

## *Week 5 - Financial Ratio*

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- The objective of ratio analysis is to *determine whether the business is improving or declining*. This serves:
  - 1] Year-to-year performance
  - 2] Firm-to-firm performance (*of course it is in same industry*).

Broadly speaking, basic ratios can be grouped into **five** categories.

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- When analyzing return on capital employed (ROCE), there are **2** factors that contribute towards ROCE in terms of why the ratio is high or low. They are:
  - 1] **Profit Margin**: It measures how much profit based on operating activity can be earned for selling 1 dollar (*thus, the profit before interest and taxation is used*).
  - 2] **Asset Turnover**: It measures how well the assets of a business are used to generate sales.

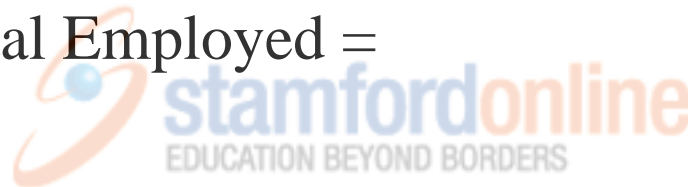
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- **Profitability and return**

### **1 ] ROCE (Return on Capital Employed)**

Return on Capital Employed =



Profit Before Interest and Taxation (PBIT)

Shareholders' Equity + Long Term Liabilities

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- **Profitability and return**

### **2 ] ROE (Return on Equity)**

Return on Equity =



Profit After Tax and Preferred Dividend

Ordinary Share Capital and Other Equity

It is not a widely used ratio.

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- **Long Term Solvency and Stability**

### 1] Capital Gearing

Capital Gearing =  **stamfordonline**  
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$$\frac{\text{Total Long Term Debt}}{\text{Shareholders' Equity} + \text{Total Long Term Liabilities}}$$

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- It measures the proportion of a company's capital that is from long term debt or share capital. Total long-term debt includes preferred shares and debentures. In general, if the proportion is more than **50%**, the company is said to be highly geared. Highly geared company will face difficulty in finding new sources of finance.

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## Long Term Solvency and Stability

### 2] Interest Cover

$$\text{Interest Cover} = \frac{\text{Profit Before Interest and Tax}}{\text{Interest Charges}}$$


Profit Before Interest and Tax

Interest Charges

The interest cover shows whether a company is earning enough profits before interest and tax to pay its interest cost comfortably.

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## Short Term Solvency and Liquidity

### 1) Current Ratio

Current Ratio =



Current Assets

—————  
Current Liabilities

The idea behind this is that a company should have enough current assets that give a promise of cash to meet its future commitments to pay off its current liabilities. Obviously, a ratio in excess of 1 should be expected.

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### Short Term Solvency and Liquidity

#### 2] Quick Ratio

Quick Ratio =



$$\frac{\text{Current Assets} - \text{Closing Inventory}}{\text{Current Liabilities}}$$

Not all companies are able to convert all their current assets into cash very quickly. For example, manufacturing companies might hold large quantities of raw material stocks. This ratio should be at least 1.

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### Efficiency

#### 1] Account Receivable Collection Period

AR Collection Period =



Trade Receivables x 365 days  
Credit Sales

It is a rough measure of the average length of time it takes for a company's customer to pay what they owe. The figure for sale should be taken as the credit sale in the income statement. The trade receivables are taken from only debtors in the balance sheet.

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### Efficiency

#### 2] Inventory Turnover Period

Inventory Turnover Period =

$$\frac{\text{Inventory}}{\text{Cost of Sales}} \times 365 \text{ days}$$

A lengthening inventory turnover period from one year to the next indicates two things:

- a) A slowdown in trading
- b) Investment in inventories is becoming excessive.

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### Efficiency

#### 3] Account Payable Payment Period

AP Payment Period =



Trade Accounts Payable x 365

Purchases

An increase is often a sign of lack of long term finance or poor management of current assets, resulting in the use of extended credit from suppliers, increased bank overdraft and so on.

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### Stock Market Ratio

#### 1] Earnings Per Share

According to FRS 3, EPS is defined as



The profit *after tax* and *after deducting preference dividends* divided by the number of ordinary shares.

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## Stock Market Ratio

### 2] Price/Earnings Ratio

$$\text{P/E Ratio} = \frac{\text{Market price per share}}{\text{EPS}}$$


PE ratio reflects the market appraisal of the shares' future prospect. If one company has a higher PE ratio than another it is because investors either expect its earnings to increase faster than the other or consider that it is a less risky company or in a more secure industry.

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### Stock Market Ratio

#### 3] Dividend Yield

Dividend Yield =



Dividend on the share for the year x 100

Current market value of the share

It is the return a shareholder is currently expecting on the shares of a company.

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• What are the limitations of financial ratio?

(1) It is sometimes difficult to identify the industry category to which a firm belongs when the firm engages in multiple lines of business.



(2) Published Industry averages are only approximations and provide the user with general guidelines rather than specifically determined averages of the ratios of all or even a representative sample of the firms within an industry.

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• What are the limitations of financial ratio?

- (3) Accounting practices differ widely among firms and can lead to differences in computed ratio. For example, depreciation method: straight line / reducing balance.
- (4) An industry average may not provide a desirable target ratio / norm. At best, an industry average provides a guide to the financial position of the average firm in the industry.
- (5) Difference in closing the year end account. Many firms experience seasonality in their operation.