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Board Characteristics and Firm Performance: Evidence From Manufacture Sector of Jordan

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ABSTRACT

The objective of the study is to investigate the impact of the board of directors' features on the financial performance of companies, which is measured using return on equity. This study utilized secondary data approach. A population is all companies listed in Amman Stock Exchange (ASE), while the sample consists of all Jordanian companies from manufacture sector from 2016 to 2018. Multiple regression has been used to test this study hypothesis and meet its objective. This study finding aligns with agency theory and resource dependence theory propositions, that the size of the board of directors is negatively related to firm performance. On the other hand, the board of directors' independence and female directors are having a positive influence on firm performance. Finally, this study recommends future studies in Jordan to include all sectors of capital market of Jordan and other corporate governance variable such as ownership structure and examine its influence in the relationship between the board of directors' features and firm performance.

INTRODUCTION

Corporate governance contains a set of relationships between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined (Kolk & Pinkse, 2010). Consistently, corporate governance has been defined as:

"A set of principles concerning the governing of companies and how these principles are disclosed or communicated externally (Parum, 2005)"

The misalignment of interests between outsiders and insiders increase the importance of corporate governance. The existence of asymmetric information assists agents to increase their interest at the expenses of principals. Therefore, managers could make decisions that increase their interest at the expense of shareholders.

Based on OECD codes, good governance principles should offer appropriate rewards and incentives for the management and board to maximize shareholders wealth and improve monitoring activities to guide companies to use their resources efficiently. Good governance assist firms to provide appropriate level that are required for the effective market performance. Thus, this reduces the cost of capital and operationalize firm resources efficiently.

Many factors influence the management behavior, for instance, labor contracts and board of directors. Ccorporate governance has addressed important role of board in shaping governance practice in companies (Haniffa & Hudaib, 2006). While for this study, the problem is whether the board features affect the financial performance of the firm.

Many studies investigate the influence of board composition, board independence, CEO duality, board meeting, board size on the performance of companies. In Jordan, studies like, Al-Manaseer et al., (2012), Tomar & Bino (2012), Alzurqan & Al_Sufy (2011) have examined the influence of corporate governance on firm performance, but don't include the impact of gender in the manufacture sector. Previous studies in developed markets show the important role of board in monitoring management activities (Desender et al., 2013), and thus this improve the performance of companies. However, the findings of developed market may not generalize in developing markets as a consequence of the economic environment and institutional setting.

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The main purpose of the selection of board features is that, board of directors is represent as a significant mechanism for advising and monitoring, governance of companies to managing business activities for the benefit of shareholders (Fama & Jensen, 1983). This study sought to extend agency theory, resource dependence theory and previous studies through providing empirical evidence on the impact of the board features on the performance of firms in Jordan.

The influence of corporate board on the performance of firms has been addressed using many theories. This study uses agency theory and resource dependency theory to explain the association between this study variable. Daily et al., (2003) report that corporate boards possess crucial roles to manage firms: advisory and monitoring. The monitoring role of corporate boards has been addressed using agency theory while advisory role of the corporation is addressed by the resource dependency theory (Zahra & Pearce, 1989).

Agency theory and resource dependence proposed that certain characteristics of corporate board could improve board advisory and monitoring role and this consequently improve the performance of companies (Desender et al., 2009). Consistently, scholars illustrate that board of directors possesses an essential role to improve company performance. Board characteristics enhance board efficiency and effectiveness for example board size, board independence and female directors (Mohammed, 2018).

Many previous studies examined the relationship between board size and the effectiveness of governance in companies (Mohammed, 2018). Previous studies explained that board feature proxies by board size have a significant role to enhance corporate effectiveness and as a result this enhances company performance. Studies proposed that large corporate board possesses greater capabilities in term of problem solving through increasing information that could be recalled and observed and enhancing the number of solution strategies to correct errors. Haniffa & Cooke (2005) reported that larger board of directors could be productive for some firms because they provide secure critical resources. In the other words, small board of directors' have weaker management abilities than the larger board of directors. However, in respect to board size, Mustafa et al., (2017) informed that the smaller size of board of directors could be more active than large corporate board as a consequence of coordination problems. They proposed that the suitable size should not be more than 8 directors.

Nonetheless, Guest (2009) proposed that rewards behind having larger corporate board underweight coordination problem between board members. The contradiction of finding of previous studies needs in respect the relationship between the size of board of director and firm performance, thus further investigation is required. Therefore, this study proposes that the smaller size of corporate board improves the performance of firms.

H_1: There is a negative impact of Board Size on firm performance

Board of directors' independence considers a significant feature to enhance board of directors' effectiveness. Agency theory proposed the separation between ownership and management lead to improve managers to maximize their interest (Jensen & Meckling, 1979). To minimize the agency problem, non-executive directors are capable to monitor and control management activities, consequently assisting in enhancing the performance of the company (Walsh & Seward, 1990).

Findings and arguments that independent directors possess crucial role in the company have been stated on previous studies. The study by Filatotchev et al., (2005) reports that independent directors work to protect their legitimacy and consequently, thus provide a suitable environment for investment. Chancharat et al., (2012) suggest that independent directors have an important role to enhance monitoring function of management. Furthermore, independent directors' have an essential role in the decision making process, specifically strategic decisions (Nugroho & Eko, 2012). Moreover, previous evidence recommended occupying more independent directors to prevent opportunistic behaviour of management (Lo et al., 2010). Independent directors work to confirm that financial decisions are made to increase all shareholders and should not lead in cash flows or earning that are biased toward the minority shareholders, controlling shareholders and managers (Donaldson & Preston, 1995).

Thus, this study proposes that the higher the proportion of independent directors, the higher the company's performance.

H_2: There is a positive impact of independent directors on firm performance

In spite of significant of board diversity, there is little research associating board diversity and corporate governance (Adams & Ferreira, 2009; Fields & Keys, 2003). The study uses diversity to indicate to the heterogeneous composition of the corporate board in regards to the demographic features that make each of us unique as individuals (Jhunjhunwala & Mishra, 2012). Therefore, this study represents diversity as the proxy of gender variance on the corporate board.

Resource dependence advocates suggest that diversity improves the independence of the board of directors because directors from various demographic could bring unique and divergent that would not come from directors with more similar backgrounds (Hillman et al., 2002; Lückerath-Rovers, 2013). Furthermore, diversity offers corporate boards with new perspectives and insights and this positively impact on firm performance (Siciliano, 1996).

Specifically, previous evidence on gender stereotypes in various cultures have linked between women with traits, for example, caring, empathy, interest in actualizing values and concern for others in relationships of great interest to the community (Boulouta, 2013). Therefore, females could create an enduring association between stakeholders and companies. In the same line with these opinions, evidences suggest women directors assist to offer strong monitoring and transparent financial reporting (Desender et al., 2009; Mustafa et al., 2018) and independence in their decision making from non-independent directors (Adams et al., 2010). Furthermore, men may be more tolerant than women towards opportunistic activities (Gul et al., 2011). Whereas others suggested that board diversity increase firm's returns and innovation (Adams & Ferreira, 2009; Miller & del Carmen Triana, 2009). This indicates that diverse board of directors are indeed stronger monitors and this will improve firm performance (Smith et al., 2006).

On the other side several researchers reported no such influence (Dimovski & Brooks, 2006; Lückerath-Rovers, 2013), and others have found adverse associations (Shrader et al., 1997). Therefore, there is inconsistency in the result in regards to the relationship between board diversity and firm performance (Adams et al., 2010). Furthermore, in regards to the influence of board diversity on the adoption of good corporate governance principles, evidences have reported that occupying a high number of female directors related with strong attention to minimize the conflict of interests (Bianco et al., 2013). Based on previous argument, this study concludes that gender diversity enhances board performance and thus firm performance.

H_3: There is a positive influence of board diversity on firm performance

METHOD

This is explanatory study, investigating the relationship between the characteristics of the board of directors and company performance. A population is all companies listed in Amman Stock Exchange (ASE), while the sample consists of all Jordanian companies from manufacture sector from 2016 to 2018. The manufacture sector continues to grow quicker compared to other sectors such as, service, agriculture and construction sector. Allan et al., (2018) report that the value added in manufacture is responsible for 18.17 per cent of Jordan's GDP, while the combined contribution of services, construction, agriculture, don't exceed 13 per cent of GDP. Therefore, this study used to concentrate on manufacture sector only. To achieve the objective of this study, the relationship between board characteristics (board size, board independence, and board diversity) and company performance has been investigated using this study model. The following model is used in order to examine this study hypothesis.

$$ROE_{it} = \beta_0 + \beta_1 BOAS_{it} + \beta_2 BOAI_{it} + \beta_3 BODI_{it} + \beta_4 LEVE_{it} + \beta_{it} \quad \ldots\ldots (1)$$

For each firm (i) and each year (t)

ROE_{it} = Firm performance
BOAS = Board size
BOAI = Board Independence
BODI = Board diversity
LEVE = Leverage
ε_{it} = Error term supposed to be normally scattered with constant differences

The construct of boards' characteristics is measures utilizing board size, board independence and board diversity. Firm performance was measured using return on equity (Danoshana & Ravivathani, 2013). In this research, the ROE- an accounting-based measure uses since it linked to management capability to professionally use corporate assets to create profit. In addition, leverage has been used as a control variable in this study. Table 1 shows the method of operationalization the variables of interest in this study.

RESULTS AND DISCUSSIONS

Table 2 shows the number of observations, mean, standard deviation, and inter-correlation between the study's variables. Descriptive statistic shows that the ROE mean is about 0.060 (0.425 percentage the standard deviation) with a minimum of -0.324 and a maximum of 0.602. The average size of corporate board is about 6.886.

Independent directors mean is about 1.720 with a range from about 2 to 4 and standard deviation of 0.868. The percentage women directors are 0.744, the standard deviation is 0.902, and the range is from a minimum of 0 to a maximum of 3. The average ratio of LEVE of the companies is 0.481 (0.279 percentage the standard deviation) with a minimum of 0 and a maximum of 1.606. Table 2 illustrates the correlation between all variables of this study. The correlation values are less than 0.80. This shows that multicollinearity problems don't exist among the variables of interest. The finding shows that there is a positive correlation between BOAI, BODI, LEVE and ROE, while BOAS is not correlated with ROE.

This study finds that there is no problem on the proposed model. The regression result shows Walid Chi^2 is 79.60 (Table 3). This indicates that independent variables explain about 79.60 of the differences in the dependent variable. This shows that about 79.60 of the variances in the company's performance is derived by BOAS, BOAI and BOAD.

Board Size on firm performance

The findings are in the same line with both of

Table 1. Variable operationalization

Code	Variable name	Operationalization
BOAS	Board size	Number of directors on the board
BOAI	Board independence	The percentage independent directors to the total number of directors.
BOAD	Board diversity	This is a binary variable where is 0 indicates that female director occupy position on the board of directors and 1 otherwise
LEVE	Leverage	Total debt/total assets ratio
ROE	Return on equity	Return on equity

Table 2. Descriptive Statistics and Correlation Matrix of the Studied Variables

Variable	Mean	SD	Min	Max	1	2	3	4	5
ROE	0.060	0.425	-0.324	0.602	1.000				
BOAS	6.886	1.764	4	13	0.003	1.000			
BOAI	1.720	0.868	2	4	0.179*	0.022	1.000		
BOAD	0.744	0.902	0	3	0.183*	0.183*	0.758*	1.000	
LEVE	0.481	0.279	0	1.606	0.593*	0.014	0.033	0.037	1.000

resource dependence theory and agency theory suggestions, that board characteristics possess an effective influence to improve the performance of the companies. Particularly, BOAS have an adverse effect on companies' performance. The finding for this variable is significant at the 5% level of significance with P-value of (0.001). In addition, the degree of impact on ROE is about 0.903. This shows that an increase in BOAS could reduce in ROE of 0.903. This study argument is aligned with that of (Amran, 2011) that small board of directors possesses higher stock value than a large board of directors (Yermack, 1996). On the same line, other studies report that limited board of directors enhances company performance because of consensus decision making and effective communication. Therefore, the finding support hypothesis 1.

Independent Directors on Firm Performance

The impact of BINDE is positive (Table 3), its influence about 0.770 for ROE. The implication of this result is that for every increase in board member independence by one unit, ROE would rise by 0.770. The finding supports hypothesis 2. The positive impact is an indication to expert advice and access to resources, as proposed by the dependence theory, and strong monitoring function as proposed by agency theory relating to board independence, are significant in improving the performance of companies (Dharmadasa et al., 2014). Resource dependence theory proposed, that independent director's offers access to resources and expert advice. In addition, the finding consistent with that of agency theory propositions that strong monitoring mechanisms are a function of independent directors inside board of directors and this highly significant in enhancing the performance of the companies. The results align with that of previous studies MacAvoy & Millstein (1999) and Peng (2004).

Table 3. Regression Models (PCSEs)

Item	Coefficient	Panel-corrected Standard Errors	t-value	p-value
BOAS	-0.903	0.870	-3.34	0.001**
BOAI	0.770	0.545	2.15	0.032**
BOAD	0.142	0.759	3.83	0.000***
LEVE	0.515	0.009	5.16	0.000***
Wald chi^2		79.60		
Prob > chi^2		0.000		

Notes: * = significant at 10%, ** = significant at 5% and *** = significant at 1%

Board Diversity on Firm Performance

Hypothesis 3 proposes that there is a positive impact of BOAD on firm performance. The study results show female directors explained 0.142 of the performance of companies. This study finding is aligning with Terjesen et al., (2016) that found a positive relationship between gender diversity and firm performance. The results of control variables (Table 3) display that LEVE has a positive significant relationship with firm performance.

CONCLUSION

This study examines the impact of BOAS, BOAI and BOAD on firm performance of publicly listed firms in the Jordan stock exchange from manufacture sector for the period 2016-2018. Cross-sectional time-series PCSEs regression is used to meet the objectives of this study and to controls of the issue's heteroscedasticity and Autocorrelation in a sample of 44 Jordanian firms. The result of the study reflects that there is a strong relationship between board features and company performance. It seems that the focus needs to be taken by companies to have a small board of directors, more independent and female directors, which is suggested and found in this research to have important implications on company performance. The study, therefore, recommends that policy makers encourage Jordanian companies to create their board with various characteristics. The research suggests conducting further studies to include more variables, inclusion of other attributes of directors.

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