

## 72.1 A drill to practise calculation and interpretation of working capital ratios

Below are extracts from the published accounts of two listed companies.

**A** is a producer of dairy foods, while **B** produces consumer durables or ‘white goods’ – washing machines, fridges, etc.

Calculate the following ratios for each company:

current ratio, quick ratio, days’ sales in stock, days’ sales in debtors, and days’ purchases in creditors.

Comment on your findings.

### A – producer of dairy foods

A : data		A : ratios	
Sales	1 355.2		
Cost of Sales	1 033.5	current ratio	$\frac{350.1}{222.3} = 1.6$
inventories	192.6		
trade receivables	142.8	quick ratio	$\frac{157.5}{222.3} = 0.7$
total current assets	350.1		
trade payables	173.3	days' sales in stock	$\frac{192.6}{1\,033.5} \times 365 = 68 \text{ days}$
total current liabilities	222.3		
opening stock	172.7	days' sales in debtors	$\frac{142.8}{1\,355.2} \times 365 = 38 \text{ days}$
<i>working for purchases</i>		days' purchases in creditors	$\frac{173.3}{1\,053.4} \times 365 = 60 \text{ days}$
Cost of Sales	1 033.5		
plus closing stock	192.6		
minus opening stock	( 172.7)	working capital cycle	46 days
<b>purchases</b>	<b><u>1 053.4</u></b>		

### Comment

Although some processes, like cheese-making, require time for the product to mature, it is surprising, given that dairy products are perishable, that this manufacturer seems to hold stock for 68 days. The firm’s need for working capital is reduced by its ability to collect its debts quite promptly (within 38 days of sale), while taking 60 days to pay its creditors.

**B – producer of consumer durables**

B : data		B : ratios	
Sales	103 848		
Cost of Sales	79 664	current ratio	$\frac{44\,091}{36\,304} = 1.2$
inventories	12 041		
trade receivables	20 905	quick ratio	$\frac{32\,050}{36\,304} = 0.9$
total current assets	44 091		
trade payables	15 320	days' sales in stock	$\frac{12\,041}{79\,664} \times 365 = 55 \text{ days}$
total current liabilities	36 304		
opening stock	18 606	days' sales in debtors	$\frac{20\,905}{103\,848} \times 365 = 73 \text{ days}$
<i>working for purchases</i>		days' purchases in creditors	$\frac{15\,320}{73\,099} \times 365 = 76 \text{ days}$
Cost of Sales	79 664		
plus closing stock	12 041	working capital cycle	52 days
minus opening stock	(18 606)		
<b>purchases</b>	<b>73 099</b>		

**Comment**

It is interesting that this firm can (on average) make *and sell* a washing machine or a fridge in less time than it takes Firm A to make and sell the average dairy product. Part of the explanation may be that Firm A's perishable goods require specialized storage facilities (best provided by Firm A itself), while Firm B's customers (retail shops) are more willing to hold stocks for longer. So Firm A cannot dispatch its goods until the shops need them for immediate sale, while Firm B can dispatch goods to shops as soon as they are made.

B's debtor collection period of 73 days is quite long, but this may be allowed to encourage retailers to hold larger stocks. In any case it is more than compensated for by a very long creditor payment period of 76 days. When such a period is unusual in the industry, and is long and getting longer, it may indicate that the firm is having difficulty in making its payments as they fall due.