The Impact of Board Activity on The Audit Committee’s Effectiveness Score: Empirical Evidence from Saudi Arabia*

Khaled Salmen ALJAAIDI¹, Omer Ali BAGAIS², Anass Hamad Elneel ADOW³

Received: September 30, 2020  Revised: November 22, 2020  Accepted: December 05, 2020

Abstract

The aim of this study is to examine the impact of board of directors’ activity on the audit committee’s effectiveness score among manufactured listed companies on Saudi Stock Exchange (Tadawul) for the period 2015-2017. The final sample of this study consists of 195 firm-year observations that represent manufactured companies listed on Saudi Stock Exchange (Tadawul) for the years 2015-2017. The data of this study in terms of board of directors’ meetings, audit committee size and meetings, firm leverage, firm performance, and firm age were hand-collected from the annual reports of the considered companies. The Pooled OLS regression’s result indicate that audit committee’s effectiveness score is influenced by the board of directors’ activity. This result gives support to the agency theory prediction. This result is also consistent with the complementary function of corporate governance mechanisms in which board of directors’ activity complements the function of audit committee’s effectiveness score. The result of this study should be useful for manufacturing companies, Saudi Stock Exchange, auditors, and regulators which relates to the association between board of directors’ activity and audit committee’s effectiveness score. This study provides a new empirical evidence on the impact of board activity on the audit committee’s effectiveness score in an interesting context which is Saudi Arabia.

Keywords: Board Activity, Audit Committee’s Effectiveness Score, Saudi Arabia

JEL Classification Code: M40, M42

1. Background of the Study

Audit committees play a part in the monitoring of organizations with the intent of ensuring appropriate financial reporting and improving corporate responsibility (Astuti et al., 2020; Al-Absy et al., 2020; Januarti et al., 2020; Klein 2002; Carcello & Neal, 2003; Habtoor, Hassan, & Aljaaidi, 2019; Hassan, Aljaaidi, Abidin, & Nasser, 2018). Auditing committees’ supervisory responsibility consists of overlooking auditing, financial reporting and corporate governance functions (Wolnizer, 1995). According to Kalbers and Fogarty (1995), the size of an audit committee determines its effectiveness. Therefore, Pincus et al. (1989) asserted that the expensive nature of an auditing committee and a monitoring mechanism implies that a larger committee leads to increased investments on this mechanism. Additionally, various studies conclude that more activities are associated with the ability of auditing committees to effectively play their role in organizations (Archambeault & DeZoort, 2001).

DeZoort et al. (2002) asserted that the frequency of the meetings by auditing committees are primarily executed as a proxy for the proficiency of an auditing committee and the observation of various financial reporting gains for organizations that have well-established auditing committees. An active audit committee paints a positive picture of the quality of an organization’s accounting and financial information, especially in cases where the costs of such organizations are substantial. Additionally,
it is often asserted that an effective auditing committee makes sure that the financial reports of an organization are accurate. It also puts in place functional risk controls and effective internal controls. An active audit committee can also improve transparency in security markets to enhance the protection of the interests of shareholders and improving the company’s book value (Yin et al., 2012; McMullen & Raghunandam, 1996; DeZoort et al., 2002; Bagais & Aljaaidi, 2020). The frequency of audit committee meetings is primarily understood to be a more appropriate measure of the observation activities conducted in an organization (Greco, 2011; Collier & Gregory, 1999; Vafeas, 1999; Laksmana, 2008; Sharma et al., 2009). Frequent meetings can also be an indication that the audit committee members with keenness of benefiting stakeholders’ meetings have a chance of performing their roles diligently (Byrne, 1996; Lipton & Lorsch, 1992). The most active members of the committee, measured by the number of meetings attended, can improve the diligence of the audit committee by making sure that there is frequent exchange with other members (Sharma et al., 2009; Al-Najjar, 2011).

The extant research on the context of audit committee has linked board activity with audit committee diligence resulted in contradictory and inconclusive findings. For instance, Maraghni and Nekhili (2014), Thiruvadi (2012), and Raghunand and Rama (2007) reported a positive association relationship between board meetings and audit committee frequency. On the other hand, Braswell et al. (2012) reported a negative association between board meetings and audit committee meeting frequency. Given the contradictory and inconclusive results reported by the previous studies. According to Cai et al. (2015), the most favorable corporate governance mechanism combinations are more effective in reducing costs in an organization and protecting stakeholder interests because corporate governance effectiveness achieved through various channels and specific mechanism’s effectiveness is reliant on the effectiveness of other mechanisms. Additionally, Ward et al. (2009) asserted that it is more appropriate to consider corporate mechanisms as a set of mechanisms for protecting the interests of shareholders and not being isolated from one another because they work in a substitutable or complimentary manner. They also argue that the reason for the mixed results from previous studies is evaluation of the corporate mechanisms indecently with the focus on how each of them can solve corporate problems. Therefore, previous studies ignored the notion that the effectiveness of each of the mechanisms is reliant on the other mechanisms.

Agrawal and Knoeber (1996) also argue that the effectiveness of a single mechanism can be misleading because the impact of various mechanisms on the performance of an organization might disappear in the combined model. Based on a similar line of thought, it gives a stronger effect of measurement during the investigation of the overall corporate governance mechanisms as compared to when examining the mechanisms individually (O’Sullivan et al., 2008). Therefore, this study examines the impact of board of directors’ activity on the audit committee’ effectiveness score which is a composite measure of audit committee size and meetings. To the best of the researcher’s knowledge, an empirical study examines the effect of board of directors’ activity on the effectiveness of audit committee does not exist. Thus, this study extends the previous line of research on audit committee context (Menon & Williams, 1994; Méndez & García., 2007; Raghunandand & Rama, 2007; Sharma et al., 2009; Greco, 2011; Al-Najjar, 2011; Thiruvadi, 2012; Yin et al., 2012; Maraghni & Nekhili, 2014; Braswell et al., 2012) in a new country setting which is Saudi Arabia.

The remainder of the paper is organized as follows. The next section highlights the sample, data and model of the study. Third section illustrates the results, tests and analysis. The final section concludes the study.

2. Sample, Data and Model

The final sample of this study consists of 195 firm-year observations that represent manufactured companies listed on Saudi Stock Exchange (Tadawul) for the years 2015-2017. The data of this study in terms of board of directors’ meetings, audit committee size and meetings, firm leverage, firm performance, and firm age were hand-collected from the annual reports of the considered companies as shown in the following Table 1:

We control for several variables that were empirically reported by the previous studies to influence the audit committee diligence. These variables are leverage (Yin et al., 2012; Méndez & García, 2007), profitability (Raghunandand & Rama, 2007; Sharma et al., 2009; Yin et al., 2012; Qasim, 2020), and age (Geroski, 1995; Gregory et al., 2005; Stinchcombe, 1965; Evans, 1987a, 1987b).

<table>
<thead>
<tr>
<th>Table 1: Sample Selection</th>
<th>Total Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total observations</td>
<td>201</td>
</tr>
<tr>
<td>Observations discarded (outliers, missing and incomplete data)</td>
<td>(6)</td>
</tr>
<tr>
<td>Final sample</td>
<td>195</td>
</tr>
</tbody>
</table>
The following study model was developed to test the impact of board of directors’ activity on the effectiveness of audit committee using a Pooled Ordinary least square model OLS:

\[
ACSCORE = \beta_0 + \beta_1 \text{BDACTIV} + \beta_2 \text{LEV} + \beta_3 \text{ROE} + \beta_4 \text{AGE} + e
\] (1)

Where:
\[
ACSCORE = \text{A composite score of audit committee size and meetings}
\]
\[
\text{BDACTIV} = \text{Number of meetings held during the year}
\]
\[
\text{LEV} = \text{Total book value of debt to total assets ratio}
\]
\[
\text{ROE} = \text{Return on equity}
\]
\[
\text{AGE} = \text{Number of years since the company is established}
\]
\[
e = \text{Error term.}
\]

3. Results

3.1. Statistics and Correlation

The descriptive statistics are presented in Table 2, showing the mean, standard deviation, minimum and maximum of each variable in the sample data set. Table 2 displays that there is a significant range of variation among the considered sample of this study. It is shown that the range of ACSCORE is from 2.00 to 8.00 with an average of 4.518 and a standard deviation of .956. The ranges of BDACTIV is from 2.00 to 22.00 with an average 5.385 and a standard deviation 2.644. The LEV ranges from 0.020 to 8.90 and mean of 0.445 and a standard deviation of 0.651. The ROE ranges from 0.00 to 1 with an average of 0.12 and a standard deviation of .115. As for the AGE, the mean is 28 years and it ranges from 2 to 62 and a standard deviation of 14.138.

Table 3 confirms that since the highest correlation matrixes among the variables reach up to 0.698 which is considered less than 0.90, indicating that multicollinearity problem does not exist.

Table 4 shows the variance inflation factor (VIF), and the tolerance results. The highest VIF score obtained is 1.169 and the highest Tolerance score obtained is 0.977. This confirms the non-existence of multicollinearity problem in which the VIF is lower than the threshold of 10 and Tolerance is lower than the threshold of 1.

3.2. Regression Results

The following Tables 5, 6 and 7 depict the estimated regression coefficients for the regression model. Table 5 shows that the adjusted R2 is 0.240, indicating that the model has explained 24% of the variance in the audit committee effectiveness score. This indicates a good fit of the audit committee effectiveness score model.

Table 6 illustrates that the F-value for the model is statistically significant at the 1% level, indicating that the overall model can be interpreted.

The regression results in Table 7 show that the coefficient of BDACTIV has a significantly positive association with audit committee’s effectiveness score (p > 0.01). This result is consistent with the prediction of agency theory and the findings of the previous studies of Maraghni and Nekhili (2014), Thiruvadi (2012), and Raghunandan and Rama (2007). In addition, this result confirms the complementary function of both activity and audit committee effectiveness score as internal corporate governance mechanisms.
4. Conclusions

This study investigates the impact of board activity on audit committee’s effectiveness score among 195 manufacturing companies listed on the Saudi Stock Exchange (Tadawul) for the period 2015-2017. In consistency with the agency theory framework, this study documents that board activity is positively related to the audit committee’s effectiveness score. This result is in line with the findings of the extant research such as Maraghni and Nekhili (2014), Thiruvadi (2012), and Raghunandan and Rama (2007). Further, this study reports that board activity complements the function of audit committee’s effectiveness score as both are internal corporate governance mechanisms.

This study contributes to the current body of knowledge in the context of corporate governance. Specifically, this study provides a new empirical evidence on the impact of board activity on the audit committee’s effectiveness score in an interesting context which is Saudi Arabia. Further, the results of this study are subject to some limitations. Firstly, the study model includes the board activity, overlooking the other board of directors’ characteristics.

Table 4: Multicollinearity statistics of assessing VIF and Tolerance values for the study Model

<table>
<thead>
<tr>
<th>Variables</th>
<th>Collinearity statistics</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Variance Inflation Factor (VIF)</td>
<td></td>
<td>Tolerance Value (1/VIF)</td>
</tr>
<tr>
<td>BDACTIV</td>
<td>1.073</td>
<td>.932</td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>1.009</td>
<td>.991</td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>1.082</td>
<td>.924</td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>1.048</td>
<td>.954</td>
<td></td>
</tr>
<tr>
<td>Mean VIF and Tolerance</td>
<td>1.053</td>
<td>.950</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.510a</td>
<td>.260</td>
<td>.240</td>
<td>.82111</td>
</tr>
</tbody>
</table>

Table 6: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>34.883</td>
<td>4</td>
<td>8.721</td>
<td>12.935</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>99.110</td>
<td>147</td>
<td>.674</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>133.993</td>
<td>151</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7: Audit committee’s effectiveness score’s regression model

| Variables | Hypothesized Variable | Expected Sign | Coef. | t     | \( P > |t| \) |
|-----------|-----------------------|---------------|-------|-------|---------|
| BDACIV    | +                     | .381          | 5.187 | .000  |         |
| LEV       | -.132                 | -1.847        |       | .067  |         |
| ROE       | -.203                 | -2.753        |       | .007  |         |
| AGE       | .276                  | 3.795         |       | .000  |         |

Bold = significance at 1%, 5% and 10% (two-tailed significance)
Future line of research may consider extending this model by including other board of directors’ characteristics such as board size, independence and financial expertise. Secondly, the sample of this study comprises of manufacturing companies which are listed. Future line of research may cover other sectors. Thirdly, the audit committee’s effectiveness score was calculated using two factors, namely; audit committee size and meetings. Future studies may include other characteristics of audit committee into the score such as financial expertise, independence, and qualifications. Finally, this study is conducted in the context of Saudi Arabia. Future studies may replicate this model or extend it using a different country context such as other GCC or Arab countries.

References


