

Full Length Research Paper

The relationship between board characteristics and manipulation in the financial statement in Jordan

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ABSTRACT

This study aimed to shed light on the role of board characteristics, i.e. board size, board composition and board leadership structure in mitigating the financial manipulation; I used the non-financial companies' annual reports for 5 years (2010-2014) to extract the needed information. By using Logistic regression, the test revealed that there is a positive relationship between board composition, board leadership structure and manipulation in financial statements, while no significant relationship between board size, and manipulation in financial statements.

Keywords: Financial Manipulation, board size, board composition and board leadership structure

INTRODUCTION

Many researchers emphasize on the role corporate governance can play in mitigating manipulation in the financial statements. In line with the interest of possible manipulation of financial statements this study seeks to examine whether board characteristics (namely, board size, board leadership structure and board composition) play a role in the presence of manipulation in financial statements. There is a need to provide empirical evidence on these relationships to see whether corporate governance mechanisms are effective in enhancing the quality of financial statements in Jordanian context.

The need to examine the relationship between corporate governance and manipulation in financial statements is motivated by the recent interest showed by the government of Jordan in corporate governance especially after the companies' law no. 23, 1997 was issued. Thereafter, the listed companies at Amman Stock Exchange (ASE) should form boards and committees to apply corporate governance mechanisms. Securities law issued in 2002 also requires the public companies to

apply corporate governance to enhance the transparency and accountability of financial statements in Jordan. After the financial crises in 2008, the Jordan Securities Commission issued the "Corporate Governance Code for Shareholding Companies Listed on the Amman Stock Exchange 2009" to define the responsibilities and duties of boards and committees in public companies.

Objectives of the study

The objectives of the study are as follows:

1. To examine the relationship between board composition, and manipulation in the financial statements?
2. To examine the relationship between board size and manipulation in the financial statements?
3. To examine the relationship between board leadership structure and manipulation in the financial statements?

Relationship between Board Characteristics and Manipulation

Agency theory states that higher percentage of non-executive directors decreases the possibility of earnings management in financial statements (Hashim and Devi, 2008). Barako et al (2006) state that non-executive directors play an important role as a reliable mechanism to diffuse agency conflicts between contracted parties, they are viewed as providing the necessary revision to enhance board effectiveness. Cheng and Courtenay (2006) relate a board's monitoring effectiveness to its composition; they argue that the higher the independent board members, the greater monitoring ability over management. Leftwich, Watts and Zimmerman (1981) state that the effectiveness of monitoring managerial opportunism increases in the case of existence of the larger the proportion of non-executive directors on the board.

Previous researchers reported mixed results on this relationship. For instance, Suarez et al. (2015) analyzed the effect that certain characteristics of board of directors in Spanish non-listed family firms have on performance. The results show a negative effect of a higher proportion of executive directors and a positive effect of CEO duality. No effects were found in relation to the diversity of family directors (executive or non-executive). In relation to the effect of outside boards, the influence on performance is negative except when this variable was considered in interaction with CEO duality. In this case, the effect on performance was positive. Ongore et al. (2015) investigated the effects of board composition on financial performance the study found out that independent board members had insignificant effect on financial performance, but gender diversity did, in fact, have significant positive effect on financial performance. Board size, on the other hand had an inverse relationship with financial performance. These results are largely consistent with conceptual and empirical literature on corporate governance with respect to small board size (5 to 7) that is sufficiently diverse in terms of gender, skill, experience, industry networks, among other important attributes. Regarding outside directors, however, the study findings appear to contradict the long-held traditional view that outsiders confer superior performance to the board. Gonzales-Bustos et al. (2014) aimed to develop an exploratory analysis of the board composition of Spanish companies that belong to innovative economic sectors. They tested the relationship between board composition and innovation, exploring the characteristics of the board in an organizational context of innovative behavior. The results confirm the relevance of medium size boards with a majority of affiliated directors and CEO duality; male directors are predominant, but the proportion of women, despite its minimum level, is significantly growing. There are

relevant differences in the board composition of different Spanish innovative sectors. However, its evolution over time is quite stable, with the exception of the proportion of women on the board. This board composition is characteristic in situations in which the innovative behavior of companies is significantly improving.

Jaggi et al. (2009) found that a higher proportion of independent directors is positively associated with earnings quality. However, they remarked that increasing the proportion of outside directors to strengthen board monitoring is unlikely to be effective in family-controlled firms. Similarly, Yuemei and Yanxi (2007) found a negative relationship between earnings management and proportion of the independent directors. Correspondingly, Hashim and Devi (2008) found a negative relationship between proportion of independent directors and earnings manipulation. Shah et al. (2009) revealed a negative relationship between role of the independence of non-executive directors and earnings management. Roodposhti and Chashmi (2011) also found a negative relationship between independent boards and earnings management. Some other researchers found no significant relationship between board characteristics and accounting manipulation, such as Saleh et al. (2005), who found no relationship between earnings management and percentage of non-executive directors in Malaysia. Wenyao and Qin (2008) found that increasing number of outside directors will not affect the presence of earning management. Additionally, Iyengar et al. (2010) found no relationship between board independence and earnings quality. Similarly, Sarikhani and Ebrahimi (2011) found no significant relationship between board composition and earnings informativeness. Gulzar and Wang (2011) also found no significant relationship between proportion of independent directors, and earnings management.

Bradbury et al. (2006) found that a small board is more efficient in monitoring management. Yuemei and Yanxi (2007) found a negative relationship between earnings management and board size. Also, Wenyao and Qin (2008) found that small boards are more effective in constraining income-increasing earnings management than a large board. Meca and Ballesta (2009) found a negative relationship between board size and discretionary accruals. Klai and Omri (2011) revealed that the size of board is related to the quality of financial reporting. On the other hand, Xia and Zhao (2009) found that the supervisory board size has no significant correlation with earnings management. Similarly, Sarikhani and Ebrahimi (2011) found no significant relationship between board size and earnings informativeness. Gulzar and Wang (2011) also found no significant relationship between board size and earnings management.

The chair of the board of directors and CEO positions should be held by different persons or by one person.

According to agency theory, the combined functions can significantly impair the boards' most important function of monitoring, disciplining and compensating senior managers. It also enables the CEO to engage in opportunistic behavior because of his/her dominance over the board, (Barako et al., 2006). Agency theory proposes that the separation of duties may lead to efficient monitoring over the board process. Thus, CEO duality will impair the supervisory role of the board. CEO duality indicates that less control is likely to be exercised over management's activities and behavior (Meca and Ballesta, 2009).

Davidson et al. (2004) found a positive relationship between existence of dual leadership and earnings management. Saleh et al. (2005) assessed the effectiveness of board characteristics in terms of preventing earnings management in Malaysia. They found that the existence of CEO-Chairman duality is related positively with earnings management. Roodposhti and Chashmi (2011) found a positive significant relationship between the existence of CEO-Chairman duality and earnings management. Ghosh et al. (2010) found that the separation of CEO/Chairman positions is related negatively with earnings management. Gulzar and Wang (2011) also found a positive relationship between CEO duality and earnings management. On the other hand, Johari et al. (2008) found no relationship between CEO duality and earnings management practice in Malaysia. Similarly, Wen Yao and Qin (2008) found that separation of CEO/ chairman does not enhance monitoring of earnings management. Meca and Ballesta (2009) also found no relationship between the existence of Chairman/CEO duality and increasing probability of earnings management. Similarly, Sarikhani and Ebrahimi (2011) revealed no relationship between board leadership structure and earnings informativeness.

H1: There is a negative relationship between board size and the presence of manipulation in financial statements.

H2: There is a negative relationship between proportion of non-executive directors and the presence of manipulation in financial statements.

H3: There is a positive relationship between board dual leadership structure and the presence of manipulation in the financial statements.

METHODOLOGY

This study tested the non-financial listed companies in Amman Stock Exchange (ASE) from 2010 to 2014. The non-financial sector consisted of 155 companies, this study excludes 21 companies due to lack of data during study's period (ASE, 2015). The measurements of the variables were as follows:

Board composition

Board composition was measured as percentage of non-executive directors to total number of directors.

Board size

Board size means total number of directors on the board of company including CEO and Chairman. Board size is measured as the total number of board's directors.

Board leadership structure

The board with dual leadership structure (CEO and chairman) was scored as 1 and 0 for unitary leadership structure.

Financial manipulation

Spathis's (2002) model was used to classify a financial statement into manipulated or non-manipulated categories. The model is as follows:

$$=b_0 + b_1(DET/EQ) + b_2(SAL/TA) + b_3(NP/SAL) + b_4(REC/SAL) + b_5(NP/TA) + b_6(WC/TA) + b_7(GP/TA) + b_8(INV/TA) + b_9(TD/TA) + b_{10}(Z) + e$$

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 scatter plots diagram various variables and the scatter plot diagrams of standardized residuals show no indication of the presence of nonlinear responses in the data, it also shows that the variance of the dependent variable is the same for all values of the independent variables as no nonlinear pattern is observed. The results of normality test (comprising the Q-Q plot and detrended Q-Q plot) of the data shows that the data represent a sample of normal population distributed homogeneously.

Table 1. Omnibus Tests of Model Coefficient

	Chi-square	Sig.
Step	88.321	.000
Block	88.321	.000
Model	88.321	.000

Table 2. Hosmer and Lemeshow Test

Step	Chi-square	Sig.
1	11.047	0.174

Table 3. Logistic Regression Result

Variables	Coefficient	Significance level
BCOM	3.902	.094*
BSIZE	.786	.233
BLST	2.035	.011**
Constant	2.33	.003***
Cox & Snell R Square	Nagelkerke R Square	
0.337	0.478	

***Sig = 0.01 (two-tailed); ** Sig = 0.05 (two-tailed); * Sig = 0.10 (two-tailed);

Table 1 and Table 2 below depict that the values of skewness and kurtosis and indicate that the data were normally distributed. This study used logistic regression to test the abovementioned hypotheses. The results came as follows:

This study used Spathis's (2002) model to test the accuracy of classifying of financial statements into manipulated and non-manipulated groups. The result is shown in Table 1.

The Omnibus test or "the goodness of fit test" indicates how well the model performs. As shown in Table 1, the significance of the model is high (Sig = .000). The chi-square value is 88.321. 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 11.047. The significance level is 0.174. This value is greater than .05 which supports the model. Table 2 shows the result.

The model summary exhibits the usefulness of the model. The Cox and Snell R Square and Nagelkerke R Square indicate the amount of variation in the dependent variable explained by the model. The values for these statistics are 0.358 and 0.520, respectively. This means that between 0.337 and 0.478 percent of variability is explained by the set of variables. Table 3 summarizes the results.

RESULTS

Results of logistic regression between manipulation, board composition, board size, and board leadership structure, are exhibited in Table 3. The Cox and Snell R^2 of 0.337 and Nagelkerke R^2 of 0.478 (sig. = 0.000) show that the model explains 47.8% of the variation in manipulation in the financial statements and it is significant at the 0.001 level.

The result of logistic regression shows that the board leadership structure (BLS) is significantly and positively related to presence of manipulation in financial statements at level 0.05. This means that companies with dual leadership structure are more likely to be manipulated. Table 3 shows no significant relationship between, board size (BSIZE) it also shows a positive relationship between board composition (BCOM) and presence of manipulation in the financial statements.

CONCLUSIONS

This study aims to provide empirical evidence on the relationship between the presence of manipulation in the financial statements in Jordan and Board Characteristics (i.e. board size, board composition and board leadership structure). The results show a positive relationship between board composition, board leadership structure and manipulation in financial statements, and there is no

significant relationship between board size, and manipulation in financial statements.

These resulted supported some previous studies, for example, Jaggi et al. (2009) remarked that increasing the proportion of outside directors to strengthen board monitoring is unlikely to be effective in family-controlled firms. Also, Wen Yao and Qin (2008) argued that the role of independent directors in monitoring earnings management is not effective in Chinese firms, and that the formal improvement in board structure may not achieve improvement in governance practices. Similarly, Uzun (2004) found no relationship between board size and corporate fraud. Regarding to the result of board leadership structure this finding confirms the result of Saleh et al. (2005) study, who found that the existence of CEO-Chairman duality is related positively to earnings management in Malaysia.

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