Full Length Research Paper

Relationship between ownership structure and earnings quality

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ABSTRACT

Ownership structure can play an important role in enhancing the quality of earnings and financial statement through acting as efficient internal control. This study aimed to define the relationship between ownership structure and earnings quality. This study used annual reports of industrial companies for five years (2009-2013). The results show that ownership structure (i.e. institutional ownership, family ownership and foreign ownership) were found to play a significant role in ensuring the quality of earnings. The findings of this study supported by agency theory and past studies and expanded the literature on these issues in Jordanian context.

Keywords Earnings quality, institutional ownership, family ownership, foreign ownership

INTRODUCTION

Numerous researchers have highlighted the role of ownership structure in enhancing the quality of earnings, for example, Kates (2008) who asserted that companies with higher private ownership equity sponsorship are engaging less in earnings management similarly Kholief (2008) argued that the ownership concentration minimizes agency problem.

Dechow et al (2010) highlighted the importance of having a high earnings' quality, he argued that higher quality earnings provide more information about the features of a firm's financial performance that are relevant to a specific decision made by a specific decision-maker. They explored the earnings quality proxies and claimed no single conclusion on what earnings quality is because “quality” is contingent on the decision context.

The OECD (2005) defines corporate governance as "procedures and processes according to which an organization is directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among the different participants in the organization such as the board, managers, shareholders and other stakeholders and lays down the rules and procedures for decision-making” (p. 1).

Literature review

Derbali and Ben Ayeche (2015) argued that the ownership structure and the quality of financial information play a dominant role in the evolution of the cost of debt of Tunisian companies. They concluded that there is a negative relationship between financial communications and the cost of debt. But we accepted the other three assumptions that: Moreover there is a positive relationship between concentration of ownership and the cost of debt and there is a negative relationship between the participation of institutional investors and the
cost of debt finally, there is a negative relationship between managerial ownership and the cost of debt.

Madani et al. (2013) investigated the impact of corporate governance on the quality of financial reporting. Among the corporate governance mechanisms, the measures of family ownership, state ownership and institutional shareholding have been applied. Consistent with the objectives of the theoretical framework of the financial reporting, the financial reporting quality is classified into two categories of representation and content the accruals are used to measure the representation quality and the net income is the measure applied for the content quality. The findings reveal that there is no significant relationship between the variables of corporate ownership and reporting quality.

In the Middle East, Klai and Omri (2011) studied the relationship between corporate governance mechanism and financial reporting quality in Tunisia. They explored characteristics of board of directors and ownership structure of Tunisian companies. They found a negative relationship between foreign and family ownership with financial reporting quality. They revealed that the financial institutional and governmental ownership are associated positively with quality of financial disclosure. They claimed that there is a lack of board independence and there is concentration of ownership in the Tunisian companies.

Roodposhti and Chashmi (2011) aimed to test the relationship between ownership concentration, board independence, CEO dominance, institutional shareholders and earnings management in Iran. They concluded that companies with higher ownership concentration and independent boards are associated negatively with earnings management, while higher institutional ownership correlates positively with earnings management. Finally they found a positive association between the existence of CEO-Chairman duality and earnings management.

Cascino et al. (2010) explored the quality of accounting information in listed family firms. They exploit the features of the Italian equity market characterized by high ownership concentration across all types of firms to disentangle the effects of family ownership from other major block-holders on the quality of accounting information. They found that family firms convey financial information of higher quality compared to their non-family peers. Further, we provide evidence that the determinants of accounting quality differ across family and non-family firms.

In the United States, Katz (2008) examined the relationship between earnings quality and ownership structure. She used a sample of private companies before and after initial public offering. She concluded companies that have private equity sponsorship have higher earnings quality, and engage less in earnings management than those do not have private equity sponsorship. She ascribed the superiority of companies that have private equity sponsorship to professional ownership, tighter monitoring, and reputational considerations exhibited by private equity sponsors. Mitra and Hossain (2011) studied the relationship between corporate governance attributes (i.e. board and ownership characteristics) and remediation of internal control material weaknesses. They applied a logistic regression for a sample of 258 companies between 2004 and 2006 in the USA. They found a positive relationship between board diligence, CEO-independent board, and managerial, institutional and dominant shareholdings with internal control weaknesses' remediation. They remarked that ownership characteristics are more important in the firms' weaknesses remediation than the board characteristics.

Kholief (2008) argues that ownership concentration minimizes agency problems especially in the case of institutional investors. Hence the high percentage of shares owned by institutions is correlated negatively with the presence of manipulation in the financial statements. In contrast, the separation of ownership increases agency costs because of conflicts that may arise between related parties. This is supported by Fama and Jensen (1983) who found that widely ownership held in a company increases the possibility of conflict between contracting parties, and vice versa in the closely ownership held company. Hashim and Devi (2008) found a positive relationship between institutional ownership and earning quality. Katz (2008) examined the relationship between earnings quality and ownership structure in the USA. She used a sample of private companies before and after initial public offering. She concluded that the companies that have private equity sponsorship have higher earnings quality and engage less in earnings management than those that do not have private equity sponsorship. She ascribed the superiority of companies that have private equity sponsorship to professional ownership, tighter monitoring, and reputational considerations exhibited by private equity sponsors. Shah et al. (2009) found that the presence of institutional investors reduces the company's weaknesses remediation than the board characteristics.

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Table 1. Population of the study

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of Companies</th>
</tr>
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<tbody>
<tr>
<td>Banks</td>
<td>15</td>
</tr>
<tr>
<td>Insurance</td>
<td>24</td>
</tr>
<tr>
<td>Diversified Financial Services</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
</tr>
</tbody>
</table>

between institutional shareholdings and internal control weaknesses’ remediation. Similarly, Sarikhani and Ebrahimi (2011) found that institutional ownership correlates significantly and positively with earnings informativeness. Abor and Biekpe (2007) found that the presence of foreign institutional ownership decreases the agency cost especially in small countries. Xiao, Yang and Chow (2004) stated that in general, foreign shareholders are likely to face higher levels of information asymmetry compared with management. Firth et al. (2007) revealed that companies with foreign shareholders have less earnings management. This is because the foreign shareholders put pressures on companies to improve the quality of financial reporting.

Mohandi and Odeh (2010) found that companies with higher percentage of foreign ownership correlate positively with quality of financial statements in Jordan. Aydin et al. (2007) found a positive relationship between foreign ownership and a company’s performance. They argued that foreign ownership enhances a company’s performance better than domestically owned. On the contrary, Klaī and Omri (2011) found a negative relationship between foreign ownership and financial reporting quality.

Madani et al. (2013) investigated the impact of corporate governance on the quality of financial reporting. Among the corporate governance mechanisms, the measures of family ownership, state ownership and institutional shareholding have been applied. Consistent with the objectives of the theoretical framework of the financial reporting, the financial reporting quality is classified into two categories of representation and content. The accruals are used to measure the representation quality and the net income is the measure applied for the content quality. The required data is collected from 102 listed firms on the Tehran Stock Exchange during a period covering 2003 to 2010. The findings reveal that there is no significant relationship between the variables of corporate ownership and reporting quality.

Cascino et al. (2010) explore the quality of accounting information in listed family firms. They exploit the features of the Italian equity market characterized by high ownership concentration across all types of firms to disentangle the effects of family ownership from other major block-holders on the quality of accounting information. They found that family firms convey financial information of higher quality compared to their non-family peers. Further, we provide evidence that the determinants of accounting quality differ across family and non-family firms.

Hypotheses of the study

Based on this argument, the hypotheses are as follows:

H1: There is a relationship between the percentage of shares owned by institutions and earnings quality.

H2: There is a relationship between the percentage of shares owned by foreigners and earnings quality.

H3: There is a relationship between the percentage of shares owned by families and earnings quality.

METHODOLOGY

After developing the hypotheses, the population, sample and measurement are discussed below:

Population and sampling

This study used the financial listed companies at ASE. The population consisted of 76 companies as detailed in table 1. above (ASE, 2015).

I excluded 28 companies due to missing data, for example some companies were newly listed or delisted during the study period; only 48 companies have published annual reports from 2009 to 2013.

Measurement

The variables of this study were measured as follows:

Institutional ownership

Institutional ownership was measured as ratio, calculated by dividing the number of shares owned by institutions to total number of company’s shares.
Table 2. Omnibus Tests of Model Coefficient

<table>
<thead>
<tr>
<th></th>
<th>Chi-square</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step</td>
<td>215.981</td>
<td>.000</td>
</tr>
<tr>
<td>Block</td>
<td>215.981</td>
<td>.000</td>
</tr>
<tr>
<td>Model</td>
<td>215.981</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 3. Hosmer and Lemeshow Test

<table>
<thead>
<tr>
<th>Step</th>
<th>Chi-square</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8.247</td>
<td>0.475</td>
</tr>
</tbody>
</table>

Foreign ownership

Foreign ownership was calculated as the percentage of shares owned by foreigners to total number of company's shares.

Family ownership

Family ownership was calculated as the percentage of shares owned by families to total number of company's shares.

Earnings quality

The external indicators of earnings quality or misstatement can be one or more of the following indicators:
if: (1) the auditors' reports of opinions include serious doubt as to the correctness of accounts; (2) the tax authorities' observations regarding serious taxation intransigencies seriously affect the financial situation and income statements; (3) the application of Jordanian legislation regarding negative net worth; (4) inclusion of the company in the ASE categories of "under observation" and "negotiation suspended" for reasons associated with falsification of the company's financial data; and (5) the existence of court proceedings pending. (Spathis, 2002)

Linearity, normality, and homoscedasticity

Linearity, normality, and homoscedasticity are other important assumptions that should be checked before regression test is performed. The need for normally distributed data is because the correlation represents a linear association between the variables while the nonlinear association is not represented. So the scatter plots should express the normal line for the independent and dependent variables. According to Hair et al. (2010), testing the normality of the data can be done by exploring skewness and kurtosis ratio. Normality is assumed when the skewness and the kurtosis are between ± 1.96 at alpha value .05 and ±2.58 at alpha .01, respectively. The results show that the data were normally distributed.

Hypotheses testing

Before testing these hypotheses, this study tested the aforementioned indicators to measure the quality of earnings on the published data in Jordanian companies' annual reports. The result of logistic regression shows that the accuracy of the model was 89.7%. To test the goodness of the model based on the conditions set earlier, the Omnibus test and the Hosmer and Lemeshow test were run. The result is shown in the next table.

The Omnibus test or "the goodness of fit test" indicates how well the model performs. As shown in Table 2, the significance of the model is high (Sig = .000). The chi-square value is 215.981. The other test of goodness of fit is Hosmer and Lemeshow test. This test is interpreted differently from the Omnibus test, where a significant value less than .05 indicates a poor fit and the insignificant value less than .05 indicates a good fit of the model. In this study, the Chi-square for Hosmer and Lemeshow test is 8.247. The significance level is 0.475. This value is greater than .05 which supports the model. Table 3 shows the result.

The model summary exhibits the usefulness of the model. The Cox and Snell \( R^2 \) Square and Nagelkerke \( R^2 \) Square indicate the amount of variation in the dependent variable explained by the model. The values for these statistics are 0.489 and 0.597, respectively. This means that between 0.489 and 0.597 percent of variability is explained by the set of variables. Table 4 summarizes the results.

Results of ownership structur and earnings quality

Results of logistic regression are exhibited in Table 4.
The results show that companies with higher institutional ownership are better in controlling the management's action and enhancing earnings quality, since the current study shows a positive relationship between institutional ownership (INOW) and quality of earnings quality at (0.00) significance level. Similarly, the presence of Family ownership (FAOW) in companies was found to increase the quality of earnings. Moreover, Table 4 shows a positive significant relationship between foreign ownership (FOW) and quality of earnings in Jordanian companies.

**CONCLUSIONS**

This study explored the relationship between ownership structure and the quality of earnings. The results show a positive relationship between institutional ownership, family ownership, foreign ownership and quality of earnings, which support first, second and third hypotheses.

This result supports the findings of Hashim and Devi (2008), Katz (2008), and Klai and Omri (2011). For example Hashim and Devi (2008) found a positive relationship between institutional ownership and earnings quality. Katz (2008) also found that companies that have private equity sponsorship have higher earnings quality and engaged less in earnings management. Klai and Omri (2011) found that financial institutional ownership is associated positively with quality of financial disclosure. The result of foreign ownership confirms past studies such as Mohandi and Odeh (2010) who found a positive relationship between foreign ownership and quality of financial statements in Jordanian banking sector. Also Ali et al. (2008) who found a negative relationship between foreign ownership and discretionary accruals. Family ownership found to enhance earnings quality; these results are in line with agency theory and Cascino et al (2010) who found that family firms convey financial information of higher quality compared to their non-family peers. They provide evidence that the determinants of accounting quality differ across family and non-family firms.

**REFERENCES**


Al-Najjar B (2010). Corporate governance and institutional ownership: evidence from Jordan. Corporate Governance, 10(2), 176-190.


**Table 4. Logistic Regression Result**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>INOW</td>
<td>1.547</td>
<td>0.000**</td>
</tr>
<tr>
<td>FOW</td>
<td>3.741</td>
<td>0.021**</td>
</tr>
<tr>
<td>FAOW</td>
<td>1.495</td>
<td>0.010**</td>
</tr>
<tr>
<td>Cox &amp; Snell $R^2$</td>
<td>0.489</td>
<td></td>
</tr>
<tr>
<td>Nagelkerke $R^2$</td>
<td>0.597</td>
<td></td>
</tr>
</tbody>
</table>

***Sig = 0.01 (two-tailed); ** Sig = 0.05 (two-tailed); * Sig = 0.10 (two-tailed); Quality, INOW = Institutional Ownership, FOW = Foreign Ownership, FAOW=Family Ownership

where Cox and Snell $R^2$ of 0.489 and Nagelkerke $R^2$ of 0.597(sig, = 0.000) show that the model explains 59.7% of the variation in the earnings quality and it is significant at the 0.001 level.
Mitra S, Hossain M (2011). Corporate governance attributes and remediation of internal control material weaknesses reported under SOX Section 404. Review of Accounting and Finance, 10(1), 5-29.