International Journal of Business and Management; Vol. 8, No. 4; 2013
ISSN 1833-3850 E-ISSN 1833-8119
Published by Canadian Center of Science and Education

Auditing the Statement of Cash Flows for Jordanian Public Listed Companies

Eman Hanini[1] & Modar Abdullatif[2]

[1] Department of Accounting, Faculty of Planning and Management, Al-Balqa Applied University, As-Salt, Jordan

[2] Department of Accounting, Faculty of Business, Middle East University, Amman, Jordan

Correspondence: Modar Abdullatif, Department of Accounting, Faculty of Business, Middle East University, P.O. Box 383, Amman 11831, Jordan. Tel: 962-796-726-101. E-mail: mabdullatif@meu.edu.jo

Received: October 5, 2012 Accepted: January 18, 2013 Online Published: January 25, 2013

doi:10.5539/ijbm.v8n4p123 URL: http://dx.doi.org/10.5539/ijbm.v8n4p123

Abstract

The study aimed to explore the process of auditing the statement of cash flows by auditors of Jordanian public listed companies. In doing so, it used a structured questionnaire that surveyed the views of auditors who work for audit firms that audit the financial statements of Jordanian public listed companies. In particular, auditors were asked about the importance of the statement of cash flows for their audit and their opinion on the financial statements, the extent of their auditing of detailed components of the statement of cash flows, and their use of specific financial ratios related to the statement of cash flows in predicting the company's continuance as a going concern.

Findings of the study suggest that auditors of Jordanian public listed companies do generally recognize the importance of the statement of cash flows and do generally audit many detailed items of the statement in its operational, investment, and financial sections, and do use financial ratios that employ cash flow measures to evaluate the company's going concern hypothesis. However, the level of such perceived importance and use of audit procedures was reported as being relatively limited, an issue that raises questions over the quality of such audits and the awareness of auditors as to the importance of auditing the statement of cash flows.

Keywords: statement of cash flows, operational cash flows, investment cash flows, financial cash flows, auditing

1. Introduction

The statement of cash flows is important in giving a view of the entity's financial performance by showing the cash flows of the entity and whether, and to what extent, its profits are turned into cash flows. This helps readers of the financial statements better judge the quality of the financial statements and their usefulness for making financial decisions.

While financial statement fraud is usually more associated with income statement and statement of financial position accounts (such as revenues, expenses, liabilities and receivables), fraud in the cash flow statement exists, and is potentially significant. Examples of such cash flow frauds include boosting the operating cash flow by shifting financial cash inflows into it and shifting normal operating cash flows out of it, and boosting operating cash flows by using unsustainable activities (Schilit & Perler, 2010). This issue highlights the importance of adequate auditing of the statement of cash flows, in order to reduce the chances of financial statement fraud and enhance the credibility of the financial statements.

Given the importance of auditing the statement of cash flows, this study aims to explore the process of auditing this statement by auditors of public listed companies in Jordan. It covers the importance of the statement of cash flows from the perception of the auditors, the process of auditing operational, investment, and financial cash flows, and the analysis of the statement of cash flows for the purpose of assessing going concern.

The importance of this study comes from the importance of the statement of cash flows itself, as it is a statement that is very important in terms of its information content to readers who want to know about the entity's operational, investment, and financial cash inflows and outflows, and how its reported net income compares to its cash flow, in order to assess its financial performance, and its ability to repay its loans when they come due. The credibility of this statement and the information content of it increase if it is adequately audited.

Given that, this study aims to answer the following questions:

a- To what extent do auditors consider auditing the statement of cash flows important?

b- What are the main operational cash flow items auditors emphasize when auditing the statement of cash flows?

c- What are the main investment cash flow items auditors emphasize when auditing the statement of cash flows?

d- What are the main financial cash flow items auditors emphasize when auditing the statement of cash flows?

e- What are the main cash flow financial ratios auditors emphasize when auditing the statement of cash flows and assessing the client's continuance as a going concern?

f- Are the views of auditors on the above issues affected by their personal background, as related to their gender, age, and professional experience?

These questions lead to the following null hypotheses that were tested in this study:

H1: Auditors do not consider auditing the statement of cash flows important.

H2: Auditors do not audit operational cash flow items

H3: Auditors do not audit investment cash flow items

H4: Auditors do not audit financial cash flow items

H5: Auditors do not use cash flow financial ratios in the course of auditing the statement of cash flows in order to assess the going concern assumption.

H6: The personal background of the auditors (gender, age, and professional experience) has no effect on their views on the issues covered in the study.

The remainder of the paper is organized as follows. First, a theoretical framework and literature review on the statement of cash flows is presented. This is followed by illustrating the study's research method, its findings, and its conclusions.

2. The Statement of Cash Flows

The statement of cash flows reports on the cash inflows (receipts) and outflows (payments) that occurred at an entity in a specific period. In doing so, it reports on the difference between the balances of the cash account at the beginning and end of that specific period. According to Kieso, Weygandt and Warfield (2011, p. 1242) it is useful for assessing the following:

a- The entity's ability to generate future cash flows.

b- The entity's ability to pay dividends and meet obligations.

c- The reasons for the difference between net income and net cash flow from operating activities.

d- The cash and non-cash investing and financing transactions during the period.

The importance of these issues increases with the existence of an economic decline, when cash may become scarce, and companies find it critical to monitor their cash flows (Spiceland, Sepe & Nelson 2011). Statements of cash flows can also be used for analyzing credit, valuation, assessing financial resources, and judging the quality of earnings (Petersen & Plenborg, 2012). Given the importance of cash flows, the International Accounting Standards Committee issued in 1992 a revised version of International Accounting Standard 7 (IAS 7), in which it proposed replacing fund flow statements with cash flow statements in financial reporting (Elliott & Elliott, 2009).

A statement of cash flows consists of three main sections of cash flows. The first is the operating section, which consists of principal revenue-producing activities of the entity, such as receipts from customers and payments to suppliers. The second section is the investing section, which mainly consists of activities concerning the acquisition and disposal of long-term assets, such as property, plant and equipment, and intangible assets. Finally, the third section is the financing section, which mainly consists of activities related to the equity and borrowings of the entity, such as cash proceeds from issuing shares or debentures, and cash repayments of amounts borrowed (Cotter, 2012).

The audit of cash and cash transactions is important, since cash is the primary target of employee fraud, and it is endemic to each of the client's accounting cycles (Louwers, Ramsay, Sinason, Stawser & Thibodeau, 2011). In

auditing cash transactions, an auditor would consider intentional and unintentional possible misstatements in the cash-related processes, whether the likely effect was an overstatement or an understatement. The auditor should obtain an understanding of internal control relevant to the cash transactions, and possibly test these controls, then select substantive tests for cash processes (Stuart, 2012).

The absence of auditing the statement of cash flows may lead to negative consequences in financial markets. It will weaken the ability of different stakeholders to assess the future and continuity of the entity, given that their assessments of its liquidity and solvency will be less accurate due to the lower credibility of the information that the assessments were based on. In particular, present and potential investors will be less able to predict future cash flows (especially dividends) and future share prices, while lenders will be less able to assess credit risk and predict future repayment of loans. Finally, in the absence of auditing the statement of cash flows, the possibility that management of some companies will manipulate when reporting the statement of cash flows will increase, to the detriment of users of the financial statements who base their financial decisions on these statements.

3. Empirical Evidence

3.1 Previous Studies

Published previous studies directly related to the audit of the statement of cash flows are probably very limited. The authors made extensive efforts to find any directly comparable studies but failed to find any.

However, studies on the importance and information content of the statement of cash flows do exist. For example, Hung, Chan and Yhi (1995) found that cash flows are preferred by a lot of users of financial statements. This finding is relatively similar to that of Christopher and Hassan (1999), who reported that the statement of cash flows is possibly as useful as the balance sheet to Malaysian investment analysts (although they found it less useful than the profit and loss account). Kusuma (1999) reported that cash flows have information content and can be used to predict future cash flows and as a main source of information for financial decision making.

Many studies attempted to compare cash flows to earnings in terms of importance and usefulness of information. Results of these studies are not conclusive and arguably do not prove that either measure is superior to the other. In the following two paragraphs, the authors list some studies that found that cash flows are superior to earnings (given the nature of this study).

Christian and Jones (2004) found that cash flows are superior to earnings and provide more valuable information in the year of the occurrence of a merger. Similarly, Farshadfar, Ng and Brimble (2008) found that, based on Australian evidence, operating cash flow, compared to earnings, has a larger power in predicting future cash flows. They also found that this superiority of cash flows from operations over earnings applies for all sizes of companies, and increases with the increase of company size. In addition, Consler, Lepak and Havranek (2011) found that cash flow per share is superior to earnings per share in predicting dividends. Finally, Miranda-Lopez and Nichols (2012) found that non-professional investors in Mexico use cash flows more than earnings, and that valuation by using cash flows, compared to using earnings, has a lower chance of producing forecasting errors.

In Jordan, Matar and Obaidat (2007) found that the use of some cash flow ratios is useful in predicting company failure, as it enhances the predictive power of a model based on accrual accounting ratios. Also, Al-Khadash and Al-Abbadi (2005) found that the cash flow to equity ratio is superior to the accounting rate of return to equity ratio in terms of their relation to share prices. Finally, Alsayed-Ahmad (2008) found that analysts of securities and credit in Jordan perceive that financial ratios based on the statement of cash flows are important for evaluating liquidity and earnings' quality.

3.2 The Potential Contribution of This Study

The above studies showed that cash flow information is important to users of financial statements, and that cash flow has been found in some studies to be better than earnings on many aspects, such as its information content and predictive ability. However, the authors have struggled to find any study that comprehensively covered the audit of the statement of cash flows, despite the statement's high importance.

Therefore, this study aims to contribute to our knowledge by surveying views on the practice of auditing the statement of cash flows in Jordan. In doing so, it attempts to explore the importance of the statement of cash flows in general, and some of its operational, investment, and financial elements in particular, from the views of auditors in Jordan.

4. Audit Firms and Corporate Audit Clients in Jordan

Audit firms began to be established in Jordan since the 1940s (Abdullah, 1986). Currently, there are about 300 audit firms operating in Jordan, and these vary in their size and the nature of their clients (Abdullatif, 2013). The

majority of these audit firms are small, sometimes possibly consisting of only one practicing auditor. However, there are some significantly larger audit firms operating in Jordan, several of which have some sort of connection with international audit firms, including each of the Big Four audit firms (Abdullatif, 2013). Registered licensed auditors in Jordan are members of the Jordanian Association of Certified Public Accountants (JACPA), which has hundreds of members, many of whom are in public practice. A significant number of practicing Jordanian auditors have international professional certificates in accounting and/or auditing, in addition to possessing the Jordanian Certified Public Accountant (JCPA) certificate.

According to Al-Khadash (2010), the number of entities in Jordan required to have their financial statements audited is about 30000. From these entities, only about 200 are public listed companies. The rest include local private shareholding companies, relatively large partnerships, and branches of multinational companies operating in Jordan (Abdullatif & Al-Khadash, 2010).

Public listed companies in Jordan have, since 1998, been required to prepare their financial statements using International Financial Reporting Standards (IFRS), and to have them audited under International Standards on Auditing (ISA). IFRS require the preparation of a statement of cash flows, and therefore, these companies are required to prepare this statement as part of their financial reporting process.

The majority of Jordanian audit clients are closely-held. In many cases, ownership is mainly by family members or close relations (Abdullatif & Al-Khadash, 2010). Under this governance system, major shareholders are likely to hold the main top executive positions and be therefore responsible for preparing the financial statements. If, as a result of this system, some top executives and directors can override the internal controls in the entity, they may abuse the financial statements, including manipulating the statement of cash flows. This increases the need to adequately audit the statement of cash flows, in order to protect the minority shareholders and outsider users of the financial statements from possible financial statement fraud.

The demand for external audit services in Jordan is arguably low due to low agency costs given the closely-held governance system in most of the Jordanian audit clients (Abdullatif & Al-Khadash, 2010). In addition, the external audit fees in Jordan are relatively low (see Abu-Nassar, 1999; Abdullatif, 2003). Therefore, it may be possible that auditors in Jordan do not concentrate enough on audit quality, including the need to sufficiently audit the statement of cash flows. This study aims to explore this latter issue. The issue is explored in the Jordanian context, which is different from more-developed countries in that most of the audit clients are small and closely-held, with relatively weak governance and internal control systems, the fact that may lead to deliberate overriding of these controls and manipulation of financial statements to the benefit of the majority shareholders and to the detriment of the minority shareholders and other financial statement users. Therefore, there is a need for adequately auditing the financial statements, including the statement of cash flows, by external auditors. However, under low audit fees and limited negative consequences of poor auditing (see Abdullatif & Al-Khadash, 2010), it is likely that auditing the statement of cash flows by Jordanian auditors may not be sufficient and of acceptable quality. This study explores this issue in detail in the Jordanian context.

5. The Study Method

This study aimed at exploring the practices of auditors in Jordan in auditing the statement of cash flows. In order to survey auditors on this issue, the study used a structured questionnaire that asked auditors about the importance of the statement of cash flows, in addition to details on what operational, investment, and financial cash flows they emphasize when auditing the statement of cash flows, and how do they analyze it for the purposes of assessing the going concern assumption. The choice of using a questionnaire was selected in order to survey as many auditors as possible. The questionnaire consisted of some personal background questions, and questions covering the main topics included in the study, as mentioned earlier. The questionnaire used a five-choices Likert scale with the value of 1 for strong disagreement, and the value of 5 for strong agreement.

The study population was defined as auditors of the Jordanian public listed companies. Jordanian public listed companies are required by law to apply IFRS and therefore prepare the statement of cash flows. Therefore, the auditors of these companies are arguably the most suitable for this study as they are expected to have ample experience in dealing with statements of cash flows. There are over 200 Jordanian public listed companies, but they are audited by a limited number of audit firms. These audit firms make up the population of this study. Of the study population, a sample of 62 auditors was selected. While the researchers aimed at increasing this number and achieving a larger sample, the reluctance of many auditors to participate limited the sample to this size.

In order to increase the response rate, questionnaires were administered to the sample by hand and collected on a later date. This method is likely to increase the response rate without the quality of responses being reduced,

since there is no interference by the researchers, given that the questionnaires are to be collected on a later date (Siam & Abdullatif, 2011; Abdullatif, 2013). From the 62 questionnaires distributed, 50 usable questionnaires were returned and used in the analysis, making a response rate of about 81%, which is arguably high and suitable for the study.

6. Findings

6.1 The Background of the Study Sample

Table 1 shows that the study sample consisted mainly of males, something normal for auditors in Jordan and similar environments. The majority of the sample was over 30 years of age and had at least five years of professional experience. In summary, it can be concluded that the study sample arguably has ample experience needed for completing the questionnaire in an acceptable and reliable manner.

Table 1. Characteristics of the study sample

Background	Frequency	Percentage
Gender		
Male	44	88%
Female	6	12%
Total	50	100%
Age		
Less than 30 years	5	10%
30 - 39 years	19	38%
40 - 49 years	20	40%
50 years and above	6	12%
Total	50	100%
Professional experience		
Less than 5 years	8	16%
5 - 10 years	27	54%
11 – 15 years	14	28%
More than 15 years	1	2%
Total	50	100%

6.2 Reliability of the Results

The reliability of the findings was measured using Cronbach's Alpha, which was found to be 0.7, an acceptable value according to Zikmund, Babin, Carr and Griffin (2010) and Saunders, Lewis and Thornhill (2012).

6.3 The Importance of Auditing the Statement of Cash Flows

Table 2 shows views of auditors on how important they perceive the statement of cash flows to be. It can be seen from the table that the statement of cash flows was perceived as being of only moderate importance (averaging about 4 from 5) in the views of the auditors. While auditors tended to report that they do audit and analyze the statement of cash flows, they did not strongly support the arguments that a statement of cash flows can be useful in evaluating the ability to generate positive cash flows, the need for external financing, and the ability to pay dividends when they become due.

Table 2. Importance of the statement of cash flows

No.	Statement	Mean	Standard deviation
2-1	I do not give my opinion on the financial statement until I audit and review the statement of cash flows	4.32	0.794
2-2	Auditing the statement of cash flows helps in evaluating the entity's ability to pay its obligations in the future	4.30	0.814
2-3	Auditing the statement of cash flows helps in evaluating the entity's ability to generate positive cash flows in the future	4.00	0.808
2-4	Auditing the statement of cash flows helps in assessing the entity's need for external financing	3.86	0.881
2-5	Auditing the statement of cash flows helps in showing the reasons for the difference between accrual net income and the related net cash flow.	3.72	0.757
2-6	Auditing the statement of cash flows helps in evaluating the entity's ability to pay dividends to its shareholders on time	3.58	0.950
Average		3.96	

In summary, auditors seemed to perceive the statement of cash flows as being important, but not very important. This view seems to indicate that the statement of cash flows is being audited as part of the requirements of laws and professional accounting and auditing standards, but not with a strong view that it is an important and integral part of an effective audit. Suggested reasons for this include the possibility that auditors lack sufficient awareness about the importance of the statement of cash flows, and the possibility that auditors consider the information content of a statement of cash flows as being of limited significance in evaluating the company's cash position and liquidity and solvency.

6.4 Auditing Operational Cash Flows

Table 3 shows the items of operational cash flows that were being perceived by auditors as the most important and worth being audited. Continuing on the general view that the statement of cash flows is of only moderate importance, it is not surprising that most items in Table 3 were reported as being audited only to a limited degree. However, it can be seen that the items that were reported as being audited to a larger degree are the cash inflows (such as receipts from interest income, investment income, and sales). It is arguable that cash receipts are more likely to be manipulated than cash payments, hence the reported additional concentration of auditors on them.

Table 3. Auditing operational cash flows

No.	Statement	Mean	Standard deviation
3-1	I audit the company's cash receipts from interest revenue	4.32	0.794
3-2	I audit the company's cash receipts from dividends and other investment income	4.22	0.737
3-3	I audit the company's cash receipts from sales	3.96	0.781
3-4	I audit the company's cash payments of interest expense	3.84	0.866
3-5	I audit the company's cash payments to its employees	3.82	0.850
3-6	I audit the company's cash payments to income tax authorities	3.82	0.850
3-7	I audit the company's cash payments for purchasing raw materials or ready inventory	3.74	0.853
3-8	I audit the balances of vendors' accounts to make sure of the correctness of recorded payments to them	3.72	0.757
3-9	I audit the balances of customers' accounts to make sure of the correctness of recorded receipts from them	3.68	0.741
3-10	I audit the company's cash receipts from its customers	3.54	0.994
Average		3.87	

6.5 Auditing Investment Cash Flows

Table 4 shows the items of investment cash flows that were perceived by auditors as most important and needing more auditing. Again, the average importance of all items was reported as moderate, but in this case we can observe that investment cash flow items were generally perceived as lower in importance than operating cash flow items. In addition, we can observe from Table 4 that investment payments were seen as more important than investment receipts, arguably due to the fact that there are usually significantly higher investment cash flow payments than investment cash flow receipts, as selling investments in the near or distant future is usually likely to generate lower cash receipts compared to what was paid to acquire the investments.

Table 4. Auditing investment cash flows

No.	Statement	Mean	Standard deviation
4-1	I audit cash payments for purchasing new fixed assets	4.16	0.817
4-2	I audit cash payments for purchasing shares in other companies	4.10	0.763
4-3	I audit cash receipts from the company's selling of a subsidiary or a branch or other part of the company	3.86	0.881
4-4	I audit cash receipts from loans the company has given to other parties	3.62	0.967
4-5	I audit cash receipts from selling the company's fixed assets	3.50	0.974
4-6	I audit cash receipts from selling shares in other companies	3.38	1.086
Average		3.77	

6.6 Auditing Financial Cash Flows

Table 5 shows the items of financial cash flows that were perceived by auditors as most important and needing more auditing. Again, the average importance of all items was reported as moderate, and generally of less importance than operational cash flows. It can be seen that financial cash flow receipts were perceived as more important and needing to be audited, when compared to financial cash flow payments, possibly given that the former are sometimes higher in total amounts and more likely to be manipulated.

Table 5. Auditing financial cash flows

No.	Statement	Mean	Standard deviation
5-1	I audit the company's cash receipts from issuing new shares	4.22	0.737
5-2	I audit the company's cash receipts from receiving long-term loans	4.02	0.792
5-3	I audit the company's cash receipts from issuing new bonds	3.88	0.918
5-4	I audit the company's cash payments for dividends	3.86	0.990
5-5	I audit the company's cash payments for its loans	3.38	0.987
Average		3.87	

6.7 Using Cash Flow Financial Ratios in Analyzing the Statement of Cash Flows

Table 6 reports on financial ratios that were used by auditors in analyzing the statement of cash flows during the course of their audit in order to evaluate the client's liquidity and solvency and continuity as a going concern. In general, all suggested ratios were reported as of only limited importance, with the most important being the ratio of operating cash flows to net income, and the ratio of cash flows to total debt. Therefore, it seems that auditors might be evaluating continuity of the client as a going concern using other information in addition to, or in place of financial ratios.

Table 6. Analyzing cash-based financial ratios

No.	Statement	Mean	Standard deviation
6-1	I calculate the ratio of net operating cash flow divided by net income, to evaluate the entity's ability to generate operating cash flow	3.86	0.783
6-2	I calculate the ratio of cash flow divided by total debt, to evaluate the entity's ability to pay its short-term and long-term obligations	3.50	0.886
6-3	I calculate the ratio of cash dividends by net operating cash flow, to evaluate the coverage of dividends to be paid by operating cash flows	3.44	0.787
6-4	I calculate the ratio of net operating cash flows divided by net sales, to evaluate the efficiency of the entity in collecting cash	3.42	0.971
6-5	I calculate the ratio of net operating cash flows divided by current liabilities, to evaluate the entity's liquidity and ability to pay its current liabilities	3.36	0.985
6-6	I calculate the ratio of interest expense divided by net operating cash flows, to evaluate the entity's liquidity and ability to pay its interest expenses	3.28	0.904
6-7	I calculate the ratio of net operating cash flows divided by cash outflows necessary for investment and financial operations, to evaluate the coverage of operating cash flows for the necessary investment and financial operations	3.12	0.961
Average		3.43	

6.8 Hypotheses Testing

In the introduction section, it was mentioned that the study aimed at testing six hypotheses. These hypotheses are listed below:

H1: Auditors do not consider auditing the statement of cash flows important.

H2: Auditors do not audit operational cash flow items

H3: Auditors do not audit investment cash flow items

H4: Auditors do not audit financial cash flow items

H5: Auditors do not use cash flow financial ratios in the course of auditing the statement of cash flows in order to assess the going concern assumption.

H6: The personal background of the auditors (gender, age, and professional experience) has no effect on their views on the issues covered in the study.

Before testing the hypotheses, the researchers employed a Kolmogorov-Smirnov test to check the normality of the distribution of values for each of the five main components of the questionnaire, which are the importance of the statement of cash flows, auditing operational cash flows, auditing investing cash flows, auditing financing cash flows, and analyzing cash flow ratios. The results of the test, reported in Table 7, show that the data can be assumed to be normally distributed, given that the 2-tailed significance value in each case was more than 0.05.

Table 7. Findings of the Kolomogorov-Smirnov test of normality of distribution

	Kolmogorov-Smirnov z	Significance value
Importance of statement of cash flows	0.993	0.324
Auditing operational cash flows	0.994	0.277
Auditing investing cash flows	0.884	0.415
Auditing financing cash flows	0.974	0.299
Analyzing cash flow ratios	1.000	0.270

As normality of the distribution of values can be assumed, the next step is to test the main hypotheses of the study. In order to test the first five hypotheses, the one-sample t-test was used. This test is concerned with comparing a mean of a distribution of values with a single fixed value (George & Mallery, 2012). For each hypothesis, the mean of the responses in the related table (Tables 2 to 6) was compared to the midpoint value of 3, which is the assumed mean value of possible responses. Given that the sample consisted of 50 respondents, the degrees of freedom for the test are 49 (sample size minus one). Table 8 reports on the results of the hypotheses testing.

Table 8. Hypotheses testing results for the first five hypotheses

Hypothesis	T calculated value	T table value (49 degrees of freedom)	P value	Decision
1	15.280	2.010	0.00	Rejection
2	17.310	2.010	0.00	Rejection
3	14.080	2.010	0.00	Rejection
4	15.844	2.010	0.00	Rejection
5	6.487	2.010	0.00	Rejection

All of the null hypotheses were rejected using the one-sample t-test with a significance level of 5%. This indicates that auditors do find the statement of cash flows important for their audit, and that they do, to some extent, audit operational, investment, and financial cash flows, and that they do, to some extent, analyze the statement of cash flows using financial ratios.

However, despite the null hypotheses all being rejected, it should be emphasized that the level of existence of the facts indicated by the null hypotheses is indeed moderate, and in some cases limited, as shown by the details of the findings of the study reported in the tables 2 to 6.

As for testing the sixth hypothesis, the Mann-Whitney test was used. This test is a nonparametric "test of whether two groups differ from each other based on ranked scores" (George & Mallery, 2012, p. 228). It is suitable for use on the data of this study given that the data is ordinal.

The test was applied three times; once for gender, once for age, and once for professional experience. In order to make reasonable comparisons, where possible some groups of respondents were merged into larger groups. This was applied for the age variable by regrouping the respondents into two groups of 'below 40 years' and '40 years and above'. For the professional experience variable, respondents were regrouped into two groups of 'ten years or less' and 'eleven years or more'. Theses regroupings were justified by the relatively small sizes of some of the initial groups (for example, one of the professional experience groups consisted of only one respondent, as can be seen in Table 1).

For each personal background variable, the comparisons were made for each individual statement in the questionnaire (see Tables 2 to 6). The findings of these tests are not reported here due to their large size (three tables of 34 statements each) and the nature of the findings of the Mann-Whitney tests (being of very low significance). The findings show that for gender, age, and professional experience, no single statement out of the 34 statements included in the questionnaire showed any statistically significant difference (at the 5% significance level) between views of the respondents that can be attributed to their personal background variables included in the study (except for only one single statement for the age variable). Therefore, it is very clear that the sixth hypothesis of the study is not rejected, and we can conclude that there are no differences in the views of the respondents that can be attributed to their personal backgrounds regarding gender, age or professional experience. This finding arguably enhances the credibility of the findings and that they can be better generalized over the population of auditors of public listed companies in Jordan.

For further analysis of the strength of the results, the Spearman coefficient of rank correlation was used to measure the strength of the correlation between the averages for each of the five main components of the study (importance of the statement of cash flows, auditing operational cash flows, auditing investing cash flows, auditing financing cash flows, and analyzing cash flow ratios). The Spearman coefficient of rank correlation was used as it is a test suitable for ordinal-level data (Lind, Marchal & Wathen, 2010). The findings, reported in Table 9, show that statistically significant positive correlations exist at the 5% significance level in most of the cases. This supports the objectivity of the findings of the study.

Table 9. Spearman coefficient of rank correlations

	Importance of statement of cash flows	Auditing operational cash flows	Auditing investing cash flows	Auditing financing cash flows	Analyzing cash flow ratios
Importance of statement of cash flows	1.000*	0.417*	0.643*	0.353*	-0.108
Auditing operational cash flows	0.417*	1.000*	0.329*	0.461*	0.047
Auditing investing cash flows	0.643*	0.329*	1.000*	0.313*	-0.054
Auditing financing cash flows	0.353*	0.461*	0.313*	1.000*	0.251
Analyzing cash flow ratios	-0.108	0.047	-0.054	0.251	1.000*

Note: Correlations statistically significant at the 5% significance level are marked with *

7. Conclusions and Implications

This study surveyed views from auditors in Jordan regarding the importance of the statement of cash flows, elements of operational and investment and financial cash flows they consider high in importance and worth more auditing, and the use of financial ratios to analyze the statement of cash flows for assessing the client's continuity as a going concern.

While findings of the study show that auditors do find the statement of cash flows important and that they do analyze it and audit many of its elements, the level of importance of all of these issues was reported as being moderate or limited.

These findings suggest that auditors do not regard the statement of cash flows as significant and relevant to their audit, and that they do not make sufficient efforts to audit numerous elements of the statement of cash flows. Possible reasons for this include limited awareness of auditors as to the importance and relevance of the statement of cash flows, and that auditors do find other information more significant to their audit than cash flows, hence they allocate limited time and efforts to the statement of cash flows. These findings contradict to some extent with many of the other international studies discussed earlier, such as Hung et al. (1995), Kusuma (1999), Farshadfar et al. (2008), Consler et al. (2011), and Miranda-Lopez and Nichols (2012). This contradiction also relatively applies to earlier Jordanian-based studies, such as Al-Khadash and Al-Abbadi (2005) and Matar and Obaidat (2007). The findings that auditors do not find the statement of cash flows very important suggests the possibility that while investors and other users find it highly important, as earlier studies report, auditors are still lagging on this issue and need to be educated and continuously trained concerning it.

The argument that audit fees in Jordan are generally low may as well be a possible explanation for the findings. If auditors were to consider compromising on the quality of their audits as a result of cost-cutting measures due to low fees, efforts on auditing the statement of cash flows may be arguably more compromised than those on auditing the statement of financial position or the income statement. This is possibly because the latter statements include considerably more subjectivity and professional judgment, compared to the statement of cash flows, and may possibly be affected by financial statement fraud, based on this subjectivity (see Zimbelman, Albrecht, Albrecht & Albrecht, 2012).

Implications of these findings include the need to further educate the auditors about the importance of the statement of cash flows and the importance of sufficiently auditing and analyzing it. This may be somewhat achieved by continuous training of auditors on the most recent methods of analyzing and auditing the statement of cash flows. In addition, auditors need to consider possible negative consequences of failing to meet their professional responsibilities regarding auditing the statement of cash flows according to ISA. These may include possible litigation and loss of clients and income and reputation if the audit firm is sued over a case of negligence in auditing the statement of cash flows.

Suggestions for future research include surveying the sources of information used by auditors in Jordan that are

considered as more important to achieve the objectives of an audit, and studying the ways auditors deal with information and process it. Behavioral studies on this issue may be very beneficial in broadening our knowledge on the study topic. Examples of such studies may include those emphasizing heuristics or protocol analysis (see Deegan & Unerman, 2011). Also, surveying with more detail the views of auditors on the importance of the statement of cash flows, possibly comparing it to other statements and disclosures, is likely to enhance our knowledge on the practice of auditing the financial statements of public listed companies in Jordan.

References

Abdullah, K. A. (1986). *The science of auditing: A theoretical approach* (4th ed.).

Abdullatif, M. (2013). Fraud risk factors and audit programme modifications: Evidence from Jordan. *Australasian Accounting, Business and Finance Journal, 7*(1), (Forthcoming).

Abdullatif, M. A. (2003). *The role of auditing in Jordan: An empirical study of responsibilities and expectations.* Unpublished PhD thesis, The University of Manchester, United Kingdom.

Abdullatif, M., & Al-Khadash, H. (2010). Putting audit approaches in context: The case of business risk audits in Jordan. *International Journal of Auditing, 14*(1), 1-24. http://dx.doi.org/10.1111/j.1099-1123.2009.00400.x

Abu-Nassar, M. (1999). Determining factors of audit fees in Jordan – auditors' and corporations' point of view. *Dirasat: Administrative Sciences, 26*(2), 397-411.

Al-Khadash, H. (2010). The profession's examination in Jordan and its development. *Almudaqqeq, 85/86*, 6-10.

Al-Khadash, H., & Al-Abbadi, M. I. (2005). The relationship between accrual-based values, cash based values, and stock prices. *Dirasat: Administrative Sciences, 35*(1), 141-153.

Alsayed-Ahmad, A. S. (2008). *The relative importance of the financial ratios derived from cash flows statement in evaluating liquidity and earnings' quality from the viewpoint of credit analysts in Jordanian commercial banks and the analysts of paper notes in Amman Stock Exchange.* Master thesis, Middle East University, Amman, Jordan.

Christian, C., & Jones, J. P. (2004). The value-relevance of earnings and operating cash flows during mergers. *Managerial Finance, 30*(11), 16-29. http://dx.doi.org/10.1108/03074350410769353

Christopher, T., & Hassan, S. (1999). Usefulness of statement of cash flow: Evidence from Malaysian Analysts. *Asian Review of Accounting, 7*(2), 84-95. http://dx.doi.org/10.1108/eb060715

Consler, J., Lepak, G. M., & Havranek, S. F. (2011). Earnings per share versus cash flow per share as predictors of dividends per share. *Managerial Finance, 37*(5), 482-488. http://dx.doi.org/10.1108/03074351111126960

Cotter, D. (2012). *Advanced Financial Reporting: A Complete Guide to IFRS*. Harlow, UK: Pearson Education Ltd.

Deegan, C., & Unerman, J. (2011). *Financial accounting theory* (2nd ed.). Maidenhead, UK: The McGraw-Hill Companies Inc.

Elliott, B., & Elliott, J. (2009). *Financial accounting and reporting* (13th ed.). Harlow, UK: Pearson Education Ltd.

Farshadfar, S., Ng, C., & Brimble, M. (2008). The relative ability of earnings and cash flow data in forecasting future cash flows: Some Australian evidence. *Pacific Accounting Review, 20*(3), 254-268. http://dx.doi.org/10.1108/01140580810920236

George, D., & Mallery, P. (2012). *IBM SPSS statistics 19 step by step: A simple guide and reference* (12th ed.). Boston, USA: Pearson.

Hung, H. Y., Chan, M., & Yhi, A. (1995). The usefulness of cash flow statements. *Asian Review of Accounting, 3*(1), 92-104. http://dx.doi.org/10.1108/eb060653

Kieso, D. E., Weygandt, J. J., & Warfield, T. D. (2011). *Intermediate accounting: IFRS edition*. USA: John Wiley and Sons. Inc.

Kusuma, H. (1999). *The information content of the cash flow statement: An empirical investigation*. DBA dissertation, Victoria University of Technology, Melbourne, Australia.

Lind, D. A., Marchal, W. G., & Wathen, S. A. (2010). *Statistical techniques in business and economics* (14th ed.). New York, USA: The McGraw-Hill Companies Inc.

Louwers, T. J., Ramsay, R. J., Sinason, D. H., Strawser, J. R., & Thibodeau, J. C. (2011). *Auditing and assurance*

services (4th ed.). New York, USA: The McGraw-Hill Companies Inc.

Matar, M., & Obaidat, A. (2007). The role of cash flow ratios in improving the accuracy of models based on accrual ratios to predict the financial failure of Jordanian industrial companies shareholders. *Jordan Journal of Business Administration, 3*(4), 440-462.

Miranda-Lopez, J. E., & Nichols, L. M. (2012). The use of earnings and cash flows in investment decisions in the U.S. and Mexico: Experimental evidence. *Journal of International Accounting, Auditing and Taxation, 21*(2), 198-208. http://dx.doi.org/10.1016/j.intaccaudtax.2012.07.008

Petersen, C. V., & Plenborg, T. (2012). *Financial statement analysis*. Harlow, UK: Pearson Education Ltd.

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (6th ed.). Harlow, UK: Pearson Education Ltd.

Schilit, H. M., & Perler, J. (2010). *Financial shenanigans* (3rd ed.). USA. McGraw-Hill.

Siam, W., & Abdullatif, M. (2011). Fair value accounting usefulness and implementation obstacles: Views from bankers in Jordan. In Devi, S. S., & Hooper, K. (Eds.), *Accounting in Asia*, *Research in Accounting in Emerging Economies, 11*, 83-107. Bingley, UK, Emerald Group Publishing Ltd.

Spiceland, J. D., Sepe, J. F., & Nelson, M. W. (2011). *Intermediate accounting* (6th ed.). New York, USA: The McGraw-Hill Companies Inc.

Stuart, I. C. (2012). *Auditing and assurance services: An applied approach*. New York, USA: The McGraw-Hill Companies Inc.

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). *Business research methods* (8th ed.). South-Western, Cengage Learning.

Zimbelman, M. F., Albrecht, C. C., Albrecht, W. S., & Albrecht, C. O. (2012). *Forensic accounting* (4th ed.). South-Western, Cengage Learning.