A Survey on Popularity of The Direct Method of Cashflow Reporting

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Abstract

The debate on presenting a statement of cash flows using a direct approach or indirect approach is long standing. In the United States, accounting standard SFAS 95 provides an option to use either approach, though most US business enterprises use an indirect approach. In contrast, the Australian Accounting Standard AASB 1026 allows only the direct method with a note reconciling net profit to net operating cash flows. The purpose of this study is to examine perceptions of which reporting method is more useful to the decision-making process of users of financial reports. The user groups selected for survey are managers, shareholders, employees, suppliers, and customers. Results demonstrate that overall the direct method of reporting cash flows is considered superior to the indirect method by these user groups. Managers and shareholders respond that the direct method helps them to understand cash flow data, satisfies their needs for decisionmaking purposes, and is relevant and reliable. On the other hand, only a small majority of employees, suppliers and customers believe that the direct method is superior to the indirect method of reporting cash flows. Further, a majority of employees and customers had neutral feelings towards the relevance and reliability of either the direct or indirect methods of reporting cash flows.

Key Words

Cash Flows Decision Making Financial Performance Liquidity

Introduction

Cash flow reportingⁱ has been adopted in almost every country since the late 1980s and early 1990s. A statement of cash flows (SCF) generally reports cash inflows and outflows under three categories: operating; investing; and financing. Assuming that an entity generates most of its cash from its normal business operations, cash flows from operating activities are likely to be the most important figure in the SCF.

There are two approaches to calculating and presenting cash flows from operating activities. First, there is the direct method, which involves reporting the gross operating cash inflows and gross operating cash outflows. The second approach is the indirect method, which provides a reconciliation of the net operating cash flows with the operating profit after income tax shown in the statement of financial performance. The calculation adjusts operating profit after income tax for noncash items of revenue and expense and changes in current assets and current liabilities.

Each method results in the same dollar amount reported for cash flow from operations. Nonetheless, the direct method has received the support of researchers (e.g., Heath, 1978 and Sorter, 1982) primarily because it presents operating cash receipts and payments more clearly related to the central activities of the firm (Drtina and Largay, 1985).

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The main advantage of the direct method is that it presents a summary of the major categories of operating cash inflows and outflows which can be traced to the cash records of the entity and which cannot be deduced from the other financial statements. Knowledge of operating cash flows in past periods may be useful in estimating future operating cash flows (Leo and Hoggett, 2001).

Jones, et al (1995) noted that the majority of respondents preferred the direct method, because it helped users to understand the cash flow data and facilitated cash flow analysis. According to these researchers, the direct method is a better indicator of company solvency, has a sounder conceptual framework and reflects accepted commercial practice. It permits an evaluation of cash flows relating to specific line items of the statement of financial performance, such as sales and cost of goods sold (Carslaw and Mills, 1991). Krishnan and Largay (2000) found that the direct method was superior to the indirect method in predicting future operating cash flows. They also discovered the presence of measurement error in estimating the operating cash flows indirectly from the statement of financial performance and the statement of financial position. The measurement error generally occurred when estimating cash paid to suppliers and employees (Krishnan and Largay, 2000).

On the other hand, supporters of the indirect approach argue that the indirect method is less costly and more convenient to use (Sondhi, et al. 1988). Others argue that the direct approach requires information that is hard to collect and sensitive (Lyons, 1991 and Wallace, et al, 1997). One difficulty with the direct approach is that some of the cash flows might have characteristics of more than one category of cash flow (AASB1026 para 5.1.1). The indirect method is also referred to as the reconciliation method, and is the method used in notes required by AASB 1026 "Statement of Cash Flows" for the reconciliation of net cash provided by operating activities to operating profit after income tax (Leo and Hoggett, 2001).

However, the indirect method has also been criticised on two grounds (Henderson and Peirson, 2002). First, the detail is unnecessary and may confuse users. Second, the addition of expenses, such as depreciation, to calculate cash flows from operations suggests that expenses are a source of cash. Drtina and Largay (1985) list the following conceptual and practical problems, which can detract from the validity of the indirect method:

- Ambiguity in the definition of "operations";
- Diversity in reporting practices;
- Impact of changes in the reporting entity on the non-cash current accounts;
- Use of absorption costing in accounting for manufactured inventory;
- Measurement of current portion of long-term leases; and
- *Reclassifications between current and noncurrent accounts.*

According to Heath (1978) and Ingram and Lee (1997), the indirect method provides no additional information compared with a funds flow statement and therefore, it may not be as useful as the direct method. Another problem of using the indirect method is that it is possible that disclosure of only net cash flows may conceal important operating, investing and financing activities. For example, a company may have had few debts settled and few new loans during a reporting period. If the cash flow statement shows only net cash flows, it would disclose a balance in that debt account as an inflow or an outflow of cash. If the cash flow statement shows gross cash flows (ie direct method), it would show both a source of cash and a use of cash (Henderson and Peirson, 2002).

Analyses both of the direct method and/or indirect method of presenting operating cash flows in different countries have been described in the accounting literature². The debate as to whether companies should use the direct and/or indirect approach for their cash flow reporting is still a matter of discussion for some countries (Wallace et al., 1997). Nevertheless, the direct method with reconciliation is mandatory in Australia and New Zealand. The Australian Accounting Standard AASB 1026 (Para. 6.2.2) requires

"the direct method of presentation in the statement of cash flows because this method provides information that is not otherwise available in the balance sheet and profit and loss account. It provides a more useful basis for estimating future cash flows than a method of presentation that discloses only the net amount of cash flow arising from operating activities".

This study explores that rationale by analysing survey results to examine users' perceptions of the understandability and usefulness of each method.

There are two aims of this study. The first is to identify perceptions of which method assists in the understanding of cash flow data; provides satisfaction with the cash flow data; and is more relevant³ and reliable⁴ in providing useful information for decision making. The second aim is to identify which user group, if any, prefers the direct approach and which the indirect approach. The findings contribute to the cash flow reporting literature, as both internal and external user groups are advocating the popularity of the direct method of cash flow reporting.

The remainder of the paper is organised as follows. Section two describes the literature review followed by the research procedure used in the study. Discussion of the results is provided in the fourth section followed by a summary and conclusions of the study.

Literature Review

There is growing research in Australia and New Zealand on the usefulness of the direct or indirect methods of cash flows reporting (Jones et al., 1995; Jones and Ratnatunga, 1997; Jones and Widjaja, 1998; Jones, et al, 1998; and Clinch, et al, 2002). These researchers have found that a variety of users prefer the direct method that assists them (together with other data) in making their decisions. For example, Jones et al., (1995) examined ratings of the direct versus indirect method by managers and other internal users of company reports and found wide spread support for the direct method of reporting cash flows. Jones and Ratnatunga, (1997) found strong support for reporting cash flows under the direct method by lenders and other users despite the direct method being considered more complex, costly and time consuming. Loan officers compared to financial analysts preferred to use direct cash flow information for their decision making (Jones and Widjaja, 1998).

Clinch et al., (2002) found a strong association between the direct method of cash flow reporting (cash collection from customers, and cash paid to suppliers and employees) and return on equity for industrial and mining firms in Australia.

This study extends the existing literature by analysing perceptions of usefulness in terms of both internal and external users. The findings show that for managers, shareholders, and suppliers, the direct method helps them to understand cash flow data, satisfies their needs for decisionmaking purposes and is relevant and reliable. On the other hand, employees and customers believe only slightly that the direct method is superior to the indirect method of reporting cash flow.

It is noteworthy that Australian companies have no option in the selection of the direct method. Wallace et al., (1997) describe this as a 'normative'5 approach as opposed to a pragmatic approach. Countries like Canada, the UK, and the US have chosen a pragmatic approach and permit entities to choose between the direct and indirect methods. Therefore, it is the aim of this study to explore the popularity of the direct method of cash flow reporting in Australia.

Accounting Standard SFAS 95 in the US recommends business entities use the direct method of cash flow reporting, but 97% of entities chose the indirect method. The popularity of the indirect method is higher in the US. This difference from the Australian situation raises questions in regard to the stance taken by Australian standard-setters. As Australian entities are permitted to use only the direct method, it could result in the disclosure of an entity's internal information that could be sensitive. Although, a comparison between two countries is tested in this study, the study will at least provide the significance of using the direct method of cash flow reporting by internal and external users.

It is notable that 'IAS 7: Cash Flow Statements' still allows the option of using the 'direct' or 'indirect' method to report cash flow from operating activities. It is proposed that the Australian Accounting Standard in 2005 will maintain the AASB 1026 requirement that the direct method of presentation must be used with a reconciliation note.

Research Procedure

The Survey

This study was conducted by surveying users of the SCF. The participants were selected by applying the identification of user groups⁶ from the Statement of Accounting Concepts (SAC) 2. The users selected were bankers, managers, shareholders, employees, suppliers, and customers. The user selection process was consistent with Jones et al., (1995). Further, Jones et al., (1995) provide a list of significant users of cash flow statements in order of ranking, ie., bankers, managers, institutional investors, shareholders, suppliers, employees and consumers, and this information was also used in the study.

Publicly available information was employed in selecting the participants. Ten bankers were selected from the ASX Web Site. From the same site, sixty publicly listed companies were also randomly selected, and thirty managers and thirty suppliers were chosen. The remainder of the sample consisted of ten shareholders, ten employees and ten customers, randomly selected from the La Trobe Valley area in Victoria.

All those surveyed were asked to complete a questionnaire. The questionnaire consisted of statements that were related to the Statement of Accounting Concepts' definition of 'Relevance' and 'Reliability'. The participants were asked to rate their responses to the given statements on a 7 point Likert scale. From these responses it was possible to analyse the data and identify which method of reporting cash flows is perceived to be more relevant and reliable to users of the SCF.

Background questions were also asked in the questionnaire. These were asked to give an indication of any trends between the preferred method of reporting cash flows and the history of the participant. The questions related to the type of user the participant represented. For example, was the participant a banker, manager, shareholder, employee, supplier or customer? Another question related to how many years the user had been a particular type of user. A question relating to the type of company they represent, was also included in this study.

Attached to the questionnaire was a covering letter describing the purpose and nature of the research. Examples of the direct and indirect method of the SCF were also attached to the questionnaire. The examples of the direct and indirect methods enabled participants to compare the two different methods of preparation of the SCF containing the same financial information.

The questionnaires were all mail delivered with the attached cover letter and examples. Accompanying the questionnaires was a stamped, self-addressed envelope.

The Response

Of the one hundred questionnaires that were distributed, forty-seven were returned. The response sample consisted of thirteen managers (28%), nine shareholders (19%), ten employees (28%), thirteen suppliers (28%), and two customers (4%).

The Cronbach alpha was used to test the reliability of the questionnaire based on the responses. This is a test of the homogeneity of the questions and the degree to which all items measure a factor. A higher score represents an instrument's greater reliability. The questionnaire achieved a Cronbach alpha score of 0.87, indicating a high level of reliability (see Nunnally, 1978).

Results and Discussion

This section of the paper examines the survey results concerning the usefulness of the direct versus indirect method of cash flow reporting by different user groups. Further, the usefulness was evaluated by respondents' perceptions of understanding cash flow data; satisfying needs for decision making; and relevance and reliability measures of operating cash flows.

From the respondents it was found that the average number of years that the participants spent as users of the SCF was eight. The average size of the company that the participants represented was medium, employing fifty to one hundred employees. The types of companies consisted of Retailers, Superannuation funds, Entertainment Industry, Miners, Contractors and Construction.

The Understanding of Cash Flow Data under Direct vs. Indirect Approach

It is revealed from the survey results that all respondents support the usefulness of the direct method of cash flow reporting, even though this method is more costly and time consuming compared to the indirect method. Table One displays the descriptive statistics for the responses in relation to understanding cash flow data under the direct versus indirect approach by user type.

User	Method	Mean	Median	SD	Range
Managers (N=13, 28%)	Direct	2.31	2.00	1.11	3.00
	Indirect	(3.46)	(3.00)	(0.97)	(3.00)
Shareholders (N=9, 19%)	Direct	2.33	2.00	1.00	3.00
	Indirect	(4.00)	(4.00)	(1.22)	(4.00)
Employees (N=10, 21%)	Direct	3.20	4.00	1.32	3.00
	Indirect	(4.40)	(4.00)	(0.84)	(2.00)
Suppliers (N=13, 28%)	Direct	3.54	4.00	0.97	3.00
	Indirect	(4.08)	(4.00)	(0.64)	(3.00)
Customers (N=2, 4%)	Direct	3.00	3.00	1.41	2.00
	Indirect	(3.50)	(3.50)	(0.71)	(1.00)
All users (N=47, 100%)	Direct	2.87	3.00	1.19	3.00
	Indirect	(3.94)	(4.00)	(0.94)	(4.00)
Note: $1 = $ Strongly Agree, $2 = A$	Agree, 3 = Sli	ghtly Agree,	4 = Neutral,	5 = Slightly I	Disagree,
6 = Disagree and 7 = Strongly 1	Disagree				-

Table One: Understanding Cash Flow Data using Direct v. Indirect Method

Users as a whole believed that the direct method of reporting cash flows helped users understand the cash flow data (Mean 2.87). These results are consistent with Jones et al., (1995). It is noted that no respondents disagreed that the direct method helped them to understand cash flow data. In comparison, respondents were, on average, neutral to the indirect method.

Employees, suppliers and customers were also slightly in favour of the direct method being more useful in understanding cash flow data. Users had overall neutral feelings towards the indirect method.

Overall, across the complete sample, the direct method was preferred over the

indirect method in the understanding of the cash flow data. This result is consistent with the view that the direct method required in the Accounting Standards is sufficient for managers' understanding of the cash flows.

One-sample two-tailed T-tests were conducted to provide empirical support for the users' observations. These tests convey significant differences in mean responses from the neutral response (e.g., neither agree nor disagree). A t value (-6.492, p<0.000) and (-.465, p<0.644) was found for preference in terms of understanding cash flow data under the direct and the indirect methods respectively. An analysis of variance (ANOVA) was also conducted to test for a significant difference between (among) the user groups. Table Two reports the results. A significant result (F = 2.774, p<0.039) was found under the direct method, but insignificant (F =1.724, p<0.163) under the indirect method. These tests are consistent with the results reported in Table One.

Table Two	Analysis Of	Variance of	f Understan	ding	Cash	Flow I	Data
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Direct Method					
Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	13.634	4	3.409	2.774	.039
Within Groups	51.600	42	1.229		
Total	65.234	46			
Indirect Method					
Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.755	4	1.439	1.724	.163
Within Groups	35.054	42	.835		
Total	40.809	46			

Satisfaction of Needs for Decision Making under Direct vs. Indirect Method

satisfying needs for decision making under the direct vs. indirect method.

Table Three provides the results for the participants' responses in relation to

User	Method	Mean	Median	SD	Range			
Managers (N=13, 28%)	Direct	2.69	3.00	1.32	4.00			
	Indirect	(3.92)	(4.00)	(1.26)	(4.00)			
Shareholders (N=9, 19%)	Direct	2.67	2.00	1.12	3.00			
	Indirect	(4.22)	(4.00)	(1.30)	(4.00)			
Employees (N=10, 21%)	Direct	3.50	4.00	0.85	2.00			
	Indirect	(4.40)	(4.00)	(0.84)	(4.00)			
Suppliers (N=13, 28%)	Direct	3.54	4.00	0.78	2.00			
	Indirect	(4.15)	(4.00)	(0.69)	(3.00)			
Customers (N=2, 4%)	Direct	3.50	3.50	0.71	1.00			
	Indirect	(3.50)	(3.50)	(0.71)	(1.00)			
All users (N=47, 100%)	Direct	3.13	4.00	1.08	4.00			
	Indirect	(4.13)	(4.00)	(1.01)	(4.00)			
Note: 1 = Strongly Agree, 2 =	Note: 1 = Strongly Agree, 2 = Agree, 3 = Slightly Agree, 4 = Neutral, 5 = Slightly Disagree,							
6 = Disagree and 7 = Strongly	Disagree							

Table Three: Satisfaction of Cash Flow Data using Direct vs. Indirect Method

Examination of Table Three reveals that the direct method satisfies users' needs for decision making. Both managers and shareholders agree that the direct method satisfied their needs for decision making, which is again consistent with the claim made in the Australian Accounting Standard. In comparison, users were neutral about the indirect method satisfying their needs for decision making. It could be argued that, because reporting entities are required to report in the direct format only, users are unaware of the potential for reporting of the indirect method.

From the users' perspective, it was also observed that employees, suppliers and customers appeared neutral about both the direct and indirect method of reporting cash flows. These user groups found that the SCF reported in either the direct or indirect method, did not satisfy their needs for decision making. Though, it should be noted that the direct method rated slightly over the indirect method. It is assumed that the neutral response from employees, suppliers and customers could have been due to little knowledge on their part of using the indirect method or a cash flow reporting in general.

One-sample two-tailed T-tests of the mean differences in the response compared to a

neutral answer were conducted for satisfying needs for decision making under the direct and indirect methods. A t value of -5.559, p<0.000 and .869, p<0.392 was reported respectively.

To test the significance of the between (within) group differences, an analysis of variance (ANOVA) was performed, with the results shown in Table Four. No significant result (F = 1.921, p<0.125) was found for either the direct method or indirect method (F = 0.504, p<0.733). These tests indicate that there was no difference from a neutral response in the group's mean response for the direct or indirect method satisfying their needs for decision making.

Direct Method					
Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.234	4	2.059	1.921	.125
Within Groups	45.000	42	1.071		
Total	53.234	46			
Indirect Method					
Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.163	4	.541	.504	.733
Within Groups	45.071	42	1.073		
Total	47.234	46			

Table Four: Analysis Of Variance of Satisfaction of Cash Flow Data

Table Five: Relevance of Cash Flow Data using Direct v. Indirect Method

User	Method	Mean	Median	SD	Range			
Managers (N=13, 28%)	Direct	3.10	3.00	1.27	4.00			
	Indirect	(4.21)	(4.00)	(0.84)	(3.00)			
Shareholders (N=9, 19%)	Direct	2.56	3.00	0.62	2.00			
	Indirect	(3.96)	(4.00)	(1.12)	(4.00)			
Employees (N=10, 21%)	Direct	3.53	4.00	0.83	4.00			
	Indirect	(4.17)	(4.00)	(0.42)	(1.00)			
Suppliers (N=13, 28%)	Direct	3.64	4.00	0.64	2.00			
	Indirect	(4.08)	(4.00)	(0.43)	(2.00)			
Customers (N=2, 4%)	Direct	3.00	3.00	1.41	2.00			
	Indirect	(4.50)	(4.50)	(0.71)	(1.00)			
All users (N=47, 100%)	Direct	3.23	4.00	0.97	4.00			
	Indirect	(4.13)	(4.00)	(0.72)	(4.00)			
Note: 1 = Strongly Agree, 2 = Agree, 3 = Slightly Agree, 4 = Neutral, 5 = Slightly Disagree,								
6 = Disagree and 7 = Strongly I	Disagree	_						

The Relevance of the Direct and Indirect Method of Reporting Cash Flows

The variable 'relevance' was measured by summing the scores to three questions. These questions related to whether the direct/indirect method is (i) a better method of helping a user to make predictions about the outcomes of past, present and future events; (ii) a better indicator of confirming or correcting their past evaluations of the company; (iii) most useful in assessing the rendering of accountability by preparers of the cash flow statement. These questions are consistent with the context of SAC 3, paragraph 5. Table Five shows the descriptive statistics by user type.

All users ranked information presented under the direct method as relevant to their predictions, confirming or correcting past evaluations and assessing accountability, compared to the indirect method. Table Five reports managers' belief that the direct method of reporting cash flows has greater relevance compared to the indirect method. The results also show that managers would prefer the preparation of the direct method even though it is more expensive, requiring the reconstruction of revenue and expenses, compared to the indirect method of reporting cash flows.

Shareholders also believe the direct method of preparing the SCF is relevant to their

decision making. Shareholders believe that the direct method of reporting cash flows is a better method of helping to form predictions about the outcomes of past, present and future events. Shareholders believe that the direct method is a better indicator of confirming or correcting past evaluations of the company in question.

Employees and suppliers were neutral, believing that either the direct or indirect method was relevant to their decision making process. The neutral feelings may be caused by employees and suppliers not using the SCF during their decision making process.

One-sample two-tailed T-tests were conducted on the overall sample to determine perceptions of the relevance of the direct and indirect method of cash flow reporting. A t value (-5.411, p<0.000) and (1.220, p<0.229) was found for the direct and the indirect methods respectively.

An analysis of variance (ANOVA) test was performed (Table Six), and it was found that F value was significant under the direct method (F = 2.208, p<0.084) but insignificant for the indirect method (F = 0.295, p<0.879). The results again are consistent with Jones et al.,(1995) and McEnroe (1996).

Direct Method					
Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.526	4	1.882	2.208	.084
Within Groups	35.788	42	.852		
Total	43.314	46			
Indirect Method					
Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.648	4	.162	.295	.879
Within Groups	23.030	42	.548		
Total	23.678	46			

Table Six: Analysis of Variance of Relevance of Cash Flow Data

Reliability of the Direct and Indirect Method of Reporting Cash Flows

The 'reliability' variable was also measured by combining three questions. These questions related to whether the direct/indirect method: (i) contains information that is represented faithfully and can be depended upon; (ii) contains information that is without bias or undue error; (iii) contains information of transactions or events that it claims to represent. These questions are consistent with the definition of reliability of SAC 3, paragraph 5. Table Seven displays descriptive statistics for perceptions in relation to reliability of the direct and indirect method of reporting cash flows.

User	Method	Mean	Median	SD	Range
Managers (N=13, 28%)	Direct	3.15	4.00	1.41	4.00
	Indirect	(3.64)	(4.00)	(0.91)	(3.00)
Shareholders (N=9, 19%)	Direct	3.00	3.00	0.80	2.00
	Indirect	(3.81)	(4.00)	(1.12)	(4.00)
Employees (N=10, 21%)	Direct	3.67	4.00	0.70	4.00
	Indirect	(4.00)	(4.00)	(0.54)	(2.00)
Suppliers (N=13, 28%)	Direct	3.74	4.00	0.53	2.00
	Indirect	(3.90)	(4.00)	(0.37)	(1.00)
Customers (N=2, 4%)	Direct	3.00	3.00	1.41	2.00
	Indirect	(3.00)	(3.00)	(1.41)	(2.00)
All users (N=47, 100%)	Direct	3.39	4.00	0.97	4.00
	Indirect	(3.79)	(4.00)	(0.79)	(4.00)
Note: $1 = $ Strongly Agree, $2 = A$	Agree, $3 = Sli$	ghtly Agree,	4 = Neutral,	5 = Slightly I	Disagree,

Table Seven:	Reliability of Cash	Flow Data using	Direct v. Indir	ect Method
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As with 'relevance', it was found that managers and shareholders preferred the direct method for 'reliability' measurement. The direct method was perceived to contain information that managers and shareholders can depend upon to be represented faithfully. The direct method was found to contain information that is without bias or undue error. The direct method also contained information of transactions and events that either it claims to represent or could reasonably be represented. The demand for the direct method may indicate that it gives shareholders a clearer image of the timing of returns and the amount of returns; as dividends are paid with cash not profit.

It was also found that employees and suppliers did not believe that either the direct or indirect method was reliable to their decision making process. The average employee and supplier had neutral feelings towards either the indirect and direct method of reporting cash flows. The neutral feelings may be caused by employees and suppliers not using the SCF during their decision making process.

It should be noted that even though results imply the direct method is superior to the indirect method, there is little difference in the findings, as can be seen above in Table Seven. The little difference suggests that both the direct and the indirect method are reliable for employees and suppliers.

One-sample Two-tailed T-tests were conducted for the reliability of cash flow reporting under the direct and indirect method. A t value (-4.294, p<0.000) and (-1.796, p<0.079) was reported respectively. This indicates that the mean responses were significantly less than the neutral response.

Analysis of variance test results are shown in Table Eight. The F value is insignificant for both the direct and the indirect approaches, suggesting that there is no difference in mean responses between (among) user groups.

Direct Method					
Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.789	4	1.197	1.295	.288
Within Groups	38.838	42	.925		
Total	43.626	46			
Indirect Method					
Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.132	4	.533	.854	.499
Within Groups	26.213	42	.624		
Total	28.345	46			

Table Eight: Analysis of Variance of Reliability of Cash Flow Data

Summary, Limitations and Future Research

Internal users of the SCF, such as managers, ranked the direct method of reporting cash flows above the indirect method of reporting cash flows. Managers' responses showed that they preferred the direct method because the direct method was perceived to help them to make decisions about the allocation of scarce resources. The direct method was also perceived to help them in making predictions about the outcomes of past, present and future events. The direct method was perceived to confirm or correct their past evaluations and was perceived to enable managers to assess the rendering of accountability by preparers of the SCF. Consistent with prior studies, managers find the direct method of SCF useful in planning and controlling day-to-day operations. This result is consistent with arguments in SAC 2 and AASB 1026.

Shareholders also ranked the direct approach above the indirect approach. Shareholders responded that they believed the direct method helped them to understand cash flow data and satisfied their needs for decision making about investments. Shareholders felt that the direct method contained information that can be depended upon to be represented faithfully and; contains information of transactions or events that either it claims to represent or could reasonably be expected to represent. Employees, suppliers and customers are users of the SCF and ranked the direct method above the indirect method of reporting cash flows. These users responded that the direct method helped them to understand cash flows. However, both the direct method and the indirect method appeared to satisfy their needs for decision making.

The study provides evidence that the direct method of reporting cash flows is perceived as superior to the indirect method of reporting cash flows, Krishnan and Largay found similar findings in 2000. Further, it was found that managers and shareholders find the direct method helps them to understand cash flow data, satisfies their needs for decision making purposes, and is relevant and reliable. It was also found that employees, suppliers and customers believed very slightly that the direct method is superior to the indirect method of reporting cash flows. However, the majority of this group had neutral feelings towards the relevance and reliability of either the direct or indirect methods of reporting cash flows. These findings are similar to McEnroe (1996) who found that the SCF was useful to bankers, lenders, shareholders and suppliers. McEnroe (1996) also found that the information in the SCF was not useful to customers and employees.

As this research was based on data obtained in an Australian context where cash flow reporting is mandatory for the direct method only, further research is needed where an option exists to allow the selection of either the direct or the indirect method of cash flow reporting. Further, it would be of interest to analyse if the direct method of cash flow reporting discloses an entity's sensitive information, which otherwise could be used to an entity's future benefit. A small sample was the limitation of this study and therefore care must be taken in interpreting the results. Future research could be undertaken with a larger sample, including an international comparison.

References

AARF (Australian Accounting Research Foundation) & AASB (Australian Accounting Standard Board) (1997), *Australian Accounting Standard AASB* 1026 Statement of Cash Flows, Australian Accounting Research Foundation, Melbourne.

Australian Accounting Standard Board (AASB), (2003) 'AASB plans for adopting IASB standards by 2005', accessed 25 August. http://www.aasb.com.au/workprog/ed_inde x.htm

Australian Stock Exchange, (2004) <u>http://www.asx.com.au/</u>

Carslaw, C.A. and Mills, J.R. (1991). Developing Ratios for Effective Cash Flow Statement Analysis. *Journal of Accountancy*, November, pp. 63-70.

Clinch, G., Sidhu, B. and Sin, S. (2002). The Usefulness of Direct and Indirect Cash Flow Disclosures. *Review of Accounting Studies*, Vol. 7, pp. 383-404.

Cronbach, I.J. (1951). Coefficient Alpha and the Internal Structure of Test. *Psychometrika*, pp. 297-334.

Drtina, R.E. and Largay III, J.A. (1985). Pitfalls in Calculating Cash Flow from Operations. *The Accounting Review*, LX(2), April, pp. 314-326.

Financial Accounting Standard Board (FASB) (1987). *Statement of Financial Accounting Standard (SFAS) No. 95:* *Statement of Cash Flows*, Stamford, CT: FASB.

Heath, L.C. (1978). Financial Reporting and the Evaluation of Solvency. *Accounting Research Monograph 3*, American Institute of Certified Public Accountants.

Henderson. S, and Peirson. G. (2002). *Issues in Financial Accounting*, 10th edition, Longman Cheshire, Melbourne.

Ingram, R.W., and Lee, T.A. (1997). Information Provided by Accrual and Cash-Flow Measures of Operating Activities. *ABACUS*, 33(2), September, pp.168-185.

International Accounting Standards Committee (IASC) (1992). *International Accounting Standard (IAS 7): Cash Flow Statements*, London: IASC.

Jones, S. and Ratnatunga, J. (1997). The Decision Usefulness of Cash-Flow Statements by Australian Reporting Entities: Some Further Evidence. *British Accounting Review*, Vol. 29, pp. 67-85.

Jones, S., Romano, C.A. and Smyrnios, K.X. (1995). An Evaluation of the Decision Usefulness of Cash Flow Statements by Australian Reporting Entities. *Accounting and Business Research*, 25(98), Spring, pp 115 - 129.

Jones, S., Sharma, R. and Mock, K. (1998). Managerial Evaluations of the Relevance of Cash vs Accrual-Based Financial Reports in the Australian Food Industry. *Australian Accounting Review*, 8(2), pp.51-58.

Jones, S. and Widjaja, L. (1998). The Decision Relevance of Cash-Flow Information: A Note. *ABACUS*, 34(2), pp.204-219.

Krishnan, G.V. and Largay III, J.A. (2000). The Predictive Ability of Direct Method Cash Flow Information. *Journal of Business Finance & Accounting*, 27(1 & 2), pp. 215-245. Lee, T.A. (ed.) (1993). Cash Flow Reporting: A Recent History of an Accounting Practice, Garland, New York.

Leo, K. and Hoggett, J. (2001). *Company Accounting in Australia*, (5th edition), John Wiley & Sons Australia.

Lyons. M. (1991). Renewed Interest in Cash-flow. *Business Review Weekly*, July 12, p. 68.

McEnroe, J. (1996). An Examination of Attitudes Involving Cash Flow Accounting: Implications for the Content of Cash Flow Statements. *The International Journal of Accounting*, 31(2), pp. 161-174.

Nunnally, J.C. (1978). *Psychometric Theory, Second edition,* New York: MaGraw-Hill.

Sondhi, A.C., Sorter, G.H., Ross, V.C. and White, G.I. (1988). Cash Flow Redefined: FAS95 and Security Analysis. *Financial Analyst's Journal*, 44(6), November/December, pp. 19-20.

Sorter, G.H. (1982). The Emphasis on Cash and Its Impact on the Fund Statement – Sense and Non-sense. *Journal of Accounting, Auditing and Finance*, Spring, pp. 188-194.

Wallace, R.S.O., Choudhury, M.S.I. and Pendlebury, M. (1997). Cash Flow Statements: An International Comparison of Regulatory Positions. *The International Journal of Accounting*, 32(1), pp. 1-22.

Yap, C. (1997). Users' Perceptions of the Need for Cash Flow Statements – Australian Evidence. *The European Accounting Review*, 6(4), pp. 653-672.

Endnotes

table by country. Australia and New Zealand have mandatory requirements for the direct method with reconciliation, whereas the US and UK allow choice of either the direct or indirect with reconciliation. Wallace et al., (1997) further report that Canada and IASC (now IASB) have no requirement to use the direct method with reconciliation but have an option to use the direct method without reconciliation or the indirect method with reconciliation.

³ See the definition of *Relevance* in SAC3, para. 5.

⁴ See the definition of *Reliability* in SAC3, para. 5.

⁵ With a normative approach, a standard-setting authority would see itself as an idealized rational decision-maker that uses knowledge to seek tirelessly the best possible choices in terms of what is perceived to be the theoretically correct options. The normative approach also assumes that standard-setters' choice would be free from value judgement (Wallace et al., 1997, p.10)

According to the Statement of Accounting Concepts SAC 2 (paras 16 to 19), there are three categories of users of general purpose financial reports: Resource providers, Recipients of goods and services and Parties performing a review or oversight function. Resource providers are those who may be compensated either directly or indirectly for the resources they provide eg., employees, lenders, creditors, suppliers. investors and contributors. Recipients of goods and services are those who consume or otherwise benefit from the goods and services provided by the reporting entity. This category comprises customers and beneficiaries. Parties performing a review or oversight function are certain parties including parliaments, governments, regulator agencies, analysts, labour unions, employer groups, and media.

ⁱ The usefulness of cash flow reporting has been an important issue; it is not discussed in this paper as it is well documented in the literature (for example, Lee, 1993; McEnroe, 1996 and Yap, 1997).

² Wallace et. al., (1997) and McEnroe (1996) provide a comparative cash flow disclosures