



# The International Journal of Applied Economics & Finance

ISSN 1991-0886

**science**  
alert

**ANSI***net*  
an open access publisher  
<http://ansinet.com>

## **The Relationship Between Corporate Governance and Value of the Firm in Developing Countries: Evidence from Bangladesh**

Md. Abdur Rouf

Department of School of Business, Asian University of Bangladesh, Bangladesh

### **ABSTRACT**

This study aimed to examine the relationship between four corporate governance mechanisms (board size, board independent director, chief executive officer duality and board audit committee) and value of the firm (performance) measures (return on assets, ROA and return on equity, ROE). The study is based on a sample of 93 listed non-financial companies in Dhaka Stock Exchanges (DSE) 2006. Using OLS as a method of estimation, the results provide evidence of a positive significant relationship between ROA and board independent director as well as chief executive officer duality. The results further reveal a positive significant relationship between ROE and board independent director as well as chief executive officer duality. The study, however, could not provide a significant relationship between the value of the firm measures (ROA and ROE) and board size and board audit committee.

**Key words:** Corporate governance, value of the firm, return on assets, return on equity

### **INTRODUCTION**

It is widely believed that good corporate governance is an important factor in improving the value of the firm in developing countries. However, the relationship between corporate governance and the value of the firm differs in the different countries due to disparate corporate governance structures resulting from the dissimilar social, economic and regulatory conditions in these countries. There is a need to understand the differences which affect the value of the firm for academic investigations, financial and management practices and public regulation of markets and corporations (Abdurrouf *et al.*, 2010). The relationship between corporate governance and the value of the firm is important in formulating efficient corporate management and public regulatory policies. According to Black (2001), Klapper and Love (2004), Gompers *et al.* (2003) and Beiner and Schmid (2005), corporate governance plays an important role in improving the value of the firm and there is a direct relationship between the two in both developing and developed countries. However, there are differences in the nature, direction, magnitude and processes of operation of the relationship between developed and developing countries due to differences in their economic, social, regulatory framework and market behavior (Hermalin and Weisbach, 1991; Ahunwan, 2003). Although, it is important especially for developing countries to incorporate these differences into the analysis of corporate governance and value of the firm relationship for an appropriate understanding of the role of corporate governance in influencing corporate value and formulating regulatory framework, these differences have not been systematically discussed in the existing literature.

This study will be analyzed and empirically investigated the nature of these differences in the relationship between corporate governance and value of the firm in developing country. For this

purpose, the financial market of Bangladesh (developing) is selected in this study for the relationship measurement between corporate governance and value of the firm. the specific objectives of the proposed study are: (i) To measure the level of value of the firm (financial performance) made by the listed companies in Bangladesh. (ii) To examine the association between corporate governances and value of the firm (financial performance) of listed companies in Bangladesh.

Researchers have defined corporate governance in a variety of ways and the most widely cited definitions follow.

According to Cadbury (1992), corporate governance is the mechanism used to discipline organizations. Morin and Jarrell (2001) argued that corporate governance is a framework that controls and safeguards the interest of the relevant players in the market. The players of the corporate governance mechanism include managers, employees, customers, shareholders, executive management, suppliers and the board of directors.

Corporate governance is the set of processes, customs, polices, laws and institutions affecting the way a corporation (company) is directed, administered or controlled. Corporate governance also includes the relationships among the many stakeholders involved and the goals for which the corporation is governed. The principal stakeholders are the shareholders management and the board of directors. Other stakeholders include employees, customers, creditors, suppliers, regulators and the community at large (Mahboob Uddin, 2006). Perfect corporate governance can strengthen intra-company control and can reduce opportunistic behaviors and lower the asymmetry of information, so it has a positive impact on the high quality of disclosed information (Li and Qi, 2008).

Corporate Governance (CG) is the relationship between corporate managers, directors and the providers of equity, people and institutions who save and invest their capital to earn a return.

The literature on corporate governance in developing and developed markets suggest that the roles of a regulatory authority, board, management, suppliers, customers and creditors are important in improving the value of the firm. Good corporate governance is focused on the protection of the rights of shareholders and plays an important role in the development of capital markets by protecting their interests (Abdurrouf *et al.*, 2010).

Obviously good corporate governance practices are more and more essential in determining the cost of capital in a capital market. Bangladeshi companies must be prepared to participate internationally and to maintain and promote investor confidence both in Bangladesh and abroad. On an examination of corporate governance practices in Bangladesh, it appears that the country stands at a position of weakness. Therefore, it is essential that these practices are reviewed to ensure that they continue to reflect local and international improvement so as to position Bangladesh in line with the best practice.

The value of the firm can be defined as the amount of utility/benefits derived from the shares of a firm by the shareholders. Some of the important measures to value of the firm in the existing literature are as follows.

Tobin's Q is defined as the ratio of the market value of assets (equity and debt) to the replacement value of assets. Tobin's Q is also used to value of the firm in the financial markets as Himmelberg *et al.* (1999), Palia (2001) and Bhagat and Jefferis (2002) used Tobin's Q in their studies to value of the firm.

Board size influences the value of the firm. Small board size is generally believed to improve the value of the firm because the benefits by larger boards of increased monitoring are out weighed

by the poorer communication and decision making of larger groups. Lipton and Lorsch (1992) suggest an optimal board size between seven and nine directors. In this respect, empirical studies have shown that the value of firms with relatively small board sizes (Eisenberg *et al.*, 1998). Hence, as board size increases board activity is expected to increase to compensate for increasing process losses. Yermack (1996) found negative correlation between board size and profitability. Mak and Kusnadi (2005) reported that small size boards are positively related to high firm value. In a Nigerian study, Sanda *et al.* (2005) reported that value of the firm is positively correlated with small, as opposed to large boards. The argument is that large boards are less effective and are easier for a CEO to control. The cost of coordination and processing problems is also high in large boards and this makes decision-taking difficult. On the other hand, smaller boards reduce the possibility of free-riding and therefore have the tendency of enhancing value of the firm. They measured the size of the board by the number of directors serving on such boards and expect this to have a negative relationship with value of the firm.

A board is generally composed of inside and outside members. Inside members are selected from among the executive officers of the firm. Outside directors are members whose only affiliation with the firm is their directorship. The role independent director on the board of directors is to effectively monitor and control firm activities in reducing opportunistic managerial behaviors and expropriation of firm resources. The proportion of independent directors is positively correlated to value of the firm (Agrawal and Knoeber, 1996). Increasing the level of the proportion of independent directors simultaneously increase firm performance as they are more effective monitors of managers (Mehran, 1995). Some researchers found that although the proportion of independent directors on the board is high, the level of board independent and professionalism is not necessary good (Chen *et al.*, 2007). The relationship between the proportion of independent director and value of the firm was found to be negative (Klein, 1998; Yermack, 1996). It has been further argued that there is no relationship between the proportion of independent directors and superior firm performance (Hermalin and Weisbach, 1991). Based upon the literature, the relationship between proportion of independent directors and value of the firm will be investigated in the study.

Within the context of corporate governance, the central issue often discussed is whether the chair of the board of directors and CEO positions should be held by different persons (dual leadership structure) or by one person (unitary leadership structure). Jensen (1993) shows a deep concern that a lack of independent leadership creates a difficulty for boards to respond to failure in top management. In this regard, Kajola (2008) also argued that concentration of decision management and decision control in one individual hinders boards' effectiveness in monitoring top management. It is argued that there is conflict of interest and higher agency costs when the same person occupies the two positions (Brickley *et al.*, 1997) and this leads to the suggestion that the two positions should be occupied by two persons. Yermack (1996) and Sanda *et al.* (2005) showed that firms are more valuable when the CEO and the chairman of the board positions are occupied by different persons. However, Daily and Dalton (1992) and Kajola (2008) does not find a positive relation on the separation of the position of CEO and board chair. Based upon the literature, the relationship between CEO duality and value of the firm will be investigated in the study.

The role of audit committee is important in implementing corporate governance principles and improving the value of the firm. The principles of corporate governance suggest that audit committee should work independently and perform their duties with professional care. In case of any financial manipulation, the audit committee is held accountable for their actions as the availability of transparent financial information reduces the information asymmetry and improves the value of the firm (Bhagat and Jefferis, 2002).

The agreement has been advanced that perhaps the audit committee is the most entity to safeguard public interest. The board usually delegates responsibility for the oversight of financial reporting to the audit committee to enhance the breadth of relevance and reliability of annual report. Thus, audit committees can be a monitoring mechanism that improves the quality of information flow between firm owners (shareholders and potential shareholders) and managers. Klein (1998) and Anderson *et al.* (2004) reported a positive relationship between audit committee and value of the firms (earnings management). On the other hand, Kajola (2008) showed that there is no significant relationship between audit committee and value of the firm. Based upon the literature the following hypothesis is tested:

**MATERIALS AND METHODS**

**Sample/research design:** The data used for this study were resulted from the audited financial statements of the firms listed on Dhaka Stock Exchange (DSE) in 2006. The sample of the firms were selected using the combination of non- probability sampling technique (firms with the required information were initially selected) and stratified random technique (firms were then selected based on their sectorial classification). A total of 93 non-financial firms were finally used as sample. The method of analysis is that of multiple regressions and the method of estimation is Ordinary Least Squares (OLS).

**Hypotheses:**

- **H<sub>1</sub>:** The size of the board is negatively related to value of the firm
- **H<sub>2</sub>:** Independent directors have a positive relationship with value of the firm
- **H<sub>3</sub>:** The separation of CEO and Board chair positions has a positive relationship with value of the firm
- **H<sub>4</sub>:** The audit committee has a positive relationship with value of the firm

**Model specification:** The economic model used in the study (which was in line with what is mostly found in the literature) is given as:

$$Y = \beta_0 + \beta \text{Fit} + \text{eit} \tag{1}$$

where, Y is the dependent variable,  $\beta_0$  is constant,  $\beta$  is the coefficient of the explanatory variable (corporate governance mechanisms), Fit is the explanatory variable and eit is the error term (assumed to have zero mean and independent across time period) (Table 1).

Table 1: Dependent and Independent variable and their descriptions as used in the study

Variable	Description/measurement
ROA = Return on assets	(Net profit after tax divided by total assets)×100
ROE = Return on equity	(Net profit after tax divided by total equity)×100
Bsize = Board size	Total number of directors on the board
BIND = Board independent	Proportion of independent directors sitting on the board
CEOD = CEO duality	Value zero (0) for if the same person occupies the post of the chairman and the chief executive and one (1) for otherwise
BACOM = Board audit committee	Board audit committee, 1 for yes or 0 No

It is important to state that this study employs two financial ratios (ROA and ROE) to measure the value of the firm. In the empirical literature, Tobin's Q (the market value of equity plus the market value of debt divided by the replacement cost of all assets) has been used extensively as a proxy for measuring value of the firm. It is however, difficult to get the required information relating to the market value of equity issued by Bangladeshi companies, since these are not usually disclosed in their financial reports. In order to mitigate this problem, Miyajima *et al.* (2003) and Sanda *et al.* (2005) used modified form of Tobin's Q. This study does not follow their line of assumption, because the various modifications made on the original Tobin's Q are considered to be subjective and in line with the dictates of the writers and may influence the outcome of the study. Himmelberg *et al.* (1999), Palia (2001) and Demsetz and Villalonga (2001) used managerial compensation as the only corporate governance mechanism; Kim *et al.* (2004) examined leverage only; Bhagat and Black (2002) and Coles *et al.* (2008) examined board characteristics only, this study examines four corporate governance mechanisms together.

By adopting the economic model as in Eq. 1 above specifically to this study, Eq. 2 below evolves.

$$VF = \beta_0 + \beta_1 BSIZE + \beta_2 BIND + \beta_3 CEOD + \beta_4 BACOM + \epsilon_{it} \quad (2)$$

### Variable description

**Analysis of data:** In order to obtain the objectives of the research study, statistical tools like average, standard deviation, co-efficient of variance, correlation, regressions and T tests, F tests have been used to analyze and interpretation of the data through the Statistical Packages for Social Science (SPSS)14.0 for windows and Tables have been used for data presentation.

### RESULTS AND DISCUSSION

**Descriptive statistics:** Table 2 shows the descriptive statistics of all the used in the study. The mean of ROA of the sampled firms is about 2.73% and the mean of ROE is 4.55% in Taka. The average board size is 6.68 with a standard deviation of 2.05 and it ranges 3 to 13 members. The average independent directors are 10.57% with standard deviation 13%. This indicates that independent director approximately 11% of the board. The result also indicates that 72% have separate persons occupying the post of the chief executive and the board chair, while 18% have the same person occupying the two posts. A majority of the firms (68%) have audit committee of the sample firms.

**Correlation analysis:** Tables 3 and 4 present the correlations among the variables. Table 3 indicates that ROA is positively correlated with the board independent director and chief executive officer duality at 1% level of significant. ROA has a negative relationship with board size and board

Table 2: Descriptive statistics

Variables	ROA	ROE	BFSIZE	BIND	CEOD	BACOM
Mean	2.725	4.552	6.68	10.57	0.72	0.68
Median	2.100	5.870	6.00	13.00	1.00	1.00
Std. Deviation	16.777	29.703	2.054	9.038	0.451	0.470
Minimum	-120.94	-120.94	3.00	0.00	0.00	0.00
Maximum	72.11	71.42	13.00	38.00	1.00	1.00

ROA: Return on assets, ROE: Return on equity, BFSIZE: Board size, BIND: Board independent director, CEOD: Chief executive officer duality, BACOM: Board audit committee

Table 3: Correlations (Pearson)-ROA as a value of firm (n = 93)

Variables	ROA	BSIZE	BIND	CEOD	BACOM
ROA	1	0.102	0.379**	0.408**	0.175
BSIZE	0.102	1	0.217*	0.207*	0.094
BIND	0.379**	0.217*	1	0.423**	0.338**
CEOD	0.408**	0.207*	0.423**	1	0.390**
BACOM	0.175	0.094	0.338**	0.390**	1

\*\*Correlation is significant at the 0.01 level (2-tailed). \*Correlation is significant at the 0.05 level (2-tailed). ROA: Return on assets, BSIZE: Board size, BIND: Board independent director, CEOD: Chief executive officer duality, BACOM: Board audit committee

Table 4: Correlations (Pearson)-ROE as a value of firm (n = 93)

Variables	ROE	BSIZE	BIND	CEOD	BACOM
ROE	1	0.047	0.324**	0.261*	0.159
BSIZE	0.047	1	0.217*	0.207*	0.094
BIND	0.324**	0.217*	1	0.423**	0.338**
CEOD	0.261*	0.207*	0.423**	1	0.390**
BACOM	0.159	0.094	0.338**	0.390**	1

\*\*Correlation is significant at the 0.01 level (2-tailed). \*Correlation is significant at the 0.05 level (2-tailed). ROE: Return on equity, BSIZE: Board size, BIND: Board independent director, CEOD: Chief executive officer duality, BACOM: Board audit committee

Table 5: Multiple Regression Results (n = 93)

Variables	ROA			ROE		
	Beta coefficient	t-value	Sig.	Beta coefficient	t-value	Sig.
BSIZE	-0.043	-0.419	0.676	-0.016	-0.163	0.871
BIND	0.264	2.321	0.023**	0.261	2.433	0.017**
CEOD	0.152	1.312	0.093*	0.314	2.864	0.005***
BACOM	0.015	0.133	0.895	-0.034	-0.328	0.743
R Square = 0.125			R Square = 0.219			
Adjusted R square = 0.086			Adjusted R square = 0.189			
F value = 3.15			F value = 6.17			
F significance = 0.018			F significance = 0.000			
Durbin Watson = 1.883			Durbin Watson = 2.016			

\*p<0.1, two-tailed, \*\*p<0.05, two-tailed, \*\*\*p<0.01, two-tailed

audit committee. Table 4 also indicates that ROE is positively correlated with the board independent director and chief executive officer duality at 1 and 5% and level of significant, respectively. However, ROE also has a negative relationship with board size and board audit committee.

**Multiple regression analysis:** Table 5 shows the results of the multiple regressions and indicates a positive relationship between ROA and board independent director at 5% level of significant and between ROE and board independent director also. This result is similar with Agrawal and Knoeber (1996) and Mehran, 1995). This result is dissimilar to Klein (1998) and Yermack (1996). The relationship between the ROA and chief executive officer duality is positive and statistically significant at 10% level and ROE with chief executive officer duality is also positively significant at 1% level. This outcome has the support of Yermack (1996) and Sanda *et al.* (2005). This result is dissimilar to Daily and Dalton (1992) and Kajola (2008). However, both board size and board audit committee show no significant relationship with ROA and ROE at 1, 5 and 10% levels.

## CONCLUSION

This study examines the relationship that exists between four corporate governance mechanisms (board size, board independent director, chief executive officer duality and board audit committee) and value of the firm, using two proxies, (ROA and ROE) . A sample size of 93 non-financial firms listed on the Dhaka Stock Exchange (DSE) in 2006 is used. Panel data methodology is employed; the method of analysis is multiple regressions and the method of regression is OLS. The result of the study indicate that a positive and significant relationship between ROA and board independent director at 5% level and a positive and significant relationship between ROA and chief executive duality at 10% level but there is no significant relationship board size and board audit committee with ROA at 1, 5 and 10% level. On the other hand, a positive and significant relationship between ROE and board independent director at 5% level and a positive and significant relationship between ROE and chief executive officer at 1% level but there is no significant relationship board size and board audit committee with ROE at 1, 5 and 10% level.

**Limitation:** There are a number of limitations of this study as well. First limitation of the study is used only non-financial companies as a sample. So, the results may not extend across all companies in Bangladesh. Second, the study considers data of only one year. The results may differ across different years if multiple years are considered for analysis. Regarding future line of research, efforts should be put at increasing the sample size and the corporate governance variables, particularly the inclusion of ownership structure.

## REFERENCES

- Abdurrouf, M., N. Siddique and M. Rahaman, 2010. Good corporate governance principles and recommendations for good practices. *J. Socioecon. Res. Dev.*, 7: 970-975.
- Agrawal, A. and C.R. Knoeber, 1996. Firm performance and mechanisms to control agency problems between managers and shareholders. *J. Financial Quant. Anal.*, 31: 377-397.
- Ahunwan, B., 2003. *Globalization and Corporate Governance in Developing Countries*. Transnational Publishers, New York.
- Anderson, R.C., S.A. Mansi and D.M. Reeb, 2004. Board characteristics, accounting report integrity and the cost of debt. *J. Accounting Econ.*, 37: 315-342.
- Beiner, S. and M.M. Schmid, 2005. Agency conflicts, corporate governance and corporate diversification-Evidence from Switzerland. Social Science Research Network, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=666264](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=666264)
- Bhagat, S. and B.S. Black, 2002. The non-correlation between board independence and long-term firm performance. *J. Corporat. Law*, 27: 231-273.
- Bhagat, S. and R. Jefferis, 2002. *The Econometrics of Corporate Governance Studies*. MIT Press, Cambridge.
- Black, B.S., 2001. Does corporate governance matter: A crude test using Russian data. *Univ. Pennsylvania Law Rev.*, 149: 2131-2150.
- Brickley, J.A., J.L. Coles and G. Jarrell, 1997. Leadership structure: Separating the CEO and chairman of the board. *J. Corporate Finance*, 3: 189-220.
- Cadbury, A., 1992. *The Cadbury Committee Reports: Fincial Aspects of Corporate Governance*. Gee and Co. Ltd., London.
- Chen, K.Y., R.J. Elder and Y.M. Hsieh, 2007. Corporate governance and earnings management: The implications of corporate governance best-practice principles for Taiwanese listed companies. *J. Contemporary Account. Econ.*, 3: 73-105.



- Coles, J.L., N.D. Daniel and L. Naveen, 2008. Boards: Does one size fit all? *J. Financial Econ.*, 87: 329-356.
- Daily, C.M. and D.R. Dalton, 1992. The relationship between governance structure and corporate performance in entrepreneurial firms. *J. Bus. Ventur.*, 7: 375-386.
- Demsetz, H. and B. Villalonga, 2001. Ownership structure and corporate performance. *J. Corp. Finance*, 7: 209-233.
- Eisenberg, T., S. Sundgren and M.T. Wells, 1998. Larger board size and decreasing firm value in small firms. *J. Financial Econ.*, 48: 35-54.
- Gompers, P.A., J.L. Ishii and A. Metrick, 2003. Corporate governance and equity prices. *Q. J. Econ.*, 118: 107-155.
- Hermalin, B.E. and M.S. Weisbach, 1991. The effects of board composition and direct incentives on firm performance. *Financial Manage.*, 20: 101-112.
- Himmelberg, C.P., R.G. Hubbard and D. Palia, 1999. Understanding the determinants of managerial ownership and the link between ownership and performance. *J. Financial Econ.*, 53: 353-384.
- Jensen, M.C., 1993. The modern industrial revolution, exit and the failure of internal control systems. *J. Finance*, 48: 831-880.
- Kajola, S.O., 2008. Corporate governance and firm performance: The case of Nigerian listed firms. *Eur. J. Econ. Finance Admin. Sci.*
- Kim, D., G. Hubbard and D. Palia, 2004. The endogenous impact of leverage on firm value. Working Paper, Rutgers University and Columbia University.
- Klapper, L. and I. Love, 2004. Corporate governance, investor protection and performance in emerging markets. *J. Corporate Finance*, 10: 703-728.
- Klein, A., 1998. Firm performance and board committee structure. *J. Law Econ.*, 41: 275-303.
- Li, H. and A. Qi, 2008. Impact of corporate governance on voluntary disclosure in Chinese listed companies. *Corporate Ownership Control*, 5: 360-366.
- Lipton, M. and J.W. Lorsch, 1992. A modest proposal for improved corporate governance. *Bus. Lawyer*, 48: 59-77.
- Mahboob Uddin, A.A., 2006. Role of corporate governance for the development of Bangladesh capital market. Editorial Page, *The New Nation*, 17 May, 2006.
- Mak, Y.T. and Y. Kusnadi, 2005. Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific-Basin Finance J.*, 13: 301-318.
- Mehran, H., 1995. Executive compensation structure, ownership and firm performance. *J. Financial Econ.*, 38: 163-184.
- Miyajima, H., Y. Omi and N. Saito, 2003. Corporate governance and firm performance in twentieth century Japan. *Bus. Econ. History*, 1: 1-36.
- Morin, R. and S. Jarrell, 2001. *Driving Shareholders Value: Value-Building Techniques for Creating Shareholder Wealth*. McGraw-Hill Publishers, Sydney.
- Palia, D., 2001. The endogeneity of managerial compensation in firm valuation: A solution. *Rev. Finance Stud.*, 14: 735-764.
- Sanda, A., A.S., Mikailu and T. Garba, 2005. Corporate governance mechanisms and firm financial performance in Nigeria. AERC Research Paper 149, Nairobi. <http://www.aercafrica.org/documents/RP149.pdf>
- Yermack, D., 1996. Higher market valuation of companies with a small board of directors. *J. Financial Econ.*, 40: 185-211.