CHAPTER 26

Statements of cash flows

26.1 Introduction

The main purpose of this chapter is to explain the reasons for preparing a statement of cash flows and how to prepare a statement applying IAS 7.

Objectives

By the end of this chapter, you should be able to:

- prepare a statement of cash flows in accordance with IAS 7;
- analyse a statement of cash flows;
- critically discuss their strengths and weaknesses.

26.2 Development of statements of cash flows

At the end of an accounting period, an income statement is prepared which explains the change in the retained earnings at the beginning and end of an accounting period and a further statement prepared to explain the change that has occurred in the assets and liabilities.

There have been three approaches to the format of this further statement. The first, called a Source and Application statement or Funds Flow Statement, was followed by two different formats for Statements of Cash Flows.

26.2.1 Source and application statement

This statement explained the changes between the opening and closing statement of financial position by classifying the changes in non-current assets and long-term capital under two headings:

- **source of funds**, comprising funds from operating and other sources such as sale of fixed assets and issue of shares and loans; and
- **application of funds**, comprising tax paid, dividends paid, fixed asset acquisitions and long-term capital repayments. The difference represented the net change in working capital.

In 1977 IAS 7 *Statement of Changes in Financial Position* was issued, requiring companies to publish a funds flow statement with the annual accounts.[1] This would appear as follows:

Source and Application Statement for the year ended 31.12.20X9

Sources of funds:		
Funds from operations	1,000	
Sale of non-current assets	500	
Issue of shares	200	
Issue of debentures	600	
		2,300
Application of funds:		
Tax paid	250	
Dividends paid	100	
Purchase of non-current assets	950	
Repayment of capital	120	
Repayment of loans	80	
		1,500
Difference = Change in working capital		800

26.2.2 Statement of cash flows

In 1987 SFAS 95 *Statement of Cash Flows* was published in the USA.[2] It concluded that a cash flow statement should replace the funds flow statement, concentrating on **changes in cash** rather than **changes in working capital**. The statement of cash flows should represent all of a company's cash receipts and cash payments during a period. There was also widespread support for the belief that statements of cash flow **were more decision-useful** and that they should replace the funds flow statement.

In 1992 the IASC issued IAS 7 (revised), which appeared to be based on SFAS 95.[3] It proposed that cash flow statements should replace funds flow statements in financial reporting. Guidelines were given about reporting cash flows, appropriate formats and minimum disclosure. The effect was that the changes in inventories, trade receivables and trade payables were disclosed as separate movements.

A report by the ICAEW Research Board and the ICAS Research Advisory Committee, entitled *The Future Shape of Financial Reports*, recommended a number of reporting reforms.[4] One of the main areas for improvement was reporting a company's cash position. Professor Arnold wrote:

> little attention is paid to the reporting entity's cash or liquidity position. Cash is the lifeblood of every business entity. The report . . . advocates that companies should provide a cash flow statement . . . preferably using the direct method.[5]

An important issue is the relationship of cash flows to the existing financial statements. As the following quotation illustrates, statements of cash flows are not a substitute for the statement of comprehensive income:

> The emphasis on cash flows, and the emergence of the statement of cash flows as an important financial report, does not mean that operating cash flows are a substitute for, or are more important than, net income. In order to analyse financial statements correctly we need to consider **both** operating cash flows and net income.[6]

The overwhelming reason for replacing a funds flow statement with a statement of cash flows was that the latter provides more relevant and useful information to users of financial statements. When used in conjunction with the accrual-adjusted data included in the statement of comprehensive income and the statement of financial position, cash flow information helps to assess liquidity, viability and financial flexibility. This view is held by Henderson and Maness, who stress the need to integrate different types of analysis to achieve an overall assessment of an organisation's financial health: 'cash flow analysis should be used in conjunction with traditional ratio analysis to get a clear picture of the financial position of a firm'.[7]

The financial viability and survival prospects of any organisation rest on the ability to generate net positive cash flows. Cash flows help to reduce an organisation's dependency on external funding, service existing debts and obligations, finance investments, and reward the investors with an acceptable dividend policy. The end-result is that, independent of reported profits, if an organisation is unable to generate sufficient cash, it will eventually fail.

Statements of cash flows can also be used to evaluate any economic decisions related to the financial performance of an organisation. Decisions made on the basis of expected cash flows can be monitored and reviewed whenever additional cash flow information becomes available.

Finally, the quality of information contained in statements of cash flows should be better than that contained in funds flow statements because it is more consistent and neutral. Cash flows can be reliably traced to when a transaction occurred, while funds flows are distorted by the accounting judgements inherent in accrual-adjusted data.[8]

The following extract from Heath and Rosenfield's article on solvency is a useful conclusion to our analysis of the benefits of cash flow statements:

> Solvency is a money or cash phenomenon. A solvent company is one with adequate cash to pay its debts; an insolvent company is one with inadequate cash . . . Any information that provides insight into the amounts, timings and certainty of a company's future cash receipts and payments is useful in evaluating solvency. Statements of past cash receipts and payments are useful for the same basic reason that statements of comprehensive income are useful in evaluating profitability: both provide a basis for predicting future performance.[9]

26.3 Applying IAS 7 (revised) *Statements of Cash Flows*

26.3.1 IAS 7 issued

IAS 7 was revised and renamed again in 2008 by the IASB to require companies to issue a statement of cash flows. Its objective was to require companies to provide standardised reports on their cash generation and cash absorption for a period. Its principal feature was the analysis of cash flows under **three** standard headings of 'operating activities', 'investing activities' and 'financing activities'. Accounting commentators said that information on cash is an essential part of a company's financial statements.

26.3.2 Methods of presenting cash flows from operating activities

IAS 7 permitted either the direct or indirect method of presentation to be used.

- The **direct** method reports cash inflows and outflows directly, starting with the major categories of gross cash receipts and payments. This means that cash flows such as receipts from customers and payments to suppliers are stated separately within the operating activities.
- The **indirect** method starts with the profit before tax and then adjusts this figure for non-cash items such as depreciation and changes in working capital.

We will comment briefly on each method.

26.3.3 The direct method

The direct method demonstrates more of the qualities of a true cash flow statement because it provides more information about the sources and uses of cash. This information is not available elsewhere and helps in the estimation of future cash flows.

The principal advantage of the direct method is that it shows operating cash receipts and payments. Knowledge of the specific sources of cash receipts and the purposes for which cash payments were made in past periods may be useful in assessing future cash flows. Disclosure of *cash from customers* could provide additional information about an entity's ability to convert revenues to cash.

When is the direct method beneficial?

One such time is when the user is attempting to predict bankruptcy or future liquidation of the company. A research study looking at the cash flow differences between failed and non-failed companies[10] established that seven cash flow variables and suggested ratios captured statistically significant differences between failed and non-failed firms as much as five years prior to failure. The study further showed that the research findings supported the use of a direct cash flow statement and the authors commented:

> An indirect cash flow statement will not provide a number of the cash flow variables for which we found significant differences between bankrupt and non-bankrupt companies. Thus, using an indirect cash flow statement could lead to ignoring important information about creditworthiness.

The direct method is the method preferred by the standard but preparers have a choice. In the UK the indirect method is often used; in other regions (e.g. Australia) the direct method is more common. It has been proposed in a review of IAS 7 that the direct method should be mandated and the alternative removed and this is the likely requirement in a new standard to eventually replace IAS 7.

26.3.4 The indirect method

The two methods provide different types of information to the users. The indirect method applies changes in working capital to net income.

The principal advantage of the indirect method is that it highlights the differences between operating profit and net cash flow from operating activities to provide a measure of the quality of income. Many users of financial statements believe that such reconciliation is essential to give an indication of the quality of the reporting entity's earnings. Some investors and creditors assess future cash flows by estimating future income and then allowing for accruals adjustments; thus information about past accruals adjustments may be useful to help estimate future adjustments.

A criticism of the indirect method is that the changes calculated from the statements of financial position are adjusted before entering in the statement of cash flows. For example, if there has been a foreign exchange difference or an acquisition the change is adjusted as seen in section 26.5.2 below so that it is not possible for a user to reconcile the two statements. This could be overcome by the inclusion of supplementary information.

Preparer and user response

The IASB indicates that the responses to the discussion paper were mixed with the preparers tending to prefer the indirect method and the users having a mixed response. There was a view that the direct method would be improved if the movements on working capital were disclosed as supplementary information and the indirect method would be improved if the cash from customers and payments to suppliers was disclosed as supplementary information, i.e. both are found useful.

Cash equivalents

IAS 7 recognised that companies' cash management practices vary in the range of short- to medium-term deposits and instruments in their cash and near-cash portfolio. The standard standardised the treatment of near-cash items by applying the following definition when determining whether items should be aggregated with cash in the cash flow statement:

> Cash equivalents are short-term, highly liquid investments which are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value.

Near-cash items falling outside this definition were reported under the heading of 'investing activities'.

There has been criticism over the definition of cash equivalents. IAS 7 does give some guidance that a cash equivalent should normally be within three months of maturity at the date of acquisition, but this guidance can create problems. For example, it is not always commercially appropriate to deal with deposits over three months as investing activities as opposed to cash equivalents. The effect of the definition of cash equivalents is to split the activities of corporate treasury departments between investing cash flows and increases or decreases in cash. If cash is put on deposit for more than three months, it is treated as a cash outflow under investing, whereas if deposited for less than three months, it is not shown as actually being a cash flow. This makes analysis of the movements in cash and cash equivalents potentially misleading.

In the UK the cash flow statement reconciles opening and closing cash rather than cash equivalents. A replacement standard will probably follow the UK practice.

26.4 IAS 7 (revised) format of statements of cash flows

The IAS 7 format is set out below and its application to Tyro Bruce illustrated.

26.4.1 The IAS 7 format is as follows

Cash flows from operating activities		
Profit before tax	x	
Adjustments for:		
Depreciation	x	
Foreign exchange loss	x	
Investment income	(x)	
Interest expense	x	
Operating profit before working capital changes	x	
Increase in trade and other receivables	(x)	
Decrease in inventories	x	
Decrease in trade payables	(x)	
Cash generated from operations	x	
Interest paid*	(x)	
Income taxes paid	(x)	
Cash flow before extraordinary item	x	
Proceeds from earthquake disaster settlement	x	
Net cash from operating activities		x
Cash flows from investing activities		
Acquisition of subsidiary net of cash acquired	(x)	
Purchase of property, plant and equipment	(x)	
Proceeds from sale of equipment	x	
Interest received*	x	
Dividends received*	x	
Net cash used in investing activities		(x)
Cash flows from financing activities		
Proceeds from issue of share capital	x	
Proceeds from long-term borrowings	x	
Payment of finance lease liabilities	(x)	
Dividends paid*	(x)	
Net cash used in financing activities		(x)
Net increase in cash and cash equivalents		x
Cash and cash equivalents at the beginning of the period		x
Cash and cash equivalents at the end of the period		x

* The position in the statement of cash flows for these items is not precisely defined in IAS 7, and choice exists in the presentation. Interest paid, and interest and dividends received, could either be classified as operating cash flows or as financing (for interest paid) and investing cash flows (for the receipts). Dividends paid could either be presented as financing cash flows or as operating cash flows. However, it is a requirement that whichever presentation is adopted by an enterprise should be consistently applied from year to year.

26.4.2 Step approach to preparation of a statement of cash flows – indirect method

Company X: A step approach to illustrate preparing a statement of cash flows with workings on face of the statements of financial position, statement of comprehensive income and notes.

Step 1: Calculate differences in the Statements of Financial Position and note whether to treat under Operating activities, Investing, Financing or as a cash equivalent.

Statements of Financial Position as at 31.3.20X8 and 31.3.20X9

			20X8			*20X9*		
	Cost	*Depn*	*NBV*	*Cost*	*Depn*	*NBV*	*Difference*	*Cash Flow section*
Non-current assets	2,520	452	2,068	2,760	462	2,298	See PPE note	Investing if there are any acquisitions or disposals
Current assets								
Inventory		800			1,200		400	PBT adjustment/decrease
Trade receivables		640			900		260	PBT adjustment/decrease
Government securities		—			20		20	Cash equivalent
Cash		80			10		70	Cash equivalent
		1,520			2,130			
Current liabilities								
Trade payables		540			500		40	PBT adjustment/decrease
Taxation		190			170		20	Cash flow from operations
Dividends		—			—		—	
Overdraft		8			478		470	Cash equivalent
		738			1,148			
Net current assets			782			982		
			2,850			3,280		
Share capital			1,300			1,400	100	Financing/increase
Share premium a/c			200			400	200	Financing/increase
Retained earnings			1,150			1,150		
Profit for year			—			180		
10% loan 20 × 4			200			150	50	Financing/decrease
			2,850			3,280		

Step 2: Identify any items in the Income statement for the year ended 31.3.20X9 after Profit before Interest and tax (PBIT) to be entered under operating activities, investing or financing.

	£000	*£000*	
Sales		3,000	
Cost of sales		2,000	
Gross profit		1,000	
Distribution costs	300		
Administrative expenses	180	480	
PBIT		520	
Interest expense		(20)	Add back interest expense to PBT
Profit before tax		500	PBT as the first Operating activities entry
Income tax expense		(200)	Operating activities/decrease
Profit after tax		300	
Dividend paid		120	Financing/decrease
Retained earnings for year		180	

The Cash Flow items can then be entered into the Statement of Cash Flows in accordance with IAS 7.

		£000	
Cash flows from operating activities			
Profit before tax		500	
Adjustments for non-cash items:			
Depreciation	From Step 3 (ii)	102	
Profit on sale of plant	From Step 3 (iv)	(13)	
Interest expense		20	
Increase in trade receivables		(260)	
Increase in inventories		(400)	
Decrease in trade payables		(40)	
Cash generated from operations		**(91)**	
Interest paid	No accrual or prepayment	(20)	
Income taxes paid (Expense + (closing accrual – opening accrual))	200 + (190 – 170)	(220)	
Net cash used in operating activities			(331)
Cash flows from investing activities			
Purchase of property, plant and equipment	From Step 3 (i)	(560)	
Proceeds from sale of equipment	From Step 3 (iii)	241	
Net cash used in investing activities			(319)
Cash flows from financing activities			
Proceeds from issue of shares at a premium		300	
Redemption of loan		(50)	
Dividends paid		(120)	
Net cash from financing activities			130
Net increase in cash and cash equivalents			**(520)**
Cash and cash equivalents at beginning of period	80 – 8		72
Cash and cash equivalents at end of the period	(478) – (10 + 20)		**(448)**

Step 3: Refer to the PPE Schedule to identify any acquisitions, disposals and depreciation charges that affect the Cash flows. The Tyro Bruce Schedule showed:

		Cost *£000*		*Depn* *£000*
At 31.3.20X8	Cost	2,520	Accum. depreciation	452
	Additions	**560**	**Charge for year**	**102**
		3,080		554
	Disposal*	320	Disposal	92
At 31.3.20X9		2,760		462

The approach to calculating the effect on a statement of cash flows arising from a disposal of non-current assets depends on whether the information available is the cash proceeds or the profit/loss on disposal. Let us assume a profit of £13,000.

If the question gives the profit/loss figure, then the cash proceeds have to be calculated as: Net book value + profit on disposal = (£320,000 – £92,000) + £13,000 = £241,000.

If the question gives the cash proceeds, then the profit/loss has to be calculated to be used as an adjustment for non-cash items. This would be Cash proceeds – Net book value = £241,000 – £228,000 = £13,000.

From this we can see that there are four impacts:

(i) Additions: The cash of £560,000 paid out on additions will appear under Investing.

(ii) The depreciation charge: This is a non-cash item and the £102,000 will be added back as a non-cash item to the Profit before tax in the Operating activities section.

(iii) Disposal proceeds: The cash received from the disposal will appear under Investing. It is calculated as NBV of £228,000 (320,000 – 92,000) + the profit figure of £13,000 = £241,000.

(iv) Profit on disposal: As the full proceeds of £241,000 are included under Investing, there would be double counting to leave the profit of £13,000 within the Profit before tax figure. It is therefore deducted as a non-cash item from PBT in the Operating activities section.

26.4.3 Statement of cash flows – direct method

One of the criticisms of IAS 7 was that it did not standardise on the use of the direct method. Under the direct method the 'operating activities' of the statement are presented differently to show the actual cash flows from customers and to suppliers and employees. In our example the (91) is calculated and disclosed as below:

Cash flows from operating activities	*£000*
Cash received from customers (a)	2,740
Cash paid to suppliers and employees (b)	(2,831)
Cash generated from operations	(91)

(a) Cash received from customers

	£000
Sales	3,000
Receivables increase	260
	2,740

(b) Cash paid to suppliers and employees

	£000
Cost of sales	2,000
Payables decreased	40
Inventory increase	400
Depreciation	(102)
Profit on sale	13
Distribution costs	300
Administration expenses	180
	2,831

26.4.4 Additional notes required by IAS 7

As well as the presentation on the face of the cash flow statement, IAS 7 requires notes to the cash flow statement to help the user understand the information. The notes that are required are as follows:

Major non-cash transactions

If the entity has entered into major non-cash transactions that are therefore not represented on the face of the cash flow statement sufficient further information to understand the transactions should be provided in a note to the financial statements. Examples of major non-cash transactions might be:

- the acquisition of assets by way of finance leases;
- the conversion of debt to equity.

Components of cash and cash equivalents

An enterprise must disclose the components of cash and cash equivalents and reconcile these into the totals in the statement of financial position. An example of a suitable disclosure in the case of Tyro Bruce is:

	20X9	*20X8*
Cash	10	80
Government securities	20	
Overdraft	(478)	(8)
Cash and cash equivalents	(448)	(72)

Disclosure must also be given on restrictions on the use by the group of any cash and cash equivalents held by the enterprise. These restrictions might apply if, for example, cash was held in foreign countries and could not be remitted back to the parent company.

Segmental information

IAS 7 encourages enterprises to disclose information about operating, investing and financing cash flows for each business and geographical segment. This disclosure is optional. IFRS 8 does not require a cash flow by segment.

26.5 Consolidated statements of cash flows

A consolidated statement of cash flows differs from that for a single company in two respects: there are additional items; and adjustments may be required to the actual amounts.

26.5.1 Additional items

Additional items appear under the operating, investing and financing activities of the cash flow statement as follows:

1 **Operating activities**
   - Adjust for non-cash income:
     - Share of profit of associate.

2 **Investing activities**
   - Dividends received:
     - Dividends received from associates.

- Purchase of a subsidiary, interest in an associated/joint venture undertaking or of a business.
- Receipt from the disposal of a subsidiary, interest in an associated/joint venture undertaking or of a business.

3 **Financing activities**

- Dividends paid to non-controlling interests (this is calculated as non-controlling interests in the opening consolidated statement of financial position plus non-controlling interests in the statement of comprehensive income less non-controlling interests in the closing statement of financial position).

26.5.2 Adjustments to amounts

Adjustments are required if the closing statement of financial position items have been increased or reduced as a result of **non-cash movements**. Such movements occur if there has been a purchase of a subsidiary to reflect the fact that the asset and liabilities from the new subsidiary have not necessarily resulted from cash flows.

Subsidiary acquired during year

For example, if Tyro Bruce had acquired a subsidiary on 31 March 20X9 on the following terms:

Net assets acquired	*£000*	*In the Statement of cash flows the effect will be:*
Working capital:		
Inventory	10	Reduce inventory increase
Trade payables	(12)	Reduce trade payables increase
Non-current assets:		
Vehicles	20	Reduce purchase of PPE
Cash/bank:		
Cash	5	Show as cash acquired in the investing section
Net assets acquired	23	
Consideration from Tyro Bruce:		
Shares	10	Reduce proceeds from issue of shares
Premium	10	Reduce proceeds from issue at a premium
Cash	3	Show as payment to acquire subsidiary in the investing section
	23	

The Tyro Bruce consolidated statement of cash flows prepared using the indirect method would appear as follows on stripping out the non-cash movements.

Statement of cash flows for Tyro Bruce using the indirect method

Cash flows from operating activities		*£000*	*£000*
Net profit before tax		500	
Adjustments for:			
Depreciation		102	
Profit on sale of equipment		(13)	
Interest expense		20	
Operating profit before working capital changes		609	
Increase in trade and other receivables		(260)	
Increase in inventories	(400)		
***Less:* inventory brought in on acquisition**	**10**	**(390)**	
Decrease in trade payables	(40)		
***Add:* trade payables brought in on acquisition**	**(12)**	**(52)**	
Cash generated from operations		(93)	
Interest paid (*from statement of comprehensive income*)		(20)	
Income taxes paid (200 + 190 – 170)		(220)	
Net cash from operating activities			(333)
Cash flows from investing activities			
Purchase of property, plant and equipment	(560)		
***Less:* vehicles brought in on acquisition**	**20**	**(540)**	
Proceeds from sale of equipment		241	
Payment to acquire subsidiary		(3)	
Cash acquired with subsidiary		5	
Net cash used in investing activities			(297)
Cash flows from financing activities			
Proceeds from issuance of share capital	300		
***Less:* shares issued on acquisition not for cash**	**(20)**	**280**	
Repayment of debentures		(50)	
Dividends paid (*from statement of comprehensive income*)		(120)	
Net cash from financing activities			110
Net decrease in cash and cash equivalents			**(520)**
Cash and cash equivalents at the beginning of the period			**72**
Cash and cash equivalents at the end of the period			**(448)**

If there had been a disposal of a subsidiary, the same adjustments would have been required except that they would have been in the opposite direction, e.g. capital expenditure on vehicles would have been increased from £1,120,000 to £1,140,000.

Supplemental disclosure of acquisition

	£
Total purchase consideration	23,000
Portion of purchase consideration discharged by means of cash or cash equivalents	3,000
Amount of cash and cash equivalents in the subsidiary acquired	5,000

26.6 Analysing statements of cash flows

Arranging cash flows into specific classes provides users with relevant and decision-useful information by classifying cash flows as Cash generated from operations, Net cash from

operating activities, Net cash flows from investing activities and Net cash flows from financing activities.

Lack of a clear definition

However, this does not mean that companies will necessarily report the same transaction in the same way. Although IAS 7 requires cash flows to be reported under these headings, it does not define operating activities except to say that it includes all transactions and other events that are not defined as investing or financing activities.

Alternative treatments

Alternative treatments for interest and dividends paid could be presented as either operating or financing cash flows. In the UK the problem is solved by adding a fourth category of cash flows titled *Returns on investment and servicing of finance*. Whilst most companies choose to report the dividends as Financing cash flows, when making inter-firm comparisons we need to see which alternative has been chosen. The choice can have a significant impact. If, for example, in the Tyro Bruce illustration the dividends of £120,000 were reported as an operating cash flow, then the Net cash outflow from operating activities would increase from (£333,000) to (£453,000). It does not affect inter-period comparisons.

The classifications assist users in making informed predictions about future cash flows or raising questions for further enquiry which would be difficult to make using traditional accrual-based techniques.[11]

We will briefly comment on the implication of each classification.

26.6.1 Cash generated from operations

In the Tyro Bruce example on page 675 we can see that there has been a significant increase in working capital of £700,000 (£260,000 + £400,000 + £40,000) resulting in a negative cash flow from operations. Lenders look to the cash generated from operations to pay interest and taxation, both of which are unavoidable – it is an indication of the safety margin, i.e. how long a business could continue to pay unavoidable costs.

Lenders in Tyro Bruce concerned with interest cover could see that the cash available to meet interest charges and taxation in the current year has been adversely affected by the significant impact of working capital changes.

Interest cover

Interest cover is normally defined as the number of times the profit before interest and tax covers the interest charge: in the Tyro Bruce example this is 26 times (520/20). The position as disclosed in the statement of cash flows is weaker. There is a negative net cash flow of £91,000 from operating activities which does not cover the interest payment.

Cash debt coverage

In addition to interest cover, lenders want to be satisfied that their loan will be repaid. Failure to do so could lead to a going concern problem for the company. One measure used is to calculate the ratio of cash flow from operations less dividend payments to total debt and, of more immediate interest, to loans that are about to mature. The ratio can be adjusted to reflect the company's current position. For example, if there is a significant cash balance, it might be appropriate to add this to the retained cash flow from operations on the basis that it would be available to meet the loan repayment.

Cash dividend coverage

The ratio of cash flow from operating activities less interest paid to dividends paid indicates the ability to meet the current dividend. If the dividend rate shows a rising trend, dividends declared might be used rather than the cash flow figure. This would give a better indication of the coverage ratio for future dividends.

Future cash flows

There are two aspects to consider when attempting to predict future cash flows from operations. The first is the level of operating cash flow before the investment in working capital; the second is the level of investment in working capital.

26.6.2 Future cash flows from operations

We need to look at previous periods to identify the trend. Trends are important with investors naturally hoping to invest in a company with a rising trend. If there is a loss or a downward trend, this is a cause for concern and investors should make further enquiries to identify any proposed steps to improve the position. This is where narrative may be helpful – the operating and financial review and chairman's statement may give some indication as to how the company will be addressing the situation. For example, is the company planning a cost reduction programme or disposing of loss-making activities? If it is not possible to improve the trend or reverse the negative cash flow, then there could be future liquidity difficulties.

The implication for future cash flow is that such difficulties could have an impact on future discretionary costs, e.g. the curtailment of research, marketing or advertising expenditure; on investment decisions, e.g. postponing capital expenditure; and on financing decisions, e.g. the need to raise additional equity or loan capital.

There are signs that there has been an increase in activity with acquisition of a subsidiary and investment in additional non-current assets. A review of the narrative should answer questions as to the reason for the increase and the likelihood of it being sustained, such as whether there are new markets, new products, change in sales mix, more competitive pricing with use of more efficient plant.

We can see the cash implication, but would need to make further enquiries to establish the reasons for the change and the likelihood of similar cash outflow movements recurring in future years. If, for example, the increased investment in inventory resulted from an increase in turnover, then a similar increase could recur if the forecast turnover continued to increase. If, on the other hand, the increase was due to poor inventory control, then it is less likely that the increase will recur: in fact, quite the opposite as management addresses the problem.

The cash flow statement indicates the cash extent of the change: additional ratios and enquiries are required to allow us to evaluate the change.

26.6.3 Evaluating the investing activities cash flows

These arise from the acquisition and disposal of non-current assets and investments.

It is useful to consider how much of the expenditure is to replace existing non-current assets and how much is to increase capacity. One way is to relate the cash expenditure to the depreciation charge; this indicates that the cash expenditure is more than five times greater than the depreciation charge calculated as follows: [(£540,000/£102,000) × 100].

This seems to indicate a possible increase in productive capacity. However, the cash flow statement does not itemise the expenditure and the non-current asset schedule does not reveal how much was spent on plant.

How much relates to replacing existing non-current assets?

There has been a criticism that it is not possible to assess how much of the investing activities cash outflow related to simply maintaining operations by replacing non-current assets that were worn out rather than to increasing existing capacity with a potential for an increase in turnover and profits. The solution proposed was that investment that merely maintained should be shown as an operating cash flow and that the investing cash flow should be restricted to increasing capacity. The IASB doubted the reliability of such a distinction but there is a view that such an analysis provides additional information, provided the breakdown between the two types of expenditure can be reliably ascertained.

26.6.4 Evaluating the financing cash flows

Additional capital of £300,000 has been raised. After repaying a loan of £50,000 and payment of a dividend of £120,000, it left only £130,000 towards a net outflow of £600,000 (£331,000 + £319,000). The business is heavily reliant on overdraft.

This does not allow us to assess the financing policy of the company, e.g. whether the capital was raised the optimum way. Nor does it allow us to assess whether the company would have done better to provide finance by improved control over its assets, e.g. working capital reduction.[12]

However, it does flag up the need to seek information as to how the business will manage the overdraft. There could be a liquidity problem with a possible requirement to raise additional share capital, possibly by a rights issue.

26.6.5 Free cash flow (FCF)

Free cash flow defined

There is no common definition of FCF. It has been variously defined as:

(a) Net cash flow used in operating activities.

(b) Net cash flow used in operating activities less purchase of non-current assets to maintain the operating capital of the company. However, for an external user of the accounts, it is not possible to split the capital expenditure between assets to maintain as opposed to assets to increase production capacity unless a company makes a voluntary disclosure of this information.

(c) Net cash flow used in operating activities less all capital expenditure (assuming that this is to maintain operating capacity) but excluding acquisitions (on the basis that these do not reflect organic growth).

(d) As for (c) but including acquisitions.

Under the definition in (d), a negative or depressed FCF may not be a disadvantage if it results from investment in high return investments as shown in the following extract from the 2001 Pearson Annual Report:

Free cash flow

Free cash flow per share is a measure of the cash which is freely available, after the payment of interest and tax, for distribution in the form of dividends and for reinvestment in the business. The proceeds of disposals and the cost of acquisitions, together with any substantial integration costs associated with them, are excluded from the calculation. Pearson's total free cash flow has been depressed over the past several years by a high level of investment demands, on our print businesses as well as on the internet. We believe that these investments will help us to sustain a higher rate of sales growth in the future but we also need to ensure that dividends to shareholders are paid from the cash generated by the business.

In the Pearson example the investment has been based on the expected higher sales growth. It should be recognised, however, that there is a risk if a company has significant free cash flow that its managers may be too optimistic about future performance. When they are not reliant on satisfying external funders there could be less constraint on their investment decisions. If there is negative free cash flow then the opposite applies and the business would require external sources of finance to maintain its operating capital.

Use of free cash flow ratios to track trends

Free cash flow as a percentage of revenue indicates what proportion of the revenue is available for discretionary expenditure.

The following is based on the BBA Aviation plc Annual Reports:

Free cash flow margin

		2007	*2006*	*2005*	*2004*
	Revenue (millions)	979	950	1,511	1,374
(i)	Free cash flow margin %	8.0%	12.5%	11.5%	9.6%
	Net cash flow used in operating activities				
(ii)	Free cash flow margin %	4.3%	2.9%	6.7%	5.5%
	As in (i) less non-current assets purchased				
(iii)	Underlying profit before interest and tax	10.7%	10.6%	5.5%	9.2%

Like all ratios they are only flags. It is interesting to hypothesise from the above: the ratios indicate that in each of the years there was a positive operating cash margin with almost 4% being used to purchase non-current assets except in 2006 when there was a 37% decrease in sales but almost 10% used to purchase non-current assets. The effect on the underlying profit ratio was to increase it by over 90% which was maintained in 2007. However, the free cash flow margin had fallen to 8% which might be due to increases in working capital as the net profit ratio was constant.

26.6.6 Voluntary disclosures

IAS 7 (paras 50–52) lists additional information, supported by a management commentary that may be relevant to understanding:

- liquidity, e.g. the amount of undrawn borrowing facilities;
- future profitability, e.g. cash flow representing increases in operating capacity separate from cash flow maintaining operating capacity; and
- risk, e.g. cash flows for each reportable segment to better understand the relationship between the entity's cash flows and each segment's cash flows.

26.6.7 Reconciliation of net cash flows to net debt

In the UK FRS 1 requires companies to reconcile the movement in cash flows to the movement in net debt by way of note in order to **provide information that assists in the assessment of liquidity and solvency**, e.g. investors review net debt levels for signs of financial distress. IAS 7, however, does not require such a disclosure.

By way of illustration, the notes prepared under FRS 1 for Tyro Bruce (see section 26.4.2 above) would appear as follows:

		20X9		*20X8*
1	Borrowings	(150)		(200)
	Overdraft	(478)	(8)	
	Government securities	20		
	Cash	10	80	
		(448)		72
		(598)		(128)

2	Reconcile net cash flow to movement in net debt	
	Decrease in cash	(520)
	Change in net debt resulting from cash	50
	Movement in net debt	(470)
	Net debt at beginning	(128)
	Net debt at end of period	(598)

3 Analysis of net debt

	20X8	*Cash flow*	*20X9*
Cash at bank	80	(520)	10
Government securities			20
Overdraft	(8)		(478)
Debt outstanding	(200)	50	(150)
Net debt	(128)	(470)	(598)

26.7 Critique of cash flow accounting

IAS 7 (revised) applies stricter requirements to the format and presentation of cash flow statements. It still, however, allows companies to choose between the direct and the indirect methods, and the presentation of interest and dividend cash flows. It can be argued, therefore, that it has failed to rectify the problem of a lack of comparability between statements.

An important point is that, in its search for improved comparability, IAS 7 (revised) reduced the scope for innovation. It might be argued that standard setters should not be reducing innovation, but that there should be concerted effort to increase innovation and improve the information available to user groups. The acceptability of innovation is a fundamental issue in a climate that is becoming increasingly prescriptive.

Our final consideration is the option of direct or indirect methods allowed in IAS 7 (revised). The direct method appears to be a genuine format for a cash flow statement, whereas the indirect method is a cross between a cash flow statement and a funds flow statement. Is it appropriate to continue to offer this hybrid format in IAS 7 (revised) as a replacement for a funds flow statement?

Summary

The funds flow statements produced until 1992 were criticised for not highlighting potential financial problems and for allowing too much choice to companies in how items were disclosed. IAS 7 (revised) defines more tightly the format and treatment of individual items within the cash flow statement. This leads to uniformity and greater comparability between companies. However, there is still some criticism of the current IAS 7:

- There are options within IAS 7 for presentation, since either the direct or the indirect method can be used; and there are choices about the presentation of dividends and interest.
- The cash flow statement does not distinguish between discretionary and non-discretionary cash flows, which would be valuable information to users.
- There is no separate disclosure of cash flows for expansion from cash flows to maintain current capital levels. This distinction would be useful when assessing the position and performance of companies, and is not always easy to identify in the current presentation.
- The definition of cash and cash equivalents can cause problems in that companies may interpret which investments are cash equivalents differently, leading to a lack of comparability. Cash flow statements could be improved by removing cash equivalents and concentrating solely on the movement in cash, which is the current UK practice.

REVIEW QUESTIONS

1 The management of any enterprise may put considerable emphasis on the cash flow effects of its decisions and actions, monitoring these with the internal reporting system. Cash flow information is also relevant to those with external interests in the enterprise. Discuss the importance of cash flow information for both internal and external decisions. What internal and external user needs does cash flow reporting satisfy? Is the current cash flow information adequate for these purposes?

2 Many people preferred the direct method for cash flow preparation, but IAS 7 did not require it. Discuss possible reasons for allowing choice and the effectiveness of the IASC's encouragement to companies to use the direct method.

3 Explain the information that a user can obtain from a cash flow statement that cannot be obtained from the current or comparative statements of financial position.

4 Company X has both a large cash balance and high borrowings. Explain why cash might not have been used to reduce debt.

5 Explain how a payment under a finance lease would be treated.

6 Discuss the limitations of a cash flow statement when evaluating a company's control over its working capital.

7 Explain why the non-current assets acquired on the acquisition of a subsidiary during the year have the same effect on the consolidated cash flow statement as an exchange gain of equal amount resulting from the translation at closing rate.

8 There is a view that if a company shows a healthy operating profit but has low or negative operating cash flows, there is a suspicion that earnings manipulation or creative accounting has occurred. Discuss why there should be suspicion.

9 Describe the voluntary disclosures suggested by IAS 7 and discuss whether these shold be made mandatory.

10 Explain how reconciliation of cash flow to movements in net debt could assist in the analysis of the financial statements and discuss whether this should be made mandatory.

EXERCISES

An extract from the solution is provided on the Companion Website (www.pearsoned.co.uk/elliott-elliott) for exercises marked with an asterisk (*).

Question 1

Direct plc provided the following information from its records for the year ended 30 September 20X9:

	€000	
Sales	316,000	
Cost of goods sold	110,400	
Other expenses	72,000	
Rent expense	14,400	
Dividends	10,000	
Amortisation expense – PPE	8,000	
Advertising expense	4,800	
Gain on sale of equipment	2,520	
Interest expense	320	
	20X9	*20X8*
Accounts receivable	13,200	15,200
Unearned revenue	8,000	9,600
Inventory	18,400	19,200
Prepaid advertising	0	400
Accounts payable	11,200	8,800
Rent payable	0	1,200
Interest payable	40	0

Required:
Using the direct method of presentation, prepare the cash flows from the operating activities section of the Statement of cash flows for the year ended 30 September 20X9.

Question 2

Almost Ready Ltd had extracted the following information from the statement of comprehensive income and statement of financial position (000s) for the year ended 30 September 20X9:

Proceeds from issue of ordinary shares 405, Dividends paid 1,923, Cash and cash equivalents at beginning of the period 6,539, Dividends from joint ventures 228, Purchase of investments 29, Interest received 43, Tax paid 1,389, Purchase of property 115, Cash and cash equivalents at end of period 9,214, Proceeds from sale of other long term assets 24, Purchase of a business (net of cash acquired) 274, Interest paid 16, Payment of principal under a finance lease 11, Cash generated from operations 5,732.

Required:
Prepare statement of cash flows for the year ended 30 September 20X9.

Question 3*

The following are the financial statements of Riddle plc for the last two years:

The statements of financial position as at 31 March

	20X8		*20X9*	
	$000	*$000*	*$000*	*$000*
Non-current assets:				
Property, plant and equipment, at cost	540		720	
Less accumulated depreciation	(145)		(190)	
		395		530
Investments		115		140
Current assets:				
Inventory	315		418	
Trade receivables	412		438	
Bank	48	775	51	907
Total assets		1,285		1,577
Capital and reserves:				
Ordinary shares	600		800	
Share premium	40		55	
Retained earnings	217	857	311	1,166
Non-current liabilities:				
12% debentures		250		200
Current liabilities:				
Trade payables	139		166	
Taxation	39	178	45	211
Total equity and liabilities		1,285		1,577

Statement of comprehensive income for the year ended 31 March 20X9

	$000	*$000*
Revenue		2,460
Cost of sales		1,780
Gross profit		680
Distribution costs	(124)	
Administration expenses	(300)	(424)
Operating profit		256
Interest on debentures		(24)
Profit before tax		232
Tax		(48)
Profit after tax		184

Note: The statement of changes in equity disclosed a dividend of $90,000.

Required:

(a) Prepare the statement of cash flows for Riddle plc for the year ended 31 March 20X9 and show the operating cash flows using the 'indirect method'.

(b) Calculate the cash generated from operations using the 'direct method'.

Question 4

The statements of financial position of Flow Ltd for the years ended 31 December 20X5 and 20X6 were as follows:

		20X5		*20X6*
	€	€	€	€
Non-current assets				
Tangible assets				
PPE at cost	1,743,750		1,983,750	
Accumulated depreciation	551,250	1,192,500	619,125	1,364,625
Current assets				
Inventory		101,250		85,500
Trade receivables		252,000		274,500
		1,545,750		1,724,625
Capital and reserves				
Common shares of €1 each		900,000		1,350,000
Share premium				30,000
Retained earnings		387,000		176,625
Current liabilities				
Trade payables		183,750		159,750
Bank overdraft		75,000		8,250
		1,545,750		1,724,625

Note that during the year ended 31 December 20X6:

1 Equipment that had cost 25,500 and with a net book value of 9,375 was sold for 6,225.

2 The company paid a dividend of 45,000.

3 A bonus issue was made at the beginning of the year of 1 bonus share for every 3 shares.

4 A new issue of 150,000 shares was made on 1 July 20X6 at a price of 1.20 for each 1 share.

5 A dividend of 60,000 was declared but no entries had been made in the books of the company.

Required:
Prepare a statement of cash flows for the year ended 31 December 20X6 that complies with IAS 7.

* Question 5

The statements of financial position of Radar plc at 30 September were as follows:

	20X8		*20X9*	
	$000	*$000*	*$000*	*$000*
Non-current assets:				
Property, plant and equipment, at cost	760		920	
Less accumulated depreciation	(288)		(318)	
		472		602
Investments		186		214
Current assets:				
Inventory	596		397	
Trade receivables	332		392	
Bank	5	933	—	789
Total assets		1,591		1,605
Capital and reserves:				
Ordinary shares	350		500	
Share premium	75		125	
Retained earnings	137	562	294	919
Non-current liabilities:				
12% debentures		400		100
Current liabilities:				
Trade payables	478		396	
Accrued expenses	64		72	
Taxation	87		96	
Overdraft	—		22	
		629		586
Total equity and liabilities		1,591		1,605

The following information is available:

(i) An impairment review of the investments disclosed that there had been an impairment of £20,000.

(ii) The depreciation charge made in the statement of comprehensive income was £64,000.

(iii) Equipment costing £72,000 was sold for £54,000 which gave a profit of £16,000.

(iv) The debentures redeemed in the year were redeemed at a premium of 25%.

(v) The premium paid on the debentures was written off to the share premium account.

(vi) The income tax expense was £92,000.

(vii) A dividend of £25,000 had been paid and dividends of £17,000 had been received.

Required:
Prepare a statement of cash flows for the year ended 30 September using the indirect method.

Question 6

Shown below are the summarised final accounts of Martel plc for the last two financial years:

Statements of financial position as at 31 December

	20X1		*20X0*	
	£000	*£000*	*£000*	*£000*
Non-current assets				
Tangible				
Land and buildings	1,464		1,098	
Plant and machinery	520		194	
Motor vehicles	140		62	
		2,124		1,354
Current assets				
Inventory	504		330	
Trade receivables	264		132	
Government securities	40		—	
Bank	—		22	
	808		484	
Current liabilities				
Trade payables	266		220	
Taxation	120		50	
Proposed dividend	72		40	
Bank overdraft	184		—	
	642		310	
Net current assets		166		174
Total assets less current liabilities		2,290		1,528
Non-current liabilities				
9% debentures		(432)		(350)
		1,858		1,178

	20X1		*20X0*	
	£000	*£000*	*£000*	*£000*
Capital and reserves				
Ordinary shares of 50p each fully paid		900		800
Share premium account	120		70	
Revaluation reserve	360		—	
General reserve	100		50	
Retained earnings	378		258	
		958		378
		1,858		1,178

Summarised statement of comprehensive income for the year ending 31 December

	20X1	*20X0*
	£000	*£000*
Operating profit	479	215
Interest paid	52	30
Profit before taxation	427	185
Tax	149	65
Profit after taxation	278	120

Additional information:

1 The movement in non-current assets during the year ended 31 December 20X1 was as follows:

	Land and buildings	*Plant, etc.*	*Motor vehicles*
	£000	*£000*	*£000*
Cost at 1 January 20X1	3,309	470	231
Revaluation	360	—	—
Additions	81	470	163
Disposals	—	(60)	—
Cost at 31 December 20X1	3,750	880	394
Depreciation at 1 January 20X1	2,211	276	169
Disposals	—	(48)	—
Added for year	75	132	85
Depreciation at 31 December 20X1	2,286	360	254

The plant and machinery disposed of during the year was sold for £20,000.

2 During 20X1, a rights issue was made of one new ordinary share for every eight held at a price of £1.50.

3 A dividend of £36,000 (20X0 £30,000) was paid in 20X1. A dividend of £72,000 (20X0 £40,000) was proposed for 20X1. A transfer of £50,000 was made to the general reserve.

Required:

(a) Prepare a statement of cash flows for the year ended 31 December 20X1, in accordance with IAS 7.

(b) Prepare a report on the liquidity position of Martel plc for a shareholder who is concerned about the lack of liquid resources in the company.

Question 7

The statements of financial position of Maytix as at 31 October 2005 and 31 October 2004 are as follows:

	2005		*2004*	
	$000	*$000*	*$000*	*$000*
Non-current assets:				
Property, at cost	4,000		3,000	
Plant and equipment, at cost	7,390		4,182	
Less accumulated depreciation	(1,450)		(1,452)	
		9,940		5,730
Current assets:				
Inventory	5,901		4,520	
Trade receivables	2,639		2,233	
Bank	—	8,540	1,007	7,760
		18,480		13,490
Capital and reserves:				
Ordinary shares	5,000		3,500	
Share premium	2,500		1,000	
Retained earnings	2,110	9,610	3,090	7,590
Non-current liabilities:				
10% loan stock		4,750		3,750
Current liabilities:				
Trade payables	1,237		1,700	
Taxation	550		450	
Bank overdraft	2,333	4,120	—	2,150
		18,480		13,490

The statement of comprehensive income of Maytix for the year ended 31 October 2005 is as follows:

	$000	*$000*
Credit sales		9,500
Cash sales		1,047
Cost of sales		(8,080)
Gross profit		2,467
Distribution costs	(501)	
Administration expenses	(369)	(870)
Operating profit		1,597
Interest on loan stock		(425)
Loss on disposal of non-current assets		(102)
Profit before tax		1,070
Tax		(550)
Profit after tax		520

Notes:

(i) The 'Statement of changes in equity' disclosed a dividend paid figure of $1,500,000 during the year to 31 October 2005.

(ii) The non-current asset schedule revealed the following details:

Property: Additions cost $1,000,000.

Plant and equipment	*Cost*	*Depreciation*	*NBV*
	$000	*$000*	*$000*
Balance at 31.10.2004	4,182	(1,452)	2,730
Additions	6,278	—	6,278
Annual charge	—	(540)	(540)
	10,460	(1,992)	8,468
Disposal	(3,070)	542	(2,528)
Balance at 31.10.2005	7,390	(1,450)	5,940

Required:

(a) Prepare the Cash Flow Statement of Maytix for the year ended 31 October 2005. Use the format required by IAS 7 'Cash Flow Statements' and show operating cash flows using the 'indirect method'.

(b) Describe the additional information that would be included in a cash flow statement showing operating cash flows using the direct method and discuss the proposition that such disclosures be made compulsory under IAS 7.

(*The Association of International Accountants*)

Question 8

Helvatia GmbH is a Swiss company which is a wholly owned subsidiary of Corolli, a UK company. Helvatia GmbH was formed on 1 November 2005 to purchase and manage a property in Zürich in Switzerland. The reporting and functional currency of Helvatia GmbH is the Swiss franc (CHF).

As a financial accountant in Corolli you are converting the financial statements of Helvatia GmbH into £ sterling in order to be consolidated with the results of Corolli which reports in £s.

The following are the summarised income statements and balance sheet (in thousands of Swiss francs) of Helvatia GmbH:

Helvatia GmbH income statement and Retained Earnings for the year ended 31 October 2007

	CHF (000)
Revenue	8,800
Depreciation	(1,370)
Other operating expenses	(1,900)
Net income	5,530
Retained earnings at 1 November 2006	3,760
	9,290
Dividends paid	(1,000)
Retained earnings at 31 October 2007	8,290

Helvatia GmbH balance sheet as at 31 October

		2007		2006
Assets		CHF (000)		CHF (000)
Non-current assets				
Land		6,300		3,300
Buildings		12,330		13,700
		18,630		17,000
Current assets				
Receivables	550		1,550	
Cash	5,610		610	
		6,160		2,160
		24,790		19,160
Liabilities and equity				
Non-current liabilities				
Mortgage loan		10,800		10,000
Current liabilities				
Payables		700		400
Equity				
Issued share capital	5,000		5,000	
Retained earnings	8,290	13,290	3,760	8,760
		24,790		19,160

The following exchange rates are available:

	1 Swiss franc = £
At 1 November 2005	0.40
At 1 November 2006	0.55
At 30 November 2006	0.53
At 31 January 2007	0.53
At 31 October 2007	0.45
Weighted average for the year ended 31 October 2007	0.50

The non-current assets and mortgage loan of Helvatia GmbH as at 31 October 2006 all date from 1 November 2005. Helvatia GmbH purchased additional land and increased the mortgage loan on 31 January 2007. There were no other purchases of non-current assets. Land is not depreciated but the building is depreciated at 10% a year using the reducing balance method. Helvatia GmbH's dividends were paid on 31 January 2007.

The sterling equivalent of Helvatia GmbH's retained earnings as at 31 October 2006 was £1,222,000.

Required:
Prepare the following statements for Helvatia GmbH *in £000 sterling*:

(a) A summarised income statement for the year ended 31 October 2007.
(b) A summarised balance sheet as at 31 October 2007.
(c) A statement of cash flows for the year ended 31 October 2007 using the indirect method. Additional notes are not required.

(*The Association of International Accountants*)

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