5.8 Working capital needs of different types of business

Different industries have different optimum working capital profiles, reflecting their methods of doing business and what they are selling.

(a) Businesses with a lot of **cash sales** and few credit sales should have **minimal accounts receivable**.

(b) Businesses that exist solely to trade will only have **finished goods in inventory**, whereas **manufacturers** will have **raw material**s and **work in progress** as well. Also some finished goods, notably foodstuffs, have to be sold within a few days because of their perishable nature.

(c) **Large companies** may be able to use their strength as customers to obtain **extended credit periods** from their suppliers. By contrast small companies, particularly those that have recently commenced trading, may be required to pay their suppliers immediately.

(d) Some businesses will be receiving **most of their monies** at **certain times** of the year, whilst incurring expenses throughout the year. Examples include travel agents who will have peaks reflecting demand for holidays during the summer and at Christmas.

5.9 Over-capitalisation and working capital

If there are excessive inventories, accounts receivable and cash, and very few accounts payable, there will be an over-investment by the company in current assets. Working capital will be excessive and the company will be in this respect over-capitalised.

Indicators of over-capitalisation	
Sales/working capital	Compare with previous years or similar companies
Liquidity ratios	Compare with previous years or similar companies
Turnover periods	Long turnover periods for inventory and accounts receivable or short credit period from suppliers may be unnecessary

5.10 Example: Working capital ratios

Calculate liquidity and working capital ratios from the following accounts of a manufacturer of products for the construction industry, and comment on the ratios.

	20X8	*20X7*
	$m	$m
Sales revenue	2,065.0	1,788.7
Cost of sales	1,478.6	1,304.0
Gross profit	586.4	484.7
Current assets		
Inventories	119.0	109.0
Accounts receivable (note 1)	400.9	347.4
Short-term investments	4.2	18.8
Cash at bank and in hand	48.2	48.0
	572.3	523.2
Accounts payable: amounts falling due within one year		
Loans and overdrafts	49.1	35.3
Corporation taxes	62.0	46.7
Dividend	19.2	14.3
Accounts payable (note 2)	370.7	324.0
	501.0	420.3
Net current assets	71.3	102.9

Notes

		20X8	*20X7*
		$m	$m
1	Trade accounts receivable	329.8	285.4
2	Trade accounts payable	236.2	210.8

Solution

	20X8	20X7
Current ratio	$\frac{572.3}{501.0} = 1.14$	$\frac{523.2}{420.3} = 1.24$
Quick ratio	$\frac{453.3}{501.0} = 0.90$	$\frac{414.2}{420.3} = 0.99$
Accounts receivable payment period	$\frac{329.8}{2,065.0} \times 365 = 58$ days	$\frac{285.4}{1,788.7} \times 365 = 58$ days
Inventory turnover period	$\frac{119.0}{1,478.6} \times 365 = 29$ days	$\frac{109.0}{1,304.0} \times 365 = 31$ days
Accounts payable turnover period	$\frac{236.2}{1,478.6} \times 365 = 58$ days	$\frac{210.8}{1,304.0} \times 365 = 59$ days
Sales revenue/net working capital	$\frac{2,065.0}{572.3 - 501.0} = 28.96$	$\frac{1,788.7}{523.2 - 420.3} = 17.38$

(a) The company is a manufacturing group serving the construction industry, and so would be expected to have a comparatively lengthy accounts receivable turnover period, because of the relatively poor cash flow in the construction industry.

(b) The company compensates for this by ensuring that they do not pay for raw materials and other costs before they have sold their inventories of finished goods (hence the similarity of accounts receivable and accounts payable turnover periods).

(c) The company's current and quick ratios have fallen but are still reasonable, and the quick ratio is not much less than the current ratio. This suggests that inventory levels are strictly controlled, which is reinforced by the low inventory turnover period.

(d) The ratio of sales revenue/net working capital indicates that working capital has not increased in line with sales. This may forecast future liquidity problems.

It would seem that working capital is tightly managed, to avoid the poor liquidity which could be caused by a high accounts receivable' turnover period and comparatively high accounts payable. However, turnover has increased but net working capital has declined due in part to the fall in short term investments and the increase in loans and overdrafts.

Exam focus point

The examiner may give you industry averages for ratios and expect you to compare performance against what could be expected using financial analysis, including ratio analysis.

In June 2008, candidates were required to work backwards from provided ratios to calculate receivables, inventory etc. This requires a very good familiarity with all of the ratios.

5.11 Overtrading 12/08

In contrast with over-capitalisation, overtrading happens when a business tries to **do too much too quickly** with **too little long-term capital**, so that it is trying to support too large a volume of trade with the capital resources at its disposal.

Even if an overtrading business operates at a profit, it could easily run into serious trouble because it is **short of money**. Such liquidity troubles stem from the fact that it does not have enough capital to provide the cash to pay its debts as they fall due.

Symptoms of overtrading are as follows.

(a) There is a **rapid increase** in **turnover**.

(b) There is a **rapid increase** in the **volume of current assets** and possibly also non-current assets. **Inventory turnover** and **accounts receivable turnover** might slow down, in which case the rate of increase in inventories and accounts receivable would be even greater than the rate of increase in sales.

(c) There is only a **small increase** in **proprietors' capital** (perhaps through retained profits). Most of the increase in assets is financed by credit, especially:
   (i) **Trade accounts payable** - the payment period to accounts payable is likely to lengthen
   (ii) A **bank overdraft**, which often reaches or even exceeds the limit of the facilities agreed by the bank

(d) Some **debt ratios** and **liquidity ratios** alter dramatically.
   (i) The **proportion** of **total assets** financed by proprietors' capital falls, and the proportion financed by credit rises.
   (ii) The current ratio and the quick ratio fall.
   (iii) The business might have a **liquid deficit**, that is, an excess of current liabilities over current assets.

Exam focus point

This list of signs is important; you must be aware of why businesses run into financial difficulties. In the exam you might be expected to diagnose overtrading from information given about a company.

5.12 Example: Overtrading

Great Ambition Co appoints a new managing director who has great plans to expand the company. He wants to increase turnover by 100% within two years, and to do this he employs extra sales staff. He recognises that customers do not want to have to wait for deliveries, and so he decides that the company must build up its inventory levels. There is a substantial increase in the company's inventories. These are held in additional warehouse space which is now rented. The company also buys new cars for its extra sales representatives.

The managing director's policies are immediately successful in boosting sales, which double in just over one year. Inventory levels are now much higher, but the company takes longer credit from its suppliers, even though some suppliers have expressed their annoyance at the length of time they must wait for payment. Credit terms for accounts receivable are unchanged, and so the volume of accounts receivable, like the volume of sales, rises by 100%.

In spite of taking longer credit, the company still needs to increase its overdraft facilities with the bank, which are raised from a limit of $40,000 to one of $80,000. The company is profitable, and retains some profits in the business, but profit margins have fallen. **Gross profit margins** are lower because some prices have been reduced to obtain extra sales. **Net profit margins** are lower because overhead costs are higher. These include sales representatives' wages, car expenses and depreciation on cars, warehouse rent and additional losses from having to write off out-of-date and slow-moving inventory items.

The statement of financial position of the company might change over time from (A) to (B).

	Statement of financial position (A)			*Statement of financial position (B)*		
	$	$	$	$	$	$
Non-current assets			160,000			210,000
Current assets						
Inventory		60,000			150,000	
Accounts receivable		64,000			135,000	
Cash		1,000			–	
		125,000			285,000	
Current liabilities						
Bank	25,000			80,000		
Accounts payable	50,000			200,000		
		75,000			280,000	
			50,000			5,000
			210,000			215,000
Share capital			10,000			10,000
Income statement			200,000			205,000
			210,000			215,000

	Statement of financial position (A)			Statement of financial position (B)		
	$	$	$	$	$	$
Sales			$1,000,000			$2,000,000
Gross profit			$200,000			$300,000
Net profit			$50,000			$20,000

In situation (B), the company has **reached** its **overdraft** limit and has **four times** as many **accounts payable** as in situation (A) but with only **twice the sales turnover**. **Inventory levels** are much **higher**, and **inventory turnover** is **lower**.
The company is overtrading. If it had to pay its next trade account, or salaries and wages, before it received any income, it could not do so without the bank allowing it to exceed its overdraft limit. The company is profitable, although profit margins have fallen, and it ought to expect a prosperous future. But if it does not sort out its cash flow and liquidity, it will not survive to enjoy future profits.

Suitable solutions to the problem would be measures to reduce the degree of overtrading.

(a) **New capital** from the shareholders could be injected.

(b) **Better control** could be applied to inventories and accounts receivable. The company could **abandon ambitious plans** for increased sales and more fixed asset purchases until the business has had time to consolidate its position, and build up its capital base with retained profits.

A business seeking to increase its turnover too rapidly without an adequate capital base is not the only **cause of overtrading**. **Other causes** are as follows.

(a) When a business repays a loan, it often replaces the old loan with a new one (refinancing). However a business might **repay a loan without replacing it**, with the consequence that it has **less long-term capital** to finance its current level of operations.

(b) A business might be profitable, but in a period of **inflation**, its **retained profits** might be **insufficient** to pay for **replacement** non-current assets and inventories, which now cost more because of inflation.

Chapter Roundup

- The amount tied up in **working capital** is equal to the value of raw materials, work-in-progress, finished goods inventories and accounts receivable less accounts payable. The size of this net figure has a direct effect on the **liquidity** of an organisation.
- The two main objectives of working capital management are to ensure it has **sufficient liquid resources** to continue in business and to **increase its profitability**.
- A business needs to have clear policies for the management of each component of working capital.
- **Working capital ratios** may help to indicate whether a company is **over-capitalised**, with excessive working capital, or if a business is likely to fail. A business which is trying to do too much too quickly with too little long-term capital is **overtrading**.