An Empirical Investigation of Determinants Associated with Audit Report Lag in Jordan

Khaled Salmen Aljaaidi¹, Ghassan Saeed Bagulaidah², Noor Azizi Ismail³ and Faudziah Hanim Fadzil⁴

ABSTRACT
This paper examines whether external auditor's reliance on the work of internal audit function and audit committee's characteristics are associated with audit report lag. We posit that an effective audit committee and more reliance on the work of client's internal auditor reduce external audit efforts, thus reducing audit report lag. Data was obtained from 87 survey respondents (external auditors) of listed companies in Amman Stock Exchange (ASE) in Jordan and annual reports of the respective firms for the year 2009. Ordinary Least Square (OLS) regression analysis show that, an active audit committee (more frequent meetings) and a high percentage of reliance on the work of internal audit function by the external auditors are associated with shorter audit report lag. The results of this study would offer important implications to accounting and auditing policy makers, ASE, external auditors and Jordanian public companies.

Keywords: External auditor's reliance decision, audit committee, internal audit function, audit report lag, Amman stock exchange.

INTRODUCTION
Audit report lag (described in some studies as audit delay) refers to the time period from a company’s financial year end to the date of the auditor’s report (Imam, Ahmed and Khan, 2001). It represents one of the most crucial factors that influence the timeliness of earning announcements (Givoly&Palmon, 1982; Ashton, Willingham and Elliott, 1987). Majority of the companies (over 70 %) do not declare their earnings until the issuance of auditor’s report (Bamber, Bamber and Schoderbok, 1993). Therefore, Audit Report Lag (hereafter ARL) provides a key role in the transference of audit information to the market (Dopuch, Holthausen and Leftwich, 1986; Lai, Cheuk&Hom, 2005) and has been associated with the market reactions (Chambers & Pennman, 1984). Likewise, researchers (e.g., Newton& Ashton, 1989; Afify, 2009) indicated that ARL is considered as one of the critical indicators of audit efficiency and thus, efficient auditors should perform more timely audits. Moreover, researchers and professional agencies consider the timeliness of financial reporting (ARL is the most influential factor in timeliness) as an important characteristic which reflects the relevancy and reliability of financial information and financial information becomes less relevant with the passage of time (FASB, 1980; Hendriksen& Van Breeda, 1992; Lawrence & Glover, 1998; McGee &Tarangelo, 2008).

Along the same line, researchers (e.g. Prickett, 2002; Kulzick, 2004) argued that the timeliness of financial
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reporting reflects one of the important aspects of transparency of financial information and therefore, represents one of characteristics of good corporate governance identified by international organizations such as OCED and World Bank (McGee & Yuan, 2008). Furthermore, Khasharmeh and Aljifri(2010) argued that ARL has greater importance especially for emerging economies since other non-financial statements such as news conferences, media releases and financial analysts’ forecasts are not well developed. In addition, the regulatory bodies in these markets are not as effective as in western developed countries (Wallace&Briston, 1993; Chahine&Tohme, 2009).

Due to the importance of ARL, several previous studies have examined this issue in different settings and these studies are still suffering of inconclusive and limited results (Leventis et al., 2005; Che-Ahmed &Abidin, 2008; El-Bannany, 2008; Lee et al., 2008; Afify, 2009; Khasharmeh&Aljifri, 2010; Mohamad-Nor et al., 2010; Hashim& Abdul Rahman, 2011). One of the issues ignored by the extant research in the discipline of ARL is the auditing standards (e.g., SAS 65, ISA 610, AS 5) that permit and encourage external auditors to use the work of internal auditors to achieve their financial statement audit. The point is that prior studies (e.g.,Wallace, 1984; Felix, Gramling & Maletta, 2001; Ho& Hutchinson, 2010) suggest that reliance on the work of IAF reduced the time and therefore the cost of the external audit. It is surprising that none of previous studies examine the relationship between external auditor's reliance on the work of internal audit function and ARL. There is a call made byGramling, Maletta, Shneider and Church (2004) to examine the impact of reliance decision on other aspects of financial reporting such as AR due to the importance of ARL as one of indicators of audit efficiency (Newton & Ashton, 1989; Afify, 2009). This is due to the importance of ARL especially for the emerging markets such as Jordan, since the information in these markets is limited and these markets have a longer time lag (Errunza&Losq, 1985; Khasharmeh&Aljifri, 2010).

Likewise, corporate governance mechanism (especially, audit committee) has a direct responsibility to monitor financial reporting process and to improve the quality of financial reporting which, in turn may influence the ARL (Abdulla, 2007; Afify, 2009;Mohamad-Nor et al., 2010; Hashim & Abdul Rahman, 2011). Therefore, this study examines the associations of external auditor’s reliance on the work of internal audit function and audit committee characteristics with ARL among Jordanian listed firms in Amman Stock Exchange (ASE). It is worth to highlight that Jordan is used as a setting to investigate the issue of ARL due to several reasons. Firstly, the Jordanian code of corporate governance of 2005 indicated to the important role of AC and IAF. The code indicated that IAF should be adequately resourced, trained, remunerated, and provided full access to company's records, and given sufficient standing and authority within the company to adequately carry out its task. Secondly, researchers (e.g., Khrisat, 1993) revealed that the Jordanian internal auditors have implemented, to some extent, internal audit standards. Further, the internal auditors of listed companies in Jordan achieve their internal auditing goals by determining their objectives and information needs before conducting their work (Al-Oroud & Shakar, 2010). Therefore, to what extent the external auditors in Jordan rely on the work of internal auditors? And is this reliance decision assists the auditors to reduce ARL? Furthermore, among its responsibilities; Audit Committees (AC) in Jordan have to ensure that the external auditors are independent; to review auditor's plan; to review the procedures of internal control; to monitor the compliance of firms with
laws and regulations and to prevent conflicts of interest of related parties (ROSC, 2005). It is surprising that none of the previous studies linked between the IAF and AC’s characteristics and audit report lag in Jordan.

This study contributes to the audit literature by examining association of reliance decision and AC and ARL. The findings of the study would have implication for many parties in Jordan. It provides supporting evidence for the external auditors in Jordan on whether reliance on the work of internal auditor could significantly decrease ARL. Furthermore, this study could assist managements of companies in Jordan to focus on the important role of their internal audit function in financial statement audit and reducing timeliness of financial reporting. Finally, this study could assist regulators in Jordan to focus on the important role of AC in reducing timeliness of financial reporting.

The rest of this paper is structured as follow. The next section reviews the literature on external auditor's reliance decision and audit committee and its expected impact on AC, and develops the testable hypotheses. This is followed by the design of the research. It further provides the results of the analysis and discussion. The final section concludes and discusses limitations and suggestion for future research.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

External auditor's reliance on the work of internal audit function

External auditors can use the work of the IAF to achieve the goals of external auditing. Hence, external auditing standards encourage the external auditors to use the work of the IAF when conducting their external audit. For example, SAS 65 includes, “The Auditor’s Consideration of the Internal Audit Function in an Audit of Financial Statements”, as indicated in paragraph 12. The work of internal auditors may affect the nature, timing, and the extent of external auditing in three areas including: procedures the auditor performs when obtaining an understanding of the entity’s internal control; procedures the auditor performs when assessing risk; and substantive procedures the auditor performs.

Likewise, International Standards on Auditing (ISA) 610 includes, “The Auditor’s Consideration of the Internal Audit Function” wherein it concluded that IAF may affect the nature, timing, and extent of audit procedures in the above areas of external audit, but cannot eliminate them entirely. Auditing Standard No 5 (AS5) includes, “An Audit of Internal Control over Financial Reporting that is Integrated with An Audit of Financial Statements”, which refers to the importance of reliance on the work of IAF by external auditors to assess the control risk for purposes of external auditing. On the other hand, international standard for professional practice of internal auditing No. 2050 includes “Coordination”, which stated that the internal auditors should share information and coordinate activities with external ones providing the assurance of avoidance of duplication efforts.

Felix, Gramling and Maletta (1998) mentioned that the increase on the work reliance of IAF by external auditors in current years is based on the following reasons: First, the Treadway Commission’s 1987 report pressured organizations and external auditors to engage the IAF in the external audit with greater authorization. Second, pressure to reduce audit fees which have encouraged external auditors to utilize the work of IAF and finally, the development of professional internal auditing standards, which have assisted in increasing the framework of the internal audit profession.

Moreover, reliance on the work of IAF by external auditors is one of the important mechanisms that can
reduce the cost of the external audit. Previous studies (e.g., Wallace, 1984; Felix et al., 2001; Ho and Hutchinson, 2010) showed that reliance on the work of IAF reduced the cost of the external audit. For example, Felix et al. (2001) found that when IAF completed 26.57% of the financial statement audit, the audit fees decreased by approximately 18%.

At the same time, reliance on the IAF’s work can avoid unnecessary duplication of auditing procedures (Schneider, 2009) and save audit time (Haron, Chambers, Ramsi and Ismail, 2004). This will improve the efficiency and effectiveness of external audit (Felix et al., 2001; Morrill and Morrill, 2003; Glover et al., 2008). In addition, the fact that internal control is considered one of the IAF’s responsibilities, external auditors place more reliance on the IAF as a mechanism to detect weaknesses in controls and to prevent and detect fraud (Goodwin & Seow, 2002). More importantly, reliance on the IAF’s work by external auditors can be administered through relying on the work already performed by IAF and/or through the use of internal auditors as assistants.

In relation to the first category, the external auditors may take into consideration the results of internal control tests conducted by internal auditors (for examples, test of control over raw materials, receivables) instead of performing independent tests of controls. Furthermore, external auditors may utilize the internal auditors to assist in the performance of the financial statement audit under the supervision of external auditors (SAS 65, AICPA 1991). For example, external auditors could request the internal auditors to perform some tests of control over accounts (cash accounts, receivables) to produce evidence pertaining to the strength of the internal control system.

Nevertheless, it is important to mention that ISA 610 does not deal with instances when the internal audit personnel assist the external auditor in carrying out external audit procedures (ISA 610, Para.1). This is because the external auditors in Jordan are obliged to adopt international standards on auditing issued by the international federation of accountants (IFAC). Therefore, the current study examines the extent of reliance on the work of IAF by external auditors on the work already performed by internal auditors in Jordan.

According to SAS 65 and ISA 610, the use of the work of IAF reduces the evidence or effort required to complete the financial statement audit, and in turn reduces the audit time. Furthermore, prior studies suggested that percentage reduction in the budgeted external audit hours is due to reliance on IAF work which typically ranges from 15% to 45%.

For example, Abdel-Khalik, Snowball and Wragge (1983) indicated that when external auditors relied on the work of IAF, 32.5% of the external audit hours are reduced when IAF reported to controller, and 42% are reduced when IAF reported to the audit committee. Likewise, Schneider (1985) and Maleta and Kida (1993) showed that the budgeted external audit hours decreased by 38% and 28% respectively as a result of reliance on the work of IAF. Finally, Felix et al. (2001) reported that 27% of the external audit work is decreased when the external auditors relied on the IAF’s work.

For the relationship between IAF and external audit, agency theory could interpret the employment of IAF on external auditing as a strategy by managers to reduce the monitoring cost of external audit but at the same time signal to owners that the coverage of the audit is not reduced (Adams, 1994). In addition, the decision to contribute to external auditing by internal auditors may be driven by self-interest motives. For example, managers may wish to draw internal auditors away from operational assignments if there is likelihood that evidence of managerial inefficiency and/or incomplete
activity will be detected. At the same time, the internal auditor may dislike the switch from assignment to assignment, and become dissatisfied with their subordinate role in the external auditing (Adams, 1994). Additionally, reliance on the work of IAF by the external auditor is one of the tools which help auditors to save time and effort and thus, assists in auditing financial statements in less time, which in turn affects the timing of issuance of the auditor’s report.

Therefore, based on the above discussions, we expect the audit report lag to be inversely related to the reliance on the work of IAF by the external auditor to perform the financial statement audit. From the above discussion, the first hypothesis is as follows:

\[ H_1: \text{There is a negative relationship between the external auditor’s reliance on the work already performed by IAF for the purpose of financial statement audit and audit report lag.} \]

Audit Committee and Audit Report Lag

Audit committee plays an important role in relation to monitoring financial reporting (POB 1993). Smith Report states that one of the responsibilities of AC is to "review the significant financial reporting issues and judgments made in connection with the preparation of the company's financial statement" (Smith Report, 2003, p.10). In USA, the Sarbanes Oxley Act (SOX 2002) determines the function of AC as: (1) to supervise the process of financial reporting of the firm, (2) to oversee the financial statement audit of the firm, (3) to ensure the effective internal control system of the firm, and (4) to oversee external auditor's work. Thus, audit committee is seen as a vital part of the overall corporate governance of the firm and the ultimate monitor of financial reporting (BRC 1999; Klein, 2002).

More importantly, Bedard and Gendron (2010) conclude that AC can enhance information quality directly by overseeing the financial reporting process and indirectly, through their supervision of internal control and external auditing. Moreover, it is argued that the issue of timeliness of financial reporting is important because it is associated with corporate transparency (Abdulla, 2007). However, there are few studies linked between the characteristics of AC and ARL.

Reinstein et al. (1984) mentioned that outside audit committee members could have the ability to be able to display and fulfill their fiduciary duties by upholding their dependence upon the audit committee pertaining to affairs such as the capability of the firm’s financial reporting, internal control structure and relationship with its external auditor. Similarly, the agency theory indicated that improving the independent director’s monitoring is expected to result in incentives for such directors to build and maintain reputation as decision control experts (Fama & Jensen, 1983). Accordingly, the independence of audit committee members is considered as an essential determinant of audit committee effectiveness (BRC, 1999; DeZoort, Hermanson, Archambeault & Read, 2002; Kohet et al., 2007; Pomeroy & Thornton, 2008).

Abdulla (2007) is one of the first researchers who examined the effect of the independency of audit committee on ARL for the non-financial companies listed in the main board of Bursa Malaysia for the financial year of 1998 and 2000. The results reported insignificant effect of audit committee independence on ARL. Furthermore, Afify (2009) reported a significant negative association between the existences of audit committee on ARL for the Egyptian listed companies for year 2007. Likewise, Mohamad-Nor et al. (2010) investigated the impact of audit AC's characteristics on ARL in Malaysia for the non-financial companies on the main and second boards of Bursa Malaysia in 2002. However, they found that the independence of audit committee had insignificant association with ARL. More recently, Hashim and Abdul Rahman (2011)
linked between the characteristics of audit committees and ARL among 288 listed companies at Bursa Malaysia for a three year period from 2007 to 2009. The findings showed that audit committee independence had a negative association with ARL in Malaysia.

In Jordan, according to the “Instructions of disclosure, Accounting Standards, and Auditing Standards”, No. 1, 1998 and corporate governance code of 2005, the board of directors of listed firms has to form the audit committee members. Yet, the instructions did not give an exact definition of audit committee independence but it only requires the members of audit committee to be non-executive. This is the major definition of the independent member of audit committee.

Furthermore, among its responsibilities, ACs in Jordan have to ensure that the external auditors are independent; to review auditor's plan; to review the procedures of internal control; to monitor the compliance of firms with laws and regulations and to prevent conflicts of interest of related parties (ROSC, 2005). Therefore, the second hypothesis is developed:

\[ H_2: \text{There is negative relationship between the audit committee independence and audit report lag.} \]

Further, Treadway Commission (1987) and Public Oversight Board (1993) and BRC (1999), and Beasley et al. (2009) consider the audit committee members' expertise in the areas such as accounting and auditing as one of the important indicators of audit committee effectiveness. Likewise, SOX (2002) indicated that audit committee effectiveness is expected to amplify as the proportion of experts in the audit committee increases.

Thereby, Miettinen (2008) signified that the expertise of the audit committee members improve the audit committee effectiveness in several respects. Firstly, experts are expected to provide greater oversight on the financial reporting quality than non-expert members. Secondly, experts are expected to comprehend the risks and benefits associated with audit quality better than non-expert knowledge colleagues. Thirdly, experts are expected to be better equipped to understand audit judgments and evaluate the substance of disagreements between management and the external auditor.

Furthermore, Qin (2007) argued that a financial expert in audit committee could guarantee adequate system of internal control and consequently, grant reliable and relevant financial reporting and high quality financial statements. Additionally, the audit committee with expert members especially in areas such as internal control, auditing, and accounting make judgments more similar to the auditors and understand the risks that the auditors face (DeZoort, 1997; DeZoort & Salterio, 2001).

In regard to the ARL, Hashim and Abdul Rahman (2011) reported negative association between the expertise of audit committee and ARL among listed companies in Malaysia.

The Jordanian code of corporate governance for the year 2005 requires all members of the audit committee to have adequate knowledge and expertise in financial and accounting matters. At least one of them should have previous working experience in the field of accounting or financial matters and have qualified scientific or professional certification in accounting or finance or related fields (Para 1.1). Therefore, the third hypothesis is:

\[ H_3: \text{There is negative relationship between the audit committee expertise and the audit report lag.} \]

In addition, audit committee’s meeting frequently represents one of the characteristics that reflect effectiveness as BRC (1999) suggests that audit committees that meet frequently are more likely to be active in achieving their duties and to be well-informed of auditing issues. Likewise, Menon and Williams (1994) consider audit committee's meeting frequently as
a signal of AC diligence. Hashim and Abdul Rahman (2011) suggested that audit committee meetings are one of the important indicators in ensuring audit committee members are fulfilling their responsibilities toward the company.

Indeed, Mohamad-Nor et al. (2010) found that audit committee meetings had a negative association with ARL in Malaysia. In relation to the audit committee meetings, the Jordanian code requires the audit committee to conduct at least four meetings during the year. Therefore, the fourth hypothesis is:

\[ H_4: \text{There is negative relationship between audit committee meetings and the audit report lag.} \]

**RESEARCH DESIGN AND MODEL SPECIFICATION**

Data for this study came from two sources of data; primary and secondary data. Primary data were obtained from the response of external auditors of listed companies in Amman Stock Exchange (ASE) for the year 2009. Secondary data was collected by analysing the audited financial statements of companies from external auditors that participated in the survey for the year 2009. This data was used to determine the audit report lag and the control variables that affect ARL.

Out of 272 companies listed in ASE, a sample of 256 companies is selected, as described in Table 1. And, 10 companies are excluded due to the absence of internal audit function while 2 companies disclosed that they fully outsource their internal audit function and 4 companies have not yet established audit committees at year end 2009. Therefore, only 87 questionnaires from the external auditors were used which represent approximately 34% of the sample.

<table>
<thead>
<tr>
<th>Table 1. Summary of Response Rate</th>
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<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Total number of the listed companies in ASE at year end 2009</td>
</tr>
<tr>
<td>Less:</td>
</tr>
<tr>
<td>Companies without IAF</td>
</tr>
<tr>
<td>Companies that fully outsourcing their IAF</td>
</tr>
<tr>
<td>Companies without AC at the year end 2009</td>
</tr>
<tr>
<td>Potential respondents for the study</td>
</tr>
<tr>
<td>Answered questionnaires from external auditors</td>
</tr>
<tr>
<td>Response rate (87/256)</td>
</tr>
</tbody>
</table>

The audit report lag model used in this study is an extension of the previous studies and it is adapted to accommodate the internal auditing and Jordanian environment. We include several control variables that have been previously evidenced to have an association with audit report lag. These variables are company size (SIZE) (e.g., Henderson & Kaplan, 2000; Ahmed & Kamarudin, 2003; Che-Ahmed & Abidin, 2008; El-Bannany, 2008; Lee et al., 2008; Afify, 2009; Mohamad-Nor et al., 2010; Hashim & Abdul Rahman, 2011), auditor type (AUDTYPE) (Chan, Ezzamel & Gwilliam, 1993; Crasewell, Francis and Taylor, 1995; Hossain & Taylor, 1998; Leventis et al., 2005), extraordinary items in financial reporting (EXT) (e.g., Newton and Ashton, 1989; Bamber et al., 1993; Jaggi & Tsui, 1999; Leventis et al., 2005; El-Bannany, 2008; Lee
et al., 2008), type of audit opinion (OPINION) (Ahmed & Kamarudin, 2003; Leventis et al., 2005; Abdullah, 2007; Che-Ahmed &Abidin, 2008; Lee et al., 2008; Mohamad-Nor et al., 2010), sign of income (LOSS) (e.g., Ashton et al., 1987; Carslaw & Kaplan, 1991; Bamber et al., 1993; Henderson & Kaplan, 2000; Ahmed & Kamarudin, 2003; Lee et al., 2008; Afify, 2009), industry classification (INDUS) (e.g., Carslaw & Kaplan, 1991; Ahmed & Kamarudin, 2003; Che-Ahmed &Abidin, 2008; Afify, 2009), and debt ratio (DEBT) (Carslaw & Kaplan, 1991; Ahmed & Kamarudin, 2003; Abdullah, 2007; Lee et al., 2008).

The functional equation of multiple regression model is utilized to determine the extent of the influence of each of the independent variables on the audit report (ARL) model:

\[ ARL = \beta_0 + \beta_1 \text{RELIANCE} + \beta_2 \text{ACINDEP} + \beta_3 \text{ACEXPER} + \beta_4 \text{ACMEET} + \epsilon + \text{CONTROL VARIABLES} \]

Where:

- ARL Audit Report Lag: a number of calendar days from fiscal year- end to the date of the auditor’s report

**Hypothesized Variables**

RELIANCE Continuous variable from 0% to 100%, with 0% indicating zero reliance on the work already performed by IAF, while 100% indicating that IAF performed all the required functions to complete the external audit (obtained from survey questionnaire)

ACINDEP Audit committee independence: 1 if all the members of audit committee are non-executive, 0 otherwise

ACEXPER Audit committee expertise: the proportion of financial expertise members to all members in audit committee

ACMEET Audit committee meetings: the number of audit committee meetings during the year 2009

**Control Variables**

- SIZE Firm size, natural logarithm of total assets of the company
- AUDTYPE Auditor type, a dummy variable of 1 is assigned to the national audit firm which is affiliated to one of the international big four audit firms and to national audit firms, 0 is assigned.
- EXT Extraordinary items in financial reporting, 1 is assigned if the company reports extraordinary items; 0 otherwise.
- OPINION Type of audit opinion, a dummy variable of 0 is assigned to the standard or unqualified audit opinion while the rest is assigned 1.
- LOSS Sign of income, the companies reporting a loss for year 2009 are assigned 1 and 0 otherwise.
- INDUS Client’s industry classification, a dummy variable of 1 is assigned where banks, insurance, financial services, and mutual fund’s sectors (financial companies) are concerned, while in the industrial and the service sectors (non-financial companies), 0 is assigned.
- DEBT Debt Ratio, total liabilities to total assets. Total liabilities refer to the sum of current liabilities and long-term liabilities.

**RESULTS**

**Descriptive Statistics and Correlation Analysis**

Table 2 reports the descriptive statistics of all variables investigated in this study. The mean of the number of calendar days from fiscal-year end to date of external auditor’s report (ARL) is 51.96 days (standard deviation of 23.44 days) with actual minimum of 13 days and maximum of 97 days. This means that the
Jordanian listed companies take approximately 52 days on average beyond their annual reports date before they are finally ready for the presentation of the audited financial reports to the shareholders. Actually, the instructions of JSC require all the listed companies in ASE to provide their annual reports within 90 days from the fiscal year end. This evidence suggests that the ARL may be an important concern for Jordanian listed companies in financial reporting policy. Comparing to other Arab countries, it is important to mention that the average audit lag of Jordanian companies is shorter than average lag of Egyptian companies (67 days) as reported by Afify (2009) and similar to audit lag in Bahrain (51 days) but longer than average of audit lag in United Arab Emirates (43 days) as reported by Khasharmeh and Aljifri (2010).

Table 2. Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std.Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Report Lag</td>
<td>13</td>
<td>97</td>
<td>51.9655</td>
<td>23.44883</td>
</tr>
<tr>
<td>Reliance Decision</td>
<td>10%</td>
<td>60%</td>
<td>38.6207</td>
<td>11.63119</td>
</tr>
<tr>
<td>AC Independence</td>
<td>0</td>
<td>1</td>
<td>9655</td>
<td>18352</td>
</tr>
<tr>
<td>AC Expertise</td>
<td>25%</td>
<td>100%</td>
<td>52.8161</td>
<td>17.80118</td>
</tr>
<tr>
<td>AC Meetings</td>
<td>2</td>
<td>19</td>
<td>5.4483</td>
<td>3.06047</td>
</tr>
<tr>
<td>Firm Size</td>
<td>490704JD</td>
<td>23099491000JD</td>
<td>548685971JD</td>
<td>JD2578906439</td>
</tr>
<tr>
<td>Auditor Type</td>
<td>0</td>
<td>1</td>
<td>.3333</td>
<td>.47414</td>
</tr>
<tr>
<td>Extraordinary Items</td>
<td>0</td>
<td>1</td>
<td>.1609</td>
<td>.36959</td>
</tr>
<tr>
<td>Auditor Opinion</td>
<td>0</td>
<td>1</td>
<td>.0920</td>
<td>.29064</td>
</tr>
<tr>
<td>Sign of Income</td>
<td>0</td>
<td>1</td>
<td>.3678</td>
<td>.48501</td>
</tr>
<tr>
<td>Debt Ratio</td>
<td>.22</td>
<td>95.75</td>
<td>42.2891</td>
<td>28.05635</td>
</tr>
<tr>
<td>Industry Type</td>
<td>0</td>
<td>1</td>
<td>.3448</td>
<td>.47807</td>
</tr>
</tbody>
</table>

For the external auditor's reliance on the work already performed by internal audit function (reliance decision), Table 2 showed that the external auditors in Jordan report that - on average - they rely 38.62 % on the work already perform by the audit client's internal audit functions. However, the percentage of reliance on the work perform by IAF in the current study is high compared with previous studies. For example, Felix et al., (2001) found that the external auditors rely on average 26.57 % on the work of IAF to complete financial statement audit in United States. Likewise, Mat Zain, Subermaniam and Stewart (2006) reported that on average 33.68 % of the work of financial statement audit completed by the internal auditors in Malaysia.

Suwaidan and Qasim (2010) indicated that the external auditors in Jordan rely on average 10.18 % on the work perform by internal auditors to complete financial statement audit. However, it is important to mention that while Suwaidan and Qasim, (2010) does not distinguish between reliance on the work already perform by IAF and or using internal auditors as assistants, the current study deals with external auditor's reliance on the work already perform by IAF.

In relation to the characteristics of audit committee, Table 2 displayed that the mean of the expertise members in Jordanian AC approximately 53 % with
standard deviation 18%, while the mean of the number of audit committee meetings held during 2009 was 6 times with minimum of one 2 meetings and maximum of 19 meetings. According to the requirements of Jordan Securities Commission (JSC) and the instructions of Amman Stock Exchange (ASE), ACs of listed firms in ASE have to meet at least 4 times during the year. However, some of the companies in the current study did not comply with this requirement.

For this study, 30 companies (34.5%) are classified as financial companies, while 57 companies (65.5%) are considered as non-financial companies. The average size of the participated companies in the study is 548,685,971 Jordanian Dinar (with standard deviation 2,578,906,439 JD), in general, the participated companies are large economically significant entities. In regard to auditors type, 58 (represent 66.7% of the sample) of the external auditors report that they do not affiliated to any of the big four. 29 (33.3%) audit firms of the external auditors on the other hand is affiliated to big four audit firms.

For the extraordinary items in financial reporting, only 14 companies (represent 16.1% of sample) report extraordinary items in their financial reports at the year end 2009, while 73 (83.9%) companies report that they do not have any type of extraordinary items at year end. 78 company (represent 89.6% of the sample) on the other hand have unqualified opinion and just 9 companies (10.3%) with other audit opinion.

Table 3. Pearson Correlation Matrix

<table>
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<tr>
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<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
<th>(11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliance Decision (1)</td>
<td>1.00</td>
<td>.195</td>
<td>.452**</td>
<td>.347**</td>
<td>.336**</td>
<td>.274*</td>
<td>-.110</td>
<td>-.100</td>
<td>-.362**</td>
<td>.178</td>
<td>.170</td>
</tr>
<tr>
<td>AC Independence (2)</td>
<td>1.00</td>
<td>.089</td>
<td>.090</td>
<td>.159</td>
<td>.134</td>
<td>-.260*</td>
<td>.060</td>
<td>-.117</td>
<td>.073</td>
<td>.173</td>
<td></td>
</tr>
<tr>
<td>AC Expertise (3)</td>
<td>1.00</td>
<td>-.002</td>
<td>.360**</td>
<td>.294**</td>
<td>-.055</td>
<td>-.032</td>
<td>-.346**</td>
<td>.294**</td>
<td>.128</td>
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<td></td>
</tr>
<tr>
<td>AC Meetings (4)</td>
<td>1.00</td>
<td>.251*</td>
<td>.152</td>
<td>-.157</td>
<td>-.073</td>
<td>-.206</td>
<td>.082</td>
<td>.251*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Size (5)</td>
<td>1.00</td>
<td>.653**</td>
<td>-.203</td>
<td>-.041</td>
<td>-.411**</td>
<td>.603**</td>
<td>.569**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auditor Type (6)</td>
<td>1.00</td>
<td>-.111</td>
<td>.028</td>
<td>-.287**</td>
<td>.297**</td>
<td>.513**</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Extraordinary Items (7)</td>
<td>1.00</td>
<td>.402**</td>
<td>.185</td>
<td>-.165</td>
<td>-.318**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Auditor Opinion (8)</td>
<td>1.00</td>
<td>.170</td>
<td>-.084</td>
<td>-.063</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Sign of Income (9)</td>
<td>1.00</td>
<td>-.133</td>
<td>-.202</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Debt Ratio (10)</td>
<td>1.00</td>
<td>.414**</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Industry Type (11)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*correlation is significant at the 0.05 level  ** Correlation is significant at the 0.01 level

Table 3 shows the Pearson Correlation among the independent variables in this study. The highest correlation is between the two control variables, firm size and auditor type at .653, which suggests that multicollinearity is not a problem for the regression results.

Multivariate Analysis

Table 4 shows the multiple regression results. As seen from Table 4, the model explains 53.2% of the variation in ARL. In general, the model is significant (F = 9.886) (Sig F = 0.000).
Table 4. OLS Regression Results: The Impact of Reliance Decision and AC on ARL

<table>
<thead>
<tr>
<th>Variable</th>
<th>Expected Sign</th>
<th>$\beta$</th>
<th>Std. Error</th>
<th>$T$ Value</th>
<th>$p$ value</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td>124.053</td>
<td>25.286</td>
<td>4.906</td>
<td>0.000</td>
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<td></td>
</tr>
<tr>
<td>Reliance Decision</td>
<td>-</td>
<td>-.485</td>
<td>.187</td>
<td>-5.222</td>
<td>0.000</td>
<td>0.630</td>
<td>1.588</td>
</tr>
<tr>
<td>AC Independence</td>
<td>-</td>
<td>-.074</td>
<td>10.140</td>
<td>-.927</td>
<td>0.357</td>
<td>0.690</td>
<td>1.157</td>
</tr>
<tr>
<td>AC Expertise</td>
<td>-</td>
<td>-.057</td>
<td>.120</td>
<td>-.627</td>
<td>0.533</td>
<td>0.661</td>
<td>1.514</td>
</tr>
<tr>
<td>AC Meetings</td>
<td>-</td>
<td>-.217</td>
<td>.640</td>
<td>-2.604</td>
<td>0.011</td>
<td>0.781</td>
<td>1.281</td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Size</td>
<td>-</td>
<td>-.101</td>
<td>3.448</td>
<td>-.770</td>
<td>0.444</td>
<td>0.318</td>
<td>3.146</td>
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<tr>
<td>Auditor Type</td>
<td>-</td>
<td>.157</td>
<td>5.128</td>
<td>1.516</td>
<td>0.134</td>
<td>0.506</td>
<td>1.975</td>
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<tr>
<td>Extraordinary Items</td>
<td>+</td>
<td>-.118</td>
<td>5.660</td>
<td>-1.319</td>
<td>0.191</td>
<td>0.684</td>
<td>1.462</td>
</tr>
<tr>
<td>Auditor Opinion</td>
<td>+</td>
<td>.202</td>
<td>6.746</td>
<td>2.416</td>
<td>0.018</td>
<td>0.778</td>
<td>1.285</td>
</tr>
<tr>
<td>Sign of Income</td>
<td>+</td>
<td>.149</td>
<td>4.248</td>
<td>1.679</td>
<td>0.094</td>
<td>0.705</td>
<td>1.418</td>
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<tr>
<td>Debt Ratio</td>
<td>+</td>
<td>.160</td>
<td>.082</td>
<td>1.628</td>
<td>0.108</td>
<td>0.564</td>
<td>1.772</td>
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<tr>
<td>Industry Type</td>
<td>-</td>
<td>-.201</td>
<td>4.832</td>
<td>-2.042</td>
<td>0.045</td>
<td>0.561</td>
<td>1.783</td>
</tr>
</tbody>
</table>

DV= ARL  \quad R^2 = .592  \quad \text{Adjusted } R^2 = .532  \quad \text{F-Ratio} = 9.886  \quad \text{Sig F} = .000

For the relationship between the external auditor’s reliance on the work already performed by internal auditor (RELIANCE) and ARL, the direction of this relationship is negative and significant at 1% ($\beta = -.485, t = -5.222, P = .000$). This result indicates the strength of the relationship between RELIANCE and ARL that means more reliance on the work performed by internal auditor by external auditor contributes to the reduction of ARL. This result supports the first hypotheses of the study. Nevertheless, this result also supports the arguments that the reliance on the work of IAF is considered as one of the important tools that assist auditor to save time and effort and therefore, reduce audit time (ISA 610, SAS 65).

At the same time, the result showed that reliance on IAF’s work by external auditor represents one of the important factors that can enhance audit efficiency by reducing ARL and providing the markets with audited information in a timely manner which reflects the relevancy and reliability of financial information. This result is in line with the findings of previous studies (e.g., Abdel-Khalik et al., 1983; Schneider, 1985; Maleta and Kida, 1993; Felix et al., 2001), who found that when the auditors use IAF work, the budgeted of external audit hours decrease. Thus, the auditors can issue their audit report earlier.

For the relationship between audit committee characteristics and ARL, the results report only one audit committee characteristic, namely audit committee meetings (ACMEET) has a significantly negative association ($\beta = -.217, t = -2.604, P = .011$) with ARL. The result supports the argument that more active audit committee contributes to the reduction of audit delay and therefore enhances the quality of financial reporting. This result is consistent with evidence provided by Mohamad-Nor et al. (2010). Thus, we accept hypotheses number 4.

On the other hand, the results show that there is no relationship between audit committee independence and
audit committee expertise and ARL. Therefore, we reject hypotheses 2 and 3 respectively. Although it has been argued that independent AC improve the monitoring function of AC and companies with high proportion of independent members in AC have higher financial reporting quality (Klein, 2002), the result fails to support this trend in regards to the relationship between independent AC and ARL.

Ismail, MohdIskandar and Mohid Rahmat (2008) found an insignificant effect of the independence of AC on quality of financial reporting in Malaysia. They argued that this is due to the company mere fulfillment of requirements, rather than the impact of requirements. Nevertheless, this result is in line with the findings of prior studies (e.g., Abdulla, 2007; Mohamad-Nor et al., 2010), who found insignificant impact of this variable on ARL in Malaysia. Likewise, the insignificant relationship between the proportion of expertise members in audit committee and ARL is consistent with the findings of Mohamad-Nor et al.’s (2010) study.

In regards to the effect of control variables on audit report lag, Table 4 exhibits that auditor opinion (OPINION), sign of income (LOSS), and industry classification (INDUS) have significant associations with ARL, while company size (SIZE), auditor type (AUDTYPE), debt ratio (DEBT), and extraordinary items in financial reporting (EXT) have no significant effect on ARL.

The firms that did not receive unqualified audit opinions took longer time to issue their audited financial statement compared to the others who received standardized audit opinion (unqualified). The positive relationship between auditor opinion (qualified opinion) and ARL is consistent with the results of most previous studies (Ahmed &Kamarudin, 2003; Leventis et al., 2005; Abdullah, 2007; Che-Ahmed &Abidin, 2008; Lee et al., 2008; Mohamad-Nor et al., 2010). Likewise, the results showed positive relationship between firms’ losses and ARL. This implies that the auditors took more time to issue their audited financial statements for firm’s losses. This result is in line with the findings of most prior studies (Henderson and Kaplan, 2000; Ahmed &Kamarudin, 2003; El-Banany, 2006; Lee et al., 2008; Afify, 2009).

Moreover, the results revealed that the financial firms in Jordan (banking, insurance) had shorter ARL compared to the non-financial firms. The result reflects that the financial sector such as banking and insurance in Jordan is more regulated than other sectors. Additionally, this result is in line with the results of most prior studies (e.g., Ahmed & Kamarudin, 2003; Che-Ahmed &Abidin, 2008; Afify, 2009) who found that financial firms have shorter ARL than firms in other industry classifications.

On the other hand, the size of companies in Jordan has no association with ARL. This result is contrary to the our expectations and the results of most previous studies (e.g., Henderson & Kaplan, 2000; Ahmed & Kamarudin, 2003; Che-Ahmed &Abidin, 2008; El-Banany, 2008; Lee et al., 2008; Afify, 2009; Mohamad-Nor et al., 2010; Hashim & Abdul Rahman, 2011), who found a negative relationship between firm's size and ARL. The result of our study is consistent with the findings of other studies (e.g., Khasharmeh & Aljifri, 2010) who reported insignificant effect of firm’s size on ARL. Similarly, the classification of auditor type to big or non-big four (AUDTYPE) has no significant impact on ARL in Jordan although most previous studies (e.g., Jaggi&Tsui, 1999; Leventis et al., 2005; Owusu-Ansah & Leventis, 2006; Lee et al., 2008; Khasharmeh & Aljifri, 2010; Mohamad-Nor et al., 2010) reported that firms audited by big audit firms (big four) had shorter ARL than others.

Nasser and Al-Khatib (2000) argued that firms
audited by big audit firms in Jordan are likely to publish high quality information. The result of our study did not support arguments related to the timeliness of financial reporting. However, the result is in line with the results of other studies that were conducted in the Arab world, for example, Afify (2009) and Khasharmeh and Aljifri (2010) found the auditor type did not affect ARL in Egypt and Emirates and Bahrain, respectively.

Additionally, the ARL did not differ for companies with extraordinary items in their financial statements and those without. This result is consistent with the findings of previous studies (e.g., Ahmed & Kamarudin, 2003 and Henderson and Kaplan (2000) that reported insignificant effect of the existence of extraordinary items in financial statement (EXTR) on ARL.

Finally, the results showed that the proportion of total liabilities to total assets has positive but insignificant association with ARL. This result is contrast to the results of previous studies (Ahmed & Kamarudin, 2003; Abdullah, 2007; Lee et al., 2008), who found that the firms with high proportion of debt have longer ARL.

**CONCLUSION**

The results of this study show that external auditor's reliance on the work already performed by internal audit function contributes to the reduction of audit report lag among listed companies in Jordan. Such result provides evidence about the importance of reliance on the work of internal audit function in completing the financial statement audit and in reducing audit lag among listed companies in Jordan. Thus, external auditors in Jordan have to emphasize on this issue by increasing the coordination level with internal auditors of the companies.

Moreover, the result of this study highlights the important role of internal audit function in financial statement audit. Hence, regulators of the companies in Jordan such as Amman Stock Exchange (ASE), Jordan Securities Commission (JSC) have to mandate all the listed companies to have an effective internal audit function, particularly because there is no clear law mandating the listed companies to have internal audit function. On the other hand, the result of the current study supports the arguments that an active audit committee (held more frequent meetings) helps to reach to solutions on financial issues and the auditors can issue timely report.

This study subjects to several limitations. Since this study relies on the response of external auditors and the annual reports of the participated companies, this leads to sample size problem. Although, 87 observations (34% useable response rate) is high compared with previous similar studies such as 12.6% by Felix et al. (2001) and 17.9% by MatZain et al. (2006) and although, 87 observations is enough for the statistical analysis such as multiple regression, a larger sample size would have been favorable for the generalization of the results of the study. Secondly, the present study’s inclusion of only the listed companies that fully in-house the function of internal auditing and thus, excluding those companies outsourcing or co-sourcing their IAF. Finally, because this study used primary and secondary data, it covered only one year because it is difficult to obtain information relating to previous years through questionnaire. For future research avenues, a possibility is to examine a direct relationship between internal audit function's characteristics and audit report lag. Future research can also investigate the impact of corporate governance mechanisms (board of directors and audit committee) on audit report lag for a longer period such as five or ten years.
REFERENCES


Ismail, H., Mohd. Iskandar, T. and MohdRahmat, M. 2008. Corporate reporting quality, audit committee and


دراسة تجريبية لمدى اعتماد مراجع الحسابات الخارجيين على وظيفة التدقيق الداخلي وتأثير هذا الاعتماد على تأخر إصدار تقرير مراجع الحسابات الخارجي

خالد سالمين الجعدي، غسان عبد الحكيم، نورعيزي، فوزى هايم، فضل

ملخص

تتناول هذه الدراسة اختبار مدى اعتماد مراجع الحسابات الخارجيين على وظيفة التدقيق الداخلي وتأثير هذا الاعتماد على تأخر إصدار تقرير مراجع الحسابات الخارجي. وكذلك تهدف هذه الدراسة أيضاً إلى اختبار علاقة خصائص لجنة المراجعة مع تأخر إصدار تقرير مراجع الحسابات الخارجي. تفترض هذه الدراسة بأن اعتماد مراجع الحسابات الخارجيين على عمل وظيفة المراجعة الداخلية سوف يقلل من تأخر إصدار تقرير مراجع الحسابات الخارجي، والذي يدور صنعي إلى تقليل تأثير التأخير في إصدار تقرير مراجع الحسابات الخارجي. وتفترض هذه الدراسة أيضاً بأنه كسباً لجنة المراجعة، تقلل التأخير في إصدار تقرير مراجع الحسابات الخارجي، مما يعود على بيانات هذه الدراسة من قبل 87 شركة مسجلة في بورصة عمان من خلال الدراسة اليدوية لتقاريرها المالية. وكذلك بيانات من 87 مجيب على الاستبيانات الموزعة على الشركات للاجح في بورصة عمان. من خلال استخدام تحليلات الربيعات الصغرى السائدة، أوصت نتائج هذه الدراسة بأنه، كما زادت نسبة اعتماد مراجع الحسابات الخارجي على وظيفة المراجعة الداخلية، مما قد يقلل من تأخر إصدار تقرير مراجع الحسابات الخارجي. ونتيجة لنتائج هذه الدراسة، تؤثر على كفاءة لجنة المراجعة وتقلل ذلك من اعتماد مراجع الحسابات الخارجي، مما قد يؤدي إلى تقييمات مفيدة لصانعي السياسات المحاسبية المتعلقة بمراجعة الحسابات. ويقوم مراجعي الحسابات الخارجي، والشركات الأردنية، بدورهم، في وظيفة المراجعة الداخلية. تؤثر وظيفة المراجعة الداخلية، تتأخر إصدار تقرير مراجع الحسابات الخارجي، ودورهم. وظيفة المراجعة الداخلية، تتأخر إصدار تقرير مراجع الحسابات الخارجي، ودورهم.

الكلمات المفتاحية: تأثير اعتماد مراجع الحسابات الخارجيين على وظيفة المراجعة الداخلية، وظيفة المراجعة الداخلية، تأخر إصدار تقرير مراجع الحسابات الخارجي، ودورهم.

1.2 اليمن حضورم، جامعة حضورم، اليمن.
2.3 كلمية الأعمال، جامعة أثار، سيدناب، اليمن.