

## THE ASSOCIATION BETWEEN INTERNAL GOVERNANCE MECHANISMS AND CORPORATE VALUE: EVIDENCE FROM BAHRAIN

Gehan A. Mousa<sup>1\*</sup> and Abdelmohsen M. Desoky<sup>2</sup>

<sup>1,2</sup>Accounting Department, College of Business Administration, University of Bahrain,  
P.O. Box 32038 Kingdom of Bahrain

\*Corresponding author: gamousa@hotmail.com

### ABSTRACT

*This research investigates the effect of internal corporate governance mechanisms (e.g. board characteristics and ownership structure) on corporate value. The paper extends the previous literature in this area and provides evidence to this effect using a sample of listed companies on the Bahrain Stock Exchange (BSE). In addition to Pearson correlation, this paper employs the Ordinary Least Square (OLS) regression analysis to test the association between board characteristics and ownership structure as independent variables and corporate value (the dependent variable) measured by three different measures namely Tobin's Q; return on assets (ROA); and earnings per share (EPS). Statistical analysis, three models of OLS regression, revealed that board characteristics and ownership structure variables have a statistically significant effect on corporate value especially when measured by EPS. The scope of this study is limited to relatively listed companies on BSE. Finally, it would be interesting to duplicate this study in other countries, which have many similarities to the Bahraini environment.*

**Keywords:** board characteristics, CEO/chair duality, corporate governance, corporate value, outside directors, ownership concentration, ownership structure

### INTRODUCTION

The literature on the topic of corporate governance (CG) has grown quite large because the CG concept is a wide term which encompasses different aspects. Awareness of CG increased significantly due to various financial scandals. A number of studies (e.g., Byrne, 2002; Deakin & Konzelmann, 2004) argue that financial scandals have long been one of the main drivers of CG because corporate failures such as Enron and WorldCom are often attributed to inadequate CG practices. The failure of corporations appears to have been a case of mismanagement of corporate risk and conflicts of interest between the board and shareholders. Du and Dai (2005) provide evidence on the importance of CG from nine of East Asian economies that are Hong Kong, Indonesia, Japan,

Malaysia, the Philippines, Singapore, South Korea, Taiwan and Thailand. They revealed that weak CG contributes to the severity of corporate value losses during the Asian financial crisis. The main objective of the current research is to examine the effect of CG mechanisms, especially issues related to board characteristics and ownership structure, as well as firm attributes on corporate value. It is argued that CG can be seen as the set of internal and external mechanisms which attempt to align incentives of managers with those of shareholders, and hence motivate managers to work harder toward maximising corporate value (Omran, 2009).

The board is considered one of a central institution in the internal CG mechanisms of a company to monitor managers (Fama, 1980) which is responsible for the company's major business decisions. The board can be a good monitoring device for shareholders if its structure is such as to ensure its independence from management. Board characteristics, such as the distinction between the chief executive officer (CEO) and the chairman, and the percentage of non-executive (outside directors) in the board can be seen as among the internal mechanisms of CG. Booth, Cornett and Tehranian (2002) identify two measures of independence on the board: the percentage of outside directors on the board and whether the CEO also serves as the board chairperson. Furthermore, appointing outside directors to the board appears to be an effective CG mechanism to reduce the agency problem and increase earnings quality (Peasnell, Pope, & Young, 2000; Klein, 2002). Therefore, the structure of the board has received much attention from regulators. However, there are also grounds for expecting that the board of directors is complementary to some aspects of ownership structure (O'Higgins, 2002; Higgs, 2003; Donnelly & Kelly, 2005). For example, a number of studies have documented the impact of outside directors on corporate value. Black, Jang and Kim (2006) confirmed that the increase in the number of outside directors leads to a rise in the market value of companies. In Japan, the same results reported by Kaplan and Minton (1994) who provided evidence that, outside directors improves corporate value.

Moreover, the effect of ownership structure on corporate value has received considerable attention in the literature. A number of studies were conducted to examine this relation. The centre of this investigation lies on the agency theory (Jensen & Meckling, 1976). Chi and Wang (2009) identified two common agency problems: first arising from the separation of ownership and management, when the owners do not manage the firm by themselves. The second problem arises as a result of the different interests of managers, owners and outside shareholders as well as those between controlling and minority shareholders (Berle & Means, 1932; Jensen & Meckling, 1976; Shleifer & Vishny, 1986).

A number of studies have suggested ways to manage these problems and reduce agency costs. For example, Jensen and Meckling (1976) proposed that managerial ownership could help to control agency problems and increase corporate value by reducing private perquisite consumption. Kaplan and Minton (1994) suggested ownership concentration as another control mechanism that helps control these problems. Shleifer and Vishny (1986) argued that concentrated ownership might improve performance by increasing monitoring and alleviating some agency problems. On the other hand, Earle, Kucsera and Telegdy (2005) suggested that large shareholders might exercise their control rights to create private benefits, sometimes expropriating smaller investors. Studies on the area of ownership structure could be classified into two main aspects according to approaches used: the first considers the concentration of shares owned by main shareholders or ownership concentration (e.g.: Maher & Anderson, 1999; Leech & Leahy, 1991), while the second considers the type of investors or ownership identity (e.g.: Denis & McConnell, 2003; Claessens, Djankov, Fan, & Lang, 1998). The present study is more related to the first aspect and examines the role played by ownership concentration (e.g. the fraction of shares owned by the three largest shareholding interests).

The Kingdom of Bahrain, which is a member of the Gulf Co-operation Council (GCC), is the focus of the current study, as an example for emerging markets. It is one of the most open economies in the Middle East and North Africa region and has been experiencing solid economic performance in recent years. Moreover, it is one of the world's leading international finance centers. The Bahrain Stock Exchange (BSE), which officially commenced operations in 1989, has grown significantly in the number of listed securities with currently 49 companies. Emerging markets are some of the fastest growing economies in the world and represent countries that are experiencing a substantial economic transformation. Such economies are home to approximately 80% of the world's population and constitute the primary destinations not only for exports but also for direct investment (Baena, 2011).

The current study is justified on the following grounds: (1) it extends the prior research on corporate value and investigates empirically the relationship between internal CG mechanisms and the corporate value of Bahraini listed companies (2) The study could help in providing benefits to investors and regulators, especially because the Bahraini government is starting to apply its CG code. (3) It may help in studying other capital markets in the area especially the Gulf Co-operation Council countries which may also contribute to the accounting literature on emerging markets (EM).

## **THE PROFILE IN THE CONTEXT OF BAHRAIN**

The Kingdom of Bahrain is the financial capital of the Middle East, enjoying a geographical and time-zone location mid-way between the Asian and European markets. It has launched a wide range of economic initiatives aimed at diversifying the economy and stimulating growth and economic stability. Bahrain aims to create the right climate to attract more foreign investment in order to ensure sustainable growth and to create increased employment opportunities. This leads to a growing concern for a high profile regarding CG in Bahrain. Such critical interest attracts a great deal of attention from practitioners and communities such as managers, shareholders, investors and regulatory agencies.

A Corporate Governance Code (CGC) in Bahrain, which has been effective since the beginning of 2011, aims to make the CG system transparent and understandable for both national and international investors in a well-liberalised and transparent economic system. All companies to which this code applies should be in full compliance by the end of 2011. At every company's annual shareholder meeting held after 1 January 2011, CG should be an item on the agenda for information regarding the company's governance. The role of directors in companies is defined also in the Commercial Companies Law 2001 and its Executive Regulations. The law specifies the requirement for a board of directors, its overall responsibilities, the composition of the board of directors and voting rights. Amendments to the law were generally directed towards CG issues such as the annual meeting, communication with third party, relationships with shareholders and disclosure requirements (Hussain & Mallin, 2003).

According to Bahrain Bourse (2010) Report, the year 2010 witnessed several considerable achievements, not only on the Bahrain Stock Exchange (BSE) level, but also on the Bahraini capital markets level in general. Royal Decree No. 60 was issued regarding the establishment of Bahrain Bourse Company as a Bahraini Shareholding Closed Company B.S.C. to replace BSE. This step has been taken to go in line with the bourse's capability to meet the modern administrative requirements of international exchanges, as well as the commercial standards that are deemed necessary to meet the rapid developments witnessed in modern stock exchanges. This is also supporting the bourse's capability to play a greater role in the economic development of the Kingdom of Bahrain and enhance its capability to attract and maintain local and foreign investments. During 2010, Bahrain Bourse joined the Association of National Numbering Agencies (ANNA). Further, the number of public shareholding companies listed on the bourse rose to 49, of which 5 are non-Bahraini, bringing up the market capitalisation of the Bahraini companies to around BD 7.56 billion (BD, a Bahraini Dina, equals US\$ 2.65) (Bahrain Bourse, 2010).

## **LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

In the light of the objective of the current study, the relevant literature can be classified into two groups of research. The first examines the relationship between board characteristics and corporate value; while the second examines the association between ownership structure and corporate value, the literature related to these areas is considered as follows.

### **Board Characteristics and Corporate Value**

The board of directors is considered pivotal in CG literature. However, the board is just one of several CG mechanisms (Donnelly & Kelly, 2005). The board provides a key monitoring function in dealing with agency problems in the firm (Lefort & Urzú, 2008). The structure of the board has received much attention from regulators as one part of the internal CG mechanism. The board of directors of any firm plays an essential role in setting the firm's strategic goals and in selecting the strategies and general policies that govern the work flow inside the firm. The board has the obligation to determine the firm's overall strategy, and to ensure that adequate controls are in place to protect shareholder value (Keenan, 2004). In Egypt, Samaha, Dahawy, Hussainey and Stapleton (2012) assessed the extent of CG voluntary disclosure and the impact of a comprehensive set of CG attributes (board composition, board size, CEO duality, director ownership, blockholder ownership and the existence of audit committee) on the extent of CG voluntary disclosure. The findings indicate that the extent of CG disclosure is lower for companies with duality in position and higher ownership concentration and increases with the proportion of independent directors on the board and firm size. The results of the study support theoretical arguments that companies disclose CG information in order to reduce information asymmetry and agency costs and to improve investor confidence in the reported accounting information.

In practice, corporate boards delegate most of their duties to the management team but retain the power to hire, compensate and, if necessary, replace the top executives (Fama & Jensen, 1983). The ultimate responsibility for corporate decisions, however, remains with the board. Several board characteristics (e.g.: board size, board composition, role duality) have been examined in the literature (John & Senbet, 1998; Kiel & Nicholson, 2003; Pye, 2000; Yarmack, 1996). Following Jensen (1993) who argued that three board characteristics are affecting the monitoring potential of a board namely board size, board composition and CEO/Chair duality. They are discussed in the current study as follows:

### ***Board size***

The number of directors on the firm's board can play a critical role in monitoring the board and in taking strategic decisions. Board size affects the efficiency of the board's control function. Previous studies showed that a board's ability to monitor and make important corporate decisions increases with its size (Dalton, Daily, Ellstrand, & Johnson, 1998; John & Senbet, 1998; Kiel & Nicholson, 2003). For instance, Dalton et al. (1998) argued that large boards are valuable for the variety of experiences the members bring to the board decision making. They suggest that a larger board is more effective in preventing corporate failure. However, other studies argued that firms with large boards are less effective than firms with a small board. For example, Jensen (1993) and Pye (2000) pointed out that a limited number of board members is important to make effective CG mechanisms. Yermack (1996) found that firms with small boards have increased quality of monitoring and decision making by the board of directors. According to this argument, firms with small boards have higher market values and provide stronger CEO performance incentives from compensation and threat of dismissal than firms with larger boards. Hermalin and Weisbach (2003) reported that board size is negatively related to corporate value and the quality of decision-making. In the light of the above discussion, it can be concluded that empirical research examining the relationship between board size and corporate value has provided inconclusive results. Accordingly, the first hypothesis is formulated as follow:

H1: Board size has a significant effect on corporate value.

### ***Board composition (percentage of outside directors)***

The CG literature emphasises the role of outside directors in resolving agency problems through the design of incentive contracts for executives and the monitoring of management behaviour (Fama & Jensen, 1983; Firth, Fung, & Rui, 2007). Outside directors are motivated to work in the best interests of the minority shareholders as they bear considerable reputation costs if they fail in their duties (Srinivasan, 2005). Fama and Jensen (1983) argued that non-executive directors act as a reliable mechanism to diffuse agency conflicts between managers and owners. They are viewed as providing the necessary checks and balances needed to enhance board effectiveness. Moreover, it was argued that outside directors seem to be more influential in terms of board decision-making (Pye, 2000). Boards dominated by outsiders are in a better position for monitoring and controlling managers (Dunn, 1987). Fama and Jensen (1983) declared that outside directors have incentives to act as monitors of management because they want to protect their reputations as effective and independent decision makers.

A number of empirical studies were carried out to investigate the relationship between the board composition and corporate value. For instance, Lefort and Urzúa (2008) investigated the effect of outside directors as an internal CG mechanism in companies with high ownership concentration by using a sample of 160 Chilean companies for a period of four years. They reported that an increase in the proportion of outside directors affects company value. Also companies that present more exacerbated agency conflicts tend to incorporate professional directors to the boards, in an effort to improve CG and ameliorate the agency problem. Using a sample of 52 newly privatised Egyptian listed companies in the period from 1995 to 2005, Omran (2009) provided evidence that outside directors are an effective CG mechanism and argued that the higher proportion of outside directors has a positive effect on corporate value.

Furthermore, Choi, Park and Yoo (2007) reported that the increase in the percentage of outside directors is positively associated with an increase in corporate value as measured by Tobin's Q. Peng (2004) provided evidence on the positive effect of outside directors on corporate value from a sample of Chinese listed firms when performance was measured in terms of sales growth. In the same line, Booth et al. (2002) reported the same results by using the market value and net income to measure the corporate value. Also, Black, Jang and Kim (2006) who explored the factors affecting board composition in Korea found that the percentage of outside directors in Korean firms has a positive correlation with Tobin's Q.

In contrast, a negative relationship between outside directors and corporate value was reported. For example, Klein (2002) found a significant negative association between the magnitude of abnormal accruals and the percentage of outside directors on the board. Furthermore, in the U.K., Peasnell, Pope and Young (2000) provided evidence of a significant negative association between income-increasing accruals and the proportion of outside board members.

On the other hand, a number of studies (Hermalin & Weisbach, 1988; Anderson & Reeb, 2003) concluded that there is no relationship between the percentage of outside directors and corporate value. For example, Chen, Cheung, Stouraitis and Wong (2005) examined the effect of CG on corporate value using a sample of 412 publicly listed companies in Hong Kong during 1995–1998. They concluded that the composition of the board of directors as one of CG mechanism has little impact on corporate value. Similarly, in the U.S., Hermalin and Weisbach (2003) pointed out that firms with a higher proportion of outside directors are not significantly associated with superior corporate value.

In the light of the above, it appears that the literature provided mixed findings regarding the relationship between board composition and corporate value. Accordingly, the following hypothesis can be formed:

H2: the percentage of outside directors has a significant effect on corporate value.

### ***CEO/Chair duality***

One of the essential concerns in CG is the board's leadership structure or CEO/Chair duality (means the same person holding the positions of company CEO and chairman of the board of directors). Literature on CG has argued that the separation between CEO and chairperson positions can improve the efficiency and effectiveness of internal control systems in companies, consequently, corporate value will be affected. When the chairman of the board of directors also takes the role of the CEO, the effectiveness of the board to monitor top management is decreased (Firth et al., 2007). Jensen (1993) argued that when the CEO also holds the position of chairman of the board, internal control systems fail as the board cannot effectively perform its key control functions. In contrast, Brickley, Coles and Jarrell (1997) argued that the separation of duties incurs costs and they found that these costs outweigh the benefits in large U.S. companies.

Empirical studies have reported different results. For instance, Chen et al. (2005) confirmed a negative relationship between CEO/Chair duality and corporate value when measured by return on assets, return on equity, and the market-to-book ratio. However, other studies reported that the separation between the two positions, chairperson and CEO has no significant impact on corporate value (Brickley et al., 1997; Vafeas and Theodorou, 1998). In the same line, Omran (2009), in Egypt, reported that corporate value is not affected by a separation between CEO and chairperson positions. In the light of the above, the following hypothesis can be suggested:

H3: The separation between CEO and chairperson positions has a significant effect on corporate value.

### **Ownership Structure and Corporate Value**

The literature in the area of the current research provides conflicting results regarding the effect of ownership concentration on corporate value. It is argued that large shareholders have the capability of monitoring and controlling managerial activities. Therefore, they are liable to contribute to the corporate value (Shliefer & Vishny, 1986). Further, La Porta, Lopez-de-Silanes, Shleifer



and Vishny (2002) pointed out that ownership concentration is more likely to have a positive effect on corporate value, especially in situations where control by large equity holders may act as a substitute for legal protection in countries with weak investor protection and less developed capital markets. Ownership concentration can increase the possibility of exerting control over professional managers and obtaining a better performance for the company. In the U.S.A, Shleifer and Vishny (1986), McConnell and Servaes (1990) and also Boubakri, Cosset and Guedhami (2005) reported a strong positive relation between ownership concentration and corporate value.

Similarly, using panel data for 64 publicly listed companies on the Saudi Stock Exchange (SSE), Soliman (2010) reported that firm financial performance, when measured by return on assets (ROA) and return on equity (ROE), is improved as ownership concentration increases of listed companies in the Kingdom of Saudi Arabia. In Turkey, Gürsoy and Aydoğan (1998) examined the impact of ownership structure of the Turkish nonfinancial firms listed on the Istanbul Stock Exchange (ISE) on corporate value by using a sample of 106 firms in 1992, and 194 of firms in 1998. They reported that there is a significant effect of ownership concentration on corporate value and higher concentration leads to better market performance. Earle et al. (2005) examined the impact of ownership concentration on corporate value using panel data for 168 firms listed on the Budapest Stock Exchange (BSE) in 1996 and 2000. The findings showed that only when concentration is measured by the largest shareholder there is a significant positive statistic effect on corporate value. In the same study, other shareholders have coefficients that are negative and statistically insignificant. The authors found that when concentration increased in the hands of a single large shareholder, corporate value is improved, whilst increased ownership by other shareholders does not improve performance and may even decrease it.

In Jordan, Jaafar and El-Shawa (2009) employed the two-stage least square (2SLS) regression on a sample of 103 firms listed on the Ammam Stock Exchange for the financial years 2002–2005 to examine the effects of ownership concentration and board characteristics on corporate value. In addition to the accounting and market measures, ROA and Tobin's Q, which was used to measure firm performance, the study used three control variables namely firm size; gearing; and industry type to control their expected influence on firm value. Jaafar and El-Shawa (2009) reported that ownership concentration has a positive and significant effect on corporate value.

Moreover, Kim (2006) examined the impact of concentrated family ownership on firm productivity performance by using the data on Korean manufacturing firms from 1991 to 1998. The results showed that family ownership concentration is associated positively with firm-level productivity

performance. Claessens and Djankov (1999) investigated the relationship between ownership concentration and corporate value by using 706 Czech firms over the period 1992 through 1997. They reported that the more concentrated the ownership, the higher the firm profitability and labor productivity. The authors estimated an inverse U-shaped relationship in the Czech Republic. In the same line, Drakos and Bekiris (2010) found a positive relation between the largest shareholder and corporate value of companies listed in the Athens stock exchange.

In contrast, Demsetz and Villalonga (2001) examined the roles played by two aspects of ownership structure, first ownership concentration (by the five largest shareholding interests) and second the fraction of shares owned by management in the 223 U.S. firms. For ownership concentration, they reported a negative insignificant relation. Leech and Leahy (1991) reported a negative relationship between ownership concentration and corporate performance when performance is measured as profitability.

On the other hand, other studies have reported different results. Cole and Mehran (1998) investigated the relationship between ownership concentration and corporate value, using a sample of 94 thrift institutions that converted from mutual to stock ownership between 1983 and 1987. The authors did not find a link between corporate value and ownership by the largest institutional or non-institutional outside blockholders. Demsetz and Lehn (1985) reported that concentrated ownership is not associated with better operating performance or higher firm valuation. The same result is declared by Chen et al. (2005) who analysed a sample of 412 publicly listed companies in Hong Kong during 1995–1998 to examine the effect of concentrated family ownership on firm operating performance. Moreover, Chang and Shin (2007) examined whether firms with high concentrated ownership and lower outside investor participation impact on corporate value using a sample of 255 controlling family ownership (165 are private and 90 public firms) listed on the Korea Stock Exchange. The results revealed no relation between concentrated family ownership and corporate value. Correspondingly, Omran et al. (2008) investigated the ownership concentration and its implications for CG, and its effects on corporate value using a sample of 304 firms from different sectors of the economy from several Arab countries including Egypt, Jordan, Oman and Tunisia. The results indicated that ownership concentration does not seem to have a significant impact on Arab firms' profitability and performance measures. The same result was declared by Karathanassis and Drakos (2004) who investigated whether ownership concentration affects corporate value in the Greek stock market by using a sample of 59 listed firms in the Athens Stock Exchange for the period 1996–1998. They failed to find any relation between ownership concentration and corporate value in the Greek Capital market.

In the light of the above results, the following hypothesis can be formulated:

H4: There is a significant relationship between ownership concentration and corporate value.

The above main hypothesis can be broken into the following sub-hypotheses as follows:

H4a: There is a significant relationship between the first largest shareholder and corporate value.

H4b: There is a significant relationship between the second largest shareholder and corporate value.

H4c: There is a significant relationship between the third largest shareholder and corporate value.

## **RESEARCH METHOD**

This section is devoted to explaining the methodology that was adopted in the study, where the researcher obtained the data and how the dependent and independent variables are identified. Also the form of data analysis being undertaken to test the hypotheses developed earlier in this research.

### **The Sample**

In selecting the sample for the study, the following criteria are used:

1. Stocks of the firms must have been listed on the BSE for at least three continuous years from (2008– 2010) as of the end of 2010.
2. The identity of the chairman and CEO (or equivalent position such as managing director, general manager, or president) should be reported in the annual reports or on the firm's web site.
3. Closed firms are excluded from the selected companies.

By applying the above criteria, a number of firms were excluded, some because of being de-listed and suspended as an international investment group and others because of being a new listing such as Aluminum Bahrain (Alba). Other firms were excluded because of insufficient data available. Complete data, three continuous years from 2008 to 2010, for all variables in the current study were available for only 43 out of 49 listed firms at the end of 2010 with total observations of 135 firms. Detailed information on variables of board characteristics and ownership structure was collected from the firms' annual reports of the years 2008, 2009 and 2010. A variety of sources, such as the BSE's

web site and other related web sites (e.g., [www.mubasher.net](http://www.mubasher.net)) which include data bases of BSE, were used in the current study. Additionally, the web site of each firm was visited and examined in detail to gather the information required.

## **Definition and Measurement of Dependent and Independent Variables**

### ***Dependent variables***

As the main aim of the present study is to investigate the effect of internal CG mechanisms (board characteristics and ownership structure) on corporate value, three measures for corporate value have been employed in this study as dependent variables. In addition to the market measure of Tobin's Q, two accounting measures of performance, namely return on assets (ROA) and earning per share (EPS), are used as dependent variables. Following a number of previous studies (e.g., Omran, 2009; Soliman, 2010), the current study considers ROA measured as the ratio of the net profit to total assets and EPS is net income divided by total shares. For the market measure of corporate value, Tobin's Q is used in a number of studies (Demsetz & Lehn, 1985; McConnell & Servaes, 1990; Demsetz & Villalonga, 2001) to examine the relationship between ownership structure and corporate value. Moreover, following previous studies (e.g. Lefort & Urzúa, 2008; Himmelberg, Hubbard, & Palia, 1999), Tobin's Q is defined as the sum of market value of ordinary shares issued, the total book value of debt and the book value of preference shares, divided by the book value of total assets. Tobin's Q is interpreted as proxies for corporate value, in general, well-managed firms should have ratios larger than one, indicating that the current allocation of the firms' assets is value-increasing.

### ***Independent variables***

In addition to the above dependent variables, there are six independent variables which were categorised into two groups. The first group includes three variables related to board characteristics. Board size (BSIZE) measured as the total number of board members; percentage of outside directors (OUTSID) measured as the fraction of outside or non-executive directors on the board to the total number of board members; and last CEO/Chairman duality (CCDUAL) which is equal to 1 when the CEO also serves as Chairman of the board of directors and 0 otherwise. The second group of independent variables includes another three variables related to ownership concentration as follows: First is the largest ownership (FIRSTSH) measured as a fraction of total company shares outstanding held by the first largest stockholder; second is the second largest stockholder (SECONDSH) measured as a fraction of total company shares outstanding held by the second stockholder; third is the third largest stockholder (THIRDSH)

measured as a fraction of total company shares outstanding held by the third largest stockholder.

***Control variables***

A number of control variables (such as firm size, gearing, industry type, profitability, advertising intensity, cash flow, investment rate, advertising-to-sales ratio, research and development expenditures-to-sales ratio, fixed assets-to-sales ratio and market risk) were used in the regression models by several studies in this area of research to control for potential influences on corporate value (e.g., Ng, 2005; Demsetz & Lehn, 1985; Jaafar & El-Shawa, 2009). For example, Omran et al. (2008) have been controlled for debt ratio because of the possibility that creditors might be able to minimise managerial agency costs and in the process affect ownership concentration. Jang and Park (2011) also expected a positive relationship between leverage and corporate value therefore they used leverage as a control variable to control the expected positive relationship on corporate value. Other studies (e.g., Ramaswamy, 2001; Frank & Goyal, 2003) have suggested that firm size might influence corporate value. Fama and French (1995) concluded that smaller firms, on average, have lower return on equity than larger firms. Accordingly, firm size has been used extensively as a control variable in the empirical analysis of corporate value. The current study used four variables namely firm size (FSIZE) measured by book value of assets; leverage (FLEVR) measured by total debts to total assets; listing period (FLISTG) is the length of time that the firm's common stock has been traded on the BSE; and firm age (FAGE) is identified by the number of years from the date of establishment of the firm so far. Definitions of all variables (dependent, independent and control variables) used in the current analysis are presented in Table 1.

Table 1  
*Definitions of the variables used in the empirical analysis*

<b>Variables</b>	<b>Definitions</b>
<b>Dependent variables (corporate value):</b>	
1. Tobin's Q (TOBINQ)	1. (market value of common stock + the book value of preferred stock + total book value of debt) / book value of total assets.
2. Return on Assets (ROA)	2. Net income to total assets.
3. Earnings per share (EPS)	3. Net income divided by total shares.

*(Continued on next page)*

Table 1 (continued)

Variables	Definitions
<b>Independent variables (board characteristics):</b>	
1. Board size (BSIZE)	1. Number of board members.
2. Non-executive directors (OUTSID)	2. Fraction of outside directors to total number of board members.
3. CEO/Chair duality (CCDUAL)	3. Dummy variable takes one if the chief executive officer and the chairman of the board are the same person, and zero otherwise.
<b>Independent variables (ownership concentration):</b>	
4. First Shareholder (FIRSTSH)	4. % of shares owned by the first largest shareholder.
5. Second Shareholder (SECONSH)	5. % of shares owned by the second largest shareholder.
6. Third Shareholder (THIRDSDH)	6. % of shares owned by the third largest shareholder.
<b>Control variables:</b>	
1. Firm size (FSIZE) (BD' 000)	1. Firm total assets.
2. Leverage (FLEVER)	2. Firm total liabilities/total assets
3. Firm listing (FLISTG)	3. Number of years a firm's stock has been traded on the BSE.
4. Firm age (FAGE)	4. Number of years from the date of establishment of the firm.

## DATA ANALYSIS

Besides the descriptive statistics which mainly depend on minimum and maximum, the mean, and the standard deviation, a statistical analysis (Pearson correlation and regression analysis) was carried out using the Statistical Package for Social Sciences (SPSS). Pearson correlation was used to explore the strength of the relationship between dependent and independent variables. The ordinary least square (OLS) regression analysis was performed for the three measures of corporate value (one model for each measure) as dependent variables and six independent variables related to board characteristics (BSIZE, OUTSID and CCDUAL) and ownership concentration (FIRSTSH, SECONSH and THIRDSH). In addition, four control variables (FSIZE, FLEVER, FLISTG and FAGE) were

included in the models. Therefore, the regression models of OLS were estimated in the current study as follows:

### The Regression Equations for Corporate Value

#### Models -1, OLS of Tobin's Q

$$Y (\text{TOBINQ}) = \beta_0 + \beta_1 \text{BSIZE} + \beta_2 \text{OUTSID} + \beta_3 \text{CCDUAL} + \beta_4 \text{FIRSTSH} + \beta_5 \text{SECONSH} + \beta_6 \text{THIRDSH} + \beta_7 \text{FSIZE} + \beta_8 \text{FLEVER} + \beta_9 \text{FLISTG} + \beta_{10} \text{FAGE} + \varepsilon$$

#### Models -2, OLS of ROA

$$Y (\text{ROA}) = \beta_0 + \beta_1 \text{BSIZE} + \beta_2 \text{OUTSID} + \beta_3 \text{CCDUAL} + \beta_4 \text{FIRSTSH} + \beta_5 \text{SECONSH} + \beta_6 \text{THIRDSH} + \beta_7 \text{FSIZE} + \beta_8 \text{FLEVER} + \beta_9 \text{FLISTG} + \beta_{10} \text{FAGE} + \varepsilon$$

#### Models -3, OLS of EPS

$$Y (\text{EPS}) = \beta_0 + \beta_1 \text{BSIZE} + \beta_2 \text{OUTSID} + \beta_3 \text{CCDUAL} + \beta_4 \text{FIRSTSH} + \beta_5 \text{SECONSH} + \beta_6 \text{THIRDSH} + \beta_7 \text{FSIZE} + \beta_8 \text{FLEVER} + \beta_9 \text{FLISTG} + \beta_{10} \text{FAGE} + \varepsilon$$

where Y = corporate value;  $\beta_0$  is a constant;  $\beta_i, i = 1, \dots, 10$ , is parameters; and  $\varepsilon$  is error term.

## EMPIRICAL RESULTS AND ANALYSIS

### Descriptive Statistics

Table 2 shows the descriptive statistics for all dependent and independent variables used in this study. Concerning dependent variables, Table 2 shows information on the three variables which used to measure corporate value across total observations of 135 firms for 43 listed Bahraini companies. For Tobin's Q (the market measure), the mean percentage is 0.9895% with a standard deviation of 0.3841%. The minimum value is 0.20% while the maximum value is 2.33%. Regarding ROA (the second measure), the mean percentage is 2.8960% with a standard deviation of 9.2902%. The minimum value is -34.26% and the maximum value is 17.24%. For EPS (the third measure), the mean percentage is 0.5525% with a standard deviation of 3.56833%. Concerning independent variables, Table 2 shows information on the three board characteristics variables. It reveals that the minimum board size (BSIZE) of listed companies is 5, while 14

members was the maximum number of board of directors. The mean percentage of the outside directors (OUTSID) is 0.68% (with a standard deviation of 0.15%). This result indicates that the majority of board members for listed companies on BSE are non-executive directors. One possible reason for this high percentage is that according to Bahraini CG code, the board should comprise a majority of non-executive directors with the technical or analytical skills to benefit the board and the company.

Concerning ownership concentration variables, the mean of percentage of shares held by the first largest shareholder (FIRSTSH) is 46.85%, the second largest shareholder (SECONSH) is 13.77 and the third largest shareholder (THIRDSH) is 9.58% with a standard deviation of 19.90%, 6.78% and 4.66% respectively. Furthermore, 94% is the maximum ownership percentage held by the first largest shareholder, while only 3% is the minimum ownership percentage held by the third shareholder. Finally the table presents information on control variables. For instance, the minimum total assets representing firm size (FSIZE) is BD 5.03 million, while BD 10,595.59 million is maximum firm size with a mean of 1,089.03 and a standard deviation of 2,371.89. Also, the mean of leverage (FLEVER) for the total sample was 43.92% with a standard deviation of 29.54%, while the minimum was 3.81% and the maximum was 90%. The minimum number of years for listing on BSE is 3 years, while maximum is 22 years.

### **Correlation Analysis**

Pearson correlation coefficients matrix (refer Table 3) shows to present the correlations between internal CG mechanism variables and corporate value variables. It shows a number of significant and non-significant associations among dependent variables (Tobin's Q, ROA and EPS) from one side and six independent variables in addition to four control variables from the other. For instance, Table 3 reveals that there are negative associations between ownership concentration variables, (FIRSTSH, SECONSH and THIRDSH), and corporate value when measured by Tobin's Q (-0.197, -0.249 and -0.133) respectively. These associations are significant with FIRSTSH and SECONSH. Also, Tobin's Q has significant positive associations with all control variables. However, Tobin's Q has weak positive and non-significant associations with BSIZE and OUTSID (0.079 and 0.099). Concerning ROA, there are weak and non-significant associations (0.018, -0.035 and 0.043) between ROA, the dependent variable, and other board characteristics (BSIZE, OUTSID and CCDUAL). Further, FIRSTSH, the first largest shareholder, is the only dependent variable, which significantly correlated with ROA (-0.282). Other dependent variables of ownership concentration, SECONSH and THIRDSH, are weakly and non-significantly correlated with ROA. The length of time that the



firm's stock has been traded in BSE (FLISTG) and the age of the firms (FAGE) have positive and significant correlations with Tobin's Q and ROA, indicating that they are associated with corporate value.

Table 2  
Descriptive statistics for variables used in this study

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Tobin's Q	135	0.20	2.33	0.9895	0.38408
ROA	135	-34.26	17.24	2.8960	9.29015
EPS	135	-.29	24.13	0.5525	3.56833
BSIZE	135	5	14	8.7556	2.00918
OUTSID	135	0.33	1.00	0.6796	0.14468
CCDUAL	135	0	1	0.0222	0.14795
FIRSTSH	135	11.94	94.00	46.8456	19.89644
SECONSH	135	5.35	32.15	13.7670	6.78269
THIRDSDH	135	3.00	23.00	9.5815	4.65723
FSIZE	135	5.03	10,595.59	1,089.03	2,371.89
FLEVER	135	3.81	90.00	43.9180	29.53894
FLISTG	135	3	22	15.8667	6.86197
FAGE	135	5	54	26.0000	12.34758

Table 3  
Correlation between corporate value measures (dependent variables) and independent variables (board characteristics, ownership concentration, and control variables)

	Tobin's Q	ROA	EPS	BSIZE	OUTSID	CCDUAL	FIRSTSH	SECONSH	THIRDSDH	FSIZE	FLEVER	FLISTG	FAGE
Tobin's Q	1												
ROA	.007	1											
EPS	-.163	.175*	1										
BSIZE	.079	.018	.394***	1									
OUTSID	.099	-.035	.113	.404***	1								
CCDUAL	-.021	.043	-.027	-.283***	.126	1							
FIRSTSH	-.197*	-.282***	.148	-.074	.005	-.210*	1						
SECONSH	-.249***	.031	.143	.212*	-.053	-.182*	.366***	1					
THIRDSDH	-.133	.061	.010	.146	.042	-.142	.192*	.609**	1				
FSIZE	.180*	.024	.014	.387***	.088	-.056	.072	.312**	.066	1			
FLEVER	.293***	-.022	.130	.274***	.110	.067	.064	.001	-.087	.302**	1		
FLISTG	.309***	-.396**	.143	-.202*	.290***	-.063	.316***	.160	.085	-.160	-.115	1	
FAGE	.325**	.394**	.045	-.175*	.247***	-.098	.330***	.198*	.245***	-.089	-.104	.841**	1

Notes: 1 = \* Correlation is significant at the 0.05 level (2-tailed); \*\* Correlation is significant at the 0.01 level (2-tailed)  
 2 = Variance inflation factors (VIF) was calculated to check inter-correlation among the independent variables and the results which refer to the three independent variables do not appear to be problematic.  
 3 = Dependent variables and independent variables are defined in Table 1 above.  
 4 = Pearson correlation was performed for all variables.  
 5 = All coefficients are based on 135 observations.

Concerning EPS, Table 3 reveals that BSIZE is the only dependent variable which is significantly correlated with EPS (0.394). This correlation is positive and nearly moderate indicating that a larger board size is associated with corporate value. Similar findings were reported by Dalton, Daily, Ellstrand and Johnson (1998) who found a positive and significant relationship between board size and corporate value. However, contradictory results were reported by previous studies in this area of research. For example, Yermack (1996) and Hermalin and Weisbach (2003) concluded that board size is negatively related to corporate value and the quality of decision-making. Other independent and control variables are weakly and non-significantly associated with corporate value when measured by EPS. It should be noted that Table 3 reveals significant correlation within dependent variables of corporate value, but this correlation is weak. For instance, positive significant correlation of 0.175 was found between Tobins' Q and ROA. Similar findings were reported by Demsetz and Villalonga (2001) who reported a significant correlation between the same two measures of corporate value, Tobins' Q and ROA.

### **Regression Analysis**

Tables 4 shows estimates of the regression models which were run using three OLS regression models which were employed using two accounting measures of corporate value, ROA and EPS, and Tobin's Q, the market measure of corporate value as dependent variables. This will help to know which of the independent variables (BSIZE, OUTSID, CCDUAL, FIRSTSH, SECONSH and THIRDSH), included in each of the three models, contribute to the prediction of the dependent variables (Tobin's Q, ROA and EPS).

Model 1 (Tobin's Q) is statistically significant (p value is 0.005) in explaining the dependent variable, when measured by Tobin's Q, with F-value of 5.278 and an adjusted R<sup>2</sup> of 0.260 which moderately explains 26% of the variance in corporate value. Significant results are found in this model for only two independent variables namely BSIZE and THIRDSH. The above results indicate that board characteristics, only BSIZE and ownership concentration, only THIRDSH, are affecting corporate value when measured by the market measure, Tobin's Q. This is partially in line with some previous studies (e.g., Jensen, 1993; Yermack, 1996; Dalton et al., 1998; Pye, 2000), which reported significant effect of board characteristics and ownership concentration on corporate value. This finding supports hypotheses H1 and H4c developed earlier in this study. Other variables of board characteristics and ownership concentration are not affecting corporate value when measured by Tobins' Q which is not supporting other hypotheses H2, H3, H4a and H4b. Results on ownership concentration, FIRSTSH and SECONSH, are consistent with those

which were reported by Chen et al. (2005) and Demsetz and Lehn (1985) who reported that concentrated ownership is not associated with better operating performance or higher firm performance. Furthermore, Omran et al. (2008) found no effect of ownership concentration on corporate value. Regarding control variables, only FAGE and FLEVER have positive and significant associations with Tobin's Q.

Model 2, ROA, is statistically significant ( $p$  value is 0.000) in explaining the dependent variable with F-value of 7.432 and the highest, among the three models, adjusted  $R^2$  of 0.324 which explains 32.4% of the variance in corporate value. Of three board characteristics variables, only CCDUAL has a significant effect on corporate value when measured by ROA. The above result is similar to what was reported by Chen et al. (2005) who found a negative relationship between CEO/Chair duality and corporate value (measured by ROA). However, Brickley et al. (1997) and Vafeas and Theodorou (1998) reported that the separation between the two positions, chairperson and CEO has no significant impact on corporate value. This finding supports H3, which predicts that separate individuals in the posts of CEO and board chairman has a significant effect on corporate value. All ownership concentration variables (FIRSTSH; SECONSH and THIRDSH) have a non-significant relationship with ROA. Consequently, these findings do not support the research hypothesis (H4) and its sub-hypotheses (H4a, H4b and H4c). In the same line, Demsetz and Villalonga (2001) and Leech and Leahy (1991) reported an insignificant effect of ownership concentration on corporate value. In contrast, Drakos and Bekiris (2010) found a positive relation between the largest shareholder and corporate value. Control variables, FLEVER and FLISTG, have a significant association with ROA.

Regarding Model 3, EPS is statistically significant ( $p$ -value is 0.000) in explaining the dependent variable, when measured by EPS with F-value of 5.616 and an adjusted  $R^2$  of 0.275 which explains 27.5 % of the variance in corporate value. EPS, dependent variable, has significant associations with all the board's characteristics variables. These results support H1, H2 and H3 which predict that the three board characteristics variables have a significant effect on corporate value.

BFSIZE has a positive and significant effect (0.728) with corporate value when measured by EPS. This result is similar to what was reported by Dalton et al. (1998) and contrary to Hermalin and Weisbach (2003) who reported that board size is negatively related to corporate value. Nevertheless, OUTSID is negatively associated (0.280) with EPS. This finding is similar to Peasnell et al. (2000) who reported a significant negative association between firm value and the proportion of outside board members. However, other studies (e.g., Lefort & Urzúa, 2008; Omran, 2009; Choi et al., 2007) reported that the increase in the

percentage of outside directors is positively associated with the increase in corporate value. On the other hand, only one variable of ownership concentration, FIRSTSH has a positive and significant relationship (0.192) with EPS. Consequently, the finding is supporting H4a. In consistent with this result, Drakos and Bekiris (2010) and Claessens and Djankov (1999) found a positive relation between the largest shareholder and corporate value. Also, Earle et al. (2005) showed that only when ownership concentration is measured by the largest shareholder, there is a significant positive statistic effect on corporate value. This indicates that the more the increase in ownership concentration in the hands of a single large shareholder, the more improvement on corporate value. On the other hand, other studies (Cole & Mehran, 1998; Omran et al., 2008; Karathanassis & Drakos, 2004) showed that ownership concentration does not seem to have a significant effect on corporate value.

## **SUMMARY AND CONCLUSIONS**

Although the issue of the current research has been examined in most developed markets such as the U.S. and the U.K., understanding such issue in emerging markets such as Bahrain is particularly important due to differences that exist in the structure of business in different markets. This study extends the literature in this area through the Bahrain context. The study has important implications for investigating corporate value in different sectors. The regulatory body may be interested to find out whether a minimum requirement of ownership by all directors (executive and non executive) on public companies is necessary or not. This study helps researchers and practitioners to understand the relationship between some internal CG mechanisms and corporate value in the Bahraini environment and could make several contributions to the existing literature on CG. The findings of this study also imply that policy makers should consider the characteristics of firms as well as the institutional environment before they implement additional CG reforms.

The study employs the OLS regression analysis to test the effect of board characteristics and ownership structure as independent variables on corporate value measured by three different measures namely Tobin's Q, ROA and EPS as dependent variables. Statistical analysis, three models of OLS regression, reported that board characteristics and ownership structure variables have a statistically significant effect on corporate value. Tobin's Q model showed significant association only with BSIZE while, non-significant associations are reported with other board characteristics variables (OUTSID and CCDUAL). Further, only THIRDSH has a significant effect on corporate value when measured by Tobin's Q. Regarding the ROA model, only one variable, CCDUAL has a significant relationship with ROA. In the EPS model, all variable of board

characteristics affect significantly on corporate value, while, only one variable of ownership concentration, FIRSTSH, has a positive and significant effect on corporate value, EPS.

Table 4  
*Regression models*

	Model 1 –Tobin's Q		Model 2 – ROA		Model 3 – EPS	
	Coefficient	T-statistic	Coefficient	T-statistic	Coefficient	T-statistic
(Constant)		5.012**				-5.419**
BFSIZE	-0.078	-.703*	0.056	0.531	0.728	6.631**
OUTSID	0.000	-.004	-0.047	-0.489	-0.280	-2.815**
CCDUAL	0.094	1.044	-0.237	-2.837**	0.247	2.758**
FIRSTSH	-0.080	-.917	-0.110	-1.317	0.192	2.210*
SECONSH	-0.007	-.064	-0.049	-0.455	0.019	0.168
THIRDSH	-0.268	-2.613*	-0.039	-0.403	-0.079	-0.782
FSIZE	-0.153	-1.695	0.160	1.877	-0.193	-2.165*
FLEVER	0.354	3.952**	-0.385	-4.922**	0.018	0.205
FLISTG	-0.121	-.764	0.461	3.165**	0.444	2.828**
FAGE	0.442	2.983**	-0.035	-0.249	-0.171	-1.163
<i>No. of Obs.</i>	135		135		135	
$R^2$	0.321		0.375		0.334	
<i>Adjusted R<sup>2</sup></i>	0.260		0.324		0.275	
<i>F-value</i>	5.278		7.432		5.616	
<i>P value</i>	0.005		0.000		0.000	

Notes: 1 = \* significant at the 0.05 level (2 - tailed), \*\* significant at the 0.01 level (2 - tailed)

2 = Dependent variables and independent variables are defined in Table 1.

3 = Coefficient is standardised coefficients (Beta) and *t*-values give a rough indication of the impact of each predictor variable.

This study is not free from limitations. It uses a sample of 43 listed companies in Bahrain with a total of 135 observations. Although the study can contribute to the understanding of the relationship between internal CG mechanisms and corporate value, it may not be able to be generalised to other countries. Such relationships could be different from country to country due to industrial composition, economic status and CG rules and regulations. Therefore, there is a need to investigate these relationships and corporate value among different countries. A number of ownership structure aspects such as the types of shareholders and the ownership of board members are not included in the current study.

The study suggests possible avenues for future research. One possibility is to replicate the present study by studying the impact of other factors such as

managerial ownership and ownership identity on corporate value. The study addresses only two aspects of CG including board characteristics and ownership concentration. Therefore, other attributes of CG need to be considered in future research. Other interesting related issues that can be explored are the extent to which differences in legal environments, protection of minority stockholders' rights, and restrictions on takeovers in different countries would affect corporate value.

### **Implications for Managers**

This paper develops and tests an explanatory model that can be useful not only to academics wishing to enhance their knowledge about internal corporate governance mechanisms, but also to managers wishing to establish new policies in emerging markets. Thus, managers may use the results of this study as a starting point for identifying modes of entry whose characteristics best meet the needs of investors from information. We believe it is important that managers start focusing on emerging markets and consider the empirical evidence from this study enhances the understanding of internal corporate governance mechanisms in Bahrain environment as one of the member of the GCC.

### **REFERENCES**

- Anderson, R., & Reeb, D. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. *Journal of Finance*, 58(3), 1301–1327.
- Baena, V. (2011) The effect of corruption on global franchising in emerging markets. *International Journal of Business and Emerging Markets*, 3(1), 57–74.
- Berle, A., & Means, G. (1933). *The modern corporation and private property*. New York: Commerce Clearing House.
- Black, B., Jang, H., & Kim, W. (2006). Does corporate governance predicts firm's market value? Evidence from Korea. *Journal of Law, Economics & Organization*, 22(2), 366–413.
- Booth, J., Cornett, M., & Tehranian, H. (2002). Boards of directors, ownership, and regulation. *Journal of Banking & Finance*, 26(10), 1973–1996.
- Boubakri, N., Cosset, J. C., & Guedhami, O. (2005). Post privatization corporate governance: The role of ownership structure and investor protection. *Journal of Financial Economics*, 76, 369–399.
- Brickley, J., Coles, J., & Jarrell, G. (1997). Leadership structure: Separating the CEO and chairman of the board. *Journal of Corporate Finance*, 3(3), 189–220.
- Byrne, J. (2002). How to fix corporate governance, *Business Week*. 6 May, 1–4.
- Chang, J., & Shin, H. (2007). Family ownership and performance in Korean conglomerates. *Pacific-Basin Finance Journal*, 15, 329–352.
- Chen, Z., Cheung T, Stouraitis, A., & Wong, A. (2005). Ownership concentration, firm performance, and dividend policy in Hong Kong. *Pacific-Basin Finance Journal*, 13(4), 431–449.

- Chi, W., & Wang, Y. (2009). Ownership, performance and executive turnover in China. *Journal of Asian Economics*, 20(4), 465–478.
- Choi, J., Park, S., & Yoo, S. (2007). The value of outside directors: Evidence from corporate governance reform in Korea. *Journal of Financial and Quantitative Analysis*, 42(4), 941–962.
- Claessens, S., Djankov, S., Fan, J., & Lang, L. (1998). Diversification and efficiency of investment by East Asian corporations. *World Bank working paper no. 2033*, Washington, DC: World Bank.
- Claessens, S., & Djankov, S. (1999). Ownership concentration and corporate performance in the Czech republic. *Journal of Comparative Economics*, 27(3), 498–513.
- Cole, R., & Mehran, H. (1998). The effect of changes in ownership structure on performance: Evidence from the thrift industry. *Journal of Financial Economics*, 50, 291–317.
- Dalton, D., Daily, C., Ellstrand, A., & Johnson, J. (1998). Meta-analytic reviews of board composition, leadership structure and financial performance. *Strategic Management Journal*, 19, 269–290.
- Deakin, S., & Konzelmann S. (2004). Learning from Enron. *Corporate Governance*, 12(2), 134–142.
- Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93(6), 1155–1177.
- Demsetz, H., & Villalonga, B. (2001). Ownership structure and corporate Performance. *Journal of Corporate Finance*, 7, 209–233.
- Denis, D., & McConnell, J. (2003). International corporate governance. *Journal of Financial and Quantitative Analysis*, 38, 1–36.
- Donnelly, R., & Kelly, P. (2005). Ownership and board structures in Irish plcs. *European Management Journal*, 23(6), 730–740.
- Dunn, D., (1987). Directors aren't doing their jobs. *Fortune*, 117–119.
- Drakos, A., & Bekiris, F. (2010). Corporate performance, managerial ownership and endogeneity: A simultaneous equations analysis for the Athens stock exchange. *Research in International Business and Finance*, 24, 24–38.
- Du, J., & Dai, Y. (2005). Ultimate corporate ownership structures and capital structures: Evidence from East Asian economies. *Corporate Governance*, 13(1), 60–71.
- Earle, J., Kucsera, C., & Telegdy, A. (2005). Ownership concentration and corporate performance on the Budapest Stock Exchange: Do too many cooks spoil the goulash? *Corporate Governance*, 13(2), 1–11.
- Fama, E. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88(4), 715–732.
- Fama, E., & French, K. (1995). Size and book-to-market factors in earnings and Returns. *Journal of Finance*, 50, 131–155.
- Fama, E., & Jensen, M. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(3), 301–325.
- Firth, M., Fung, P., & Rui, O. (2007). Ownership, two-tier board structure, and the informativeness of earnings -Evidence from China. *Journal of Accounting and Public Policy*, 26(4), 463–496.
- Frank, M., & Goyal, V. (2003). Testing the pecking order theory of capital Structure. *Journal of Financial Economics*, 67, 217–248.

- Gürsoy, G., & Aydoğan, K. (1998). *Equity ownership structure, risk-taking and performance: An empirical investigation in Turkish companies*. Paper presented at The International Global Finance Conference –1998, Istanbul, Turkey.
- Himmelberg, C., Hubbard, R. G., & Palia, D. (1999). Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of Financial Economics*, 53, 353–384.
- Hermalin, B., & Weisbach, M. (1988). The determinants of board composition. *RAND Journal of Economics*, 19(4), 589–606.
- Hermalin, B., & Weisbach, M. (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic Policy Review–Federal Reserve Bank of New York*, 9(1), 7–26.
- Higgs, D. (2003). *Review of the role and effectiveness of non-executive directors*. London: Department of Trade and Industry.
- Hussain, S., & Mallin, C. (2003). The dynamics of corporate governance in Bahrain: Structure, responsibilities and operation of corporate boards. *Corporate Governance: An International Review*, 11(3), 249–261.
- Jaafar, A., & El-Shawa, M. (2009). Ownership concentration, board characteristics and performance: Evidence from Jordan. In M. Tsamenyi & S. Uddin (eds.), *Research in accounting in emerging economies* (pp. 73–95). Vol. 9. Bingley, UK: Emerald Group Publishing Limited.
- Jensen, M. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48(3), 831–880.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency cost, and capital structure. *Journal of Financial Economics*, 3, 305–60.
- John, K., & Senbet, L. (1998). Corporate governance and board effectiveness, *Journal of Banking and Finance*. 22(4), 371–403.
- Jang, S. S. & Park, K. (2011). Inter-relationship between firm growth and profitability. *International Journal of Hospitality Management*, 30, 1027– 1035.
- Kaplan, S., & Minton, B. (1994). Appointments of outsiders to Japanese boards: Determinants and implications for managers. *Journal of Financial Economics*, 36(2), 225–257.
- Keenan, J. (2004). Corporate governance in UK/USA boardrooms. *Corporate Governance – An International Review*, 12(2), 172–176.
- Karathanassis, G., & Drakos, A. (2004). A note on equity ownership and corporate value in Greece. *Managerial and Decision Economics*, 25, 537–547.
- Klein, A. (2002). Audit committee, board of director characteristics, and earnings Management. *Journal of Accounting and Economics*, 33(3), 375–400.
- Kiel, G., & Nicholson, G. (2003). Board composition and corporate performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate Governance – An International Review*, 11(3), 189–205.
- Kim, E. (2006). The impact of family ownership and capital structures on productivity performance of Korean manufacturing firms: Corporate governance and the "chaebol problem". *Journal of the Japanese and International Economies*, 20, 209–233.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2002). Investor protection and corporate valuation. *Journal of Finance*, 57, 1147–1170.



- Leech, D., & Leahy, J. (1991). Ownership structure, control type classifications and the performance of large British companies. *The Economic Journal*, 101, 1418–1437.
- Lefort, F., & Urzúa, F. (2008). Board independence, firm performance and ownership concentration: Evidence from Chile. *Journal of Business Research*, 61(6), 615–622.
- Maher, M., & Anderson, T. (1999). Corporate governance: Effects on firm performance and economic growth. *Research Paper*, Organization For Economic Co-Operation And Development (OECD).
- McConnell, J., & Servaes, H. (1990). Additional evidence on equity ownership and corporate value. *Journal of Financial Economics*, 27, 595–612.
- Ng, C. M. (2005). An empirical study on the relationship between ownership and performance in a family-based corporate environment. *Journal of Accounting, Auditing and Finance*, 20, 121–146.
- O'Higgins, E. (2002). Non-executive directors on boards in Ireland: Co-option, characteristics and contributions. *Corporate Governance*, 10(1), 19–28.
- Omran, M., Bolbol, A., & Fatheldin, A. (2008). Corporate governance and firm performance in Arab equity markets: Does ownership concentration matter? *International Review of Law and Economics*, 28, 32–45.
- Omran, M. (2009). Post-privatization corporate governance and firm performance: The role of private ownership concentration, identity and board composition. *Journal of Comparative Economics*, 37, 658–673.
- Peasnell, K., Pope, P., & Young, S. (2000). Detecting earnings management using cross-sectional abnormal accruals models. *Accounting and Business Research*, 30(4), 313–326.
- Peng, M. (2004). Outside directors and firm performance during institutional transitions. *Strategic Management Journal*, 25(5), 435–471.
- Pye, A. (2000). Changing scenes in, from and outside the board room: UK corporate governance in Practice from 1989 to 1999. *Corporate Governance – An International Review*, 8(4), 335–346.
- Bahrain Bourse (2010). *Annual report 2010*. Retrieved 31 March 2011, from <http://www.bahrainbourse.com.bh/downloads/Annual2010En.pdf>
- Ramaswamy, K. (2001). Organizational ownership, competitive intensity, and firm performance: An empirical study of the Indian manufacturing sector. *Strategic Management Journal*, 22, 989–998.
- Samaha, K., Dahawy K., Hussainey K., & Stapleton, P. (2012) The extent of corporate governance disclosure and its determinants in a developing market: The case of Egypt. *Advances in Accounting, incorporating Advances in International Accounting*, 28, 168–178.
- Shleifer, A., & Vishny, R. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94, 461–88.
- Soliman, M. (2010). Ownership concentration and firm financial performance: Evidence from Saudi Arabia. *Journal of the Faculty of Commerce for Scientific Research*, 47(1), 27–44.
- Srinivasan, S. (2005). Consequences of financial reporting failure for outside directors: Evidence from accounting restatements and audit committee members. *Journal of Accounting Research*, 43(2), 291–334.

*Gehan A. Mousa and Abdelmohsen M. Desoky*

- Vafeas, N., & Theodorou, E. (1998). The association between board structure and firm performance in the UK. *British Accounting Review*, 30(4), 383–407.
- Yermack, D. (1996). Higher market valuation of companies with a small board of Directors. *Journal of Financial Economics*, 40(2), 185–211.