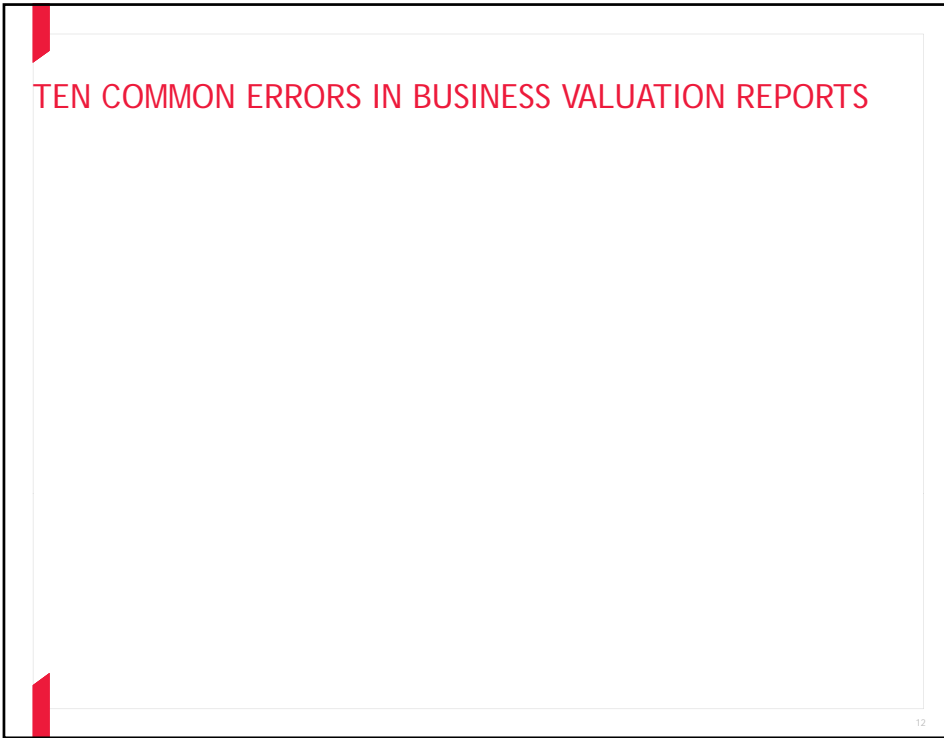
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## PROPOSED §2704 REGULATIONS

## Current Update

- Clarifying statements provided by Catherine Hughes, Attorney-Adviser, Office of Tax Policy, Treasury Department and the December 1, 2016 Hearing
  - There is no intent to make the three-year rule retroactive.
  - The regulations are not imputing a deemed put right in the valuation analysis.
  - The regulations do not intend to do away with all discounts.

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## #1 - MATHEMATICAL ERRORS

Difficulty in discerning mathematical errors  
Worth the time to recalculate

Effect on the credibility of the expert  
If cross examining dig into the error



More than just gamesmanship  
Often an expert who makes errors, makes them in more than one area

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## TEN COMMON VALUATION ERRORS IN EXPERT REPORTS

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Incorrect Application of  
Appropriate Standard of Value

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## #2 - INCORRECT APPLICATION OF APPROPRIATE STANDARD OF VALUE

### Standards of Value

- Investment Value
  - Specific Buyer Strategic
  - Value to A Specific Investor Based on Individual Investment

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## #2 - INCORRECT APPLICATION OF APPROPRIATE STANDARD OF VALUE

### • Fair Value

#### ASC 820

"Fair value is the 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."

#### Revised Model Business Corporation Act

"The value of the shares immediately before the effectuation of the corporate action to which the dissenter objects, excluding any appreciation or depreciation in anticipation of the corporate action, unless exclusion would be inequitable."

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**#2 - INCORRECT APPLICATION OF APPROPRIATE STANDARD OF VALUE**

- Fair Market Value

"The price at which the property would change hands between a willing buyer and a willing seller, neither being under a compulsion to buy or sell and both having reasonable knowledge of the relevant facts."

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**#2 - INCORRECT APPLICATION OF APPROPRIATE STANDARD OF VALUE**

Primary differences between Investment Value and Fair Value/Fair Market Value

Revenue Synergies

Cost Synergies

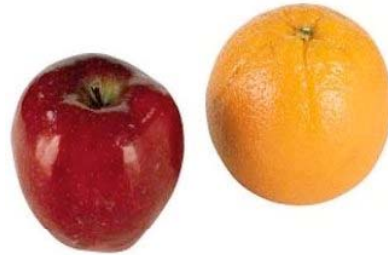
Different (Lower) Cost of Capital

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## TEN COMMON VALUATION ERRORS IN EXPERT REPORTS

### 3

Mismatching capitalization or discount rates with measures of economic income



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### #3 - CAPITALIZATION AND DISCOUNT RATES

In general, valuation can be summarized in one simple formula:

$$\text{Value} = \text{Cash Flow} / \text{Risk}$$

Discounting future income to a present value is simply an expansion of the cash flow portion

Discount rates and capitalization rates are representative of the risk used to discount future cash flows to the present value

Rates are reflective of the risk inherent in the cash flows

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### #3 - CAPITALIZATION AND DISCOUNT RATES

Rates are derived for equity and weighted average cost of capital (WACC)

WACC is the long way of saying "both bank and owner input"

Typically WACC will be lower than an equity rate

Debt is typically secured by assets and paid first, and as a result, it is less risky

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### #3 - DERIVING A CAPITALIZATION RATE

Build Up Method - Example

Risk Free Rate	5.00%
Equity Risk Premium	5.00
Small Stock Premium	6.00
Industry Risk Premia	5.28
Other Risk Considerations	<u>6.00</u>
Discount Rate	27.28%

Capitalization Rate = Discount Rate Less Long Term Growth Rate,  
Typically about 3%.

Cap Rate would be 24.28%

Compare to Current Prime Rate which is approximately 3.25.

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## WACC V. EQUITY

Equity Rate is 24.28%. Debt rate is 8.75%

WACC:

	Debt	Equity	Total = WACC
Rate of Return	5.25%	24.28%	
Percentage of Financing	50%	50%	
Weighting	2.63%	12.14%	14.77%

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## TYPICAL CAPITALIZATION MODEL

Value of Equity Using Cash Flows to Invested Capital		Value of Equity Using Cash Flows to Equity	
Cash Flows to Equity	\$ 2,000	Cash Flows to Equity	\$ 2,000
Plus Interest	432	Plus Interest	N/A
Cash Flows to Invested Capital	2,432	Cash Flows to Equity	2,000
Capitalization Rate (WACC)	14.77%	Capitalization Rate (Equity Rate)	24.28%
Market Value of Invested Capital	16,474	Market Value of Equity	8,237
Less: Interest Bearing Debt	(8,237)	Less: Interest Bearing Debt	N/A
Market Value of Equity	\$ 8,237	Market Value of Equity	\$ 8,237

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### ERRORS ARISE WHEN ANALYSTS MISMATCH RATES:

Error - Used Equity Rate to Discount Cash Flows to Invested Capital	
Cash Flows to Equity	\$ 2,000
Plus Interest	432
Cash Flows to Invested Capital	2,432
Capitalization Rate (Equity Rate)	24.28%
Market Value of Equity	10,018
Less: Interest Bearing Debt	(8,237)
Market Value of Equity	\$ 1,781

Divided by wrong rate (should have used WACC of 14.77%)

Then subtracted debt

Misstatement of \$6.5 million

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### ERRORS ARISE WHEN ANALYSTS MISMATCH RATES:

Error - Used Equity Rate Discount Rate as Opposed to Capitalization Rate	
Cash Flows to Equity	\$ 2,000
Plus Interest	N/A
Cash Flows to Equity	2,000
Capitalization Rate (Equity Rate)	27.28%
Market Value of Equity	7,331
Less: Interest Bearing Debt	N/A
Market Value of Equity	\$ 7,331

Forgot to subtract growth of 3% from equity rate

Misstatement of \$1 million

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## TEN COMMON VALUATION ERRORS IN EXPERT REPORTS

## 4

Mismatching of Economic Income Measure  
and Interest Bearing Debt

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#4 - MISMATCHING OF ECONOMIC INCOME MEASURE  
AND INTEREST BEARING DEBT

<b>Error - Neglected to Impact Cash Flows for Interest Bearing Debt</b>	
Cash Flows to Equity	\$ 2,000
Cash Flows to Invested Capital	2,000
Capitalization Rate (WACC)	14.77%
Market Value of Invested Capital	13,546
Less: Interest Bearing Debt	(8,237)
Market Value of Equity	\$ 5,309

Forgot to add back interest expense (**Rule of thumb:** if the cap rate is lower than the equity rate, interest should probably be added back)

Misstatement of \$2.9 million

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#### #4 - MISMATCHING OF ECONOMIC INCOME MEASURE AND INTEREST BEARING DEBT

<b>Error - Did Not Subtract Debt When Determining Value to a Specific Owner</b>	
Cash Flows to Equity	\$ 2,000
Plus Interest	432
Cash Flows to Invested Capital	2,432
Capitalization Rate (WACC)	14.77%
Market Value of Invested Capital	16,474
Less: Interest Bearing Debt	N/A
Market Value of Equity	\$ 16,474

Misstatement of \$8.2 Million

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#### TEN COMMON VALUATION ERRORS IN EXPERT REPORTS

# 5

Failure to Appropriately Account for  
Tax Related Considerations

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## #5 - FAILURE TO APPROPRIATELY ACCOUNT FOR TAX RELATED CONSIDERATIONS

Discussion of Ibbotson data as it relates to tax considerations

Brief overview of tax considerations in the valuation of a closely held business.

What is a reasonable rate to use?

NOL Issues

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## #5 - FAILURE TO APPROPRIATELY ACCOUNT FOR TAX RELATED CONSIDERATIONS

Theoretical Considerations - Tax Ramifications of Closely-Held Businesses

**Built-In Gains Tax** - the tax on built in gains under IRC §1374 is a corporate-level tax on S corporations that dispose of assets that appreciated in value during years when the corporation was a C corporation.

This provision essentially provides a 10-year look-back (5 years for the 2011 Tax Year) for gains that would otherwise have been realized if the S election had not been made.

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## #5 - FAILURE TO APPROPRIATELY ACCOUNT FOR TAX RELATED CONSIDERATIONS

Theoretical Considerations - Tax Ramifications of Closely-Held Businesses

**Trapped-In Gains** - this term refers to the unrealized capital gains and ordinary income from depreciation recapture which is inherent in the difference between the fair market value of the assets of the business and their tax basis.

Income taxes on the sale of stock or sale of assets and resultant liquidation of the corporation.

Often times included as a provision in the discount for lack of marketability.

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## #5 - FAILURE TO APPROPRIATELY ACCOUNT FOR TAX RELATED CONSIDERATIONS

Treatment of Trapped In Gains (TIG) in Business Valuations

Underlying Theory Applied to Business Valuation

A hypothetical willing buyer would discount the price which would be paid for a stock in a corporation with trapped in gains (TIG). Similarly, a hypothetical seller will accept a lower price for a stock that is subject to trapped in gains.

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## #5 - FAILURE TO APPROPRIATELY ACCOUNT FOR TAX RELATED CONSIDERATIONS

### Treatment of Trapped In Gains (TIG) in Business Valuations

ABC Corporation holds \$5 million worth of assets and has no trapped in capital gains. XYZ Corporation holds \$5 million of identical classes of assets, but has trapped in capital gains of \$3 million due to depreciation recapture and market appreciation of its assets. All other things being equal, a hypothetical buyer would pay less for an interest in XYZ Corporation than in ABC Corporation due to the trapped in capital gains.

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## #5 - FAILURE TO APPROPRIATELY ACCOUNT FOR TAX RELATED CONSIDERATIONS

### Theoretical Considerations - Tax Ramifications of Closely-Held Businesses

Corporate income taxes on projected/historical earnings.	Almost always factored into the business valuation in order to match an after-tax discount or capitalization rate with an after tax cash flow stream. As noted above, a minority of business appraisers believe that Pass Through Entities should be treated differently.
Built-In Gains Tax	May be considered in underlying business valuation.
Trapped-In Gains	May be considered in underlying business valuation.
Income taxes on sale of stock or sale of assets and resultant liquidation of the corporation.	Not considered in business valuation.

Please note that all of the above income tax considerations are distinct.

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## #5 - FAILURE TO APPROPRIATELY ACCOUNT FOR TAX RELATED CONSIDERATIONS

Theoretical Considerations - Tax Ramifications of Closely-Held Businesses

In a traditional Fair Market Value business appraisal, the tax consequences required under Act #175 are an additional calculation beyond the scope of a "fair market value" opinion.

The income taxes to be paid by the seller after the sale do not affect the price at which the business would change hands.

- These taxes must be distinguished from Trapped In Gains (TIG) associated with the business itself.

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## TEN COMMON VALUATION ERRORS IN EXPERT REPORTS

### 6

Mismatching Control Adjustments  
With Interests Being Valued

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## #6 - MISMATCHING CONTROL ADJUSTMENTS WITH INTERESTS BEING VALUED

### Control Adjustments

#### *Type 1 Normalization Adjustments*

The first type are adjustments that eliminate one-time gains or losses, other unusual items, non-recurring business elements, expenses of non-operating assets and the like.

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## #6 - MISMATCHING CONTROL ADJUSTMENTS WITH INTERESTS BEING VALUED

### Control Adjustments

#### *Type 2 Normalization Adjustments*

The second type of normalization adjustment involves adjustments that normalize officer/owner compensation and other discretionary expenses that may be eliminated by an owner motivated to maximize profits and provide the greatest return to its stockholders.

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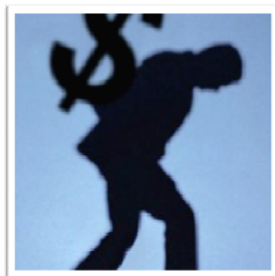
## #6 - MISMATCHING CONTROL ADJUSTMENTS WITH INTERESTS BEING VALUED

### Control Adjustments

- Must consider the size of, and level of control associated with, the Subject Interest in determining whether to make Type 2 Control Adjustments.
- The use of minority cash flows in the income approach produces a minority interest value.
- Minority cash flows are those cash flows without any adjustments for prerogatives of control by the controlling shareholder (e.g. excess compensation and perquisites).

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## TEN COMMON VALUATION ERRORS IN EXPERT REPORTS



7

Failure to Appropriately Determine the Capital Structure When Valuing a Non-controlling Interest

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## # 7 - FAILURE TO APPROPRIATELY DETERMINE THE CAPITAL STRUCTURE WHEN VALUING A NON-CONTROLLING INTEREST

### Capital Structure Issues as it Relates to Controlling or Non-Controlling Interests

Appraiser needs to be careful to not change the capital structure when valuing a non-controlling interest, unless it has been deemed appropriate to value the subject interest on a controlling basis and then take a discount for lack of control.

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## TEN COMMON VALUATION ERRORS IN EXPERT REPORTS

### 8

Marketability Discounts With Little or No Empirical Support or Analysis



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## #8 - MARKETABILITY DISCOUNTS WITH LITTLE OR NO EMPIRICAL SUPPORT OR ANALYSIS

### Marketability Discounts

Mandelbaum v. Commissioner - Nine factors

McCord v. Commissioner - Pre-IPO studies (see 2009 IRS job aid)

Numerous cases where haphazard averaging (Benchmark Average Approach) or discounts based on valuator's judgment ignored

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## #8 - MARKETABILITY DISCOUNTS WITH LITTLE OR NO EMPIRICAL SUPPORT OR ANALYSIS

### Our Methodology:

We utilize two approaches  
Nine Mandelbaum factors

### Evaluate Restricted Stock Comparison

- Nearly 600 transactions
- Divided into quintiles to compare to subject
- Utilize up to 11 financial statement factors

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## #8 - MARKETABILITY DISCOUNTS WITH LITTLE OR NO EMPIRICAL SUPPORT OR ANALYSIS

Restricted Stock Comparison

Subject Data (for Marketability Discount):		Include? (Yes/No)		Mean	Median	
		Quintile	Indiv Study	Overall Study		
Market Value	2,000 *	1	Yes	Yes	31%	32%
Revenues	1,500 *	1	Yes	Yes	24%	24%
PreTax Income	15 *	4	Yes	Yes	26%	24%
Net Profit Margin	1%	4	Yes	Yes	20%	16%
Dividend Payout Ratio	0%	1	Yes	Yes	21%	18%
Total Assets	20,000 *	2	Yes	Yes	26%	26%
BV of Equity	225.00 *	1	Yes	Yes	29%	26%
Price per Share	2.00	1	Yes	Yes	33%	33%
Trading Volume	N/A	5	No	No	N/A	N/A
MTB Ratio	1.00	1	Yes	Yes	21%	15%
Volatility	N/A	5	No	No	N/A	N/A
* In Thousands (000's)		Mean			26%	24%
		Median			26%	24%

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## #8 - MARKETABILITY DISCOUNTS WITH LITTLE OR NO EMPIRICAL SUPPORT OR ANALYSIS

Restricted Stock Comparison

Ticker	Exchange	Market Value	Total Assets	BV of Equity	Price per Share	Discount
TCGI	OTH	7,048	4,806	2,839	1	49%
PURE	OTH	9,879	5,558	4,057	1.25	18%
ILT	OTC	10,215	4,686	3,366	1.75	16%
SLEEQ	OTH	2,803	427	420	4	36%
DYTK	OTH	14,367	12,701	8,211	1.5	0%
TAG	AMS	6,502	10,183	(1,691)	1.12	39%
						26.36%
						26.88%

Note: Parameters are adjusted for inflation where applicable

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## #8 - MARKETABILITY DISCOUNTS WITH LITTLE OR NO EMPIRICAL SUPPORT OR ANALYSIS

Restricted Stock Comparison

Client Name		
Summary of Marketability Discounts		
	Mean	Median
Individual Company Discount	26%	27%
Overall Study Discount		
Mean	26%	24%
Median	26%	24%
Discount Chosen	<b>26.5%</b>	

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## TEN COMMON VALUATION ERRORS IN EXPERT REPORTS

# 9

Utilization of Private Comparable Transactions with Little or No Follow Up Research

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## #9 - UTILIZATION OF PRIVATE COMPARABLE TRANSACTIONS WITH LITTLE OR NO FOLLOW UP RESEARCH

Could be a major issue if used as a final conclusion of value

- If used there should be a detailed write-up in the report about what analysis was performed to show comparability to the subject company/interest

Oftentimes databases are a good resource for purposes of determining reasonableness compared to other valuation methodologies

Oftentimes databases contain information related to strategic acquisitions - standard of value would be aligned more towards investment value rather than fair market value or fair value

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## TEN COMMON VALUATION ERRORS IN EXPERT REPORTS

# 10

Random or haphazard averaging or overreliance on rules of thumb



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## #10 - RANDOM OR HAPHAZARD AVERAGING OR OVERRELIANCE ON RULES OF THUMB

- Rely on anecdotal evidence
- Typically are more like investment value
- Fail to account for operating or asset differences between entities
- Rarely are the terms cash equivalent (i.e. earnouts etc.)
- Particularly problematic of minority interests
- Nevertheless if they are commonly referred to, they should not be ignored
- Don't take into account geographical differences

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## #10 - RANDOM OR HAPHAZARD AVERAGING OR OVERRELIANCE ON RULES OF THUMB


Example:

Rule of Thumb - 20% of revenue

2 companies with \$2M in revenue may have attained that revenue in different manners



Possibility of non-operating assets

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# QUESTIONS?

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Joshua Lefcowitz  
BDO Consulting Managing Director  
jlefcowitz@bdo.com

Tami Bolder  
BDO Consulting Senior Manager  
tbolder@bdo.com

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