Audit Committee Characteristics, Family Ownership, and Firm Performance: Evidence from Jordan

Ghaydaa Issa, Yousef Abu Siam

Accounting Department, Faculty of Business, Applied Science Private University, Amman, Jordan, Email: yousefabusiam@asu.edu.jo

This study investigates impacts of the association between characteristics of an audit committee and firm performance. The manufacturing firms listed on Amman Stock Exchange (ASE) are selected as a study sample consisting of 37 companies for the period 2013-2017. An index containing four characteristics is established to measure the effectiveness of an audit committee, namely: independence of an audit committee, size, meetings, and financial expertise. From the findings of this study, there is a significant positive association between the audit committee characteristics and firm performance. In addition, the results document that the association between the audit committee effectiveness and firm performance becomes strong when there is an interaction with family ownership. This indicates that an increase in the effectiveness of the audit committee leads to improved firm performance, especially in the case of family controlled firms. The findings of this study are useful to all regulators and stakeholders as they provide them with a significant premise about the type of controlling shareholders and the internal mechanisms of corporate governance that will protect their interests.

Key words: Jordan, firm performance, audit committee characteristics, family ownership.

Introduction

One of the main structures of corporate governance (hereafter, CG) is the audit committee (hereafter, AC) which is essential for supervising the performance of the company. Therefore, the AC is perceived with great interest as a safety valve to safeguard the interests of investors and other relevant parties through the role it plays in supervising and monitoring the company's management and oversight. Consistent with agency theory, the separation of company ownership and control in the firm can create multiple internal and external stakeholders, each with different interests. However, these stakeholders may face conflicts of interest, which can negatively impact the firm's performance. As a result, the AC plays a crucial role in the CG system by supervising the management and ensuring that the interests of the firm are protected.
management and shareholders leads to a difference in benefits between them, which is known as the first type of agency problem, and it is supposed that governance mechanisms work to decrease conflicts between managers and owners. Therefore, it is expected that an effective AC will help maximise shareholder wealth, improve firm performance and prevent managements from achieving personal benefits at the expense of other stakeholders’ interests (Wathne & Heide, 2000).

The AC effectiveness is affected by a diversity of characteristics, such as, AC independence, size, financial expertise, meetings, and others characteristics. Consequently, the existence of an effective AC, as an internal CG mechanism that is important in enhancing the company's performance, depends on its characteristics. In addition, the good characteristics of the AC are related to good company performance (Kent et al., 2010; Zabri et al., 2016).

It can be argued that the company’s environment in which the ownership concentration is high, gives rise to the agency problem between controlling shareholders (i.e. family ownership) and minority shareholders instead of the conflict between the shareholders and management. In such an environment, major shareholders seek to expropriate the wealth of minority shareholders through obtaining incentives and benefits of their own. A stream of previous studies on CG indicates that the efficacy of CG mechanisms is influenced by the form of ownership structure of companies (Desender et al., 2013), especially in developing countries where family ownership (hereafter, FO) is more prevalent and legal systems to protect the rights of minority shareholders are weaker (Idris et al., 2018a).

In line with Dezoort et al., (2002) who pointed out that the AC effectiveness may increase further if the characteristics of AC are studied together. Therefore, the present study seeks to use a composite score to measure the impact of the AC characteristics (independence, meetings, financial expertise, and size) on the company performance. Moreover, the ownership structure for Jordanian companies has its unique characteristics as FO is more prevalent, especially in manufacturing and financial sector companies (Al-Najjar et al., 2010). This research also examines the influence of control of FO on the relationship between the effectiveness of AC characteristics as a composite measure and the company performance in all manufacturing firms listed on ASE during the period between 2013 and 2017.

This study is one of the few studies in the Jordanian context that will test the influence of the AC characteristics using a composite score on the performance of manufacturing companies indexed on ASE. In addition, it tests the effect of FO as a moderate variable in the association between the AC characteristics and the performance of Jordanian manufacturing companies.
Agency Theory

The theory of agency argues that manager’s decisions are driven by self-interest, and that such decisions may not always increase shareholders’ wealth (Arnold and De Lange, 2004). As such, CG mechanisms, both external and internal, are supposed to work effectively to monitor and mitigate opportunistic administrative behaviour, thereby mitigating conflicts of interest and protecting shareholder wealth (Fama and Jensen, 1983).

While the traditional notion of agency problems tends to exist in the markets of USA and UK, the prevalent agency conflict seems to be a common phenomenon in companies with a family ownership structure. Some studies have documented that FO seems to be a common form of control among companies that operate in capital markets of Asian countries (Claessens et al., 2000). Therefore, CG mechanisms in such companies need further research to examine their oversight effectiveness.

As a result, previous research shows that AC characteristics contribute positively in improving the company performance (Kent et al., 2010). Therefore, this study combines a number of the characteristics of the AC (meetings, financial expertise, independence, and size), rather than individual characteristics, to investigate whether the characteristics of the AC affect company performance. Moreover, this research attempts to investigate the effect of FO on the relation between the composite measure of AC characteristics and company performance.

AC Characteristics, Family Ownership, and Firm Performance

Many international organisations have appealed to regulatory authorities to establish ACs, provided that they have many characteristics that allow them to perform their duties well. Previous studies have shown that the characteristics of the AC have a significant impact on firm performance. Amer et al., (2014) argue that the effective AC puts the interests of shareholders as a first priority and this enhances the validity of the company's financial reports, which in turn effects the company's performance significantly. Bronson et al., (2009) claimed that the effectiveness of financial reports will depend on the activity of ACs. In addition, Contessotto and Moroney, (2014) claim that an effective AC will improve the reliability of the financial reports of the firm and hence reduce underlying risks.

In response to the global market crises, the government in Jordan formed audit committees in 2009, as a step in a string of reforms to increase CG practices, return investor confidence in the Jordanian indexed firms and promote the stock market. Prior research has showed that the effectiveness of the AC improves the quality and reliability of the financial reports, which helps in the role and work of the board, charged with protecting and promoting the benefits of owners (Demsetz, 1983). The effective AC is likely to concentrate on increasing owners' wealth and
preventing senior management from maximising personal wealth (Wathne & Heide, 2000). Therefore, the ACs play an important role in overseeing and controlling company management with a view to protecting owners' benefits (Kallamu & Saat, 2015). As a result, there is an increase in the efficiency of the AC in carrying out its monitoring operations, and the characteristics necessary for that have been identified. These characteristics include the AC size, financial expertise, meetings, and independence (BRC, 1999).

Moreover, another series of studies suggests that the effectiveness of CG mechanisms depends on the corporate ownership structure (Al-Ebel, 2013; Desender et al., 2013; Hashim & Amrah, 2016). Especially, since the problem of agency of the second type recently raised concern in many countries, especially in emerging markets, where the concentration of ownership is more prevalent and legal systems to protect the rights of weaker minority owners (Abdullatif et al., 2015). Therefore, in a country like Jordan, with issues related to the FO structure, the effectiveness of these mechanisms among firms that control FO in the Jordanian context has not yet been explored (Zureigat et al., 2014). Consequently, this study investigates whether controlling FO improves the link between the effectiveness of the AC and firm performance in Jordan.

Literature Review and Hypothesis Development

The credibility of published financial reports of companies depends on the extent to which there are effective ACs arising from the boards of directors of these firms. Consequently, the AC as a CG mechanism plays a key role in enhancing the performance and value of companies. Therefore, the effectiveness of the AC depends on its characteristics in terms of the independence, size, financial expertise, and the number of its meetings in improving the performance of companies (Zabri et al., 2016). In addition, the effectiveness of CG mechanisms can also be affected by the form of ownership structure (Desender et al., 2013; Hashim and Amrah, 2016). Previous studies have discussed many of the characteristics of the AC that have an effective influence on the firm’s performance. In the study carried out by Bouaziz & Triki, (2012) who indicated that the effectiveness of the AC relies on its characteristics that relate to the independence of AC members, size, meetings and the experiences of members of the AC to protect the benefits of the owners in Tunisian companies for the period 2007-2010. In Jordan, Hamdan et al., (2013) investigates the relation between the characteristics of the AC and the firm’s performance in the industry and services sectors, where the study results find a positive relation between the characteristics of the AC and the firm’s performance. Another study by Wakaba,) 2014) who investigated the influence of the characteristics of the AC on the company’s performance which indexed on the Nairobi Stock Exchange in Kenya. The research examined the following characteristics of the AC, namely: AC size, independent members of the AC, gender diversity, the financial experience of members of the AC, and how these characteristics affect the company performance using agency theory to explain this association.
The outcomes showed that the experience of members of the AC, gender diversity, size, and the AC independence have an important and positive impact on the company's performance.

In Pakistan, Yasser and Mamun, (2015) examined the characteristics of the AC which were independence, age of the committee chairman, financial and accounting expertise, size, and the educational qualifications of the committee chair for the sample of companies indexed on the Karadchi for the year 2013. The findings of the study identified companies that have more than three members of the AC and whose members have independence related to increasing and enhancing the performance of companies. Moreover, the study also documented a positive and important relation between the age of the committee chairperson, the educational qualifications of the committee chair, the financial experiences of committee members and the company’s performance. Another study by Zábojníková, (2016) investigated the relation between the AC's characteristics and corporate performance of a sample of 100 British companies for the year 2016. This study tested the relation between AC independence, financial expertise, size, number of frequency meetings and company performance in the UK. The findings revealed a significant positive association between the committee size, annual meetings, and the presence of members who possess financial and accounting experience in committees and the performance of the companies; while the relation between the ACs independence and the firm’s performance was negative.

In the Malaysian context, (Cheah et al., 2016) studied the relation between the characteristics of the ACs (the busyness of the AC, size, financial expertise, and independence) and company performance. Their study results showed that AC’s independence and busyness has an important positive association with the company's performance. In a study by Alqatamin, (2018) tested the effect of the characteristics of the AC (size, gender diversity of committee members, financial expertise, meetings, and independence,) on the performance of the company using a sample of 165 company indexed on the ASE between 2014 to 2016. The findings show that the size, independence and gender diversity of the AC members have a major positive effect on the firm’s performance, while finding no relation between the meetings and financial experience with the performance of the company. Zraiq & Fadzil (2018) tested the relation between the AC and the financial performance of companies in Jordan. The results showed a positive trend between AC size and the number of its meetings with the companies’ performance. Rahman et al., (2019) investigated the effect of the AC's characteristics on companies' performance. Their results showed that the size of the AC relates positively to corporate performance. They also showed that there was a negative relation between the meeting of the AC and the companies ’performance.

The empirical results for the influence of AC characteristics on firm performance in previous studies is mixed and may be due to the fact that these studies used individual AC characteristics to examine the AC's effect on firm performance. Recent CG literature has criticised this
approach for lack of representation of the consistency of the CG mechanisms (e.g., Ward et al., 2009; Ramly, 2013). The composite measure of such mechanisms as AC can be considered better to minimise the agency cost of the companies and protect the benefits of all shareholders, including the minority shareholders, due to the effectiveness of CG achieved across various channels and the effectiveness of particular mechanism depends on the effectiveness of other factors (Cai et al., 2008). Moreover, the efficacy of CG mechanisms such as AC is influenced by the ownership structure of companies, especially in developing countries, where ownership is more concentrated (Desender et al., 2009; Abdullatif et al., 2015; Idris et al., 2018a). This study therefore examines Jordan as one of the developing economies and whether FO improves the relationship between the effectiveness of the AC and the performance of Jordanian companies. Therefore, the following two hypotheses need to be tested:

**H1:** The AC characteristics are positively related with company performance.

**H2:** Family ownership influences the relation between the AC characteristics and firm performance.

**Research Methodology**

**Sample Selection**

The sample in this study is composed of all Jordanian manufacturing companies indexed to the ASE for the period 2013 to 2017 (www.ase.com). It was found that the number of manufacturing firms indexed on the ASE (62) is a manufacturing firm as at the end of 2017, and (10) firms have been excluded from the study because of inadequate financial and non-financial data. Mining firms were also excluded from the study sample of (15) firms, in line with the study by Idris, (2012). Thus, the number of study sample firms becomes (37) firms for a period of 5 years from 2013-2017.

**AC Characteristics**

The AC is considered a board sub-committee for the purposes of controlling and overseeing the financial reports of companies. It will be measured by:

**AC Independence**

The current study will measure AC independence through the number of independent AC members divided by the total number of AC members (Rahman et al., 2019).
AC Size

The size of the AC shall be measured by the number of members elected by the board of directors of Jordanian manufacturing public shareholders (Aldamen et al., 2007).

AC Meetings

AC meetings are measured against the number of meetings held annually (Li et al., 2012).

AC Financial Expertise

AC financial expertise is measured by the ratio of audit committee members who hold a scientific qualification in the field of accounting, financial management, or financial and banking sciences to total number of AC members (Aldamen et al., 2007).

To measure the effectiveness of the AC as a composite measure, the AC has four characteristics: the AC independence, size, meetings, and financial expertise. This is done by comparing the average value of each variable with each value of the same variable, then the scores for the four individual characteristics of the AC will be combined to create a comprehensive composite measure of the characteristics of the AC ranging from zero to 4 (Idris et al., 2018b).
Table 1: Measurements of the Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Symbol</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Performance (ROA)</td>
<td>FP</td>
<td>Return on Assets Ratio (ROA) where the measurement will be made by dividing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the net profit after tax on total assets (Yilmaz and Buyuklu, 2008).</td>
</tr>
<tr>
<td><strong>Independent Variable:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit Committee Characteristics Score</td>
<td>AC_Score</td>
<td>Sum of the four individual characteristics of AC (independence, meetings,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>expertise, and size). The score of 4 means all the four characteristics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>are above the sample median, while the score of 0 means all the four</td>
</tr>
<tr>
<td></td>
<td></td>
<td>characteristics are equal to or lower than the sample median (Idris et al.,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2018b).</td>
</tr>
<tr>
<td><strong>Moderate Variable:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Ownership</td>
<td>FO</td>
<td>Is measured as the percentage of family members to total number of directors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>on the board (Amrah et al. 2013).</td>
</tr>
<tr>
<td><strong>Control Variables:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Size</td>
<td>FS</td>
<td>Is measured by the natural logarithm of total assets (Ismail et al., 2009).</td>
</tr>
<tr>
<td>Firm Growth</td>
<td>GR</td>
<td>Is measured as the change in total assets scaled by lagged total assets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Idris, 2012).</td>
</tr>
</tbody>
</table>

Regression Model

To test the research hypotheses, two regression models are employed as follows: model (1) is employed to evaluate the relation between AC_Score and company performance. The model (2) is used to measure the family control influence on the relationship between AC Score and firm performance by including an interaction term between AC Score and family control.

Model (1): \[ FP_{it} = a_0 + \beta_1 \text{SIZE}_{it} + \beta_2 \text{GR}_{it} + \beta_3 \text{AC-Score}_{it} + \epsilon_{it} \]

Model (2): \[ FP_{it} = a_0 + \beta_1 \text{SIZE}_{it} + \beta_2 \text{GR}_{it} + \beta_3 \text{AC-Score}_{it} + \beta_4 \text{FO}_{it} + \beta_5 \text{AC-Score}_{it} \times \text{FO}_{it} + \epsilon_{it} \]

Previous Table 1 provides definitions of the research variables used in the models above.
Methodology and Results

Descriptive Statistics

Table 2: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Maximum</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP</td>
<td>1.413</td>
<td>8.756</td>
<td>29.019</td>
<td>-21.091</td>
</tr>
<tr>
<td>AC_Score</td>
<td>3.10</td>
<td>0.924</td>
<td>4</td>
<td>0.000</td>
</tr>
<tr>
<td>FO</td>
<td>0.286</td>
<td>0.235</td>
<td>1.000</td>
<td>0.000</td>
</tr>
<tr>
<td>FS</td>
<td>7.520</td>
<td>0.502</td>
<td>8.413</td>
<td>5.861</td>
</tr>
<tr>
<td>GR</td>
<td>0.016</td>
<td>0.179</td>
<td>1.206</td>
<td>-0.527</td>
</tr>
</tbody>
</table>

The descriptive statistics for all variables used in this research are listed in Table 2. The descriptive statistics include the value of mean, maximum, minimum, and standard deviation. According to the findings of descriptive analysis as summarised in Table 2, the return on assets (ROA) used to measure the firm performance (FP) for all firms in the current study has an average value of 1.413, with a minimum and maximum value of -21.091 and 29.019 respectively. It can be argued that the large variance in the performance ratio of manufacturing companies in this sample as measured by (ROA) may be due to the economic and financial instability of firms, as a result of the instability of the region surrounding the Jordan (Abweeni and Al-Omari, 2016). The mean value for the ACE Score, as reported in Table 2, is 3.10, with a standard deviation of 0.924 and a minimum and maximum value of 0 and 4 respectively. This finding indicates that companies with AC more effective can mitigate agency conflicts through improving the effectiveness of monitoring and provide credible financial reports and improving the performance of companies.

Moreover, the result on the FO structure in Table 2, also shows that the mean of family members (FO) on board is 28.6%, and with a standard deviation of 23.5%, and with a maximum 100% and minimum of 0% where some firms do not have family members on corporate boards. The variances in sample periods explain the increase in mean FO which is found in this study compared to prior studies. The current study uses control variables namely: growth and firm size. Table 2, shows the statistics descriptive for those variables. In terms of company size (FS), which is measured by the natural logarithm of total assets, the results in Table 2 showed that the average size of the company is around 7,520. Finally, growth percentage (GR) has an average 0.016 with a standard deviation of 0.179, with a maximum and minimum value of 1.206 and -0.527 respectively.
Main Empirical Findings

Table 3: Regression analysis results of audit committee characteristics, family control and firm performance

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model (1)</th>
<th>Model (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cofe. t-stat</td>
<td>Cofe. t-stat</td>
</tr>
<tr>
<td>Intercept</td>
<td>-21.457*** -2.600</td>
<td>-23.691*** -2.875</td>
</tr>
<tr>
<td>AC_Score</td>
<td>1.523*** 2.386</td>
<td>1.418*** 2.236</td>
</tr>
<tr>
<td>FO</td>
<td></td>
<td>1.253*** 3.961</td>
</tr>
<tr>
<td>AC_Score*FO</td>
<td></td>
<td>1.563*** 2.102</td>
</tr>
<tr>
<td>FS</td>
<td>2.810*** 2.501</td>
<td>3.087*** 2.756</td>
</tr>
<tr>
<td>Adj-R²</td>
<td>0.287</td>
<td>0.300</td>
</tr>
<tr>
<td>Obs.</td>
<td>185</td>
<td>185</td>
</tr>
<tr>
<td>F-stat</td>
<td>11.446</td>
<td>10.763</td>
</tr>
</tbody>
</table>

*** ** and * indicate significant at 1%, 5% and 10% respectively.

AC_Score*FO = Interaction between AC characteristics and family control.

Table 3, demonstrates regression estimates for testing the relation between AC_Score and FP, and the moderating effect of FO on this association. The results indicate that AC_Score has a positive and important relation with FP. This result supports agency theory and assumes that effective ACs exist to enhance the quality of corporate financial reporting and reduce agency problems by reducing the information asymmetry between owners and management, which in turn is reflected in improving corporate performance. This finding is consistent with the results of previous research, which indicated that companies enjoying CG's high quality can achieve a degree of quality in their financial reports, due to the decline in agency problems and increased supervision of administrative procedures, and is therefore likely to provide credible financial reports (Piot et al., 2007; Erkugrul & Hegde, 2008). Additionally, the findings of this study are also consistent with what was reported in the study by Dezoort et al. (2002) that the efficacy of the AC may further increase if the committee's characteristics are collectively studied. This means that the AC, consisting of at least three members, including independent members and at least one financial or accounting expert, meets three times a year to restrict profit management. This ultimately improves the performance of the company better than the AC in which all characteristics do not appear.

Regarding the interaction between FO and the characteristics of the AC (AC_Score*FO), Table 3, illustrates that the result shows existence family control is associated in enhancing the firm's performance. Moreover, this finding supports previous research arguments that family firms establish CG mechanisms to comply with legal requirements to enhance the quality of financial reports and better deal with proxy problems (Kosnik, 1987). The reason in this result is due to
when most of the board members in a family firm come from a controlling family, the firm experiences enhanced performance (Che and Langli, 2015). This result, however, contradicts the documentation from Abdullatif et al. (2015) that the demand for effective ACs in Jordanian publicly listed companies is considered low and the performance of their duties by AC is within a limited scope. The reason for their results may be to use a questionnaire survey to investigate the performance of ACs and the various test periods between which CG quality has improved in Jordan.

Conclusion

This research investigates the relation between the characteristics of the AC and firm performance in an emerging market such as Jordan. In addition, it examines whether FO affects the relation between the characteristics of the firm performance. The results show that the characteristics of the AC combined have an effect on the performance of Jordanian manufacturing companies indexed to the ASE. The results of the study indicated that the effectiveness of the AC could increase further if the characteristics of the committee were studied together. The results of this study also indicated that FO as a moderate variable has an effect on the relation between the characteristics of the AC combined and the performance of manufacturing companies, where FO contributes to the improvement of companies' performance. The results of this study are beneficial to all stakeholders, as it provides them with a significant indicator of the form of shareholder controlling and the internal CG mechanisms that will protect their interests.

In light of the outcomes of this study, the study recommends conducting further research by testing other variables that are not covered in this study, such as the nationality, age and gender of members of the AC. In addition, this study recommends testing other CG mechanisms such as the characteristics of the board of directors. Moreover, the study recommends more research that deals with agency theory, especially the second type of agency problems that occurs between majority and minority shareholders due to the lack of studies related to this type of agency problem.

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