

This question will test your understanding and ability to interpret financial indicators/figures. A large percentage of marks are allocated in all examinations to this topic so it is good to ensure that you have the necessary knowledge and skill.

QUESTION 25 (New Era grade 12 study guide)

Ratio analysis (40 marks; 30 minutes)

WATCH YOUR TIME – YOU NEED TO ENSURE THAT YOU CAN ANSWER QUESTIONS IN THE ALLOCATED TIME.

You are provided with the financial indicators calculated from the financial statements of Smart Shoes Ltd for the past two years ended 30 April. The business uses the perpetual inventory system to value stock and a gross profit mark-up of 75% on cost.

REQUIRED:

Study the financial indicators and then answer the questions which follow.

| | 20.8 | 20.7 |
|-----------------------------------------------|--------------|--------------|
| Solvency ratio | 3.0 : 1 | 3.2 : 1 |
| Current ratio | 3.8 : 1 | 3.0 : 1 |
| Acid-test ratio | 0.6 : 1 | 0.6 : 1 |
| Rate of stock turnover | 3.0 | 4.1 |
| Trading stock deficit as a % of cost of sales | 3% | 1% |
| Stock holding period | 120 days | 90 days |
| Credit terms granted by creditors | 60 days | 60 days |
| Debtors average collection period | 28 days | 35 days |
| Return on shareholders' equity: after tax | 16% | 18% |
| Return on shareholders' equity: before tax | 22% | 26% |
| Earnings per share | 51 cents | 63 cents |
| Dividends per share | 12 cents | 5 cents |
| Change in total sales | 17% decrease | 10% increase |
| Gross profit on cost of sales | 75% | 67% |
| Gross profit on sales | 42% | 40% |
| Net profit after tax on sales | 11% | 14% |
| Operating expenses on sales | 37% | 30% |
| Operating profit on sales | 15% | 20% |
| Return on total capital employed | 26% | 30% |
| Debt/equity ratio | 0.6 : 1 | 0.3 : 1 |
| Interest rate on long-term loans | 14% | 12% |
| Net asset value per share | 310 cents | 380 cents |
| Market price per share | 330 cents | 390 cents |
| Sales | R3 154 000 | R3 800 000 |

QUESTIONS:

Explain the answers to each of the following questions and quote the actual ratios / percentages from the above list to support your answers.

- 25.1 Should the directors be satisfied with the liquidity of the business and the control of stock? (10)
- 25.2 Should the directors be satisfied with the operating activities as reflected in the Income Statement? (10)
- 25.3 Should the shareholders be satisfied with the returns, earnings, dividends and share price? (12)
- 25.4 The directors want to raise more funds for expansion of the business. Should they issue shares or raise loans? (8)

QUESTION 25 (New Era Grade 12 Study guide)

Ratio analysis

(40 marks; 30 minutes)

The answers below are very comprehensive and are allowing for all possible answers.

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| 25.1 | Should the directors be satisfied with the liquidity of the business and the control of stock? | (10) |
| <p><i>Liquidity refers to the ability of your current assets to pay off your current liabilities. A liquidity question requires you to look at the following:</i></p> <ul style="list-style-type: none"> <i>Current ratio</i> <i>Acid test ratio</i> <i>Stock turnover rate</i> <i>Stock holding period</i> <i>Debtors payment period</i> <i>Creditors payment period</i> <p><i>General comment ✓✓✓✓✓ Identification of trends ✓✓✓✓✓ (Trends involves comparing the previous year and this year's figures and saying whether it has improved or not. Quote figures at all times.)</i></p> <p>Stock appears to be a problem – turnover rate has dropped from 4 to 3 times a year, period of stock on hand is higher at 4 months (120 days), and stock deficit has increased three times.</p> <p>Current ratio (3.8 : 1) too high due to high level of stock – this has also caused a low acid-test ratio of 0.6 : 1.</p> <p>Debtors are paying promptly at 28 days (within 1 month credit terms).</p> <p>Creditors are giving a favourable 2 months to pay, but with stock sitting on the shelves for 4 months, there could be liquidity problems in future.</p> <p>Current ratio possibly too high 3.0 : 1 → 3.8 : 1.</p> <p>Acid-test ratio was maintained at a constant 0.6 : 1 (exposing stock-piling).</p> <p>Rate of stock turnover dropped 4.1 → 3.0.</p> <p>Period for which enough stock is on hand 90 days → 120 days.</p> <p>Period of credit granted by creditors constant 60 days.</p> <p>Debtors average collection period 35 days → 28 days.</p> <p>Trading stock deficit as a % of cost of sales has increased 3 times.</p> <p><i>The above are all options. 10 marks require 5 comments, i.e. one on each of the aspects – current ratio, acid test ratio, stock, debtors and creditors.</i></p> | | |

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| 25.2 | Should the directors be satisfied with the operating activities reflected in the Income Statement? | (10) |
| <p><i>Operating activities refers to the profit made by the business so you have to comment on any items from the Income Statement.</i></p> <p><i>General comment ✓✓✓✓✓ Identification of trends ✓✓✓✓✓</i></p> <p>The company needs to sort out its pricing and its control of operating expenses.</p> <p>Gross profit on cost of sales was maintained at the present 75% target an increase from last year – the company did not give away trade discounts as they had in the previous year – now achieving the 75% they are aiming at instead of 67% in the previous year, but this has affected the sales volume (17% decrease due to higher prices).</p> <p>This has a direct effect on gross profit on sales – now earning 42c in each Rand of sales, but total sales have dropped significantly.</p> <p>Operating expenses have not been well controlled – increase from 30% to 37% on sales.</p> <p>This has led to a decline in operating profit on sales from 20% to 15%.</p> <p>Change in sales 17% decrease this year compared to last year.</p> <p>Gross profit on cost of sales increased 67% → 75%.</p> <p>Gross profit on sales increased 40% → 42%.</p> <p>Operating expenses on sales increased 30% → 37%.</p> <p>Operating profit on sales decreased 20% → 15%.</p> | | |

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| 25.3 | Should the shareholders be satisfied with the returns, earnings, dividends and share price? | (12) |
| <p><i>This question has stipulated that you must comment on the return, earnings and dividends – however sometimes they ask a more general question as to whether the shareholder should be happy. Then you need to know that this consists of the return, earnings and dividends. It is essential that you compare your answers to last year or in the case of the return to that of alternative investments, i.e. 6 – 8%. General comment ✓✓✓✓✓✓ Identification of trends ✓✓✓✓✓✓</i></p> <p>The % return has dropped from 18% to 16% but still exceeds returns on alternative investments. EPS dropped from 63 to 51 cents, but dividends were increased from 5 to 12 cents. Directors are obviously trying to appease the shareholders with higher dividends to mask the drop in earnings. Due to less income being retained, the NAV per share has dropped. This might have caused a 60c drop in the market price of the share, and public perceptions might be affecting the poor performance of the share price as well. Return on shareholders' equity: after tax dropped 18% → 16%. Return on shareholders' equity: before tax dropped 26% → 22%. Earnings per share dropped 63 cents → 51 cents. Dividends per share increased 5 cents → 12 cents. Net asset value per share decreased 380 cents → 310 cents. Market price per share dropped 390 cents → 330 cents.</p> | | |

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| 25.4 | The directors want to raise more funds for expansion of the business. Should they issue shares or raise loans? | (8) |
| <p><i>You need to calculate the Return on total capital employed (ROTCE) and compare it to the interest rate on the loan. As long as the return is higher than the interest rate on the loan there is positive gearing and the funds are being utilised effectively. There is nothing wrong with a high risk if there is positive gearing but you must compare to the previous year as well. While loans cost interest this will eventually come to an end and the shareholders should benefit from the higher returns. But there is always a risk as the loan plus interest has to be paid back – hence the reason to look at the gearing and the risk. On the other hand there is no risk with selling shares but for always the profits have to be shared amongst more shareholders which will mean less per person. General comment ✓✓✓✓✓ Identification of trends ✓✓✓</i></p> <p>The company has made greater use of loans this year – the debt/equity ratio has doubled. Although this increases risk, the ROTCE still exceeds the interest rate on the loans (14%). However, the ROTCE has dropped due to lower operating efficiency. If ROTCE continues to drop further, and if interest rates climb higher, the company will suffer financially. Issuing new shares will be less risky because shares are not repaid and there is no interest implication. However, issuing shares means that the profit is shared between a greater number of shareholders, which could disadvantage them. Conclusion: either option (shares/loans) depending on the overall impact on risk. Return on total capital employed decreased 30% → 26%. Debt/equity ratio increased 0.3 : 1 → 0.6 : 1. Interest rate on long-term loans increased 12% → 14%.</p> | | |

**If you have experienced problems with any of these questions refer to the videos on the web page in which the different sections of this question are explained.
Also refer to the New Era study guide for more questions and answers on this section.**