# FINC3015: Financial Valuations: A Case Study Approach

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# Lecture 1: An Introduction to Valuation

## What is Valuation?

Valuation is centred around understanding: it is an attempt to value equities as an asset class. However, the principles applied here are transferable to any asset class.

The purpose of valuation is to **eliminate uncertainty**, or, to understand/measure uncertainty through the attachment of a number/figure to the asset.
- Economics - how do we allocate resources efficiently?
- Stocks - how do we maximise shareholder wealth?
- Valuation does not remove uncertainty, it confronts it.
    - Help determine whether or not a decision is precarious/positive.
    - Our understanding of the past and anticipation of the future will always be obscured by uncertainty.

Corrections/modifications aim to take into account new information and developments i.e. differing uncertainty.
- The process of gathering information allows the process of decisions making or pricing to be more informative.
- Valuation = increased information

Uncertainty helps/drives valuation, not limit it. In the end, our aim is to have a **strong conviction in terms of your inputs.**

## Speculating v Investing:

Speculating:
- Speculators base their craft on a prediction of the behaviour of others. They are therefore ignorant of investment fundamentals.
    - They ultimately lose out in the 'greater-fool' game i.e. **the house always wins**
    - Key difference: investing is less timing the market. Example: tech bubble – even if a firm had identified early on that there was a bubble, it still could have

gone bankrupt. In contrast, could have ridden the bubble just before it burst and made significant excess returns.

- o Timing is a very difficult task

Investing:

- The decision to invest is based on the **difference between the current value of an asset and the perceived value of it**.
- Investors of this approach expect to profit in at least one of three ways
  - o Higher FCF which is reflected in higher share price
    - It is not the FCFF itself, but the **market expectation** of free cash flows in t=1. It is about whether the company does or doesn't meet market expecations, and from that, the share price will either fall or rise.
  - o An increase in the multiple than an investor is willing to pay for the underlying business
    - This is to do with changing perceptions of industries and sectors.
  - o A narrowing of the difference between the share price and underlying business value
    - Market are not always efficient. If the market is irrational, people may trade on this and then profit once the market self corrects.
    - In the long run, inefficiencies will be arbitraged away.

## Applications of Valuation

- Stock selection
  - o Pricing stocks through valuation models
- Inferring market expectations
  - o Valuation can help provide an understanding of the market
  - o Help calculate market risk premium i.e. how risky the market is
- Evaluating corporate events
  - o Used in mergers
- Rendering fairness opinions
  - o Neutral providing fair opinion for shareholders on whether a deal is going to be valuable or not
- Evaluating business strategies and models
  - o Every model can be critiqued

- - Target company being held as a 'buy' by research team
- Communicating with analysts and shareholders
- Appraising private business
  - Private equity - buying and selling business
  - Number of private businesses far exceeds public companies

## Stock Selection

Is a stock overpriced, should I buy/sell?

If EMH true, then the best one could do is track the market i.e. index fund/passive

Valuation is contrary to market efficiency i.e. you believe you have an edge that the market hasn't yet picked up.
- While the market in the LT is efficient, it goes through periods of inefficiency. This is the opportunity that financial valuation can exploit.
- Ben Graham's analogy to Mr Market - should take advantage of anomalies i.e. too pessimistic/optimistic

Fama and French:
- Risk factors; inclusion of risk factors in calculation can allow for short term gains, LT market is efficient

Summary: always a need for valuation analysis because 1) valuation informs markets and 2) ST irrationalities

## Inferring Market Expectations:
Example:
- Intel's revenue short by 7-9%, 8-12% analyst expectations in 2000 Q3
- Stock price fell by 30%

Did announcement warrant such a loss?
- The magnitude could be indicating a new trend for intel i.e. previous growth is not linear, may reach a new normal which is lower than previous expectations

- The drop can be seen as a reversion of expectations, thus, drop could be justified
- Price movements are always based on **expectations**
  - Fail to meet expectations = prices fall, reverse applies

Equity risk premium = difference between risk free rate of return and ROE

What future revenue growth rates were consistent with SP of $61.5 and $43.41 only five days later?

- 20%, not realistic for an established company

Was investors' reaction to the press release therefore irrational?

- Market is irrational longer than you can remain solvent

## An Investment Formula

1. Understanding business
   a. Understanding a company's economic and industry context and management's strategy responses
      1. Whether variations with economic cycle are pro-cyclical or counter-cyclical
      2. Industry factors i.e. input drivers that determine future position of firm
   b. Questions that need to be addressed:
      1. How attractive are industries in which company operates in terms of offering prospects for sustained profitability?
      2. What is company's relative position within the industry?
      3. What is the company's competitive strategy?
      4. How well is company executing its strategy?
   c. If asset has value, what is driving it?
      1. Value driver: performance variable which impacts the result of a business such as production effectiveness or customer satisfaction.
      2. Value drivers should be linked to shareholder value creation and measured by both financial and operation KPIs which must cover long-term growth and operating performance
         1. Sales, costs, investements, earnings/CF/ROI/CAPEX

3. Growth, profitability and capital intensity
4. Can look at financial statements: sales growth, whatever is considered a value driver. Make sure it is a small selection.

2. Forecasting company performance
   a. Forecast sales, earnings, dividends, and financial position
   b. Economic forecasting
      1. Top down/bottom up
      2. Start with forecasted economic growth, market size, and market share to arrive at revenue forecasts
   c. Financial forecasting
      1. Analysts will integrate the analysis of industry prospects and competitive corporate strategy with FSA to formulate specific numerical forecasts
      2. This **pro-forma analysis**

3. Selecting appropriate valuation model
   a. Base selection on company characteristics

4. Using forecasts in a valuation
   a. Use judgment in valuation application

5. Applying the Valuation Conclusions
   a. Investment recommendations
   b. Valuation opinions
   c. Strategic decisions

Issues in Financial Statement Analysis
1. Non-numeric analysis
   a. Understand regulation around an industry
   b. Natural for humans to look for patterns

2. Regression toward the mean
   a. Quant analysis important to know starting points e.g. if good first year all other years will look not as good. Growth is not linear, companies as they mature with regress to the mean i.e. growth of the economy

3. Mature firms vs Start-ups
   a. Start ups - costs usually exceed revenues, sometimes no revenue yet, still to grow heaps

4. Sources of information
    a. Financial analysis is only one part of analysis
5. Quality of Earnings
    a. Dollar earned by each company is never the same
    b. Is the dollar earned a better/worse quality of earnings?
    c. Quality of earnings = good predictor of future earnings
    d. High quality earnings = high propensity for future earnings i.e. not vulnerable to imminent risks

Data is not perfect:
- Various news sources use different calculations
- Must be able to make independent decisions

Quality of Earnings Examples

Firm A recognises revenue early using bill-and-hold sales i.e. revenue is not strong in current period --> potentially poor underlying performance, reported income increase, and future income decrease (WARNING SIGN)
- Drop in quality of earnings --> poor performance

Firm B capitalises product development expenses i.e. taking expenses that are meant to be in P/L statement and putting on balance sheet --> potentially poor underlying performance, reported income increases, and future income decreases
- Signal that quality of earnings decreasing

Firm C has large amounts of off-balance-sheet financing
- Liabilities understating

Firm D increases its loan-loss reserves
- Current income decreases as to inflate future performance
- Smooth out earnings

Quality of Earnings Risk Factors
- Poor quality of accounting disclosures

- Related-party transactions
- Frequent management or director turnover
- Pressure to make earnings targets
- Auditor conflicts of interest or frequent turnover
  - Changing auditors
  - Top 500 having a second-tier auditors i.e. want to screw them over
- Incentive compensation tied to stock price
- External or internal pressures on profitability
- Debt covenant pressures
- Previous regulatory/reporting issues

Example: QBE
- 112 acquisitions since 1983, integration = costs, not always simple
- QBE hard to value with confidence when there are acquisitions, re-insurance side deals, protection against catastrophe costs, spread movements, capital ratios, discount rates
- QBE tried to grow through acquisition instead of organically
  - This leads to uncertainty about their ability to grow
  - QBE does not have much leverage as other companies know their only growth is non-organic