

SECTION 3



**THE IMPACT OF CORPORATE GOVERNANCE ON
MARKET CAPITALIZATION: EVIDENCE FROM
BAHRAIN BOURSE**

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Abstract

Our study is based on the “Agency Theory”, as it interprets the relationship between corporate governance and market capitalization of firms listed in Bahrain Bourse (BB). Longitudinal data is used in this study from 36 listed firms in Bahrain Bourse during the period of 2009-2013. A set of econometric methods, including the fixed effects method, is used to overcome different measurement problems of such relationship. The study findings include a set of results that are related to effect of ownership structure and board of directors’ characteristics on market capitalization of firms. Based on these findings, a set of recommendations, along with study limitations and future research, are put forward.

Keywords: Corporate Governance, Market Capitalization, Agency Theory, Bahrain Bourse

1. INTRODUCTION

This study contributes to the academic and executive debate that takes place about the impact of corporate governance on the various firms’ activities in Bahrain. It sheds light mainly on the level of corporate governance required especially after the corporate governance list has become mandatory by such firms. This study also provides evidence, not previously discussed in a developing market, on the impact of compliance of corporate governance rules on firms’ market capitalization. This paper mainly examines the roles of the board of directors’ characteristics and ownership structure as two main stepping stones of corporate governance that have impact on market capitalization of listed firms in the Bahrain Stock Exchange. It is expected that this type of examination would add a real contribution to the understanding of such topic both at academic and managerial levels.

Some authors have attributed the emergence of corporate governance to the emergence of major financial problems by international companies. Such companies called for a set of rules and norms of ethical and professional principles to achieve confidence and credibility of the information in the financial statements. In reality, the corporate

governance procedures are far from being a reaction of financial crises as corporate governance procedures have been in place since the emergence of public shareholding companies and the agency theory. The procedures that govern the relationship of shareholders with the board of directors, executive management, and other relevant stakeholders have been addressed since old times. Recent financial crisis, followed by subsequent collapse in major international companies have made these rules and laws essential in order to protect the interests of all parties of the company.

Good corporate governance seeks to achieve a set of goals by the board of directors and provides them with the right incentives to achieve such goals. Effective corporate governance usually facilitates an efficient monitoring process that helps companies to wisely exploit their own resources and prevents any manipulation, distortions or deceit that could lead to asymmetry in information. This can be through the application of robust supervision and control of all economic units. In this way, the interests of various parties can be met by offering an appropriate legal and formal framework that can positively contribute in the economic community, locally and internationally. To achieve such goals, effective and independent information control

measures should be first in place with the aim of continuous improvements.

A company with a good corporate governance level can help reduce business risks, enjoy trading shares in the financial markets, and increase shares value. This is attributed to the important role corporate governance can play which is reflected in an implied value of the share price. Corporate governance can also improve the quality of company's leadership, and the quality of its offerings in term of products and services. It also supports transparency, and enhances trust and the credibility of the financial statements (Hamdan et al., 2013). Our main study gap tries to answer the following questions: What is the level of corporate governance in listed firms in the Bahrain Stock Exchange? Is there a disparity in the application of corporate governance among Bahraini firms based on firms' characteristics? Can corporate governance contribute in improving market capitalization of the firm?

Our study is expected to be significant as it seeks to insightfully research the subject of corporate governance in the Bahrain Stock Exchange, as most of financial analysts and investors look at this market as one of the oldest, most important and active Arab financial markets. This financial center market is located at the heart of the Arabian Gulf region, a region which is known with oil rich. Bahrain market has attracted foreign investments and foreign workers resulting in subsequent huge money transfers. Identification of corporate governance level in this market reflects how transparent that listed companies are and the results of this study can contribute to the development of the corporate governance guide in Bahrain. Studying and analyzing the relationship between corporate governance and market performance of listed firms might reveal new findings in this market not previously researched.

The remainder of this study is divided into the following sections: In the second section we have reviewed previous studies and then developed research hypotheses. In the third section we have discussed research methodology, study sample, and variables measurement's approaches. We have then conducted a descriptive study to describe the relationship between corporate governance and market capitalization, followed by hypotheses testing and results analysis. Finally, we have identified study findings, recommendations as well as highlighting study limitations and suggesting some points for future research.

2. CONCEPTUAL BACKGROUND AND RESEARCH HYPOTHESES

Belloc (2012) discussed corporate ownership, corporate finance and labor as three main channels that constitute a corporate governance system that shapes a corporate's innovation activity. They called for further studies that focus on interrelation between various dimensions of corporate governance and their effect on company's innovation. Perez-de-Toledo and Bocatto (2013) found that extra cash was valued more at companies with good governance as opposed to those who had poor governance. Good corporate governance was assessed based on four dimensions namely access

and content of information, board structure, ownership structure and control and transparency. They claimed that investors increase or decrease their investments based on good or bad governance of the firm as investors believe benefits of holding cash to finance future projects offset the potential agency costs associated with it. Future growth opportunities were found to work well as a moderator with the same euro of extra cash at firms with varied levels of governance quality.

Pae and Choi (2011) found that cost of equity capital decreases when corporate governance is high and also becomes low for firms with strong commitment to business ethics. The authors suggested for companies to lower their cost of equity and increase value by practicing effective corporate governance and showing commitment to higher standards of business ethics. Competitive markets are characterized by high speed of change. In this respect, company performance is monitored by stakeholders and its value is reflected in the stock price. Investors in such competitive environment seek effective corporate governance to protect their investments and reduce anticipated financial risks. Caixe and Krauter (2014) confirmed the positive link between corporate governance and market value and also found that firms listed in premium corporate governance segments are priced higher by the market compared to firms listed in the traditional trading segment.

Jo and Harjoto (2011) investigated the empirical link between corporate governance (CG) and firm value through corporate social responsibility (CSR). Their study postulates that corporate governance manages the interests of multiple stakeholders. CSR here is seen as an extension of firms' efforts to foster effective corporate governance, ensuring firms' sustainability via sound business practices that promote accountability and transparency. They found that CSR was positively associated with corporate governance. Chen et al., (2010) propose that improvements in corporate governance of companies could help reducing costs of equity financing. They found that external financing needs provides incentives for firms to improve their overall quality of corporate governance practices. They linked governance value with specific external forces namely product market competition, investment opportunities and external financing needs, with particular emphasis being placed upon the impact of external financing needs as they relate directly to outside shareholders. They conclude that external financing needs provide incentives for firms to make improvements in the quality of their corporate governance practices and this in terms will have positive effect on firm value.

Some studies show that higher firm value is achievable in those firms with better governance practices that are open to market measures than in those firms with relatively poor governance practices (Core et al., 2006 and Bebchuk et al., 2009). Renders and Gaeremynck (2012) examined how agency problems between majority and minority shareholders as well as voluntary corporate governance can affect the quality of corporate governance in European listed companies. They found that the conflict affects the quality of corporate governance and if agency conflicts are

severe, the costs of installing good governance are high for the majority shareholders while firm's quality is low. Once installed, corporate governance improves and firm value gets higher. Their findings also suggest that there are costs related to good corporate governance, namely, loss of private benefits of control, and that majority shareholders take these costs into account when deciding on the quality of corporate governance. A positive relation exists between good corporate governance and firm value and is more obvious when the principal-principal conflict is more severe. Therefore, good corporate governance is able to lessen the negative effect of the principal-principal agency conflict on firm value as investors value good corporate governance more in companies with more severe conflicts.

Lei and Song (2012) investigated the effects of board structure and internal corporate governance (CG) mechanisms on firm value in an emerging market that have ownership focus and family contribution. They found that firms with independent board structure can have higher firm. They also found that board structure is the most important among the major internal CG mechanisms and can be most valuable to investors in markets with concentrated ownership. They suggested that companies with concentrated ownership should focus on monitoring CG mechanisms with boards of directors to have a greater degree of independence. Therefore, it may be constructive to reduce the number of directors who are family members with the aim of increasing the firm's value.

Toledo and Bocatto (2013) examined the value investors give to one euro of extra cash held by firms in Spain and the influence of corporate governance on this value by comparing the value of cash for firms with good and poor corporate governance. Their study aim was to analyze the interaction between cash and governance and its effect on the market value of Spanish publicly traded firms. They found that one euro of extra cash is valued at a considerable premium at firms with good governance and the conflict between shareholders and debt holders is high as investors apply high discount for leverage when valuing Spanish firms. As with future growth opportunities, investors pay higher premium to good governance which suggests that shareholders believe the benefits of holding cash to finance future investment counterweigh the potential agency costs associated with it.

On other hand, the relationship between ownership types and firm performance with a moderating effect of corporate governance was well addressed and examined by Tam and Tan (2007). Their study revealed that different types of majority owners show different behaviors and preferences for corporate governance practices which in turn affect firm performance. Governance practices such as adopting concentrated ownership and firm characteristics such as firm age, size and sector, are all found to have affected firm performance. Their study suggests that the protection of shareholders' rights, mainly those of the minority shareholders, remains a key issue as large shareholders exercise dominant control through ownership concentration and representation on company board and management regardless of ownership types. Therefore, they called for better scrutiny to moderate the power of large shareholders with the aim of protecting the interests of minority shareholders. This is possible by applying more transparency and accountability in the relationship between governments and business, large shareholder and board of directors, and board of directors and management.

3. RESEARCH DESIGN AND METHODOLOGY

This part describes the research methods of the study, including sample selection and sources of data, study model, measuring descriptive statistics, and data validity.

3.1. Sample Selection and Sources of Data

Bahrain Bourse contains (48) listed companies. Companies were selected according to the following criteria: first, data is available in the period of (5) years (2009 to 2013), and second, companies have not been closed or emerged with any other company during the study period. We start the sample collection process with all the listed firms on the Bahrain Bourse; we obtain data on financial statements, corporate governance indicators, and others control variables from Bahrain Bourse database. (12) companies were excluded from the sample and they were either non Bahraini or were closed during the study period, which left us with 36 companies representing 75% of the original sample. Table (1) summarizes the study sample selection.

Table 1. Sample Selection

#	Sector	Listed companies	Excluded companies	Study sample
1	Commercial Banks	8	2	6
2	Investment Sector	12	1	11
3	Insurance Sector	5	0	5
4	Service Sector	9	2	7
5	Industrial Sector	3	0	3
6	Hotel-Tourism	5	1	4
7	Closed Company	2	2	0
8	Non Bahraini Co.	4	4	0
Total		48	12	36

3.2. Study Model

This study tries to find the effect of corporate governance dimensions on market capitalization. Thus, corporate governance indicators are considered

as independent variables and market capitalization is considered as the dependent variable. In order to measure the impact of corporate governance on market capitalization; the study estimates the following linear regression model:

$$\begin{aligned} \text{MarketCapitalization}_{it} = & \alpha + \beta_1 \text{CGindicator1}_{it} + \beta_2 \text{CGindicator2}_{it} + \beta_3 \text{CGindicator3}_{it} \\ & + \beta_4 \text{CGindicator4}_{it} + \beta_5 \text{CGindicator5}_{it} + \beta_6 \text{CGindicator6}_{it} \\ & + \beta_7 \text{Size}_{it} + \beta_8 \text{Age}_{it} + \beta_9 \text{Leverage}_{it} + \beta_{10} \text{Growth}_{it} + \text{Sector}_{it} + \ell_{it} \end{aligned}$$

Where: Market Capitalization_{it}: is the dependent variable; continuous variable, and is the market capitalization represented by how much the firm (i) worth in the market in the year of (t). α : is the constant. β_1 -10: is the slope of independent and control variables. CGindicator1: is the first corporate governance indicator; coded 0 if a shareholder owns more than 20%, 1 if not for the firm (i) in the year of (t). CGindicator2: is the second corporate governance indicator; coded 0 if the boards' number is not between 7-13, 1 if otherwise for the firm (i) in the year of (t). CGindicator3: is the third corporate governance indicator; coded 0 if ownership of the 3 largest shareholders is more than 50%, 1 if otherwise for the firm (i) in the year of (t). CGindicator4: is the fourth corporate governance indicator; coded 0 if the board is not controlled by more than 50% independent outside directors, 1 if otherwise for the firm (i) in the year of (t). CGindicator5: is the fifth corporate governance indicator; coded 0 if chairman is also CEO, 1 if not for the firm (i) in the year of (t). CGindicator6: is the sixth corporate governance indicator; coded 0 if property managers of the company's shares are not between 1-20%, 1 if otherwise for the firm (i) in the year of (t). Size_{it}: is control variable, the company's size for the firm (i) in the year of (t). Age_{it}: is control variable, the age of the firm (i) in the year of (t). Leverage_{it}: is control variable, the financial leverage of the firm (i) in the year of (t). Growth_{it}: is control variable, the growth is sales of firm (i) for the year of (t). ℓ_{it} : random error.

3.3. Measurement and Descriptions of Variables

The selection of variables is based on an examination of previous empirical studies, table (2) shows the dependent variable, the independent variables, and the control variables employed for all estimated models of the study.

Six corporate governance dimensions have been selected for this study. The first three dimensions are related to ownership of firms operating in Bahrain, while the other three are related to characteristics of board of directors. Tables (2) and (3) describe corporate governance dimensions for firms operating in Bahrain. The first dimension of corporate governance sets a rule that shares of the largest shareholder in the firm should not exceed 20% of overall firm's ownership to protect from the dominance of a small group on the decision making, ignoring the larger group. In this respect, 58% of firms operating in Bahrain have not exceeded 20% of largest shareholder condition which is a good indicator of corporate governance. On the other hand, the remaining 42% of firms are dominated by one owner which is a sign of absent or low corporate governance. The second dimension shows that the ownership of the largest three shareholders should not exceed 50%, to avoid dominance of small group. It has been observed from tables (2) and (3) that only 39% of firms with three largest shareholders have not exceeded 50% of ownership, while 58% of firms are dominated by this small group. Therefore, the finding does not meet the condition and is not reflecting a good practice of corporate governance.

Table 2. The measurement of variables and descriptive statistics

Variable	Description	Descriptive statistics			
		Mean	SD	Minimum	Maximum
Dependent variable:					
Market capitalization	Company's outstanding shares multiplied by its stock price per share.	183,798	294,001	3,600	1,769,545
Independent variables:					
Corporate governance dimensions:					
Ownership of the largest shareholder	Dummy variables coded 0 if a shareholder owns more than 20%, 1 if not.	0.583	0.494	0.000	1.000
Size of the Board of Directors	Dummy variables coded 0 if the boards' number is not between 7-13, 1 if otherwise.	0.889	0.315	0.000	1.000
Ownership of the three largest shareholders	Dummy variables coded 0 if ownership of the 3 largest shareholders is more than 50%, 1 if otherwise.	0.400	0.491	0.000	1.000
Independency of Board of Directors	Dummy variables coded 0 if the board is not controlled by more than 50% independent outside directors, 1 if otherwise.	0.944	0.230	0.000	1.000
Duality of chairman and CEO posts	Dummy variables coded 0 if chairman is also CEO, 1 if not.	0.917	0.277	0.000	1.000
Property of managers	Dummy variables coded 0 if property managers of the company's shares are not between 1-20%, 1 if otherwise.	0.371	0.485	0.000	1.000
Corporate governance index	The average of the six dimensions of corporate governance.	0.681	0.144	0.333	1.000
Control variables:					
Firm size (Millions)	Logarithm of the company's total assets.	1,122,442	2,427,334	4,518	12,344,488
Firm Age	The natural log of the number of years that a firm is listed on an exchange.	25.654	12.998	1.000	55.000
Financial leverage	Total debt divided by total assets.	0.427	0.297	0.000	0.934
Growth	Percentage increase in sales from previous year.	-0.034	0.305	-1.000	1.221
Industrial dummy	Companies who belong to different sectors differ in their corporate governance and market capitalization.				

Table 3. Corporate governance dimensions

Corporate governance dimensions	Frequency of 1's		Frequency of 0's	
	Frequency	Percent	Frequency	Percent
Ownership of the largest shareholder	105	58	75	42
Size of the Board of Directors	160	89	20	11
Ownership of the three largest shareholders	70	39	105	58
Independency of Board of Directors	170	94	10	6
Duality of chairman and CEO posts	165	92	15	8
Property of managers	65	36	110	61

The third dimension is property of management in shareholding, as agency theory says when management owns shares in a firm, agency conflicts is reduced, resulting in reduction in agency costs which is a good indication of corporate governance. From descriptive analysis in tables (2) and (3), it has been noticed that for most of firms in Bahrain, managers do not own shares in their firms. Therefore, this dimension has not been met and the consequences will be high agency conflicts and high agency costs.

The second group of corporate governance dimensions is related to firm's board of directors' characteristics. The fourth dimension relates to the size of board of directors. Previous studies show that the ideal size of board of directors ranges from 7 to 13 members. (89%) of firms in Bahrain meets this condition which is highly favorable and supports good corporate governance practices. The fifth dimension shows independency of board of directors where 50% of firms' board members should not be from executive management. The results show that 94% of firms in Bahrain have 50% of independent board of directors and this is an indication of good corporate governance and gently meets the set criterion. The last dimension is duality of chairman and chief executive officer posts. Our findings reveal that 92% of firms in Bahrain have no dual relationships of these two posts. Overall, we observe that firms in Bahrain have satisfactorily achieved conditions of characteristics of board of directors; however, the level of satisfaction is partially achieved in firms' ownership.

3.4. Descriptive Analysis of the Relationship between Corporate Governance and Market Capitalization

Table (4) shows two categories of firms in Bahrain. The first category enjoys high corporate governance practices while the other category lacks some. In each category, an average of market value is computed to identify the level of relationship between corporate governance and market capitalization for firms operating in Bahrain.

3.5. The Relationship between Corporate Ownership and Market Capitalization

The findings show that market value has increased for those firms which have achieved two conditions of corporate governance that are related to corporate ownership and increase firms' performance. These two conditions are ownership of the three largest shareholders and property of managers. With regard to the third condition of corporate governance, the ownership of the largest shareholder, the findings reveal that firm's performance increases when one person controls the firm. This might be attributed to the fact that in small and family firms, the owner might closely know all the firm's operational details, hence making better performance. This pattern of relationship remains controversial, and needs more study and analysis.

Table 4. Corporate governance dimensions and market capitalization

Market capitalization with:	Corporate governance dimensions					
	Ownership of the largest shareholder	Size of the Board of Directors	Ownership of the three largest shareholders	Independency of Board of Directors	Duality of chairman and CEO posts	Property of managers
Highest Corporate Governance	201,327	232,910	224,040	209,677	208,964	248,578
Lowest Corporate Governance	223,107	36,547	207,880	221,200	224,914	193,906
Mean t-values	-0.455	2.709	0.326	-0.114	-0.190	1.094
(Student's t-test p-value)	(0.650)	(0.007)	(0.745)	(0.910)	(0.850)	(0.275)
Mean z-values	-0.741	3.685	0.606	-1.086	-2.271	0.273
(Mann-Whitney test p-value)	(0.459)	(0.000)	(0.545)	(0.277)	(0.023)	(0.785)

Table 5. The relationship between corporate governance index and control variables

Variable	Corporate governance index	Pearson correlation	Student's t-test p-value	Mann-Whitney z-test p-value
Company size	0.669	-0.055	-1.308	-1.667
	[0.697]	(0.464)	(0.193)	(0.095)
Company age	0.683	0.129	0.119	0.144
	[0.680]	(0.085)	(0.906)	(0.885)
Financial leverage	0.669	-0.034	-1.222	-1.881
	[0.695]	(0.648)	(0.223)	(0.060)

3.6. The Relationship between Board of Directors' Characteristics and Market Capitalization

Our study of the relationship between characteristics of board of directors and firm's performance reveals that only one dimension of corporate governance has a positive relationship with firm's performance, which is the size of the board of directors, see table (4). Firms with an ideal size of board of directors have outperformed other firms. On the other hand, firms with independent board of directors have not performed well which indicates that there is a negative relationship between independency and firm's performance. This finding gently fits with Hamdan's study (2016) which shows that independency of board of directors for firms operating in Bahrain is ineffective as dependent board members enjoy a good level of work knowledge and experience and subsequently perform better than firms with independent board members. Surprisingly, a negative relationship exists when firms separate the two posts of chairman and chief executive officer, meaning that duality of these two posts increases firms' performance, a finding that might need further analysis taking into consideration.

3.7. The Relationship between Corporate Governance Index and Control Variables (Company Size, Company Age and Financial Leverage)

To identify the characteristics of companies and their relationship to the level of corporate governance, we categorize companies operating in Bahrain into two categories based on company size, company age, and financial leverage. We then compute a governance indicator in each category as shown in table (5). We observe that there is a lower governance level in large sized companies compared to small sized companies as a governance indicator in large sized companies' counts for 66.9% while small sized companies' indicator reaches to 69.7%. Surprisingly, governance variation levels between the two sizes of companies are found to be statistically insignificant. Our study results contradict with the management theory that calls for strong and positive relationships between company size and governance level. In the normal situation, large companies with strong economic and financial stands in the country can usually best use governance practices to maintain its economic position and make sure its high impact on economy. This fact still does not exist in companies operating in Bahrain which might be attributed to the newly adopted principles of governance in the country.

With regards to the relationship between company age and governance level, it is clear from table (5) that old companies have better governance than new companies, but insignificant variation is found between the two groups which is again attributed to the possibility of newly and recent adoption of governance principles by such companies. The relationship between financial leverage and corporate governance shows a strong power of creditors on Bahrain companies. Table (5) shows a negative and insignificant relationship between the financial leverage and governance level. This might be a sign of absence of real control from

creditors over companies in Bahrain or creditors do not take the corporate governance level into consideration when lending.

4. EMPIRICAL STUDY

There are two types of panel regression models used, firm fixed effect (FE) model and random effect (RE) model. The trade-off between the two models depends on Hausman test where null hypothesis calls for no differences between effects of both (FE) and (RE) models. Rejection of null hypothesis indicates that the (RE) model is inappropriate and it is preferable to use (FE) model instead. We base our study on fixed effect (FE) model in hypotheses testing as table (6) shows the significance of chi-squared test of Hausman. Although both of (FE) and (RE) models are statistically acceptable, where p-value (F) is significant and less than (1%) for both models, but the fixed effect (FE) model seems to be more representative than random effect (RE) model as the former has high Adjusted R². Also fixed effect (FE) model does not seem to have an autocorrelation problem as a Durbin-Watson stat falls within the adequate range of (1.5-2.5). Also panel regression models are suitable for our study as (VIF) does not exceed (10) for all independent and control variables. Therefore, a multi-linear problem does not exist with current independent and control variables.

4.1. The Effects of Ownership Structure on Market Capitalization

With regard to the effect of governance characteristics in relation to ownership structure on firm's performance, our study results in table (6) show that there is an adverse effect and significant of ownership concentration as more than 50% of firm's shares falls in the hand of three largest shareholders of market value. The table also shows an adverse effect of property of managers on firm's equity and market capitalization. The agency theory suggests that ownership concentration which is in the hand of few shareholders makes them have high control over the firm and generally improves firm's performance. Many previous studies have confirmed this pattern of positive relationship (Pivovarsky, 2003; Sanda, Mikailu and Garba, Sanda et al., 2005; Joh, 2002; Xu and Wang, 1997), while other studies have not found any effect of ownership concentration on firm's performance (Demesetz and Lehn, 1985; Demesetz and Vilalunga, 2001; Kumar, 2003; Rowe and Davidson, 2002).

The study of Khamis et al., (2015) found an adverse effect of ownership concentration on rate of return on assets. Our study goes in line with their study, as we found an adverse relationship of ownership concentration on firm's performance. Furthermore, we also found a positive relationship between governance standard that rejects ownership concentration and firm's market capitalization. Based on that, an adverse relationship exists between ownership concentration and firm's market capitalization. This finding can be justified as ownership distribution among a large number of shareholders improves firm's image, increases exchange of firm's shares and improves market share value. Another justification could be that more

shareholders mean more variety of experience in the firm which positively improves firm's performance.

Based on agency theory, property of managers can reduce agency's conflicts and improve firm's performance. Some researchers found conflicting results about property of managers' effects on firm's performance. While some studies indicated positive effects of property of managers' on firm's performance (Severin, 2001; Kumar, 2003). In our current study and as shown in table (6), we explored a governance indicator of management owning part of firm's shares and its effect on improving firm's market value and found that there is a positive and significant relationship between property of managers and firm's market value as this action within the Bahraini's firm can motivate managers to improve their firm's market performance. It also gives a good and positive impression to the economic and financial community about the firm and removes any suspicion concerning conflict of interests. The results of our study agree with the study of Hamdan et al., (2013) that was conducted in Kuwait and found that there was a positive effect of property of managers on many performance indicators such as market value-added and rate of return on assets.

4.2. The Effects of Board of Directors' Characteristics on Market Capitalization

Our study uses three corporate governance indicators that are related to board of directors' characteristics. These indicators are optimum size of board of directors, independency of board of directors, and duality of chairman and CEO posts. Table (6) illustrates a positive and significant effect of size of board of directors on market value, as firms with an optimal size (7-13 members) have achieved higher market capitalization. Our study agrees with the study of Topal and Dogan (2014) that confirms a positive effect of board of directors on firms' performance in Turkey, but differs with the study of Hamdan et al., (2013) as it does not find any effect of size of board of directors on performance indicators.

There are two approaches in the management and finance literature that discuss the independency of board of directors and its effect on firm's performance. Many studies support the notion that there is no effect of independency of board of directors on firm's performance (Hermalin and Weisbach, 2003). Studies based on accounting measurement of performance (MacAvoy et al, 1983; Hermalin and Weisbach, 1991; Mehran, 1995; Klein, 1998; Bhagat and Blak, 2001) and on Tobin's Q measurement (Morck et al., 1988) have both not found any effect of independency of board of directors on firm's performance. Furthermore, the Stewardship theory, as opposed to Agency theory, supports the idea of no relationship between independency of board of directors and firm's performance and assumes that internal managers are trustful to manage the firm and its resources to achieve optimal performance results and to the interest of shareholders (Donaldson, 1990;

Donaldson and Davis, 1991, 1994). Therefore, Stewardship theory views central control to be in the hand of firm's managers (Dalton et al, 1998). Based on this theory, many studies have found positive relationships between managers and the availability of information that would help taking right decisions within a firm (Baysinger and Hoskisson, 1991). Firm's managers know their firm better and can reach to quality decisions that increase firm's performance. Therefore, a positive relationship between managers and firm's performance does exist (Kenser, 1987).

Some studies have found a relationship between managers and R & D spend (Baysinger et al., 1991; Hill and Snell, 1988), while other studies have not confirmed a relationship between independency of board of directors and firm's performance (Chaganti, Mahajan, and Sharma, 1985; Daily and Dalton, 1992, 1993; Kesner, Victor, and Lamont, 1986; Schmidt, 1975; Zahra and Pearce, 1989). Some other studies have cast doubt on independency of the board members who come from outside the firm as executive directors could have an influence on their selection for reasons other than firms' interests and to their own interests. (Coles et al., 2010; Weisbach, 1998). Additionally, firm's shareholders think that multiple appointments to board members in more than one firm could lead to a phenomenon of busy directors as such directors cannot devote enough time and efforts to serve each firm effectively. This phenomenon makes investors not willing to invest in firms with a high number of independent directors (Fich and Shivdasani, 2006). Furthermore, empirical evidence shows that some independent directors work for their own interest rather than a host firm's interest (Dittmann et al., 2010), hence they opt to work in firms that increase their own benefits irrespective of firm's value (Fahlenbrach et al., 2010a).

The second approach that investigates the effect of independency of board of directors on firm's performance is supported by "Agency theory". To reduce agency costs, board of directors should consist of majority of independent directors as independency contributes in agency cost reduction as indicated by Mobbs (2013), and reduce conflicts that might exist between directors and shareholders as well as the ability to obtain high quality information (Rutherford and Buchholtz, 2007). High objectivity, control and better decision making can be obtained when there is a good number of independent board of directors (Fama and Jensen 1983) as they can intervene whenever opportunism exists among managers (Post et al., 2011). Differences between internal and external board of directors stem from their different strategic views. Internal directors mainly concern with short term performance, whereas external and independent directors put long term performance, environmental and social issues on top of their priority (Johnson and Greening, 1999). With regard to environment and society, a positive relationship has also found between independency of board of directors and firm's performance (Shaukat et al., 2015).

Table 6. Panel regression results

t-Critical: at df 179, and confidence level of 99% is 2.326 and level of 95% is 1.960 and level of 90% is 1.645. F-Critical (df for denominator n-β-1 = 180-10-1 = 169) and (df for numerator =β=10 and confidence level of 99% is 2.34 and confidence level of 95% is 1.84 and confidence level of 10% is 1.6. Significance at: *10%; **5% and ***1% levels.					
Variables	VIF	Firm fixed-effect Model		Random-effect Model	
		β	t-Statistic	β	t-Statistic
Constant		8.535	6.235*** (0.000)	11.320	6.037*** (0.000)
Independent variables:					
Ownership of the largest shareholder	3.579	0.513	0.913 (0.363)	0.788	1.402 (0.164)
Size of the Board of Directors	1.666	1.373	2.563** (0.012)	1.447	1.872* (0.064)
Ownership of the three largest shareholders	5.471	1.513	2.829*** (0.005)	-0.292	-0.525 (0.601)
Independency of Board of Directors	1.785	-0.429	-0.607 (0.545)	-0.784	-0.774 (0.441)
Duality of chairman and CEO posts	1.324	-1.098	-1.641 (0.103)	-0.363	-0.380 (0.705)
Property of managers	8.344	1.319	1.988** (0.041)	0.136	0.283 (0.778)
Control variables:					
Firm size	2.439	0.150	1.806* (0.073)	0.123	1.270 (0.207)
Firm age	1.630	0.003	0.221 (0.826)	-0.065	-5.052*** (0.000)
Financial leverage	2.651	1.098	1.562 (0.121)	-0.810	-2.120** (0.036)
Growth	1.172	-0.299	-0.605 (0.546)	-0.059	-0.825 (0.411)
R2		0.472		0.198	
Adjusted R2		0.223		0.129	
F-Statistic		3.608***		2.861***	
p-value (F)		(0.000)		(0.003)	
Hausman Test (Chi2)	30.142***				
p-value (Chi2)	(0.000)				
Durbin-Watson stat		1.772		0.808	

The relationship between independency of board of directors and firm's performance has clearly been identified in countries that do not have robust regulations to protect investors' interests and other stakeholders. China, as one of emerging markets, has recently moved from managing governmental companies toward independency of board of directors. One of the studies there surveyed the effect of independency of board of directors in 16000 listed firms in Shanghai's bourse and found a positive effect of independency of board of directors on firm's performance. Such independency works as an alternative to rules and regulations that protect investors' rights in firms and improves firms' performance (Liu et al., 2015). A study conducted by Dahya et al., (2008) has provided empirical evidence from (22) countries, apart from USA, and shown a positive and significant relationship between independency of board of directors and firm's performance in countries that have low protection for investors. Other studies later have confirmed same findings (Aggarwal et al., 2009; Bruno and Claessens, 2010).

In Bahrain, our study finds an adverse and insignificant relationship between independency of board of directors and market capitalization. We find that internal directors are more capable of managing a firm as they know firm's operational details more than independent directors. Results in table (6) indicate an adverse and insignificant relationship between duality of chairman and CEO, and market capitalization. This result contradicts with the Agency theory and other previous studies

that show a positive effect of duality of chairman and CEO on firms' performance in Kuwait.

5. CONCLUSION

This paper examines the relationship between corporate governance and market capitalization on firms operating in Bahrain. This study is based on the "Agency Theory" using longitudinal data; which includes (36) companies listed on the Bahrain Stock Exchange for the period (2009-2013). Many econometric techniques are used to overcome the different measurement problems in this relationship. Corporate governance has been divided into two dimensions: the ownership of the board of directors, and the characteristics of the board of directors. The empirical results of the study showed an adverse relationship and important differences between concentrated ownership and market capitalization of Bahraini companies, but a positive relationship between the ownership of the board of directors and market capitalization. Despite the fact that the first relationship is not consistent with the agency theory, but the existence of an adverse relationship between the concentration of ownership and company performance can be justified as the dispersion of properties and distribution between the largest number of shareholders may improve the image of the company to shareholders and indicate a good sign of corporate governance quality in these companies.

The adverse relationship between ownership and performance of the board of directors can also be justified. The positive relationship between the

ownership of the board of directors and companies' performance are consistent with the agency theory, which encourages executive directors to own shares within the company which in turns can improve their performance and thereby improve the company's profitability and performance in all areas, and at the same time reduce agency conflicts and costs. As for corporate governance dimensions that are related to the characteristics of the board of directors in the performance of companies, the results show that the commitment to the optimal size of the board of directors contributes in the improvement in the market value of the company. The optimal size of the board can help improve decision making process and increase company's performance. It is also crucial to have board of directors with relevant expertise that increase company's performance.

The relationship of the independence of the board of directors with firm's performance appears to be negative in the sense that managers internally are the most capable personnel for of the company's management as they maintain adequate expertise with details of operational work, as well as possessing sufficient information that makes them take the right decisions to improve performance. However, this relationship is not statistically significant nor it can be generalized to all companies in Bahrain. There are many benefits to have independent members on the board, but it must be commensurate with the nature of the business environment and culture prevailing in society. Business environment in Bahrain which is relatively small may make it unfavorable to increase independent board of directors. Therefore, executive directors who are knowledgeable and experienced with operational details are more in demand. The most important recommendation of this study is not to increase the number of independent members of the board of directors to more than five members, as at this level the negative impact of independent members starts to emerge, reducing company's performance. I was found that companies combining two positions, chairman of the board of directors and chief executive officer, can achieve better performance, but such relationship was not found to be statistically significant, nor could be generalized.

Study Limitations and Future Research

Our study uses a set of econometric methods to overcome measurement problems, and to reach to correct relations between variables in a way that makes study results more robust. The study also provides preliminary evidence about the relationship of the corporate governance with companies' performance in Bahraini business market. On the other hand, a precaution should be taken when disseminating the results of this study. Despite the fact that the sample represents 75% of the listed companies in the Bahrain Stock Exchange, it remains a small sample, from a small market, as econometric models might not be able to precisely capture relations as in developed markets. Also some other external and internal impact factors are not included in the study sample. Thus; more accurate results can be obtained when a study sample is expanded to financial markets in the Arabian Gulf which share similar social and economic conditions. Future

studies can research the impact of corporate governance, quality of earnings, and its relationship with corporate social responsibility which might probably contribute to further portray the importance of corporate governance in the economic environment of Bahrain.

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