projected cash flow statements

relevant to CAT Scheme Paper 10

looking forward

The aim of this article is to demonstrate the alternative approaches to preparing a projected cash flow statement in Paper 10, *Managing Finances*. Since this is a management paper and not a financial accounting paper, you would not be expected to adopt any strict financial reporting format for such a cash flow statement. The approaches outlined below do not, therefore, cover cash flow statements prepared under IAS 7 or FRS 1.

As an introduction, it is worth considering why projected cash flow statements are relevant to the Paper 10 syllabus. Businesses usually prepare a forecast profit and loss account for the year, and often for each individual month. Why, then, do we need projected cash flow statements as well? The answer lies in the fact that profit and loss forecasts reflect the 'profit' that a business hopes to make, whereas projected cash flow statements reflect the increase or decrease in cash that a business anticipates over a period of time. 'Profit' is arrived at after making numerous accounting adjustments for items such as depreciation, accruals, and bad debt provisions. Such adjustments are 'non-cash adjustments' – they do not affect the physical cash that a business pays or receives. Profit and cash are not the same thing. It may be predicted, for example, that a new company will make £1m profit in its first year, but the harsh reality is that if that company has not accurately anticipated its need for cash then it could go into liquidation before the year is out. Many a profitable business has failed because of poor cash control and therefore the need to forecast cash is actually far greater than the need to forecast profit.

As a result, projected cash flow statements play a key role in the management of a business's finances and therefore a key role in the Paper 10 syllabus. I will now consider a typical projected cash flow statement question, and show the two best ways to approach such a question, highlighting the benefits and drawbacks of each method.

The following financial information relates to a fictitious company called A Ltd. From this information, you are required to prepare a projected cash flow statement for the year ending 31 December 2006.

A Ltd
Forecast profit and loss account for the year ending 31 December 2006

	£000
Turnover	11,950
Operating costs	(6,295)
Operating profit	5,655
Interest payable	(330)
Profit before tax	5,325
Tax payable	(1,598)
Profit after tax	3,727
Dividends payable	(1,295)
Retained profit	2,432

Extract from historical balance sheet as at 31 December 2005

	£000	**£000**	**£000**
Fixed assets			4,000
Current assets			
Stock		965	
Debtors		1,150	
Cash		820	
		2,935	
Current liabilities			
Trade creditors	623		
Tax payable	1,300		
Dividends payable	764		
		(2,687)	
Net current assets			248
Net assets			4,248

Extract from forecast balance sheet as at 31 December 2006

	£000	£000	£000
Fixed assets			4,200
Current assets			
Stock		1,425	
Debtors		1,263	
Cash		3,061	
		5,749	
Current liabilities			
Trade creditors	687		
Tax payable	1,600		
Dividends payable	982		
		(3,269)	
Net current assets			2,480
Net assets			6,680

Additional information

1 Operating costs include depreciation of £115,000.
2 The company does not plan to sell any fixed assets over the next year.
3 Fixed assets are all tangible (physical).
4 All interest charges are paid in the year in which they are incurred.

ANSWERING THE QUESTION

The question is laid out, as you would expect, with one historical balance sheet for the company, one forecast balance sheet, and one forecast profit and loss account. The projected cash flow statement could be approached in one of two main ways, as set out below:

Method 1: Projected cash flow statement

	£000
Operating profit	5,655
Depreciation	115
Interest	(330)
Tax (w.1)	(1,298)
Dividends (w.2)	(1,077)
Fixed asset purchases (w.3)	(315)
Increase in stock (w.4)	(460)
Increase in debtors (w.5)	(113)
Increase in trade creditors (w.6)	64
Projected increase in cash over the year	2,241

Reconciled as follows

Cash per BS at 31/12/05	(820)
Cash per BS at 31/12/06	3,061
Projected increase in cash over the year	2,241

Workings

	£000
1 Tax paid	
Tax creditor b/f at 01/01/06	1,300
Add tax charge per P&L	1,598
Less tax creditor c/f at 31/12/06	(1,600)
Therefore cash paid	1,298
2 Dividends paid	
Dividends creditor b/f 01/01/06	764
Add dividends charge per P&L	1,295
Less dividends creditor c/f at 31/12/06	(982)
Therefore cash paid	1,077
3 Fixed asset purchases	
Fixed assets c/f at 31/12/06	4,200
Add depreciation charge per P&L	115
Less fixed assets b/f at 01/12/06	(4,000)
Therefore cash paid	315
4 Increase in stock	
Stock c/f at 31/12/06	1,425
Less stock b/f at 01/01/06	(965)
Increase in stock	460
5 Increase in debtors	
Debtors c/f at 31/12/06	1,263
Less debtors b/f at 01/01/06	(1,150)
Increase in debtors	113
6 Increase in trade creditors	
Trade creditors c/f at 31/12/06	687
Less trade creditors b/f at 01/01/06	(623)
Increase in trade creditors	64

Comments on method 1

1 The above is the most traditional method, with the starting point being the 'operating profit' figure.
2 Since deprecation is a non-cash adjustment, this is added back to the operating profit figure, because the additional information states that 'Operating costs include depreciation of £115,000'.
3 Interest is then deducted since this falls below the operating profit line. The additional information states that all interest charges are paid in the year in which they are incurred. This means that the interest charges, as stated in the profit and loss account, represent the actual amount of cash that will be paid out in interest over the year. No adjustment to the figure is needed.
4 Tax and dividends are a little more complicated than interest payments. This is because the charge for tax and dividends in the profit and loss account is not the same as the actual amount of cash to be paid out in the year. You must deduce this from careful reading of the balance sheets, which include creditors for tax and dividends in both 2005 and 2006. Workings 1 and 2 are therefore necessary to calculate the actual cash paid for these items.
5 It is then necessary to consider how much cash will be paid out for fixed asset purchases in the year. It is not possible to simply look at the difference between fixed assets on the 2005 and 2006 balance sheets because these amounts are shown net of depreciation. However, it is possible to make the calculation when you know how much depreciation is included in the 2006 profit and loss account, and whether any disposals are anticipated during the year. For A Ltd, you are told that there will be no disposals in 2006 and you know that depreciation will be £115,000. From this, you can calculate the actual cash spent on fixed asset purchases, as shown in working 3.
6 The adjustments to operating profit that remain are those that reflect any increase or decrease in stock, debtors, and trade creditors, as shown in workings 4 to 6. The key point to remember here is that stock and debtors are assets, whereas trade creditors are a liability. Therefore, if either stock or debtors is set to increase between 2005 and 2006, this will mean that more cash is tied up in assets rather than being in the form of cash. Consequently, such an increase will be

shown as a deduction from operating profit in arriving at the projected increase in cash over the year. The opposite is true for the trade creditors figure because if, as in this case, trade creditors increase between 2005 and 2006, less cash has actually been paid out in expenses and the amount must therefore be shown as an addition to operating profit. It is on these adjustments that students often make the most errors. It is therefore worth gaining a thorough understanding of the logic of such adjustments, rather than just trying to learn whether they are an addition to, or a deduction from, the operating profit figure in the projected cash flow statement.

7 The reconciliation of cash b/f to cash c/f is a useful check to show that the projected cash flow statement is correct. In an exam situation, however, if this reconciliation shows that your statement is wrong, only go back through your workings if time permits. Do not cross out your reconciliation just because it shows you have made a mistake, because the marker will see that you have made a mistake anyway.

8 The main benefit of using the method above is that it encourages you to adopt a thorough, methodical approach that will result in less mistakes being made. If mistakes are made, but the workings are laid out as above, a minimum number of marks will be lost because follow-through marks are always given. For example, if the wrong figure was used for debtors b/f at 01/01/06, but the rest of the calculation for 'Increase in debtors' was right, then 1.5 out of two marks would still be earned.

9 The main drawback with the above approach is that it is time-consuming, long-winded and a little monotonous. However, the marks allocated to a projected cash flow statement question anticipate that the above approach might be used. Consequently, if you allocate your time according to the marks available, you will have enough time available to use this method.

Method 2: Projected cash flow statement

Receipts	**£000**	**£000**
Revenue	11,950	
Add debtors b/f at 01/01/06	1,150	
Less debtors c/f at 31/12/06	(1,263)	
Cash received		11,837
Less payments		
Operating costs	6,295	
Less trade creditors c/f at 31/12/06	(687)	
Add trade creditors c/f at 01/01/06	623	
Add stock c/f at 31/12/06	1,425	
Less stock b/f at 01/01/06	(965)	
Less non-cash expenses (depreciation)	(115)	
Cash paid	6576→	(6576)
Interest paid per P&L		(330)
Tax paid (w.1)		(1,298)
Dividends paid (w.2)		(1,077)
Fixed asset purchases (w.3)		(315)
Projected increase in cash over the year		2,241

Reconciled as follows

Cash per BS at 31/12/05	(820)
Cash per BS at 31/12/06	3,061
Projected increase in cash over the year	2,241

Comments on method 2

1 Rather than using operating profit as a starting point, method 2 starts with the company's receipts. As the company has debtors, it is therefore clearly making credit sales, so it is not possible to simply use the sales figure in the profit and loss account as the actual cash receipts figure for the projected cash flow statement. The sales figure must be adjusted by adding debtors brought forward at 01/01/06, and deducting debtors carried forward at 31/12/06. Again, it is necessary to stress that the logic of the approach must be understood. Mistakes will be made if you just try to learn whether to add or deduct debtors b/f to sales, for example.

2 The actual cash payments made by the business are then calculated and, as you can see from the above answer, there are many adjustments to be made to the operating costs figure. First, the operating costs figure must reflect timing differences since the company clearly makes purchases on credit terms, otherwise there would not be any trade creditors in the balance sheet. Next, the fact that there will be stock brought forward at the beginning of the year, and stock carried forward at the end of the year, must be adjusted for. Finally, since we know that depreciation is included in operating costs but it is a non-cash item, it must also be taken out of operating costs.

3 Having calculated the cash paid out for these costs, it will then be necessary to make the same adjustments used in method 1 for interest, tax and dividends.

4 The reconciliation of cash brought forward to cash carried forward will also be the same as in method 1.

5 The main advantage of method 2 is that it is quicker. However, it is tempting not to show workings properly and this will lead to marks being lost far more easily than when using method 1.

SUMMARY

In an exam where IAS 7 or FRS 1 format is not required for a projected cash flow statement, either of the above methods and layouts would be acceptable. This is not to say that no other approach could be taken but in my opinion, the above methods produce the best answers. Although it takes time to write everything out so thoroughly, by clearly showing workings in this way, candidates can ensure that they score high marks even when they have made careless errors. ■