

EMPIRICAL STUDY CONCERNING THE VIEWS ON THE FORMAT OF CASH FLOW STATEMENTS

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Abstract:

Following the proposals about the new IFRS that would replace the existing standards on financial statement presentation in IFRSs, IAS 1 Presentation of Financial Statements and IAS 7 Statement of Cash Flows, we conduct an empirical study on the opinions regarding the format of the cash flow statement, and the most appropriate method of presentation. The objective of this research is to develop a critical analysis based on this literature, regarding the most appropriate method of presenting cash flow statements. The results of our research is that the direct method is the most adequate for statement of cash flows, being confirmed by most studies reviewed, most researchers considering this method of reporting as the most appropriate and useful, compared with reporting by using the indirect method.

Key words: *financial statements, statement of cash flow, direct method, indirect method*

JEL Classification: *M41*

1. Introduction

In July 2010, the two normalisation bodies, the U.S. (FASB) and the international (IASB) one, published on their websites the document “*Staff Draft of Exposure Draft on Financial Statement Presentation*”, which reflects the positions of these bodies in terms of financial statement presentation. It was published as a result of the joint discussion document issued by FASB and IASB entitled “*Preliminary Views on Financial Statement Presentation*”. The proposed model had to determine that “the entity’s financial statements be more useful by requiring entities to provide detailed information, organised in a manner that clearly conveys a financially integrated image of the entity”(Discussion Paper: Preliminary View on Financial Statement Presentation, 2008), mainly due to concerns of financial statement users regarding existing requirements at that time, which allowed quite a few alternatives of presenting the elements of financial statements and that the information contained in these financial statements are presented inconsistently and in a highly aggregated manner, thus accomplishing the full understanding of the connections between the financial statements and the financial results of the entity.

The two normalisation bodies proposed three objectives for the presentation of the financial statements that specified that the information had to be presented in the financial statements so as to comply with the following (Discussion Paper: Preliminary View on Financial Statement Presentation, 2008), paragraph 2:

- *to describe a coherent picture of the activities of an economic entity.* This means that between the elements of financial statements there is a clear relationship and the financial statements of an entity complement each other as much as possible;
- *to detail information so that it is useful in predicting future treasury cash flows of the entity.* The analysis of financial statements has as objectives the

amount assessment, timing and uncertainty of future cash flows so that financial information should be detailed in a reasonable number of homogeneous groups.

- *to help users understand the entity's liquidity and its financial flexibility.* Information about the economic entity's liquidity helps users understand the entity's ability to meet its financial obligations when they fall due, while the information about financial flexibility helps users understand the economic entity's ability to make use of opportunities arising in the business environment and to invest or be able to meet unexpected needs.

Thus the two normalisation bodies were concerned to develop a global standard for the presentation of financial statements, prepared in order to provide users of financial statements with the information useful in decision making, while at the same time contributing to the improvement of the usefulness of financial information reflected in the financial statements so as to help management to better be informed on the financial situation of users of financial statements. Based on the finding that both IFRS and U.S. GAAP provided quite many presentation formats the boards of the two organisations sought to provide a higher level of standardisation especially in terms of classification and information detailing.

Regarding cash flow statements, it was stated that an entity should submit separately the major classes of receipts and payments from the operation using the direct method rather than to reconcile net profit or loss in net treasury cash flows from the operation using the indirect method. It was believed that the presentation of each paid and received cash element provides a more useful detailing of information on cash flows, while helping users make connections between operation assets and liabilities, operation income and expenses and operation receipts and payments. Reconciliation between cash flow and comprehensive income situation was also proposed, to conduct a detailing of cash income, arrangements other than revaluations and components of revaluations.

Also, one can note an inconsistency in the presentation of information in financial statements. Thus, both the IFRS and the U.S. GAAP requested a specific section in the operation in the cash flow statement and did not provide a section of the operation in the statement of the financial position and in the statement of comprehensive income, resulting in user difficulties when trying to understand the quality of earnings of an entity by comparing operation profit to treasury cash flows from the operation.

Following these discussions, it was felt that a statement of cash flow should "provide information on the changes in cash during a time frame in a manner binding cash receipts and cash payments to the information presented in the statement of financial position and the statement of comprehensive income"(Staff Draft of Exposure Draft IFRS X Financial Statement Presentation, 2010).

The aim was for an entity to disclose in the cash flow statement the gross cash receipts and gross cash payments into sections and categories that are consistent with the classification of assets, liabilities or equity corresponding to the statement of financial position as well as items of income and corresponding expenses from the statement of comprehensive income. Also, an economic entity needed to show reconciliation of operating income to net cash flow from the operation as part of the cash flow statement.

These changes are part of Phase B of the project on the presentation of financial statements that will replace IAS 1 "*Presentation of Financial Statements*" and IAS 7 "*Statement of Cash Flow*".

Following these topical discussions we believe it to be useful to conduct an empirical study on the opinions regarding the format of the treasury cash flow statement, and the most appropriate method of presentation.

2. Research Methodology and Research Hypotheses

The study uses a mainly deductive research methodology. To achieve the objectives of the study, research methods are primarily qualitative, based on bibliographic documentation, using as methods of observation literature and analysis. The objective of this study is to develop a critical analysis based on this literature, regarding the most appropriate method of presenting cash flow statements.

A similar methodology was used by Matis, D., and Bonaci, C.G., in an empirical study on the views on fair value and guidance in times of crisis (Matis & Bonaci, 2009), a study based on articles related to fair value, published in the ISI accounting journals during 2005 to 2009, and Pascan, I., in an empirical study on the opinions on the statement of comprehensive income (Pascan, 2010).

To identify relevant literature, the research was initiated using the following methodology. We chose as literature data source the *Ebsco* database, because it provided access to a large number of articles in this field. The selection of articles from this database was conducted using as search criteria two terms. The first search term was “direct cash flow” in all academic journals, in all years and in all fields (text, author, title, subject terms, source, abstract). The search returned a total of 55 possible articles in the period between 1972 and 2012. The second search term was “indirect cash flow” in all academic journals, in all years and in all fields (text, author, title, subject terms, source, abstract). This search returned a total of 31 possible articles in the period between 1976 and 2012. After reviewing the search results, we selected a total of 10 articles that met our research objectives.

Below are the articles related to the treasury cash flow statement, based on the journal they were published in, according to their release date:

Figure 1
Articles on cash flow statement

1	<i>Journal of Accountancy</i>	1988
2	<i>Journal of Business Finance & Accounting</i>	2000
3	<i>The European Accounting Review</i>	2001
4	<i>Strategic Finance</i>	2002
5	<i>Review of Accounting Studies</i>	2002
6	<i>CPA Journal</i>	2004
7	<i>Financial Analysts Journal</i>	2004
8	<i>The Accounting Review</i>	2009
9	<i>Australasian Accounting Business & Finance Journal</i>	2010
10	<i>Australian Accounting Review</i>	2011

We note that the articles were published between 1988 and 2011, in journals in the United States of America, Europe and even Australia.

Our study's first hypothesis is that the direct method is the best method of presenting the cash flow statement, and the second hypothesis is that the indirect method is the best method of presenting cash flow statement.

3. Research results

Following IASB and FASB discussions regarding the presentation of financial statements and the statement of cash flows, the study seeks to identify whether there is a link between the views expressed in the studied research and the desired format of the treasury cash flow statements to be adopted by two normalisation bodies.

We note that seven articles, both theoretical and empirical, were published before the publication of the IASB and FASB discussion joint document in 2008.

Also relevant to the purpose of our research is to observe the field addressed in analysed studies by this understanding the accounting rules addressed by these studies, and the geographical locations of entities included in the study. Thus we note the following:

- an article summarises the requirements of SFAS 95 “*Statement of Cash Flows*”, issued by the FASB in November 1987, effective for annual periods ending after July 15, 1988, showing how it the cash flow statement should be presented (Mahoney, Sever, & Theis, 1988);
- an article presents an empirical study examining the utility of using the direct method of presenting information on treasury cash flows in accordance with the SFAS 95 “*Statement of Cash Flows*”, especially if using the direct method results in more accurate forecasts of future cash flows than the indirect method (Krishnan & Largay, 2000);
- a theoretical article supports the view that double-entry bookkeeping can learn from specific governmental organisations’ accounting (*cameral accounting*) to perform the separation of balance sheet changes in non-cash cash and prepare directly the treasury cash flow statements from cash accounting transactions before they are placed in double-entry bookkeeping (Monsen, 2001);
- a theoretical article designs a fast method for supporting the direct method through a redesign of traditional accounting systems (Miller & Bahnson, 2002);
- an empirical article investigates the operating cash flow ability to explain annual earnings for a sample of Australian companies (Clinch *et al.*, 2002);
- an empirical article studies preferences regarding the format of treasury cash flows prepared in accordance with the SFAS 95 “*Statement of Cash Flows*”, issued by the FASB, from the perspective of respondents and industry (Brahmasrene *et al.*, 2004);
- a theoretical article reveals recent cases of abuse and misinformation regarding the SFAS 95 “*Statement of Cash Flows*” and makes recommendations for its improvement;
- an empirical article explores the value of forecasting of the direct method of presenting treasury cash flow statement, by using a sample of companies selected from the Lexis-Nexis electronic database (Orpurt & Zang, 2009);
- an empirical article uses a sample of Australian companies that reported operation treasury cash flows using the direct method and presented using the indirect method in notes, and tries to establish the utility of the two methods in the context of the joint discussion document issued by the IASB and FASB entitled “*Preliminary Views on Financial Statement Presentation*” (Hughes *et al.*, 2010);
- a theoretical article tries which is the best way of reporting cash flows statements in the context of the joint project of the AASB (*Australian Accounting Standards Board*) and the FRSB (*Financial Reporting Standards*

Boards) of harmonising with IFRSs as they were adopted in Australia and New Zealand.

For research purposes, we classified articles studied according to their type, empirical and theoretical studies. Thus we note that eight of the ten articles advocate using the direct method in presenting cash flow statements, of which four are theoretical and four are empirical studies. In our research, a single theoretical study is favourable to the indirect method, while an empirical study does not distinguish between the usefulness of the two methods.

Figure 2

Types of views expressed relating to the method of presenting cash flow statements in the literature studied in the Ebsco database

<i>Type of study</i>	<i>Favorable to direct method</i>	<i>Favorable to indirect method</i>	<i>Favorable to both method</i>	<i>Total</i>
<i>theoretical study</i>	4	1		5
<i>Empirical study</i>	4		1	5
Total	8	1	1	10

3.1. Theoretical Studies

We note that the first theoretical study dates from 1988 (Mahoney *et al.*, 1988), who prefer the indirect approach of presenting cash flows for three reasons, namely:

- it provides a useful link between the cash flow statement and balance sheet and profit and loss account;
- financial statement users are more familiar with this method of presentation;
- it is a less expensive method.

In this study, emerges the idea that presenting via the direct method the information in the profit and loss account based more on cash accounting than on accrual accounting may suggest that the net cash resulted from the operation is a measure of financial performance as good as or even better than net profit.

The second theoretical study (Monsen, 2001) is favourable to the use of the direct method of presenting cash flow statements.

We noted that the third theoretical study (Miller & Bahnson, 2002) also favours the use of the direct method of presenting cash flow statements, the direct method “being far superior to the indirect one because it produces information that is more useful to the capital markets regarding amounts’ assessment, time placement and uncertainty regarding future cash flows of the company” (Miller & Bahnson, 2002, p. 51).

The fourth theoretical study (Broome, 2004), also expresses a favourable attitude to the use of the direct method of presenting cash flows. This 2002 study considered that events related to accounting issues in the Adelphia, Dynegy, Qwest, Tyco, WorldCom cases, reflecting among others cash flow statement reporting issues, have led to a new approach to the basics of financial statements. A common feature of cases observed in this study is the misclassification of cash flows in the three sections that make up the cash flow statement. Usually, certain cash outflows that should have been included in the operating section were classified as cash outflows for investments, thus making the operating cash flows to seem better than they actually were. Also, this

study noted in analysed cases that all companies used the indirect method for the operation, adjustments made to reconcile net income were numerous, complicated and sometimes difficult to understand. As a result, there was the danger of manipulation techniques in reporting cash flows that were inconsistent with the FASB desired object of financial reporting. According to it, information on cash flows should enable users to understand the operations of economic entities, to evaluate financing activities, to assess liquidity and solvency and to understand the information provided by profit. In conclusion, this study recommended FASB to require the direct method and associated with this a reconciliation of net income to cash flow for operations, as a section of cash flow statements.

The fifth theoretical study (Bradbury, 2011), based on the arguments presented, shows that using the direct format of reporting cash flows compared with the indirect method leads to better forecasting of future performance of the economic entity and presents the stronger link with stock prices.

3.2. Empirical Studies

The first empirical study (Krishnan & Largay, 2000) is favourable to the direct method. It notes that the direct method of presenting cash flows provides a better forecasting of future cash flows compared to information derived from the use of the indirect method and compared to earnings and accrual accounting information taken separately.

The second empirical study (Clinch *et al.*, 2002) also expresses an opinion favourable to the direct method. According to it, the direct presentation of cash flows transmits the information that is also reflected in the performance of the economic entity.

The third empirical study (Brahmasrene *et al.*, 2004) appears as a result of the research conducted, namely that the argument that those preparing financial statements fail to gather sufficient information necessary for implementing the direct method cannot be considered legitimate. It also shows that integrated software allows data to be processed for different purposes, one of these being the cash flow statement using the direct method.

The fourth empirical study (Orpurt & Zang, 2009) carries out three interrelated researches in order to investigate the predictive ability of presenting treasury cash flows using the direct method. The stated goal of the study is to respond to the CFA Institute (*Chartered Financial Analyst Institute*) claims regarding recent presentation requirements, together with those of the FASB and IASB calling for more research on the methods of presentation by the direct method.

Thus, according to this study, in the use of data from the profit and loss account and the cash flow statement using the indirect method, resulted deficiencies in estimating the components of the direct method. By using the components' estimation of the direct method in forecasting models, an improvement in future cash flows and profits can be noted. The direct method manages to reduce presentation errors, improves profits' and operation cash flows' forecasting, and better reflects the future performance.

The last empirical study (Hughes *et al.*, 2010) tries to observe the differences in the use of the indirect methods to estimate the main elements of operation cash flows, such as cash receipts from customers and cash paid to creditors, as a result of the joint Discussion Project issued by the FASB and IASB entitled "Preliminary Views on Financial Statements Presentation", which contained a major proposal requiring companies to report cash flows by using the direct method and also required that the indirect method of determining operation treasury cash flows to be disclosed in the

notes to the financial statements. The study used a sample of companies in Australia that reported treasury cash flows using the direct method and disclosed in notes the indirect method, thus managing to notice the appearance of significant differences between the reported and estimated values for both cash collected from customers and for cash paid to the creditors. The study shows that users are not able to accurately estimate the main components of operation treasury cash flow, especially since they are not able to incorporate the impact of discontinued operations. In conclusion, this study believes that economic entities should report treasury cash flows using both the direct and indirect method.

4. Conclusions

We note in the results of our study that the first hypothesis, namely that the direct method is the most adequate for statement of cash flows, is confirmed by most studies reviewed, while the second hypothesis is confirmed only by one study.

Currently, IFRSs allow those preparing financial statements to choose between the direct and indirect method of reporting operation treasury cash flow statements. Thus, we can observe that although the IFRSs encouraged reporting cash flows using the direct method, those that prepared financial statements were allowed to report also by using the indirect method. From our study we note that the direct method of reporting cash flows is considered by most researchers to be the most appropriate method managing to reduce presentation errors, to improve profits' and operation cash flows' forecasting and to better reflect future performance. In this context, it is not surprising that the two normalisation bodies, the U.S. (IASB) and international (IFRS) one, wish to apply using the direct method, without any exception. However the entities will have to provide a reconciliation of the profit or loss from the operation with the operation cash flow as part of the treasury cash flow statement. Thus, this request of the two bodies, to the extent that it will result in the final form of a standard, is a much awaited measure, most researchers considering this method of reporting as the most appropriate and useful, compared with reporting by using the indirect method, the high cost of the presentation by the direct method no longer being able to be considered a relevant reason, given the nowadays widespread use of integrated software that allow fast processing of data and information so that it can meet different needs of users.

The benefits and the importance of using the direct method can be seen in the future if the IFRS regarding the Financial Statements Presentation will be adopted as proposed.

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