

## Chapter 10 Cash flow

### Questions

1. Byron is a wholesaler of DIY kitchen fittings. In the year to 28 February 20X1 his business transactions include the following:

Purchase on credit of goods for resale at a cost of £12 800  
 Drawings by Byron of £15 000  
 Payment of interest on a business bank overdraft of £750  
 Sale of a fixed asset for £7000. The asset had cost £23 000 and accumulated depreciation at the date of sale was £18 660.

For each transaction show the impact on cash, other assets and liabilities and the impact on profit.

2. Ciaran's trading business has the following profit and loss account for the year ending 31 May 20X2:

	£	£
Sales		365 210
Cost of sales		
Opening stock	28 470	
Purchases	289 462	
	<hr/>	
	317 932	
Less: closing stock	(29 950)	
		<hr/>
		287 982
Gross profit		<hr/>
		77 228
Interest received		1 802
Expenses		(51 550)
Net profit		<hr/>
		27 480

Expenses include £4850 depreciation.

Debtors at 31 May 20X2 were £39 447; the corresponding figure at 31 May 20X1 was £38 402.

Creditors at 31 May 20X2 were £29 572; the corresponding figure at 31 May 20X1 was £32 224.

Prepare the first section of Ciaran's cash flow statement concluding with the figure for net cash inflow or outflow from operating activities.

3. Decca runs a designer fashion store. Her profit and loss account for the year ending 31 December 20X7 is as follows:

	£	£
Sales		686 004
Cost of sales		
Opening stock	75 550	
Purchases	461 473	
	<u>537 023</u>	
Closing stock	(78 772)	
		<u>458 251</u>
Gross profit		227 753
Expenses excluding depreciation		(143 270)
Depreciation		(21 420)
Operating profit		<u>63 063</u>
Interest paid		(1 857)
Net profit		<u>61 206</u>

Decca's balance sheets at 31 December 20X7 and 20X6 are as follows:

	20X7	20X7	20X6	20X6
	£	£	£	£
Fixed assets at net book value		118 180		139 600
Current assets				
Stock	78 772		75 550	
Debtors and prepayments	7 255		5 250	
Cash at bank	2 806		—	
	<u>88 833</u>		<u>80 800</u>	
Current liabilities				
Bank overdraft	-		7 481	

Creditors and accruals	82 428	92 740
	<u>82 428</u>	<u>100 221</u>
Net current assets/liabilities	6 405	(19 421)
	<u>124 585</u>	<u>120 179</u>
Long-term loan	(20 000)	(40 000)
	<u>104 585</u>	<u>80 179</u>
Capital		
Capital brought forward	80 179	88 639
Profit for the year	61 206	28 740
Drawings	(36 800)	(37 200)
	<u>104 585</u>	<u>80 179</u>

During the year ending 31 December 20X7 Decca has not bought or sold any fixed assets.

- (a) Prepare a cash flow statement for Decca for the year ending 31 December 20X7.
- (b) Briefly comment on the state of the business as revealed by the profit and loss account, balance sheets and cash flow statement.

4. Demetrios runs a car spares business. During his 20X5 financial year he moved the business from its rented premises to a freehold retail warehouse. This has given the business much more selling space and Demetrios hopes to be able to increase sales by a significant margin in the new location. The new warehouse cost £140 000 and Demetrios has had to take out a long-term loan of £100 000. £40 000 of the cost of the warehouse relates to land value. The remainder (£100 000) is to be depreciated over 50 years on the straight line basis. By 31 March 20X5 Demetrios has owned the warehouse for six months and the charge to depreciation included in his profit and loss account is £1000.

Other movements in fixed assets are as follows:

Fittings and storage

	£
Cost at 1 April 20X4	18 250
Additions	16 600

Disposals	(9 870)
Cost at 31 March 20X5	<u>24 980</u>
	£
Depreciation at 1 April 20X4	15 200
Accumulated depreciation on disposals	(8 462)
Depreciation for the year	2 498
Depreciation at 31 March 20X5	<u>9 236</u>

The fittings and storage equipment that was disposed of at the time of the move to the new premises was mostly very old. Demetrios received £1000 for it.

Demetrios's profit and loss account for the year ending 31 March 20X5 is as follows:

	£	£
Sales		276 774
Cost of sales		
Opening stock	77 870	
Purchases	195 376	
	<u>273 246</u>	
Closing stock	(78 120)	
		<u>195 126</u>
Gross profit		81 648
Expenses excluding depreciation		(61 995)
Depreciation (£1000 + 2498)		(3 498)
Loss on sale of fixed assets		(408)
Operating profit		<u>15 747</u>
Interest paid		(3 662)
Net profit		<u>12 085</u>

Demetrios's balance sheets at 31 March 20X5 and 20X4 are as follows:

	20X5	20X5	20X4	20X4
	£	£	£	£
Fixed assets at net book value				
Warehouse		139 000		—
Fittings and storage		15 744		3 050
		<u>154 744</u>		<u>3 050</u>
Current assets				
Stock	78 120		77 870	
Debtors and prepayments	2 006		1 980	
Cash at bank	—		38 431	
	<u>80 126</u>		<u>118 281</u>	
Current liabilities				
Bank overdraft	12 270		—	
Creditors and accruals	43 277		31 442	
	<u>55 547</u>		<u>31 442</u>	
Net current assets		24 579		86 839
		<u>179 323</u>		<u>89 889</u>
Long-term loan		(100 000)		—
		<u>79 323</u>		<u>89 889</u>
Capital				
Capital brought forward		89 889		81 384
Profit for the year		12 085		29 975
Drawings		(22 651)		(21 470)
		<u>79 323</u>		<u>89 889</u>

Prepare a cash flow statement for Demetrios for the year ending 31 March 20X5.

## Answers

### 1. Byron

	Effect on cash etc.	Effect on profit
Purchase on credit of goods for resale at a cost of £12 800	No immediate effect on cash. Creditors and stock both increase by £12 800. Cash will decrease in the future when the liability of £12 800 is paid.	No immediate effect on profit. A sale of these goods will probably take place at which point their value is set off against sales in the form of cost of sales
Drawings of £15 000	Cash and capital are both reduced by £15 000	There is no impact on profit. Effectively, Byron is taking £15 000 of his own capital out of the business.
Payment of interest on bank overdraft of £750	Cash is decreased (or, more likely, the liability of bank overdraft is increased).	The interest paid reduces profits
Sale of fixed asset for £7000	Cash is increased by £7000. The total net book value of fixed assets is reduced by the net book value of the asset which has been disposed of (£23 000 – £18 660 = £4340)	There is a profit on sale of £2660 (£7000 – net book value of £4340). This increases the overall profits from Byron's business.

### 2. Ciaran

Extract from cash flow statement for the year ending 31 May 20X2

	£
Operating profit (working 1)	25 678
Add back: depreciation	4 850
	<hr/> 30 528
Changes in working capital	
Stock – increase (29 950 – 28 470) (cash outflow)	(1 480)
Debtors – increase (39 447 – 38 402) (cash outflow)	(1 045)
Creditors – decrease (29 572 – 32 224) (cash outflow)	(2 652)
Net cash inflow from operating activities	<hr/> 25 351 <hr/>

### Working 1

Operating profit

Gross profit 77 228

Less: expenses (51 550)

25 678

Note: operating profit in this case is the same as net profit before taking into account interest received. Remember that interest is dealt with in the lower part of the cash flow statement and does not appear in the section relating to operating activities.

### 3. Decca

(a) Cash flow statement for the year ending 31 December 20X7

	£	£
Operating profit		63 063
Add back: depreciation		21 420
		<hr/> 84 483
Changes in working capital		
Stock (78 772 – 75 550) (cash outflow)	(3 222)	
Debtors and prepayments (7 255 – 5 250) (cash outflow)	(2 005)	
Creditors (82 428 – 92 740) (cash outflow)	(10 312)	
Net change in working capital	<hr/>	(15 539)
Net cash inflow from operating activities		<hr/> 68 944
Interest paid		(1 857)
Proprietor's drawings (cash outflow)		(36 800)
Long-term loan repayment (40 000 – 20 000)		(20 000)
Net cash inflow		<hr/> 10 287
Change in cash balance:		
Overdraft at 1 January 20X7		(7 481)
Cash at 31 December 20X7		2 806
Increase in cash – net cash inflow (£7481 + 2806)		<hr/> 287

(b) Decca's business appears to have improved its performance in 20X7, compared to 20X6. Net profit in 20X6 was £28 740, compared to £61 206 in 20X7; this is a very substantial increase. The cash position has improved: Decca has paid off the overdraft and half (£20 000) of the long-term loan. Stock and debtors are not greatly different at the two year ends but creditors have been reduced from £92 740 to £82 428 between 31 December 20X6 and 31 December 20X7. Although it can be helpful to have a reasonably high level of creditors (who provide what is effectively a source of interest-free credit) there are limits. If creditors are not paid within a reasonable time limit they may become reluctant to make further supplies of goods available.

Only a fairly limited comparison is possible from the figures available. It would be helpful to have the 20X6 profit and loss account in order to analyse the business performance in more detail.

#### 4. Demetrios

Cash flow statement for the year ending 31 March 20X5

	£	£
Operating profit		15 747
Add back: depreciation		3 498
Add back: loss on sale of fixed assets		408
		<hr/> 19 653
Changes in working capital		
Stock (78 120 – 77 870) (cash outflow)	(250)	
Debtors and prepayments (2006 – 1980) (cash outflow)	(26)	
Creditors (43 277 – 31 442) (cash inflow)	11 835	
Net change in working capital	<hr/>	11 559
Net cash inflow from operating activities		<hr/> 31 212
Interest paid		(3 662)
Capital expenditure (cash outflow)		
Purchase of building		(140 000)
Purchase of fixtures and storage		(16 600)
Proceeds of sale of fixed assets (cash inflow)		1 000
Proprietor's drawings (cash outflow)		(22 651)



Long-term loan (cash inflow)	100 000
Net cash outflow	<hr/> 50 701
Change in cash balance:	<hr/>
Cash at 1 April 20X4	38 431
Overdraft at 31 March 20X5	(12 270)
Decrease in cash – net cash outflow (£38 431 + 12 270)	<hr/> 50 701
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