Formulae and Help Sheet

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| **Gross profit as a percentage of sales**  Gross profit  x100  Sales revenue | **Net profit as a percentage of sales**  Net profit  x100  Sales revenue |
| **Return on capital employed**  x100  Net profit before interest and tax  Capital employed | **Current ratio**  Current assets  Current liabilities |
| **Acid test ratio**  Current assets – stock  Current liabilities | **Debtors payment period**  Debtors  X365  Credit sales |
| **Creditors payment period**  Creditors  X365  Credit purchases | **Rate of stock turnover**  Average stock  X365  Cost of goods sold |
| **Average stock**  Opening stock + closing stock  2 | **Gross profit**  Sales revenue – total costs |

**What do the ratios mean?**

**Gross profit percentage of sales**

* This ratio shows for everyone £1 made in sales revenue how much is left in gross profit.
* Above 50% is deemed to be quite a good figure and shows the business is profitable
* The greater the percentage, the more successful the business has the potential to become
* If gross profit margin falls from one year to the next, or if it is thought to be too low, a firm might reduce its total costs (cost of production) e.g. looking for a cheaper supplier without compromising quality. Alternatively, it might try to increase sales without increasing the cost of goods sold

**Net profit percentage of sales**

* It shows how much, for everyone £1 made in sales revenue, is left as net profit after all expenses have been deducted
* The typical value is between 20-30%. However, the higher the outcome, the better it is for the business
* If net profit margin falls from one year to the next or if it is too low, a firm might look to reduce their expenses e.g. by moving to a cheaper location or cutting staff costs.
* It is important for a firm to understand the reasons why there is a fall in the net profit if happens

**Return on capital employed**

* Shows the percentage return a business is achieving from the capital (or money) being used to generate that return
* It shows for everyone £1 invested in the business in owners’ capital or retained profits, the value of it that is being generated in profit
* Businesses will often compare the ROCE of a business to the interest rates being offered by a bank or building society. Usually, the ROCE is greater than the interested rates offered by the bank/building society

**Current ratio**

* This ratio shows the amount of current assets in relation to current liabilities and is expressed as a x:1.
* If a firm had a current ratio of 2:1, this would mean that for every £2 it owned in current assets it owed £1 in current liabilities
* 2:1 is a relatively positive ratio
* If the “x” is less than 1, this means that the value of their current assets are not sufficient enough to pay their current liabilities – this means that if the firm’s bank demanded repayment of loans/overdrafts immediately or creditors demanded payment, the firm would not be able to cover these demands from the current assets – which is not a good place to be in!

**Acid test ratio**

* A tougher measure of the firm’s liquidity (how easily a firm can pay off its debts if needed to with the current assets we had)
* Like the current assets, it shows the amount of current assets in relation to the current liabilities but this time it does not include the value of the stock remaining in the business. This is because it assumes that the remaining stock cannot be sold. The reason for this is because stock is considered the hardest current asset to turn into cash quickly
* Expressed as a x:1

**Debtors’ payment period**

* Measures how long it takes on average for debtors to pay – it is written in number of days
* A business with cash flow problems will try to reduce their debtors payment period (remember, debtors are people who owe the business money)
* The payment period offered usually depends on the reliability of the customer (a customer can be a business customer or an actual customer)

**Creditors’ payment period**

* Measures on average how long it takes a business to pay for goods and services bought on credit – written as a number of days
* A business with cash flow problems tries to lengthen their creditors payment period
* Remember, creditors are people the business owes money to

**Rate of stock turnover**

* Measures the average amount of time an item of stock is held by a business – written as a number of days
* This is dependent on the nature of the firm (e.g. food stores have a quicker turnaround of stock compared to cars)
* If the rate of stock turnover appears high for a firm it could be a problem if the product goes out of fashion at a later date