

# FINA2207 - Business Analysis and Valuation

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Which method is best for the firm?

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## Chapter 1: Introduction to Investing and Valuation

### USERS OF FIRMS FINANCIAL INFORMATION (DEMAND SIDE)

Financial Statement Analysis	Primary information that firms publish about themselves. The method by which users extract information to answer their questions about a firm.
Equity Investors	Use statements for investment analysis and management of performance evaluation.
Debt Investors	Use statements to calculate the probability of default, determination of lending rates, covenant violations, etc.
Management	Use statements for strategic planning, investment in operations, evaluation of subordinates, subsidiaries, etc.
Employees	Use them to assess job security and for remuneration.
Litigants	Use them for disputes over value in the firm.
Governments	Use statements for policy making, regulation, taxation and government contracting.
Competitors	Use them to evaluate and compare themselves. Monitor performance to outmatch their competitor's, what they spend on marketing, how much their manufacturing costs are.

Investors and management are the primary users of financial statements. Investors are always concerned about the amount to pay for an investment.

“Price is what you pay, value is what you get”

If the market is efficient then price is equal to value, but this is not common. Deviation from equilibrium means that they are not equal.

Our goal is to calculate value to convert to price and determine if it is over or under priced.

### INVESTMENT STYLES

	Style	Cost
Intuitive Investing	Relies on intuition and hunches, no analysis.	Self-deception, ignores ability to check intuition.
Passive Investing	Accepts market price as value, no analysis. Assumes the ‘efficient market’ approach.	Risk paying too much.

Momentum Investing	Those stocks that have gone up have momentum to continue going up more.	Nothing can go up forever. Speculation feeds itself on creating bubbles.
Fundamental Investing	<p>Uses <b>Fundamental Analysis</b> or <b>valuation analysis</b> (also called <b>security analysis</b> when securities such as stocks or bonds are involved).</p> <p>It examines information about firms for the purpose of reaching conclusion about the underlying value. It challenges market prices. It can either be <i>active investing</i> or <i>defensive investing</i>.</p>	<p>Requires work.</p> <p><i>Defensive</i>: prudence requires analysis, a defence against paying the wrong price or selling at the wrong price.</p> <p><i>Active</i>: activism requires analysis, an opportunity to find mispriced investments.</p> <p>Fundamental investors try to discover the <b>intrinsic value</b> (warranted / fundamental value) which is the worth of an investment that is justified by the information about its payoff.</p>
Fundamental Risk	Is the risk that results from business operations.	
Price Risk	Is the risk of trading at the wrong price. Paying too much or selling for too little.	
Key Idea	To find the true value and exploit mispricing.	

## ALPHA AND BETA TECHNOLOGIES

### Beta Technologies:

- Passive investment needs a beta technology (except for index investing).
- Calculates risk measures: Betas.
- Calculates the normal return for risk using a model such as the CAPM.
- Ignores any arbitrage opportunities.
- Hedges against the fundamental risk by holding a well-diversified portfolio.
- Index investors are protected against fundamental risk but not against price risk.

### Alpha Technologies:

- Active investing needs a beta and an alpha technology.
- Try to gain abnormal returns by exploiting arbitrage opportunities from mispricing.
- They try to capture the price risk.
- Normal rate of return is the one justified by the risk.

## BUBBLES

- Many bubbles in the last two decades.
- Occur when people form unreasonable expectations of likely returns and so make misguided consumption and investment decisions.

## SUMMARY

- A Valuation model directs how analysis is to be done and how valuations are to be carried out.
- Accrual accounting corrects the deficiencies of cash accounting.
- Book value of equity – bottom line number in the balance sheet.
- Earnings (income) – bottom line number in the income statement.
  - Accrual accounting valuation is anchored based on these numbers.
- Valuation is a matter of measurement of value generated in the firm.
- The intelligent investor by Benjamin Graham.
- Shareholder = equity = common shares = profitability
- Bondholder = firm's debts = bonds = default
- Investors typically invest in a firm by buying equity shares or the firm's debt.
- Fundamental analysis does not take away all uncertainty, it reduces it.
- P/E ratios over 30 suggest that stocks are too expensive.
- Value of the firm = enterprise value.
- Business model = business concept = business strategy
- For the inside investor, business strategy is the result of valuation analysis.
- For the outside investor, the business strategy is the starting point for analysis.
- Intangible assets, knowledge capital, new technology and web real estate are all speculative.

## Chapter 3: How Financial Statements are used in Valuation

### THE METHOD OF COMPARABLES:

The Method of Comparables or multiple comparison analysis is simply the ratio of the stock price to a particular number in the financial statement. It involves:

1. Identifying comparable firms that have similar operations to the firm whose value is in question (the “target”). Usually use firms in the same industry (peers/competitors)
2. Identifying measures for the comparable firms in their financial statements – earning, book value, sales, cash flow – and calculate multiples of those measures at which the firms trade.
3. Applying an average or median of these multiples to the corresponding measure for the target firm to get that firm's value.

Price earnings ratio is the most popular.

Hewlett Packard, Lenovo, and Dell 2011

	1	2	3	4	4/1	4/2	
4/3							
	Sales	Earnings	Book Value	Market Value	P/S	P/E	P/B
Hewlett-Packard Co.	\$84,799	\$8,761	\$40,449	\$89,835	1.06	10.3	2.2
Lenovo Group Ltd.	21,540	242	1,763	5,730	0.27	23.7	3.3
Dell, Inc.	50,002	2,635	7,766	?	?	?	?
	Average Multiple for Comparables			Dell's Number	Dell's Valuation		
Sales	0.67		×	\$50,002	=	\$33,501	
Earnings	17.0		×	2,635	=	44,795	
Book value	2.8		×	7,766	=	21,745	
Average valuation						33,347	

Dollar numbers are in millions.

Dell's actual valuation on April 5, 2011, was \$28,041 million.

The average valuation for Dell is \$33,347m. Given 1,918m shares outstanding, this would give a value of \$17.39/share. The market price at that time was \$14.62. This, based on our valuation, the stock is cheap.

Conceptual Problems:

- Circular reasoning: Price is ascertained from the price of the comparables.
- Violates the tenet: “When calculating value to challenge price, don't put price into the calculation.”
  - Can bypass this if you use fair values not market values but long
- If the market is efficient for the comparable companies... Why is it not for the target company?