

11 – Ratios Analysis

Profitability ratios

(i) Gross Profit Ratio (margin) (also known as Gross Profit percentage) = $\frac{\text{Gross Profit}}{\text{Revenue}} \times 100$

$$\text{Mark up} = \frac{\text{Gross Profit}}{\text{Cost of Sales}} \times 100$$

(ii) Profit Ratio (also known as Profit percentage) = $\frac{\text{Profit for the year}}{\text{Revenue}} \times 100$

can also be expressed as $\frac{\text{Profit for the year (after interest)}}{\text{Revenue}} \times 100$

(iii) Return on Capital Employed = $\frac{\text{NPBI}}{\text{Capital Employed}} \times 100$

[Capital Employed = Issued Shares + Reserves + Non-Current Liabilities]

(iv) Return on Equity = $\frac{\text{Profit for the year after Preference Dividends}}{\text{Equity}} \times 100$

[Equity = Issued Ordinary Shares + Reserves]

(v) Return on Total Assets = $\frac{\text{NPBI}}{\text{Total Assets}} \times 100$

[Total Assets = Non-Current Assets + Current Assets]

(vi) Operating expenses to Revenue Ratio = $\frac{\text{Operating Expenses}}{\text{Revenue}} \times 100$

(vii) Non-Current Asset Turnover = $\frac{\text{Net Revenue}}{\text{Total Net Book Value of Non-Current Assets}}$

Liquidity

$$(i) \text{ Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$(ii) \text{ Liquid Ratio} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$$

(Also known as 'Acid Test' or 'Quick Ratio')

$$(iii) \text{ Trade Receivables Turnover} = \frac{\text{Trade Receivables}}{\text{Credit Sales}} \times 365 \text{ days}$$

(Also known as Average Collection Period)

$$(iv) \text{ Trade Payables Turnover} = \frac{\text{Trade Payables}}{\text{Credit Purchases}} \times 365 \text{ days}$$

(Also known as Average Payment Period)

$$(v) \text{ Inventory Turnover} = \frac{\text{Average Inventory}}{\text{Cost of Goods Sold}} \times 365 \text{ days}$$

$$\text{Or Rate of Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}} \text{ (answer given in times)}$$

Cambridge International A Level only

$$(vi) \text{ Working Capital Cycle (in days)} = \text{Trade Receivables Turnover (in days)} + \text{Inventory Turnover (in days)} - \text{Trade Payables Turnover (in days)}$$

Or

$$\text{Working Capital Cycle (in days)} = \text{Average Collection Period} + \text{Inventory Turnover (in days)} - \text{Average Payment Period}$$

$$(vii) \frac{\text{Net Working Assets}}{\text{Sales/Revenue}} \times 100$$

Net Working Assets = Inventories plus Trade Receivables less Trade Payables

$$(viii) \text{ Income Gearing} = \frac{\text{Interest Expense}}{\text{Profit Before Interest and Tax (PBIT)}} \times 100$$

$$(ix) \text{ Gearing Ratio} = \frac{\text{Fixed Cost Capital}}{\text{Total Capital}}$$

Which is:
$$\frac{\text{Non-Current Liabilities} + \text{Preference Share Capital}}{\text{Issued Ordinary Share Capital} + \text{All Reserves} + \text{Non-Current Liabilities} + \text{Preference Shares}}$$

Investment ratios (stock exchange ratios) Cambridge International A Level only

$$(i) \text{ Earnings per share} = \frac{\text{Net Profit} - \text{Preference Share Dividend}}{\text{No. of issued Ordinary Shares}}$$

$$(ii) \text{ Price Earnings Ratio} = \frac{\text{Market Price per share}}{\text{Earnings per share}}$$

$$(iii) \text{ Dividend yield} = \frac{\text{Dividend paid and proposed}}{\text{Market Price of share}}$$

$$(iv) \text{ Dividend cover} = \frac{\text{Profit available to pay ordinary dividend}}{\text{Ordinary dividend paid}}$$

$$(v) \text{ Dividend per share} = \frac{\text{Ordinary dividend paid}}{\text{Number of issued ordinary shares}}$$

- Calculate ratios using year-end balances where appropriate, unless the question specifies the use of average figures.
- Calculate ratios to the number of decimal places required by the question.

PROFITABILITY

GROSS PROFIT MARGIN

While the gross profit is a dollar amount, the gross profit margin is expressed as a percentage of net sales. The Gross Profit Margin illustrates the profit a company makes after paying off its Cost of Goods sold. The Gross Profit Margin shows how efficient the management is in using its labour and raw materials in the process of production (In case of a trader, how efficient the management is in purchasing the good). There are two key ways for you to improve your gross profit margin. First, you can increase your process. Second, you can decrease the costs of the goods. Once you calculate the gross profit margin of a firm, compare it with industry standards or with the ratio of last year. For example, it does not make sense to compare the profit margin of a software company (typically 90%) with that of an airline company (5%).

$$\frac{\text{Gross Profit}}{\text{Revenue}} \times 100$$

NET PROFIT MARGIN

Net profit margin tells you exactly how the management and operations of a business are performing. Net Profit Margin compares the net profit of a firm with total sales achieved. The main difference between GP Margin and NP Margin are the overhead expenses (Expenses and loss). In some businesses Gross Margin is very high but Net Margin is low due to high expenses, e.g. Software Company will have high Research expenses.

$$\frac{\text{Profit for the year (after interest)}}{\text{Revenue}} \times 100$$

Return on Capital Employed (ROCE)

This is the key profitability ratio since it calculates return on amount invested in the business. If this ratio is high, this means more profitability (In exam if ROCE is higher for any firm it is better than the other firm irrespective of GP and NP Margin). This return is important as it can be compared to other businesses and potential investment or even the Interest rate offered by the bank. If ROCE is lower than the bank interest then the owner should shoot himself. This ratio can go up if profits increase and capital employed remains the same. Also if Capital employed decreases, this ratio might go up.

$$\frac{\text{NPBI}}{\text{Capital Employed}} \times 100$$

[Capital Employed = Issued Shares + Reserves + Non-Current Liabilities]

Return on Total Assets

This shows how much profit is generated on total assets (Fixed and Current). The ratio is considered an indicator of how effectively a company is using its assets to generate profits.

$$\frac{\text{Operating Profit}}{\text{Total Assets}} \times 100$$

Return on Shareholders' Funds / Return on Net Assets / Return on Owners capital

Since all the capital employed is not provided by the shareholders, this specifically calculates the return to the shareholders (It's almost the same thing as ROCE)

$$\frac{\text{Net Profit After Tax}}{\text{Share holder Funds / Equity}} \times 100$$

LIQUIDITY

As we know a firm has to have different liquidity. In other words they have to be able to meet their day to day payments. It is no good having your money tied up or invested so that you haven't enough money to meet your bills! Current assets and liabilities are an important part of this liquidity and so to measure the firm's liquidity situation we can work out a ratio. The current ratio is worked out by dividing the current assets by the current liabilities.

CURRENT RATIO

The figure should always be above 1 or the firm does not have enough assets to meet its liabilities and is therefore technically insolvent. However, a figure close to 1 would be a little close for a firm as they would only just be able to meet their liabilities and so a figure of between 1.5 and 2 is generally considered being desirable. A figure of 2 means that they can meet their liabilities twice over and so is safe for them. If the figure is any bigger than this then the firm may be tying too much of their money in a form that is not earning them anything. If the current ratio is bigger than 2 they should therefore perhaps consider investing some for a longer period to earn them more.

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

However, the current assets also include the firm's stock. If the firm has a high level of stock, it may mean one of the two things, 1. Sales are booming and they're producing a lot to keep up with demand. 2. They can't sell all they're producing and it's piling up in the warehouse!

If the second of these is true then stock may not be a very useful current asset, and even if they could sell it isn't as liquid as cash in the bank, and so a better measure of liquidity is the ACID TEST (or QUICK) RATIO. This excludes stock from the current assets, but is otherwise the same as the current ratio.

ACID TEST RATIO

Ideally this figure should also be above 1 for the firm to be comfortable. That would mean that they can meet all their liabilities without having to pay any of their stock. This would make potential investors feel more comfortable about their liquidity. If the figure is far below 1, they may begin to get worried about their firm's ability to meet its debts.

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

Rate of Stock Turnover

It shows the number of times, on average, that the business will sell its stock in a given period of time. It basically gives an indication of how well the stock has been managed. A high ratio is desirable because the quicker the stock is turned over, more profit can be generated. A low ratio indicates that stocks are kept for a longer period of time (which is not good).

$$\frac{\text{Cost of Sales}}{\text{Average Inventory}} \quad (\text{answer given in times})$$

Inventory Holding Period (Days): This is Rate of stock turnover in days. Lower the better.

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

Debtors Collection Period (Days): Shows how long it takes on average to recover the money from debtors. Lower the better.

$$\frac{\text{Trade Receivables}}{\text{Credit Sales}} \times 365 \text{ days}$$

Creditor Payment Period (Days) Shows how long it takes on average to payback the creditors. Higher the better.

$$\frac{\text{Trade Payables}}{\text{Credit Purchases}} \times 365 \text{ days}$$

Working Capital Cycle: (Only for MCQ). (Lower the better)

Stock Days + Debtor Days – Creditor Days

Utilization Ratios

Total Asset utilization (Total Asset Turnover)

Shows how much sales are being generated on Total Assets. Higher ratio indicates better utilization of Total Assets.

$$\frac{\text{Net Sales (times)}}{\text{Total Assets}}$$

Fixed Asset Utilization (Fixed Asset Turnover)

Shows how much sales are being generated on Fixed Assets. Higher ratio indicates better utilization of Fixed Assets.

$$\frac{\text{Net Revenue}}{\text{Total Net Book Value of Non-Current Assets}}$$

Working Capital Utilization (Working Capital Turnover)

Shows how much sales are being generated on Working Capital. Higher ratio indicates better utilization of Working Capital.

$$\frac{\text{Net Sales (times)}}{\text{Working Capital}}$$

INVESTMENT RATIOS

All of these ratios are calculated from the point of view of ordinary shareholders

What is Earning? (Profit attributable to ordinary shareholders) This is Profit After Interest , tax and preference share dividend. Basically whatever goes to ordinary shareholders.

1. Earning Per Share

How much profit after tax and preference share dividends is attributable to each ordinary share. Simply shows how much the company has earned for one ordinary share, since all the earnings belong to ordinary shareholders. Investors regard EPS as a measure of success of the company. Obviously the higher this number the more money is made by the company. This ratio allows us to compare different companies power to make money. The higher the EPS (with all else equal), the higher each share should be worth. When we do our analysis we should look for a positive trend of EPS in order to make sure the company is finding more ways to make more money. Otherwise the company is not growing. The main problem with EPS is since it is expressed on per share basis it becomes difficult to compare companies with different amount of number of shares. An important aspect of EPS that's often ignored is the capital that is required to generate the earnings in the calculation. Two companies could generate the same EPS number, but one could do so with less equity (investment) - that company would be more efficient at using its capital to generate income and, all other things being equal, would be a "better" company.

$$\frac{\text{Net Profit} - \text{Preference Share Dividend}}{\text{Number of issued Ordinary Shares}}$$

2. Dividend Per Share

This is calculated using dividends paid . Dividends are a form of profit distribution to the shareholder. Having a growing dividend per share can be a sign that the company's management believes that the growth can be sustained. A high Dividend per share also means the company has enough cash available to pay for dividends.

$$\frac{\text{Ordinary dividend paid}}{\text{Number of issued Ordinary Shares}}$$

3. Dividend Cover

This shows the relation of earning to dividends . How many times the dividend for the year can be covered(paid) from this year's earnings. A low cover indicates future dividends are at risk if company's profitability falls in the future(as they are not retaining enough profits and are distributing the majority) .A high dividend cover is an indication of safety of dividends in the future ,as the company has retained enough profits. The long term investors look for high dividend cover companies, because they believe if the company is retaining more profits then they have more growth opportunities. If the ratio is under 1, the company is using its profit from a previous

year to pay this year's dividend. This ratio also shows the dividend policy of the company, a high cover indicates a very conservative approach where majority of the profits are invested back in the business.

$$\frac{\text{Profit available to pay ordinary dividend}}{\text{Ordinary dividend paid}}$$

4. Dividend Yield :

This shows the dividends as a % of market price. This is used to calculate cash return on investment. We take investment as market price because that is the opportunity cost of holding a share. High dividend yield makes the share more attractive.

$$\frac{\text{Dividend paid and proposed}}{\text{Market Price of share}}$$

5. Interest Cover

Shows how many times the operating profit can cover for the interest expense. A high ratio is desirable to this would mean company has more ability to handle its interest charges and to more amount will be available to pay for dividends. A low cover may turn a small profit into a loss due to the interest expense. Low cover also makes it difficult for the company to raise more debts and loans as the financial intuitions demand a minimum interest cover level.

$$\frac{\text{Profit before interest and tax (PBIT)}}{\text{Interest expense}} \quad (\text{times})$$

6. Price to Earning Ratio

This relates market price to the Earning per share. High Ratio shows the investor has more confidence in this company's future to maintain its current level of earning, that is why they are willing to pay more. The ratio should be compared with the average ratio of the similar companies. Some believe that the high ratio may mean that share price is overvalued and will fall in future. But a growing PE ratio shows increase in the confidence level of investors.

$$\frac{\text{Market Price per share}}{\text{Earnings per share}}$$

7. Gearing Ratio

This shows how much of the total capital employed (total amount invested in the business) is coming from external sources (not by ordinary shareholders). The amount of financing provided by long term liabilities and preference shareholders.

This is measure of risk because if a high proportion is coming from these sources than majority of the profits will go as interest payments and preference dividends (especially In the low profitability years), infact the interest expense has to be paid even in case of losses. If a company is already highly geared then its difficult to raise more loans (obviously). Gearing of more than 50% is considered high and risky. Remember high gearing is not necessarily bad (but it's risky) , it depends on risk preference of the investor. A high geared company tends to grow faster because they rely on debt and external financing, it can give amazing returns in good years but in a bad year it can also go bankrupt.

$$\frac{\text{Fixed Cost Capital}}{\text{Total Capital}}$$

which is:

$$\frac{\text{Non-Current Liabilities} + \text{Preference Share Capital}}{\text{Issued Ordinary Share Capital} + \text{All Reserves} + \text{Non-Current Liabilities} + \text{Preference Shares}}$$

8. Income Gearing

This shows how much% of operating profit has to go for interest Its same as interest cover but calculated as a %.

$$\frac{\text{Interest Expense}}{\text{Profit Before Interest and Tax (PBIT)}} \times 100$$

9 . Net Asset Value Per Share (Book value Per Share)

This is the value of one ordinary share according to the balance sheet. Remember all reserves belong to ordinary shareholders. This indicates the amount of cash each share will receive if the company is liquated at that date. Theoretically the book value of one share should also be the market value , but market value tends to be higher because - Balance sheet does not include internally generated intangible assets such as human capital and goodwill. - Balance Sheet is historical and cant take into account future gains - Speculations in stock market effects the share price.

$$\frac{\text{Ordinary Share Capital} + \text{All Reserves}}{\text{No of Ordinary Shares}}$$

10.RETURN ON EQUITY : Shows how much return as a percentage of capital is earned by the company

$$\frac{\text{Profit After Interest and Tax}}{\text{Total Ordinary Shareholder funds}} \times 100$$

Advantages of Ratios

1. Shows a trend
2. Helps to compare a single firm over a two years (time series)
3. Helps to compare to similar firms over a particular year.
4. Helps in making decisions

Disadvantages (Limitations):

1. A ratio on its own is isolated (We need to compare it with some figures)
2. Depends upon the reliability of the information from which ratios are calculated.
3. Different industries will have different ideal ratios.
4. Different companies have different accounting policies. E.g. Method of depreciation used.
5. Ratios do not take inflation into account.
6. Ratios can ever simplify a situation so can be misleading.
7. Outside influences can affect ratios e.g. world economy, trade cycles.
8. After calculating ratios we still have to analyze them in order to derive a conclusion.

11 - RATIOS ANALYSIS

- Q1.** The final accounts for Abercrombie plc for the year ended 30 April 2012 had been prepared. Due to a fire it is now necessary to prepare them again from limited information.

The accountant provides you with the following details:

Rate of inventory turnover	10 times
Gross profit ratio	35%
Net profit ratio	15%
Income gearing	12.5%

The administrative expenses for the year were twice as much as the distribution costs.

The taxation charge for the year was equal to half of the interest charge.

The inventories at 30 April 2012 were valued at \$81 250 which was 25% higher than the inventories valuation at 1 May 2011.

REQUIRED

- (a) Prepare the income statement for the year ended 30 April 2012. [18]

Additional information

- 1 The non-current asset turnover was 2.
- 2 The current ratio was 1.9:1.
- 3 Current assets also included the bank balance and the only current liability was trade payables.
- 4 Trade receivables turnover was 34 days. All sales were on credit.
- 5 Trade payables turnover was 59 days. All purchases were on credit.
- 6 Interest was paid on a 10% debenture redeemable in 2020.
- 7 No interim dividends were paid but a final dividend of \$0.05 per share was proposed.
- 8 The total proposed dividend was \$10 000, ordinary shares are \$1 nominal value and there was no share premium.
- 9 The balance on the retained earnings account at 1 May 2011 was \$23 756 credit.
- 10 There was a revaluation reserve which was the balancing figure.

REQUIRED

- (b) Prepare the statement of financial position at 30 April 2012. [20]
- (c) State how a proposed final dividend should be dealt with in the accounts. [2]

[Total: 40]

Q2. The following information is available for Phoencia Ltd for the year ended 30 June 2011.

Inventories at 1 July 2010	\$28 000
Inventories at 30 June 2011	\$34 000
Rate of inventory turnover	8 times
Gross profit percentage	35%
Net profit percentage	12%
Income gearing	40%

Administrative expenses were twice as much as distribution costs.

The share capital consists of 250 000 ordinary shares of \$0.50 nominal value.

Dividends paid during the year were \$0.05 per share.

The directors are **not** required to implement the IAS regulations because Phoencia Ltd is a private limited company.

REQUIRED

- (a) Prepare an income statement (profit and loss account) and appropriation account, in as much detail as possible, for the year ended 30 June 2011. [20]

The directors of Phoencia Ltd have decided to invest in **either** Algebra plc **or** Vector plc.

Financial information for these two companies is shown below:

For the year ended 30 June 2011

	Algebra plc \$000	Vector plc \$000
Profit from operations	100	200
Finance charges	(40)	(70)
Profit for the year	60	130
Preference dividend	(8)	(40)
Ordinary dividend	(20)	(10)
Retained profit for the year	<u>32</u>	<u>80</u>

At 30 June 2011

	Algebra plc \$000		Vector plc \$000
Non-current assets	850	Non-current assets	1 450
Net current assets	80	Net current assets	130
2020 8% Debentures	500	2016 10% Debentures	700
	<u>430</u>		<u>880</u>
Ordinary shares of \$1	100	Ordinary shares of \$1	100
8% \$1 Preference shares	100	8% \$1 Preference shares	500
Retained profit	230	Retained profit	280
	<u>430</u>		<u>880</u>

The market value of one ordinary share at 30 June 2011 in each company was:

Algebra plc	\$2.50
Vector plc	\$3.25

REQUIRED:

- (b) For each company calculate the following ratios giving your answer to **two** decimal places.
- (i) Gearing ratio
 - (ii) Earnings per share
 - (iii) Price earnings ratio
 - (iv) Dividend cover
 - (v) Dividend per share
 - (vi) Dividend yield [12]
- (c) Based on these calculations advise the directors of Phoenicia Ltd whether they should invest in either Algebra plc or Vector plc. Give reasons for your decision. [8]

[Total: 40]

Q3. The following information is available for Sanaa Malik Ltd at 31 May 2010:

Gross profit ratio margin (gross profit percentage)	40%
Net profit ratio (net profit percentage)	15%
Rate of inventory turnover (stockturn)	1 month
Creditors' turnover (average payment period)	40 days
Debtors' turnover (average collection period)	45 days
Current ratio	2.5 : 1
Non-current (fixed) asset turnover	2 times

Additional information

- 1 Inventory (stock) at 1 June 2009 cost \$27 000.
- 2 Revenue (sales) for the year ended 31 May 2010 was \$870 000.
- 3 All ordinary goods purchased (purchases) were on credit.
- 4 50% of revenue (sales) was on credit.
- 5 Issued share capital at 31 May 2010 was:
 - 8% preference shares of \$1 each fully paid \$50 000.
 - Ordinary shares of \$1 each fully paid \$180 000.
- 6 6% debentures, repayable 2027, had been issued in 2007 for \$100 000.
- 7 Retained earnings at 31 May 2009 were \$93 733.
- 8 An ordinary share dividend of \$0.10 per share and the preference dividends for the year ended 31 May 2009 were both paid in the year ended 31 May 2010.
- 9 An ordinary share dividend of \$0.12 per share and the preference dividends for the year ended 31 May 2010 will both be paid in the year ended 31 May 2011.

REQUIRED

- (a) Prepare an income statement (profit and loss account) **and** appropriation account for the year ended 31 May 2010. [12]
- (b) Prepare a balance sheet at 31 May 2010. The balance at bank is a balancing figure. [13]
- (c) Calculate:
 - (i) income gearing; [3]
 - (ii) the gearing ratio. [3]
- (d) Comment on the ratios calculated in (c) above. [3]
- (e) Comment on the liquidity position of the company. [6]

[Total: 40]

Q4. The following information is available about Grist plc:

- 1 In 2001 it issued at \$0.75 a number of ordinary shares with a nominal value of \$0.50 each. At the same time it issued at par a number of 5% preference shares of \$1 each.
- 2 During 2007 Grist Ltd issued \$200 000 6% debentures repayable in 2018.
- 3 On 1 January 2009 the balance on the profit and loss account was \$62 000.
- 4 On 31 December 2009 the non-current (fixed) assets had a value of \$610 000.

Further information relating to 2009 is as follows:

- 1 Interest cover was 16 times.
- 2 The tax charge for the year was calculated as 20% of profit before tax.
- 3 The ordinary dividends paid during the year were \$54 000.
- 4 Earnings per share were \$0.22.
- 5 Dividend per share was \$0.09.
- 6 The directors decided to create a general reserve of \$30 000.
- 7 The market value of the ordinary shares was \$2.50.

REQUIRED

- (a) Starting with profit from operations (operating profit), prepare a statement to calculate the retained profit for the year ended 31 December 2009. [11]
- (b) Giving as much detail as possible, prepare the balance sheet at 31 December 2009. [10]
- (c) Calculate:
- (i) the dividend cover
 - (ii) the price earnings ratio
 - (iii) the dividend yield
 - (iv) the gearing ratio
 - (v) the return on capital employed.
- [14]

Vaughan plc is a company in the same line of business as Grist plc and is in a similar location. The following ratios have been calculated for Vaughan plc:

Gearing ratio	63.8%
Return on capital employed	22.1%
Dividend cover	1.8 times

REQUIRED

- (d) Compare and comment on the performance of Grist plc and Vaughan plc in the light of these ratios. [5]

[Total: 40]

Q5. The following information relates to the business of Lopez Ltd for the year ended 31 March 2007:

Rate of stock turnover (calculated using average stock)	20 days
Gross margin	50%
Net margin	15%
Dividend paid as percentage of net profit	25%
Creditors' payment period	32 days
Debtors' collection period	28 days
Current ratio	3 : 1

Issued share capital 500 000 ordinary shares of \$0.50 each.

Profit and loss account balance at 1 April 2006 was \$73 424.

Stock at 1 April 2006 was valued at \$10 000.

Stock at 31 March 2007 was valued at \$14 000.

The market price of an ordinary share in Lopez Ltd at 31 March 2007 was \$0.80.

REQUIRED

Note: work to the nearest \$

- (a) Prepare a trading and profit and loss account for the year ended 31 March 2007 in as much detail as possible. [8]
- (b) Prepare a balance sheet at 31 March 2007 in as much detail as possible. (Fixed assets and balance at bank are balancing figures.) [9]

The following statistics have been prepared by a local bank. They relate to similar businesses in the same district as Lopez Ltd.

Dividend yield	5.6%
Dividend cover	3 times
Dividend per share	10.7 cents
Earnings per share (EPS)	32 cents
Price earnings ratio	5.9

REQUIRED

- (c) Explain what **each** of the **five** ratios indicates. [5]
- (d) Calculate the same **five** ratios for Lopez Ltd. Show the formulae that you have used. [10]
- (e) Discuss the **five** ratios calculated for Lopez Ltd and comment on what they show about the company. [8]

[Total: 40]

Q7. The directors of Wotknot Limited provided the following information.

Equity and liabilities (balances) at 1 May 2013

	\$
Share capital, 200 000 ordinary shares of \$0.50 each	100 000
General reserves	40 000
Retained earnings	(40 000)
10% debenture	50 000

At 30 April 2014 inventory was valued at \$80 000. This was 100% more than the inventory valuation at 30 April 2013.

The following information is available for the year ended 30 April 2014.

Inventory turnover	10 times
Gross profit margin	40%
Operating expenses to sales ratio	21%
Administrative expenses	\$140 000
Transfer to general reserves	\$20 000
Dividends paid	\$0.08 per share
Non-current asset turnover	5 times
Trade receivables turnover	40 days
Trade payables turnover	35 days

The only current assets were inventory and trade receivables. All sales and purchases were on a credit basis.

REQUIRED

- (a) Prepare, in as much detail as possible, the income statement for the year ended 30 April 2014. [10]
- (b) Prepare the statement of changes in equity for the year ended 30 April 2014. [5]
- (c) Prepare, in as much detail as possible, the statement of financial position at 30 April 2014. [12]