

Chapter 23: Exam practice question

Karachi Paper Products plc

1 Define the following terms:

a current assets (2)

These are items which have been purchased by a business or money owed to the business which is likely to be used or received, respectively, within the next 12 months, e.g. inventory, cash, debtors.

b capital employed. (2)

This is the sum of shareholders' funds (i.e. share capital + retained earnings) and long-term debt. It effectively consists of the core funds that individuals, banks and other businesses have committed long term to the business.

Apply **Resources table 3a** mark band descriptors.

2 Explain one ratio you would use to measure Karachi's liquidity. (4)

Current ratio = current assets ÷ current liabilities

This is the number of times the business can repay its current liabilities by liquidating its current assets. It is questionable because the market value of current assets may be less than the book value.

Acid test ratio = current assets – inventories ÷ current liabilities

Like the current ratio, this is the number of times the business can repay its current liabilities by liquidating its current assets. In this case, however, inventories are taken to have no value because in a forced-sale situation their value is probably minimal.

Apply **Resources table 3b** mark band descriptors.

3 Calculate the following ratios for 2009 and 2010: (2 × 5)

Ratio	Equation (given in table handed out in exam)	Calculation 2010	Calculation 2009
a ROCE	Net profit × 100% ÷ capital employed	$35 \times 100 \div 300 = 11.7\%$	$33 \times 100 \div 260 = 12.7\%$
b gross profit margin	$\text{Sales} - \text{COGS}^* \times 100\% \div \text{sales}$	$400 - 120 \times 100\% \div 400 = 70\%$	$330 - 100 \times 100\% \div 330 = 69.7\%$
c net profit margin	Net profit × 100% ÷ sales	$35 \times 100 \div 400 = 8.75\%$	$33 \times 100 \div 330 = 10\%$

d gearing	Long-term loans/capital employed	$150 \div 300 = 0.5$	$120 \div 260 = 0.46$
e debtor days	Trade debtors $\times 365 \div$ sales (days)	$80 \times 365 \div 400 = 73$ days	$70 \times 365 \div 330 = 78$ days

* COGS: cost of goods sold

No marks for choosing the correct formula.

No marks if only answers are given with no calculation details.

1 mark for each correct calculation which clearly shows all working details.

- 4** On the basis of the ratios you have calculated, evaluate the change in performance of Karachi Paper Products over the two years. (7)

ROCE:

This fell by 1%. This was because, although net profit rose slightly, there was an increase of \$40 million in capital employed. This was partly due to a \$14 million increase in retained earnings and the rest was due to an increase in long-term liabilities.

\$14m retained earnings + \$30m LT loans = \$44m (but the question only shows an increase of \$40m).

Gross profit margin:

This rose very marginally. This may be due to reductions in purchase prices, purchasing economies of scale as sales increased, or increased labour productivity versus wages (see also 'Gearing', below).

Net profit margin:

This dropped 1.25%. Interest and tax rose by \$1 million from 2009 to 2010. The majority of this change was, however, due to an increase in overheads from \$67 million to \$85 million. This may have been due to interest related to the \$30 million (20%) increase in long-term borrowing.

Gearing:

This rose slightly. Although capital employed was boosted by an extra \$14 million retained earnings, long-term borrowings rose by \$30 million, so gearing was correspondingly higher. Karachi must have made major investment requiring so much more long-term borrowing. This may have been the reason for the improvement in cost of goods sold as a percentage of sales, which improved from 30.3% to 30%.

Debtor days:

Debtors are paying on average four days faster. This could be due to Karachi pushing for payment, offering shorter credit terms, or perhaps they are offering discounts for faster payment. This means that increased inventories, perhaps due to new equipment, do not push the current ratio below 1.0.

Conclusion: a significant capital investment has enabled Karachi to improve trading efficiency. This has not, however, manifested itself in a better net profit margin, probably because interest charges and/or management costs rose. Nevertheless, debtor days improved and this has helped to support a current ratio of 1.0 despite increased inventories.

7 marks:

A full and in depth understanding of each ratio and the interacting significance between ratios and company figures given.

5–6 marks:

A detailed analysis which may miss out some of the significances of the ratios. For 5 marks, it may not have a conclusion.

3–4 marks:

A basic analysis with little in depth understanding.

1–2 marks:

Analysis attempted.

Advice on ratio analysis questions:

This is a very demanding question for only 7 marks. It is not unusual for a significant level of skill to be required for full marks in ratio analysis questions and it is difficult to score highly. For this reason, it is sometimes better to encourage students to answer alternative questions if there is another choice of question with which they are comfortable.