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Economics Working Paper 75

**Issues in the Use of the Cash Flow  
Statement—Experience in Some Other  
Countries.**

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March 1994

*Keywords:* Cash Flow, International Accounting.

*Journal of Economic Literature classification:* M41, G30.

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## **Abstract**

This paper reviews the cash flow reporting experience of several countries. After analyzing the differences between funds flow and cash flow we investigate the different uses of the cash flow statement and the international variations in exemptions, direct/indirect method and formats.

It raises a number of issues for financial accountants: use of cash flow in assessing a company's position and adjustments needed when comparing companies in different countries.

## **Issues in the use of the cash flow statement - experience in some other countries**

### **Introduction**

The Plan General de Contabilidad of 1990 included, in its extensive reforms, a requirement that the notes to the accounts should include a Funds Flow Statement (see Amat et al 1991 pp 154-159 for full details).

A number of other countries, including many of those in the English speaking World have had a similar requirement for many years. Curiously, just as Spain introduced a requirement for a funds flow statement, with its focus on working capital, other countries have been progressing to a requirement for a cash flow statement, with a focus on actual cash movements.

In 1991 the UK Accounting Standards Board issued their first Financial Reporting standard, FRS1, "Cash Flow Statements". Other countries with earlier standards in this area include the USA, where FAS 95 was issued in 1987, and New Zealand, where SSAP10 issued in 1987 was followed by a revised FRS10 in 1992. In Australia, as in the UK, more time was taken to make the change from a funds flow statement with the issue of AASB26 in 1992. In France, OECCA issued a recommendation on cash flow accounting in 1990 (see Stolowy & Walser-Prochazka 1992).

In December 1992, IASC issued a statement requiring cash flow statements for accounting periods from 1 January 1994. In the interests of international accounting harmonisation it seems likely that Spain will, in the future, move to a requirement for a cash flow statement. In this article we explain the difference between funds flow and cashflow and we draw on experience from the UK, the USA, New Zealand, and Australia to consider:

- a) What purpose the cash flow statement is intended to serve and how it may be used.
- b) Some major variations internationally in the presentation of cash flow statements.
- c) Some limitations in the claimed "objectivity" of cash flow analysis
- d) Some possible future developments in cash flow reporting requirements.

### **The difference between funds flow and cash flow**

A funds flow statement shows the movement of 'funds' through a business. 'Funds' can be defined in a number of ways, but the term is generally taken to refer to the 'working capital' of a business. The term 'working capital' is itself defined in a variety of ways.

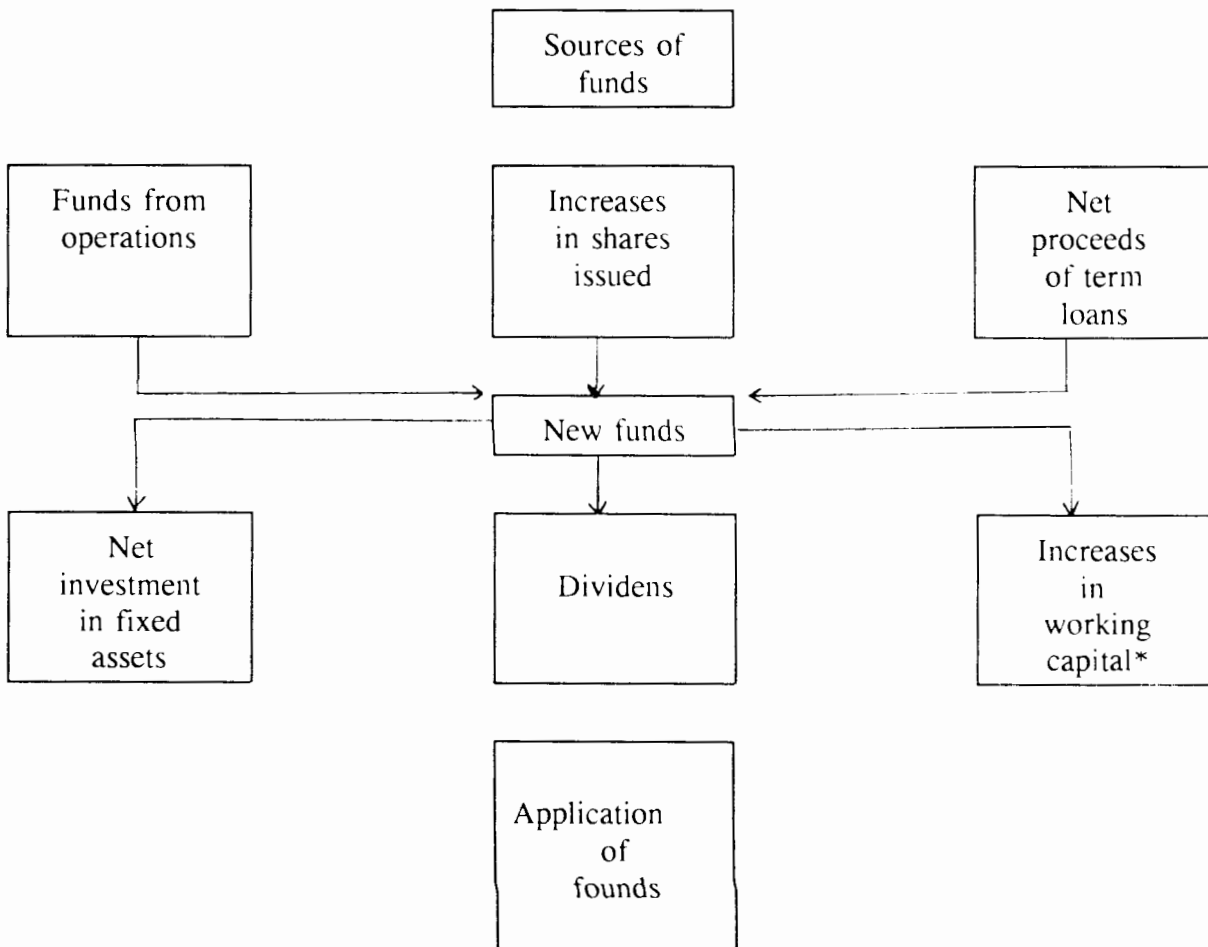
Amat & Carenys (1992) offer a simple diagram to illustrate the form of the funds flow statement in Spain, shown in table 1.

Table 2 shows a simple illustration of a cash flow statement and relates this to the funds flow illustration in table 1. For the purposes of illustration the following simplifying assumptions have been made:

- a) All non cash changes in working capital are related to operating activities.
- b) Net investment in fixed assets is positive.
- c) Long term loans issued exceed those redeemed.
- d) Share and net long term loans issued together exceed dividends paid.

Table 1

The funds flow statement



\* Working capital = current assets - current liabilities

By contrast, a cash flow statement focuses on cash. The main difference from the funds flow statement is that the changes in the non cash parts of working capital will be adjusted against the related activities; in the main these changes are attributable to the operations of the business e.g. inventory, trade debtors, trade creditors. Some many relate to other aspects e.g. an accrual or prepayment relating to fixed assets.

Table 2

The cash flow statement

Operating activities	Funds from operations	-	Non cash increases in working capital
	<u>less</u>		
Investing Activities	Net investment in fixed assets		
	<u>plus</u>		
Financing	Increases in shares issued	-	Dividens
	+		
	Net proceeds of long term loans		
	=		
Change in cash balance	Increase/ Decrease in cash		



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From the example we can see that preparation of the cash flow statement from the accruals based accounts is more complex than the funds flow statement because working capital changes have to be analysed into the activities that give rise to them.

### Uses of the cash flow statement

Assertions that a cash flow statement is a necessary part of the financial statements tend to focus on its usefulness in assessing liquidity and solvency. Thus it is asserted in the UK in FRS1 that:

"A cash flow statement in conjunction with a balance sheet provides information on liquidity, viability and financial adaptability" (Para 49)

Hussey and Bence (1992) report that UK investment analysts appear to support this view. Asked whether they preferred the cashflow statement or the funds flow statement, replies were:

<b>Preferred statement</b>	<b>Number</b>
Cash flow	15
Funds flow	4
No preference	2

Edmonds et al (1990) put forward what they see as the two major arguments for a cash flow statement:

- a) The 1980's have seen a big increase in Management Buy Outs, leading to an increase in the number of high geared companies. It is argued that such companies are particularly sensitive to cash flows: "it takes cash to maintain large debt obligations" (page 9).
  
- b) Accrual accounting relies on a range of judgements, estimates and accounting policy choices made increasingly unreliable by "creative accounting".

By contrast "cash flow data is more reliable because it cannot be easily distorted by such things as deferred expenses, accrued wages, and other accounting procedures" (page 14).

Similarly, in arguing the case for a cash flow statement in Spain, Iglesias (1992) argues that this offers:

"a good opportunity to include in Spanish business accounting reports an 'objective' and 'neutral' statement, free from the valuation problems that underlie the concept of working capital".  
(p83).

A number of studies of individual company collapses have indicated that cash flow analysis should have given an early warning of danger where accrual based accounts failed:

- a) In the USA Largay and Stickney (1980) examined the case of the collapse in 1975 of WT Grant and Co., then the largest retailer in the USA. The accounts showed negative cash flows for eight of the previous ten years. By contrast traditional accounting ratios failed to indicate any problems until two years before the collapse.
- b) Lee (1982) analysed five years of cash flow data for Laker Airways, a company that failed in February 1982. He argued that a fall in operating cash inflows as a percentage of total cash inflows in 1979 and 1980 gave advance warning of the company's problems.
- c) Currie (1987) offers a similar analysis for an unnamed Australian company where four years of operating cash flows led up to corporate failure.

Emmanuel (1988) points out that of 45,000 US corporate bankruptcies in 1985, 60% had appeared to be earning profits according to accruals based accounts, and argues that this indicates the need for cash flow information to assess liquidity.

Lawson (1980) demonstrated a broader role for cash flow analysis. He computed tax cash flows in relation to equity earnings cash flows and concluded that "the UK corporate tax system virtually confiscated equity earnings". This paper is particularly interesting because:

- a) It demonstrates the usefulness of cash flow analysis in place of the inflation - distorted accruals based accounts.

- b) The use of cash flow data is taken beyond the traditional objective of assessment of liquidity to provide insights into issues of public policy.

Charitou and Ketz (1991) point out that healthy operating cash flows are important not only for sustaining liquidity but also to support new investment.

Tests of the predictive ability of cash flow reports have produced a variety of results. Neill et al (1992) summarise a review of empirical studies thus:

"early studies that employed crude cash flow measures consistently failed to detect incremental information content. Subsequent research has employed increasingly sophisticated cash flow definitions and empirical methodologies but has resulted in mixed evidence" (pages 133 - 134)

Studies that identify potential predictive ability from the cash flow statement in excess of that from accruals based accounts have tended to focus on operating cash flows. Thus the following studies offer a range of ratios which are shown to possess predictive ability:

<b>Authors</b>	<b>Number of useful ratios including operating cash flow or a component thereof</b>	<b>Total useful ratios identified</b>
Giacomino & Mielke 1988	7	14
Carshaw & McNally 1990	11	13
Gahlon & Vigeland 1988	9	16

This analysis supports the view expressed by Hovey (1986) that "a firm's operating cash flows are its essence".

The most frequently cited ratio from the cash flow statement is the ratio of operating cash flow to operating profit, often termed "quality of earnings". Emmanuel(1988) puts the case:

"The cash flow statement can and should be used to measure the quality of earnings. The analysis of earnings quality facilitates an understanding of the income statement by linking income and expense data to cash flows. By measuring the gap between accrual income and net cash flow from operations, the true operating strength of the entity can be ascertained"

However, there are strong arguments against over simplistic use of the cash flow statement.

Singleton-Green (1991) points out that of two major corporate collapses in the UK one, Polly Peck, did indeed show negative operating cash flows but the other, Brent Walker, showed operating cash inflow of £171 million compared to operating profit £118 million. He argues:

"To take the extreme cases, a fixed capital intensive company in decline might be flattered by its cash flow figures, a non-fixed capital intensive and rapidly expanding company might present an unduly gloomy picture".

Murphy (1991) sees a broader danger arising if simplistic cash flow analysis is widely adopted. He argues that this may promote short termism because "Short term positive cash flow management can very often be inconsistent with long-term economic management".

One of the UK's foremost champions of the cash flow statement has similarly argued that "operating and other cash flows are inevitably lumpy due to the cyclical nature of business activity", (Lee 1992) and therefore cash flow data needs to be judged on a longer term basis than a single period. Lee goes on to suggest a range of useful cash flow ratios and adds:

"It will take time to adapt to the unevenness of cash flow accounting. This is an educational task in which academic accountants ought to be taking a primary role." (p 35)

Two ways of computing cash flow based ratios are:

- a) Ratios used to compare the components of accruals based accounts can be adapted to compare the equivalent components of cash flow. As an example, the relationship between operating cash flows and financing cash flows gives an insight into gearing.
- b) Ratios may also relate cash flow data to accruals based data. For example, the ratio of operating cash flow to total assets gives a picture of the liquidity generated from asset utilisation.

## International variations

International variations in the detailed requirements for cash flow statements are interesting both for the analyst making inter company comparisons and for the light they throw on areas of difficulty in formulating a standard on cash flow reporting.

## Exemptions

Cooper (1992) comments that "there are substantial exemptions" in the UK to the requirement to prepare a cash flow statement. These include "small companies" (as defined in the Companies Acts), most wholly owned subsidiaries, Building Societies and Mutual life assurance companies. Murphy (1991) articulates the case for the small business exemption:

"Small companies do not need cash flow information in the form stipulated ...and cannot afford to have this burden imposed on them". (p 26)

Carsberg et al (1985) identified SSAP10 on funds flow as one that small business managers in the UK seemed to resist:

"Only 16% of managers claimed that they used the statement of source and Application of Funds. 14% said that their accounts did not contain such a statement, 28% did not know; in 12% of the cases, the filed accounts did not in fact contain a statement even though the standard seemed to be applicable."  
(pp6, 7)



However, small companies may well find that lending banks will apply pressure to receive a cash flow statement. In the USA Sliwoski: (1991) has argued the case that a cash flow statement is actually of especial relevance to a small business without feedback from the financial markets on their position. Ginzl (1988) urges US bankers to require small business borrowers to produce a cash flow statement. In New Zealand there is no small company exemption in the production of the cash flow statement and, in arguing that all unincorporated businesses should also provide such a statement, Devonport (1988(a)) reports:

"Reporting on cash flows has been an integral part of farm accounts reporting for years".

Board Day and Napier (1993) make an interesting point on the situation that arises in the UK where a listed company presents "summary financial statements". Such a summary may omit the cash flow statement. Given that a particular merit of the cash flow statement is that it is "more comprehensible to unsophisticated shareholders", then it is precisely this target group who will lose insights as a result of the omission.

### **Direct/Indirect Method**

There are two ways in which operating cash flows may be shown on the face of the cash flow statement:

- a) The direct method shows the operating cash flows that make up the net cash flow from operations, eg. cash receipts from customers, cash payments to suppliers, cash payments to or on behalf of employees.
- b) The indirect method shows the operating profit and adjusts it for non cash charges and credits to reconcile it to the net cash flow from operations.

In the UK a note to the cash flow statement must include the reconciliation between operating profit and operating cash flow implied by the indirect method, while companies are also permitted to use the direct method if they wish; not surprisingly, as in the US where companies are allowed to choose between the two approaches, most UK companies prefer the more economical indirect method. By contrast standard setters in Australia and New Zealand have opted for the direct method.

In the USA the permitted choice has been criticised. Gahlon and Vigeland (1988) report that:

"An indirect cash flow statement will not provide a number of the cash flow variables for which we found significant differences between bankrupt and nonbankrupt companies". (p14)

The indirect method has also been criticised as imprecise. Drtina and Largay (1985) report:

"The indirect method seems at best to produce an estimate of CFO (cash from operations) which differs from the actual CFO by an unknown amount of error". (p 325)

Permitting use of either the direct or indirect method has been criticised both in the US (Zega 1988) and the UK and Republic of Ireland (Fitzgerald 1991) as reducing comparability. O'Leary (1988) argued, in the USA, for requiring both, and Gonzalo & Jimenez Herreros (1993) argue that an approach whereby the direct method is shown on the face of the cash flow statement and a reconciliation between operating profit and operating cash flow is shown by way of note maximises benefit to the user.

New Zealand's experience of applying the direct method has been instructive. In 1991 the New Zealand Society of Accountants reviewed their accounting standard on cash flow reporting. They found that 47 respondents favoured continued requirement to use the direct method, compared with 6 respondents against. Thus experience seems to support such a requirement.

### **Definitions of Cash**

In the UK FRS1 provides definitions of both "cash" and "cash equivalents", an improvement on the previous SSAP10 which failed to define the key term "funds". "Cash equivalents" include investments "within three months of maturity when acquired" and advances from banks "repayable within three months from the date of the advance".

The problem here is that the three month boundary may lead to arbitrary variations from year to year between financing cash flows and the make up of cash balances. Cheah-Liaw (1992) points out that the term "cash equivalents" has been omitted from the New Zealand standard because it is too broad, while Devonport (1988b) reports that a clear majority of respondent to the New Zealand exposure draft supported this omission in the interests of objectivity.

Wallace & Collier (1991) report on the varying definitions of cash used in different national standards, and argue that the differences are so significant that "national and global inter-company comparability of financial figures will not necessarily be improved by cash flow information" (p52).

Wallace & Collier also make an interesting point on the definition of cash equivalents being based on three months from the date of the investment or advance to maturity or payment, arguing that on a "substance over form" basis three months from the reporting date would be more appropriate.

Lopez et al (1993) observe:

"Definitions of the term working capital vary".

It is interesting to observe that definitions of cash are also diverse.

## Formats

Most countries, including New Zealand, the USA and Australia provide for three major headings in the cash flow statement being "operating activities", "investing activities" and "financing". By contrast, in the UK FRS1 has two additional headings "returns on investments and servicing of finance", which embraces interest received and paid and dividends received and paid and "taxation". Australia is more flexible in allowing a variety of forms of presentation.

The UK approach does create some problem in international comparisons but avoids some problems of allocation found in other countries. For example, in New Zealand Purchas (1991) has argues that interest may be more usefully placed under the "operating" rather than the "financing" heading (a change made in the revised New Zealand standard), while Sharma and Robb (1991) report a variety of accounting treatments by companies in the finance industry.

### The "objectivity" of cash flow analysis

As we have seen above, one of the claimed merits of cash flow accounting is that it avoids many of the allocation problems of accruals based accounting and is therefore more objective. It is, however, important to be aware that some of the issues that raise problems in accruals based accounting can be equally difficult in the cash flow statement.

In New Zealand, Jamieson (1988) observed:

"Items that have a major effect on the funding of a company are not shown in a cash flow statement. For instance, leased assets are not included" (p35).

The leasing problem can be illustrated by the example shown whereby a business might contrive to acquire the use of the same asset in three different ways each giving rise to the same pattern of cash flows:

- a) The asset may be purchased with finance from an instalment based loan. In the accruals based accounts the asset (subject to depreciation) will appear in the Balance Sheet as will the outstanding liability. In the Profit and Loss account the depreciation charge and the finance cost will appear. The cash flow statement will show the asset as an investing outflow and the loan received as a financing inflow, while loan instalments net of interest are shown as a financing outflow and interest is shown as servicing of finance.
- b) A finance lease may be used, giving rise to a similar Balance Sheet and profit and Loss treatment as for a purchase. In the cash flow statement the interest element appears as a servicing of finance and the instalments net of interest as a financing outflow. This is similar to the process of purchasing an asset with an instalment loan, except that there is no recognition of the investing and financing implications of the inception of the lease contract in the cash flow statement.
- c) An operating lease may be used. Rentals are charged on a systematic basis against profit, and in the cash flow statement rentals, when paid form part of operating cash flows.

The example shows how each method might be used to achieve the same objective, provision of a business asset. The illustration shows how each method, while leading to the same outcome as a cash increase and representing the same economic substance, produces a very different breakdown of reported cash flows; the UK format of the cash flow statement has been used for illustration.

**Example:**

A taxi driver has the following ways of obtaining a new taxi:

- a) He may buy the taxi for £11,080, borrowing the entire sum on 1st January 1992 and repaying the loan by quarterly instalments of £1,080, payable in advance, for three years. The first year's finance charge is £1,055. The taxi is to be depreciated on a straight line basis over four years with no residual value.
- b) He may enter a finance lease with a primary term of three years at £1,080 per quarter payable in advance, and an option to continue the lease thereafter at £1 per year.
- c) He may enter a lease on similar terms to (b) above, but with a clause on residual value risks that converts this into an operating lease.

In 1992 the taxi driver has fare income of £25,000 and expenses, all in cash of £10,000.

**Illustration:**

	(a) Loan Finance		(b) Finance Lease	(c) Operating Lease	
	£	£	£	£	£
Operating activities					
Cash from customers	25000		25000	25000	
Cash for supplies	(10000)		(10000)	(10000)	
Cash for rental					(4320)
		15000		15000	10680
Servicing of finance:					
Loan interest/ Lease finance charge		(1055)	(1055)	-	
Investing activity:					
Payment to acquire taxi		(11080)			
Net cash outflow from operating activity		2865	13945	10680	
Financing:					
Loan received		11080	-	-	
Loan repaid		(3265)	(3265)		
Increase in cash		10680	10680	10680	



In the US Sondhi (1988) lists leasing, debt-equity swaps, and asset exchanges as examples of non cash financing transactions that fail to appear on the face for the cash flow statement. Similarly in the UK Loveday (1992) offers an example showing how both leasing and cash flows arising from an acquisition are omitted from the face of the cash flow statement, arguing that this "emphasises the importance of the notes to the statement". (p 80)

Rutherford (1982) identifies a number of situations where allocations have to be made in preparing a cash flow statement, giving rise to the need for the exercise of judgement.

### Possible extensions of requirements

Bracken and Volkan (1988) argue the case for requiring the cash flow statement:

- a) To be presented as part of the interim statement
- b) To be analysed segment by segment
- c) To distinguish between fixed and variable cash flows

There is some current argument in the UK in support of two of these propositions. The Cadbury Report recommended that interim reports be expanded to include a Balance Sheet, and that further consideration should also be given to requiring cash flow information. Coopers and Lybrand (1992) looked at a sample of interim reports published by the UK's top 500 companies and found an interesting contrast between the top 100, where 21% currently include a cash flow statement in the interim report, and companies below that size, where only 2% produced a cash flow statement (p7). They point out that the Cadbury recommendation to include "cash flow information" rather than a full cash flow statement shows respect for continuing to allow companies to take their own view on user requirements in this area.

Emmanuel and Garrod (1992) see the omission of segmental cash flow information from the accounts as inconsistent, arguing :

"How can segment reports provide a mirror image of the consolidated reports when no attempt is made to indicate movements in the sources and applications of funds?" (p116)

Street and Stanga (1989) tested segmental cash flow data on a group of US bank loan officers. They found that leaders' decision making could benefit by knowledge of whether cash flows came from a stable industry segment or a troubled industry segment.

One other potential development is the provision of forecast cash flow information.

Two surveys on attitudes to this provision show an interesting contrast:

- a) Lee (1981) in a survey of accountants working in industry and commerce in Scotland found that 42% favoured a requirement to include forecast cash flows in the accounts.
- b) McEnroe (1989) in a survey of audit partners in US accounting firms found that only 16% supported a requirement to include forecast cash flows in the accounts.

It is likely that both the difference in occupations and the difference in countries are significant in explaining the difference between the two surveys, given that auditors tend to favour verifiable information and that in the litigious environment of the USA any extension of accounting and audit obligations is likely to be unwelcome to auditors.

Spain has some experience in this respect. Under Spanish company law a dividend is not normally paid or provided for in respect of a year until the accounts are approved at the A.G.M. However there is provision for a payment to be made ahead of such approval, subject to including in the accounts a forecast of cash flows demonstrating that the company's liquidity will support the payment Carmona & Currasco (1994 p 105) provide an example of such a forecast, distinguishing between operating and financial flows.

## Conclusion

This review of experiences of cash flow reporting raises a number of issues for accountants:

- a) The cash flow statement is useful in assessing a company's position, especially in relation to liquidity, but needs to be used with a number of ratios and over a period of time to avoid crude, simplistic, and misleading conclusions.
- b) Countries vary in the range of exemptions from the requirement to present a cash flow statement. Advisers to small businesses might consider urging voluntary provision of a cash flow statement both to help manage the business and to demonstrate awareness of the importance of cash flow to lenders, even if the business operates in a country where there is no legal obligation to present such a statement.
- c) When comparing companies in different countries adjustments for different forms of computation and presentation of the cash flow statement need to be made.
- d) Countries with existing requirements to present cash flow statements may well propose amendments in the future, both to improve international comparability and to expand the information provided. Should such amendments be proposed then companies would be well advised to consider the cost of implementation and, if this appears excessive, make representations to their national accounting regulatory body.

- e) The cash flow statement may omit important information on the financing of the business which can only be identified by careful analysis of the notes to the statement.

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