Role of internal audit in performance of Libyan financial organizations

Subhi Ahmad M Alaswad, Dr. Mile Stanišić

Abstract
The study aims to investigate the influence of Internal Audit on performance of financial organizations in Libya. Data is collected from 26 financial companies listed in Libya Stock Market. The 4 internal audit characteristics namely, the audit committee size, the audit committee independence, the auditor’s qualification and the auditor’s experience are taken as independent variables whereas Return of Assets (ROA) is used as dependent variable to measure the performance of the variable. The data is retrieved from the financial reports of organization for the three years period 2013-215. Correlation and regression tests are performance using SPSS software. The result reveals that the relation between internal audit committee size and performance is statistically insignificant whereas other variables are significant with performance of these organizations. This study helps both academicians and practitioners for policy designs. The empirical results of the study lead to recommendation to tighten the weak areas identified in this study.

Keywords: Internal audit, financial organization, performance, Return on Assets

Introduction
The role of the internal audit function has evolved in reaction to shifts in international corporate practices. Consultation to management and assisting boards of directors to mitigate risk has been emerged as opportunities for Internal Auditors (Mihret et al., 2010; Lenz et al., 2015) [11, 19]. Internal auditing improves organization’s operations as it is an independent activity helping a firm achieve its goals by using a well-organized approach to manage their risk, control and governance efficient and effective (Stewart & Subramaniam, 2010) [29] as the ultimate goal of internal audit is achieve better returns for the organization in shape of improved firm performance (Saud, 2012) [28].

Many of the internal auditors claim that there is a correlation between internal audit function and firm’s performance. Identification of ways to improve firm’s efficacy and help in reducing overhead can be possible by effective internal audit. The effective internal audit can also safeguard the firm by potential losses which can impact the performance of the firm. Effective and efficient Internal audit function helps to achieve increased level of shareholders value (Awdat, 2015) [7]. An effective internal audit function has relationship with improve financial performance of the firm (Feizizadeh, 2012) [10].

The operations of an organization are developed by efficient internal auditing as financial reports of a firm reflect the attributes of internal audit committee. Furthermore, internal audit plays a vital role in the good governance of an organization. The internal audit function includes monitoring activities taken by the board and audit committee to ensure the credibility of financial reporting (Al Matarneh, 2011) [3]. Authentic and unbiased service provision is the performed by the internal audit for the management, board of directors and audit committee as the stakeholders are concerned about reliable financial reporting and good governance practices of the corporate (Ljubisavljević & Jovanovi, 2011) [20]. Multiple studies are indifferent about the effectiveness of the internal audit (Al-Twaijry et al., 2003; Mihret et al., 2010; Mihret and Yismaw, 2007) [5, 11, 12]. It probably is the case in underdeveloped economies such as Libya, where firms may not be aware of internal audit’s concepts as Western societies are (Al-Twaijry et al., 2003; Mihret, 2009) [5, 21]. In economies like Libya, studying internal audit’s role in firm performance could provide concrete understanding of internal audit function hence providing support to the countries.
economy, as developing nations have a strong need to perform similar studies to assist in increased general perspective about the significance of internal audit. The need financial compliance service has created the demand for internal audit function in developed economies for the purpose of providing a number of value added services. It is suggested that there is the need to explore the role of internal audit in Libya, most previous studies in Libya have focused on external audit. Hence, the goal of this study is to investigate the role of internal audit function on performance of Libyan financial organizations.

Literature Review
There is a large contribution of internal audit in achieving business objective (Ljubisavljević & Jovanovi, 2011) [20]. Additionally reinforcement management and audit committee is the responsibility of internal audit function (Hutchinson & Zain, 2009) [16]. Internal audit ensures the reliability and authenticity of financial and operational information that coming from different sub units, on which suitable decision making can be done at all levels. Internal audit has to be independent for being successful that is the management should not be influenced by any action of audit function. The internal audit report serves as a communication tool between the auditors and management as well as a vital parameter for a successful governance of the organization (Ljubisavljević & Jovanovi, 2011) [20].

Role of Internal Audit
Internal audit issues have been addressed by several studies focusing on developing countries such as the U.S. and the U.K. but there has been a little evidence in developing economies. Hutchinson and Zain’s (2009) [16] investigated the relationship between internal audit and organizational performance in Malaysia and recommended to consider several models that probably affect the quality of internal audit and increased firm performance. Furthermore Al-Matari et al. (2012) examined the role of board characteristics in firm performance in Kuwait and suggested to examine the relationship between internal audit and organizational performance whether it is direct relation there is a moderating effect of some other variable too. Ljubisavljević and Jovanovi (2011) [20] investigated the association between the internal audit and firm performance in Serbia. The findings suggested no association between the internal audit and firm performance.

Firm Performance
Ondieki (2013) [24] stated that there are three accounting-based performance indicators: return on assets, the return equity and return on investment as they are frequently used to evaluate the of firm performance, including financial firms. Financial analysis use return on assets and return on equity to measure firm performance and predict future trends in firms value as well as use as input in statistical models to predict firm future position i.e. failure or success etc (Khrawish, 2011) [18]. These indicators are also used for several other purposes such as measuring profitability. As firm size is an important moderator in governance and control researches and combines in the variable of ROA as the denominator is the total assets hence it is important to take the measure of firm performance by ROA.

Internal Audit Characteristics
It is important to note that audit committee size, audit committee independence, auditor qualification and auditors experience impact on firm size. As they are indicators of good governance and control they ensure the management accountability and responsibility towards increasing the shareholders wealth and make the managers accountable to avoid frauds and conflict of interest (Yusoff, 2010) [31]. Therefore, size, independence, qualification and experience of the audit committee are the blend of good audit committee structure of firm. Previous studies could not found a consistent role of internal audit in firm performance as it is mentioned in the next sub-section.

Size of the Internal Audit Committee
In the present study audit committee size considered an important factor of internal audit characteristics. It is simply measured by the total number of members associated with the audit committee of the organization (Nuryanah & Islam, 2011; Obiyo & Lenee, 2011) [22, 23]. Audit committees bridges the communication gap between different stakeholder mainly the internal auditors, external auditors and board of directors especially during activities such as auditors nomination, revising the scope of internal and external audit and reporting the financial position of the firm (Chanawongs, Poonpol, & Poompool, 2010) [9]. Audit committee helps firms to establish good governance and control which results in profitability hence benefiting the firm and the stakeholders (Saibaba & Ansari, 2011) [27]. Although being important component of internal audit, very few researches has used this variable as an internal audit characteristic.

Audit Committee Independence
Audit committee independence is also an important characteristic of internal audit. The audit committee should have at least three directors. The ratio of non-executive directors should be 2/3 of total members of the committee (Abdullah et al., 2008; Kang & Kim, 2011) [1, 17]. The non-executive directors play an important role in ensuring the good audit practices to effect firm performance (Swamy, 2011) [30].

Experience of the Internal Audit
The other main important characteristic of internal audit is the experience of internal auditors. An auditor with the experience of several years can make the better decisions as compared to the non-experienced members. There has been little research which investigates the association between the experience of internal auditor and organization performance both in developed and developing economies. Especially there is a significant gap of research in emerging countries. Hutchinson and Zain (2009) [16] examined the relationship of internal audit and organizational performance in Malaysia. The investigation found a significant relationship between experience of internal auditor and organizational performance. Moreover, Al-Matari et al. (2012) suggested reinvestigating the relationship between the internal auditor’s experience and organization performance.

Qualification of the Internal Auditor
The qualification of internal auditor is an important characteristic of audit committee and plays a vital role in enhancing the quality of internal audit. A highly qualified
internal auditor easily deals with internal audit challenges. Among the few good researcher, Hutchinson and Zain (2009) [16] found the association between auditor’s qualification and organization’s performance. The results suggested a significant role of qualification of internal auditor and firm performance. The current research tries to investigate the role of qualification of internal auditor and firm performance. Therefore, the following hypotheses are proposed to be tested:

**Methodology**

There are 26 financial organization listed in Libya Stock Market (LSM) as of 2015. We have retrieved the data from all these organizations’ financial reports for testing hypothesis. The data has been retrieved for last three years from the year 2013 to 2015. The total observations for this study are 78. We measured the dependent variables as Return on Assets (ROA). The variable is measured based on prior studies (e.g. Andres et al., 2005; Ghosh, 2006) [6, 13] to find the impact of firm size on firm performance and is used as one of the control variables in empirical research. According to Patro et al., (2003) [20] impact of firm size is evident in prior researches which have highlighted that companies which are larger in size in comparing to small size companies are less effective due to more bureaucracy, ambiguity and higher agency issues. The four variables of internal audit characteristics namely the audit committee size, the audit committee independence, the auditor’s qualification and the auditor’s experience, and two control variables firm size and leverage are studied. The relation between independent variables as well as control variables with dependent variables is given for a model for the study.

The model is:

$$ROA = \alpha_0 + \beta_1 ACS + \beta_2 ACI + \beta_3 AQ + \beta_4 AE + \beta_5 FS + \beta_6 LEV + \epsilon$$

**Hypothesis**

We have teste the following hypothesis to measure the impact of internal audit on performance of Libyan financial organizations

H1: There is a relationship between audit committee size and ROA.

H2: There is a positive relationship between the independence of internal audit and firm performance.

H3: There is a positive relationship between the experience of internal audit and firm performance.

H4: There is a positive relationship between qualification of internal auditor and firm performance.

**Data Analysis and Results**

In order to examine the effect of internal audit committee on performance of financial Libyan organizations statistical tests are performed. The data is analyzing using SPSS version 21. First we generated the table of descriptive statistics (see Table 1) of variable chosen for the study including 4 independent variables, 2 control variables and 1 dependent variable. After examining the descriptive statistics, we have performed inferential statistics tests namely correlation and regression tests. The results of all tests are mentioned in given tables and discussed in detail separately.

**Descriptive Statistics**

We have generated the descriptive statistics (mean, Standard deviation, Minimum and Maximum for our data. The results point out that the average audit committee size between 3 and 4 persons with minimum of 2 auditors whereas in some organization size may reach up to 8 members. Regarding audit committee independence, we can see that on average 88% the committee is independence with the variation of 25%. As far as Auditor qualification concern, average qualification is graduation. The experience of auditor is on 11.5 years with the variation of 2.5 years.

**Table 1: Descriptive Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unit</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Committee Size</td>
<td>Number</td>
<td>3.43</td>
<td>0.83</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Audit Committee Independence</td>
<td>Ratio</td>
<td>0.88</td>
<td>0.25</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Auditor Qualification</td>
<td>Number</td>
<td>3.5</td>
<td>.20</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Auditor Experience</td>
<td>Number</td>
<td>8.5</td>
<td>.75</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Firm Size</td>
<td>Number</td>
<td>11.5</td>
<td>2.5</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Leverage</td>
<td>Ratio</td>
<td>0.35</td>
<td>0.23</td>
<td>0.04</td>
<td>1.54</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>Ratio</td>
<td>0.08</td>
<td>0.13</td>
<td>-</td>
<td>0.23</td>
</tr>
</tbody>
</table>

**Correlation Analysis**

We can find the correlation summary in Table (2). The results indicate the all variables used in the study have the correlation value below 0.80 which is in accordance with Gujarati & Porter (2009) [14] statement about correlation matrix. Theses authors have argued that correlation matrix should be below 0.80 or else it raises the issue of multicollinearity. Another reason to test the correlation is to find the relation. To apply the regression test, there is an assumption suggested by Gujarati & Porter (2009) [14] about relation between dependent and independent variables. The table clearly shows that there is a significant relation between (7) ROA with all other variables between dependent and independent variables

**Table 2: Correlation Matrix**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.ACS</td>
<td></td>
<td>.129*</td>
<td>.145*</td>
<td></td>
<td>.134</td>
<td>.198</td>
<td>.194</td>
</tr>
<tr>
<td>2.AC1</td>
<td>.145*</td>
<td></td>
<td>.121*</td>
<td>.134</td>
<td>.94</td>
<td>.014</td>
<td>.112</td>
</tr>
<tr>
<td>3.AE</td>
<td>.134</td>
<td>.121*</td>
<td></td>
<td>.198</td>
<td>.014</td>
<td>.112</td>
<td>.101</td>
</tr>
<tr>
<td>4.AQ</td>
<td>.129*</td>
<td>.121*</td>
<td>.94</td>
<td></td>
<td>.101</td>
<td>.013</td>
<td>.123*</td>
</tr>
<tr>
<td>5.FS</td>
<td>.198</td>
<td>.014</td>
<td>.112</td>
<td>.101</td>
<td></td>
<td>.013</td>
<td>.123*</td>
</tr>
<tr>
<td>6.LEV</td>
<td>.194</td>
<td>.112</td>
<td>.101</td>
<td>.013</td>
<td>.123*</td>
<td></td>
<td>-.067</td>
</tr>
<tr>
<td>7.ROA</td>
<td>.194</td>
<td>.112</td>
<td>.101</td>
<td>.013</td>
<td>.123*</td>
<td>-.067</td>
<td></td>
</tr>
</tbody>
</table>

**Multiple Linear Regression Analysis**

Hair (2010) suggests Regression Analysis as one the most common statistical method to test the model for so many science disciplines applications. A regression method allows the researchers to predict the value of one variable from one or more other variables (DeCoster 2004) [8]. The author states that a regression equation predicts the dependent variable’s value are by independent variable when we perform the
regression analysis. For this research we have applied the liner regression analysis to determine the relation of dependent variable with independent variable. In order to predict the value of single continuous dependent variable by a single continuous independent variable, the linear regression must be employed (Pallant, 2011) [25]. The below table (3) presents the result of linear regression model. The value of R² indicates that this model explains 23.4% variability in ROI which is used as performance variable for this study. However, we may better see the model fit with the help of adjusted R2 because this study uses multiple regression model and whenever, multiple regression is employed, the model fit should be tested through adjusted R2. The variability 21.1 % provides the explanatory power of this model however, 79.9% still remain unexplained and it is considered as one of the limitation for this study.

<table>
<thead>
<tr>
<th>Table 3: Multiple Regression Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Audit Committee Size (ACS)</td>
</tr>
<tr>
<td>Audit Committee Independence (ACI)</td>
</tr>
<tr>
<td>Auditor Experience (AE)</td>
</tr>
<tr>
<td>Auditor Qualification (AQ)</td>
</tr>
<tr>
<td>Firm Size (FS)</td>
</tr>
<tr>
<td>Leverage (LEV)</td>
</tr>
<tr>
<td>F Value</td>
</tr>
<tr>
<td>Adjusted R²</td>
</tr>
<tr>
<td>R²</td>
</tr>
</tbody>
</table>

F-test helps to explain the significance of the model. Table shows that 5.14 p<0.01 which is significant value for testing this model. It is surprising and interesting fact that Audit committee size is insignificant to predict the performance of financial organizations of Libya. Hence we find no impact of audit committee size on performance and we do not reject our null hypothesis. We find the results in consistent with a prior Chinese research of Wei (2007), Mohd (2011) and Nuryanah & Islam (2011) [22] from developing countries. Comparing to other countries, Libya might not consider Audit Committee as important as other countries do. It could be one possible cause for insignificant result in this study. The result predicts that Libya in comparison to developed countries do not value the role of some specific board practices. However, our other variables are significant therefore we may predict that audit committee independence, auditor experience and auditor qualification have the positive impact on firm performance. Moreover, with the result of F-significance, we may also predict the whole model and find the joint-effect of all variables. Hence our model explains as:

\[
ROA = \alpha (0.134) + \beta_1 (-0.005) + \beta_2 (0.032) + \beta_3 (0.05) \beta_4 (0.019) + \beta_5 (0.322) + \beta_6 (-0.423) + \epsilon
\]

The above model helps to predict the performance of Libyan organizations. With this model we may find the effects of internal audit committee characteristics on performance (ROA).

Conclusion

Libya is the developing country where the role of audit committee is of great importance. In order to examine the effect of Audit committee, the present study selected the audit committee variables namely Audit Committee size, Audit Committee dependence, Auditor qualification and auditor experience as independent variables, whereas Return on Asset was chosen as dependent variable to operationalize the performance of organization. Data is retrieved from the financial organization listed in Libya Stock Market. The data is taken from the financial reports of these organizations of last three years (2012-2015). This study helps the academic and practitioner understanding the characteristics of Internal Audit and they may draft the policies accordingly.

Reinforcement stills lacks in Libya inspite of realizing the role of internal audit committee.

Limitations and Suggestions for Future Research

Though the present study has empirically examined the role of internal audit committee for Libyan financial firm performance, the avenue for future study is always possible for other researchers. The present study provides the few suggestions to conduct the similar study. Researchers may examine the relation of board directors, executive committee and other committee with performance of organization in Libyan context. We have considered ROA as a proxy for performance. However, there are many other proxies which may be chosen for measuring organizational performance. Moreover, ROA is a financial performance indicator, there are also other indicators such human performance, operation performance may be chosen to depict better picture of the firm performance.

Another suggestion is identifying other sectors of Libya. This study has limited only with financial sectors, Libya is a developing country and mainly depends on oil and gas sector. Researchers may select other sectors for conducting the similar studies so that generalizability at nation level is made.

References


