

Ratio Analysis

A2 Accounting

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Ratio Analysis

- Looks at the pairing of financial data in order to get a picture of the performance of the organisation
- Ratios allow a business to identify aspects of their performance to help decision making

Ratio Analysis

- Allows you to compare performance between departments and over time

Ratio Analysis

Four different types of ratios can be used to measure:

- Profitability – how profitable the firm is
- Liquidity – the businesses ability to pay
- Investment/shareholders – allows businesses to look at risk and potential earnings of investments
- Gearing – looks at the balance between loans and shares in a business

Current Ratio

- Current ratio looks at the liquidity of the business
- Looks at the ratio between Current Assets and Current Liabilities
- **Current Ratio = Current Assets : Current Liabilities**
- Ideal level – approx 1.5 : 1
- Need enough current assets to cover current liabilities
- If its too high means too many current assets e.g. might have too much stock, could use the money tied up in current assets more effectively
- If its too low you run the risk of not being able to meet current liabilities and you could have liquidity problems

Acid Test

- Acid test ratio is another way of looking at liquidity
- It has been argued that stock takes a while to convert to cash so a more realistic ratio would ignore stock
- $(\text{Current assets} - \text{stock}) : \text{liabilities}$
- 1:1 seen as ideal
- Again if it is too high means that the business is very liquid - may be able to use the cash for other activities to increase performance
- If it is too low then the business may face working capital problems
- Some types of business need more cash than others so acid test would be expected to be higher

Investment/Shareholders

- Shareholders are interested in the following ratios:
- Dividends per share– total dividends / number of shares issued
- A higher figure means the shareholder got a larger return
- Good to compare with competitors
- Businesses can improve this themselves by increasing dividend payments
- Dividend yield – ordinary share dividend / market price x 100 –
- Compares the return amount with what would be needed to purchase a share
- The higher the better
- This ratio varies daily with changes to a companies share price

Gearing

- This is an efficiency ratio
- Looks at the relationship between borrowing and fixed assets
- Gearing Ratio = Long term loans / Capital employed x 100
- The higher it is the greater the risk the business is under if interest rates increase

Asset Turnover ratio

- Looks at a businesses sales compared to the assets used to generate the sales
- $\text{Asset turnover} = \text{sales (turnover)} / \text{net assets}$
- $\text{Net assets} = \text{Total assets} - \text{current liabilities}$
- The value will vary with the type of business:
 - Businesses with a high value of assets who have few sales will have a low asset turnover ratio
 - If a business has a high sales and a low value of assets it will have a high asset turnover ratio
 - Businesses can improve this by either increasing sales performance or getting rid of any additional assets

Stock turnover ratio

- Another efficiency ratio
- Looks at how efficiently a company converts stock to sales
- $\text{Stock turnover ratio} = \text{cost of sales} / \text{stock}$
- High stock turnover means increased efficiency
- However it depends on the type of business
- Low stock turnover could mean poor customer satisfaction as people might not be buying the stock

Debtors collection period

- This is another efficiency ratio
- This looks at how long it takes for the business to get back money it is owed
- Debtors collection ratio = $\text{debtors} \times 365 / \text{turnover}$
- The lower the figure the better as get cash more quickly
- However sometimes need to offer credit terms to customers so this may increase it
- Need to ensure keep track of any changes in credit terms as these should impact this ratio

Profitability

- Profitability measures look at how much profit the firm generates
- Profit is the number one objective of most firms
- Different measures of profit – gross and net
 - Gross profit – total revenue – variable costs (cost of sales)
 - Net Profit – Gross profit – overheads

Profitability

- **Gross profit looks at how much of the sales revenue is converted into profit**
- **Gross Profit Margin = Gross profit / turnover x 100**
- The higher the better
- Allows the firm to assess the impact of its sales and how much it cost to generate (produce) those sales
- A gross profit margin of 35% means that for every £1 of sales, the firm makes 35p in gross profit

Profitability

- Net profit looks at how much of the sales revenue is left as net profit
- $\text{Net Profit Margin} = \text{Net Profit} / \text{Turnover} \times 100$
- Includes overheads / fixed costs
- Net profit is more important than gross profit for a business as all costs are included
- A business would like to see that this ratio has improved over time

Profitability

- Another profitability ratio – looks at operating profit and capital employed by the business
- Return on Capital Employed (ROCE) = $\text{Profit} / \text{capital employed} \times 100$
- Typically should be 20-30%
- Need to compare to previous years and competitors to get a clear picture
- Can improve this by increasing profits without increasing fixed assets / capital

Limitations With Ratio Analysis

- To be most beneficial the results need to be compared with other data including:
 - The results for the same business over previous years
 - The results of ratio analysis for their competitors
 - The results of ratio analysis for other firms in other industries

Other factors need to consider

- The market the business is trading in
- The position of the firm in the market
- The quality of the workforce and management
- The economic environment

Summary

- Ratios are used to look at the performance of a business
- Liquidity ratios look at the firms ability to meet its debts
- Current ratio = $\frac{\text{current assets}}{\text{current liabilities}}$
- Acid test ratio = $\frac{\text{current assets} - \text{stock}}{\text{current liabilities}}$
- Shareholder ratios these are ratios that shareholders would be interested in
- Dividends per share = $\frac{\text{total dividends}}{\text{number of shares issued}}$
- Dividend yield = $\frac{\text{ordinary share dividend}}{\text{market price}} \times 100$
- Efficiency ratios - how well the business is operating
- Gearing = $\frac{\text{Long term loans}}{\text{Capital employed}} \times 100$
- Stock turnover = $\frac{\text{cost of sales}}{\text{stock}}$
- Asset turnover = $\frac{\text{sales (turnover)}}{\text{net assets}}$
- Debtors collection period = $\frac{\text{debtors} \times 365}{\text{turnover}}$
- Profitability ratios - assess the profitability of the business
- Gross profit = $\frac{\text{Gross profit}}{\text{turnover}} \times 100$
- Net profit = $\frac{\text{Net profit}}{\text{turnover}} \times 100$
- Return on capital employed = $\frac{\text{Profit}}{\text{capital employed}} \times 100$
- Limitations of ratio analysis - need to be able to compare figures over time and between companies to be most effective