

# Fraud in Business Valuation

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# Reasons for a Business Valuation

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- Merger/Acquisition/Fairness Opinions
- Family succession planning/Estate and gift taxes
- Employee stock ownership plans (ESOP)
- Buy-Sell Agreements
- Executive compensation (options/SARS)
- Stock repurchase or recapitalization
- IPO
- Charitable gifts
- Bankruptcy
- Divorce
- Fair Value Accounting



# Standard of Value

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- Fair market value
  - Taxes
  - ESOP
- Strategic value
  - Sale of company
- Market value
  - IPO
- Fair value
  - Divorce
  - Dissenting shareholder
  - Accounting standards

*Value, like  
beauty, is in  
the eye of the  
beholder*



# Fair Market Value

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- The amount at which the capital stock of the company would change hands between a hypothetical willing buyer and a hypothetical willing seller.
- Each having reasonable knowledge of the relevant facts, neither being under any compulsion to act.



# IRS Revenue Ruling 59-60

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- The nature of the business and the history of the enterprise from its inception.
- The economic outlook in general and the condition and outlook of the specific industry in particular.
- The book value of the stock and the financial condition of the business.
- The earning capacity of the company.

# IRS Revenue Ruling 59-60

cont.

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- The dividend-paying capacity of the company.
- Whether or not the enterprise has goodwill or other intangible value.
- The price, size, and type of interests sold previously and the size and type of the interests to be valued.
- The market price of interests or stocks issued by companies in the same or a similar line of business and actively traded in a free and open market, either on an exchange or over-the-counter.

# The Relative Levels of Value

**Synergistic Value**

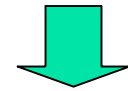


Premium for Synergy

**Control Value**



Premium for Control    Minority Discount



**Marketable, Minority Value**



Lack of Marketability Discount

**Nonmarketable, Minority Value**



# Synergistic Premium

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- Reflects the value to a specific buyer
- Synergistic buyer can pay more due to perceived earnings benefits from a merger
- Not appropriate consideration in determining “fair market value”



What Discounts/Premiums Apply in  
Valuing Shares in a Closely-Held  
Company?



## Control Premium

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- Appoint or remove management or determine their compensation
- Set policy or change the course of business
- Acquire or liquidate assets
- Make acquisitions of other companies
- Liquidate, dissolve, sell, or recapitalize the company
- Registering the company's stock for an initial public offering
- Force the sale of the stock to the Company (stock redemption)
- Determine the amount and timing of any dividends to shareholders
- Amend the Articles of Incorporation



# Minority Discount

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- A minority interest in a closely held corporation is generally held to be worth less than its proportionate share of the value of all the outstanding shares.
  - This is because minority shareholders generally cannot control the company.
  - The magnitude of a minority discount depends on the shareholder's ability to exercise any or all of a variety of rights typically associated with control.



# Premium for Control and Discount for Minority Interest

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- Size of control premium is influenced by many factors but most frequently falls in the 10% to 40% range.
- This equates to a minority discount range of 9% to 29%.

# Marketability Discount

- Securities of privately owned companies are not readily tradable on an established exchange and may require a discount for their lack of marketability.





# Marketability Discount cont.

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- Non-ESOP Shares
  - Minority blocks of non-ESOP stock typically have a discount in the 25% to 45% range.
    - Control blocks of stock are generally more readily marketable than minority blocks.
- ESOP shares
  - Have a put right.
  - The effect of this put option is generally to improve the marketability and liquidity of the security.
    - Marketability discounts for ESOP shares typically range from 0% to 15%.



# Valuation in Divorce

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# Community property or equitable distribution?

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- Community property
  - All assets acquired during a marriage are owned jointly by the community.
  - Equal division of assets upon divorce
- Equitable distribution
  - Distribute based on specific facts and circumstances



# Active or Passive appreciation?

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- Separate property at marriage
  - Active appreciation
    - Due to the efforts of a spouse-part of the marital estate
  - Passive appreciation
    - Due to external factors-separate property
- During marriage
  - Post marriage/pre property settlement



# Standard of Value

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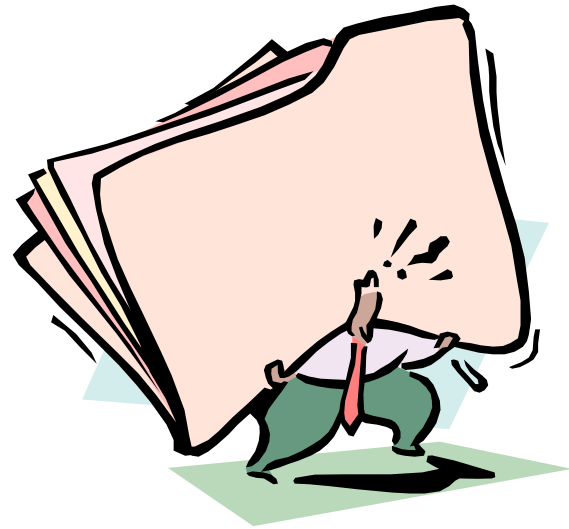
- Investment value
  - Value to the marital community in the hands of the present owner
- Fair market value
  - Hypothetical sale
    - What is the level of value?



# Information gathering

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- Management Interview
- Deposition
- Interrogatories





# Goodwill

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- Professional/Personal
  - Intangible value attributable solely to the efforts of or reputation of an owner spouse of the business
- Institutional
  - Intangible value that would continue to inure to the business without the presence of that specific owner spouse



# Summary of Valuation in Divorce

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- Personal Goodwill is not a marital asset
- Only business goodwill is a marital asset
- All intangible value related to the business is a marital asset

# Valuation in Bankruptcy

- Value collateral
- Going concern v. Liquidation
- Where are the assets?
- What assets to include?

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"I WAS LOOKING FOR A LITTLE STRONGER MISSION STATEMENT THAN THAT."



# Steps in the Valuation Process

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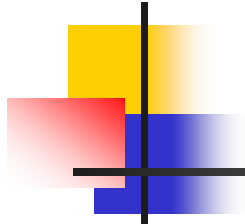
- Gather Company data
- Site Visit
- Research economic and industry information
- Analyze company financial statements/ratio analysis
- Tests of Valuation
- Discounts, Premiums and Value Conclusion



# Adjustments to Financial Statements

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- Balance Sheet
  - Non-Operating Assets
  - Market Value versus Book Value
- Income Statement
  - Non-recurring items
  - Add backs
  - Deducts
  - Tax Adjustments



# EBITDA

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Earnings before interest expense, taxes,  
depreciation and amortization

Net income

+ interest expense on long term debt

+ income taxes

+ depreciation and amortization

EBITDA



# Approaches to Business Valuation

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- I. Asset-Based Approach
- II. Market Approach
- III. Income Approach



# Asset-Based Approach

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- Adjusted Book Value Method
- Liquidation Value Method



# Market Approach

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- Previous Sales of or offers for the Company's Stock
- Sales of Similar Companies
- Sales of Stock of Publicly Traded Companies
- Rules of Thumb



# Income Approach

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- Capitalization of Earnings Method
- Discounted Cash Flow Method
- Leveraged Buyout



# Correlation and Conclusions

APPROACH	MINORITY	CONTROL
ASSET		Liquidation
MARKET	Public Company	Merger
INCOME	DCF	LBO

# FRAUD

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*"I'm afraid our accountants are being investigated for fraud -- on the brighter side, our financial statements have made the New York Times best-seller fiction list."*

# Abuse of Company Funds

- Tyco's former CEO Dennis Koslowski
- Abuse of company funds is using the company's own money for uses that benefit an individual but do not benefit the company.
  - \$6,000 shower curtain
  - \$2,000 trash can
  - \$2,000,000 birthday party for his wife in Italy
- Example

- When com  
asset will r  
compensa  
Adelphia/T



buy an asset when that  
any's benefit or as  
g the asset.



# Conflict of Interest

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- Securities analysts being accused of issuing bad reports about some stocks to their management but, issuing public reports praising that same stock.
  - The conflict arises when that stock is being promoted by the firm that pays those analysts' salaries.
- Example
  - When you ask for objective advice between two products from a salesman of one of the products. That salesman earns a salary from selling one of those products and nothing for telling you to buy the other product.



# Cooking the books/Falsified financial statements

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- This old accounting phrase refers to the manipulation of financial statements and records to conceal the reality.
- Example
  - Enron/Worldcom cooked the books.
    - Enron inflated revenue, and did not record some liabilities and losses.

# Deceit

- Deliberately misleading someone for personal gain though no actual crime has been committed.
- Example: French bank SocGen
  - \$7.1 billion fraud loss





# Embezzlement/Larceny

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- This is the illegal use of funds placed in someone's control.
- Example
  - The bookkeeper takes company money for their own use.
  - Collapse of Barings Bank- Nick Leeson



# Claims and Peddling

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- False/fraudulent claims
  - Insurance claims overvaluing the loss or creating the loss for secret gain.
- Influence peddling
  - When one attempts to control the actions of another by offering a personal gain outside the normal course of business. This is accused of happening frequently with politicians.



# Insider Trading

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- Gaining from or reducing a loss from a publicly traded security by selling it or buying it on important news learned before it is released is called insider trading.
- From whom this news is learned is the difference between being legal or illegal.
  - Overhearing a conversation in a restaurant is not illegal
  - Hearing it from the company's president is illegal.
- Example
  - Martha Stewart and IMClone.



# Internal Theft

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- This refers generally to the pilferage of company assets by employees.
- Companies dealing in products have the most problems in this area.
  - Example
    - Retail stores suffer from inventory shrinkage where goods are taken without being paid for.
    - 2008 estimate of Wal-Mart Inventory Shrinkage is more than \$3 billion



# Misappropriation of Company Funds for Personal Gain

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- This is using the company's cash as one's own piggy bank.
- When the owner does this in a privately owned company, it is rarely a crime (may be tax fraud).
- In a publicly owned company, it can be considered abuse of investor funds and may be a crime.

# Overcharging for Services

- This practice is most common in the services sector which includes plumbers as well as lawyers.
  - Local Examples
    - Adams & Reese
      - Lawyer indicted for stealing \$30 million from clients





# Payoff/Kickback/ Bribes

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- A bribe is a direct payment in order to gain where one would not likely gain in normal circumstances.
- Bribes are frequently paid to buyers or influence peddlers to gain orders for a company that it may otherwise not get.
- A payoff is paid before the sale is made, a kickback is paid after the sale is made. A payoff is like saying "please"; a kickback is like saying "thank you".

# Payoff/Kickback/ Bribes cont.

- Examples
  - Richard "Dickie" Scruggs bribes a Mississippi judge \$50,000
  - Air Force/ Boeing Scandal
  - Copeland corporate attorney Bryan White bribed Judge Bodenheimer





# Royalty and License Fraud

- This is attempting to avoid paying fees for the use of another's intellectual property (patent, trademark or copyright) or using another's intellectual property without permission.

Example:  
Chinese Black Market

  - In a small amount of time, Windows Vista hit the Chinese black market for a low, low price of \$295.
- Large companies with many copyrights, trademarks or patents maintain significant legal representation (lawyers) to very aggressively sue anyone they think is engaged in such activity or even possibly contemplating such activity.

- Before the I-Phone was released in China, it hit the black market, with hackers being able to unlock the phone and download Chinese software.



# Additional Frauds

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- Phony or bad investments
  - Ponzi schemes, phoney real estate deals, false stock information make up most types of this fraud. This group includes legal but misunderstood investments and also illegal offerings.
- Skimming
  - Taking money directly from the receipts and not recording them on the books. In larger scale, I call it "income diversion".



# Valuing a Business with Fraud

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Valuation Example

# Adjusting for Fraud- Balance Sheet

	Reported	Adjusted	Market Value
			Adjusted
Cash	5,000,000	10,000,000	10,000,000
Accounts Receivable	7,000,000	(2,000,000)	5,000,000
Inventory	4,000,000		4,000,000
Total Current Assets	16,000,000	24,000,000	24,000,000
Property Plant & Equipment	34,700,000	2,430,000	37,130,000
Accumulated Depreciation	(15,240,000)	(1,130,000)	(16,370,000)
Net PP&E	19,460,000	21,300,000	25,000,000
<b>TOTAL ASSETS</b>	<b>35,460,000</b>	<b>45,890,000</b>	<b>49,000,000</b>
Accounts Payable	4,000,000	4,000,000	4,000,000
Accrued Expenses	3,500,000	3,240,000	3,240,000
Total Current Liabilities	7,500,000	10,240,000	10,240,000
Long Term Debt	12,500,000	5,600,000	18,100,000
<b>TOTAL LIABILITIES</b>	<b>20,000,000</b>	<b>28,840,000</b>	<b>28,840,000</b>
Equity	15,460,000	17,050,000	20,160,000
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>35,460,000</b>	<b>45,890,000</b>	<b>49,000,000</b>

Overstated due to AR clerk depositing checks into personal acct

Overstated due to personal inventory (TV, house, etc)

Unpaid payroll taxes and penalties due to incompetent payroll clerk

Loan to cover capital expenses not on the books

# Adjusting for Fraud- Income Stmt.

Company A			
Income Statement for the Year Ended December 31, 2007			
	Reported	Adjusted	
Revenue	20,000,000	2,350,000	
Cost of Revenue	10,000,000	(1,300,000)	
<b>Gross Margin</b>	<b>10,000,000</b>	<b>13,650,000</b>	
<b>Operating Expenses</b>			
Owners Salary	3,000,000	3,000,000	
Other Salaries	5,000,000	(1,000,000)	
Rent	1,250,000	(550,000)	
Depreciation	745,000	745,000	
Interest Expense	300,000	300,000	
Repair and Maintenance	50,000	50,000	
Other Expenses	-	-	
Total Operating Expenses	10,345,000	8,795,000	
Investment Income	300,000	300,000	
<b>Pre-Tax Income</b>	<b>(45,000)</b>	<b>5,155,000</b>	
Income Taxes	(17,550)	2,010,450	
<b>Net Income</b>	<b>(27,450)</b>	<b>3,144,550</b>	
Depreciation	745,000	745,000	
Capital Expenditures	(500,000)	(500,000)	
Change in Working Capital	(150,000)	(150,000)	
<b>Free Cash Flow After Tax</b>	<b>67,550</b>	<b>3,239,550</b>	
Net Income	(27,450)	3,144,550	
Interest Expense	300,000	300,000	
Income Taxes	(17,550)	2,010,450	
Depreciation	745,000	745,000	
<b>EBITDA</b>	<b>1,000,000</b>	<b>6,200,000</b>	

Cash Sales Not Inflated due to personal purchases

Vacation home not used for business

# Market Approach

			<b>Unadjusted Company A</b>	<b>Adjusted Company A</b>	<b>Unadjusted Value</b>	<b>Adjusted Value</b>
	<b>Multiple</b>					
Price/Revenue	0.50		20,000,000	22,350,000	10,000,000	11,175,000
Price/Earnings (PE)	4.00		(27,450)	3,144,550	(109,800)	12,578,200
Price/Equity	2.00		15,460,000	17,050,000	30,920,000	34,100,000
Total Enterprise Value/EBITDA	5.00		1,000,000	6,200,000		
Less Long Term Debt			12,500,000	18,100,000	(7,500,000)	12,900,000
			<b>CONCLUSION OF VALUE</b>		<b>8,300,000</b>	<b>17,700,000</b>

# Income Approach

			Unadjusted	Adjusted		Unadjusted	Adjusted
		PV Factor	Company A	Company A		Present Value	Present Value
Free CFAT							
Year 1 (1)		0.83	72,954	3,498,714		60,552	2,903,933
Year 2		0.68	78,790	3,778,611		53,577	2,569,456
Year 3		0.56	80,760	3,873,076		45,226	2,168,923
Year 4		0.47	97,720	4,686,422		45,928	2,202,619
Terminal Value (2)		0.47	541,420	25,965,314		254,467	12,203,697
			<b>CONCLUSION OF VALUE</b>			<b>459,751</b>	<b>22,048,627</b>
<b>Assumptions</b>							
Short Term Growth Rate				8.00%			
Long Term Growth Rate				2.50%			
Discount Rate				21.00%			
Capitalization Rate (Disc. Rate- LT Growth Rate)				18.50%			
(1)	67,550	X	1.08	72,954			
Adj.	3,239,550	X	1.08	3,498,714			
(2)	97,720	X	1.025	100,163 /	18.50%		541,420
Adj.	4,686,422	X	1.025	4,803,583 /	18.50%		25,965,314

# Asset Approach

	Unadjusted			Adjusted		
	Market Value	Liquidation Cost	Total	Market Value	Liquidation Cost	Total
Cash	5,000,000	0	5,000,000	15,000,000	0	15,000,000
Accounts Receivable	7,000,000	700,000	6,300,000	7,000,000	700,000	6,300,000
Inventory	4,000,000	1,000,000	3,000,000	4,000,000	1,000,000	3,000,000
PP&E at Market Value	30,000,000	3,000,000	27,000,000	25,000,000	2,500,000	22,500,000
<b>TOTAL ASSETS</b>	<b>46,000,000</b>		<b>41,300,000</b>	<b>51,000,000</b>		<b>46,800,000</b>
Less Liabilities			20,000,000			28,840,000
<b>Net Proceeds</b>			<b>21,300,000</b>			<b>17,960,000</b>

# Conclusion and Reconciliation

		Unadjusted		Adjusted	
		Minority	Control	Minority	Control
<b>Market Approach</b>					
	Mergers		8,300,000		17,700,000
<b>Income Approach</b>					
	Discounted Cash Flow	362,565		16,335,936	
<b>Asset Approach</b>					
	Liquidation		21,300,000		17,960,000
<b>Conclusions</b>					
<b>Control Value</b>			<b>14,800,000</b>		<b>17,800,000</b>
	<i>Minority Discount</i>		97%		8%
<b>Marketable, Minority Value</b>			<b>400,000</b>		<b>16,300,000</b>
	<i>Lack of Marketability Discount</i>		30%		30%
<b>Nonmarketable, Minority Value</b>			<b>280,000</b>		<b>11,410,000</b>

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