CEO DUALITY AND FIRM PERFORMANCE: EVIDENCE FROM A DEVELOPING COUNTRY

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Abstract

This study examines if the CEO duality influences firm performance in Bangladesh. It also examines the interaction of industries in influencing the relationship between CEO duality and firm performance. From an observation of 825 firm years the study uses a 2-stage least square regression (2SLS) analysis. The finding is that there is a negative (non-significant) relationship between CEO duality and firm performance. However, when the industry interaction terms (the role of industries as moderating variable) are added, the CEO duality and firm performance is found to vary across industries. The findings of this study suggest that the CEO duality and firm performance is contingent; no single leadership structure is universal; both the leadership structure has cost and benefits. It is beneficial in some situation supporting the stewardship theory while it is not in other situations supporting the agency theory. This study contributes to the literature on CEO duality and firm performance in the context of developing countries.

Keywords: Agency Theory, Bangladesh, Board Chair, Board Leadership, CEO, Corporate Governance, Power, Stewardship Theory

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Introduction

There is a considerable debate in corporate governance literature on the role of board in disciplining the firm management, particularly the distribution of powers between the board Chair and Chief Executive Officer (CEO). Firms having one individual serving as both board Chair and CEO are considered to be the so called CEO duality. It is the situation in which the titles of both the board Chair and CEO go to one individual. In the words of Rechner and Dalton (1991: 155), it is "a board leadership structure in which the CEO wears two hats; one as the CEO of the firm, the other as chairman of the board of directors". Although there is a sacred and secret relationship between them (Kakabadse, *et al*, 2006), monitoring by the board depends on the distribution of power between the board Chair and the CEO (Pearce II and Zahra, 1991; Finkelstein and Hambrick, 1996). The professional integrity and trust to each other are the salient features that may influence the firm performance (Kakabadse *et al*, 2006).

The proponents of the dual board leadership structure (CEO duality) suggest that the CEO duality is required to enhance conformity and encourage firm performance (Tricker, 1994); it facilitates the faster respond to the hostile external conditions (Boyd, 1995); it is essential for strong firm leadership and power in managing the firm operations and to make quick decisions (Finkelstein and Hambrick, 1996). Dual leadership is a solution to external environmental challenges which has potential to increase firm performance (Kang and Zardkoohi, 2005). It allows combining firm specific knowledge and experience (Brickley *et al*, 1997). The corporation will have superior (improved) financial performance when CEO will have the full authority (Donaldson and Davis, 1991).

The proponents of CEO non-duality criticized such duality arguing that there is a problem of monitoring the management by the board if the board Chair and CEO is the same person. CEO duality gives enormous power to the CEO which tends to fail the internal control system (Jensen, 1993; Goyal and Park, 2002); reduces the check and balances as CEO may be motivated by self-interest ignoring the interest of the various other stakeholders (Tricker, 1994). Such a powerful CEO can influence the board activities by forming board committees in pursuant to his personal interest and manipulate the board meetings by not raising an important agenda. The CEO may not want a capable board as the capable board may challenge their power and authority (Zahra, 1990). CEO duality makes it difficult for the board to remove poorly performing managers (Goyal and Park, 2002), rather with their power, the CEO dominated board may select, reward or replace a director. CEO duality reduces the firm performance due to CEO entrenchment and a decline in board independence (Kang and Zardkoohi, 2005). It is also argued that the CEO can not represent the shareholders and the management at the same time (Rechner and Dalton, 1991). Duality promotes the

CEO entrenchment (Finkelstein and D'Aveni, 1994). CEO duality is detrimental to the firm performance as the same person will be marking his/ her "own examination paper" (Wan and Ong, 2005: 278). In the words Abdullah (2004) 'who will watch the watchers?' or in the words of Alchian and Demsetz (1992) 'who monitors the monitor?' Separating the position of CEO and board Chair reduces the CEO and inside directors to exercise the opportunistic behavior which will in turn allow the board to better exercise its control (Daily and Dalton, 1994a).

Despite such debate it is still a puzzle whether the independent leadership structure will enhance the board effectiveness that may ultimately lead to better firm performance. There is no significant impact of CEO duality on firm performance (Baliga *et al*, 1996). There is no optimal board leadership structure; both form of leadership structure may have potential costs, as well as benefits (Boyd, 1995; Brickley *et al*, 1997; Mak and Li, 2001; Elsayed, 2007). Kang and Zardkoohi (2005) suggest that CEO duality is contingent and there are five antecedents of CEO duality, such as (1) duality as a reward for CEO's good performance, (2) duality is a solution to the environmental resource-scarcity, complexity and dynamism, (3) duality is conforming to institutional pressure, (4) duality is a result of social exchange reciprocity and (5) duality is imposed by powerful CEO. Kang and Zardkoohi (2005) further argue that, leadership structure has no particular advantages for shareholders; when CEO imposes duality to entrench his/her power, there will be a negative impact on firm performance and when board adopts the duality to provide strong leadership and to increase the speed of strategic decision making, there will be positive impact on firm performance. Enron, Tyco International, and Xerox had a CEO duality and CEO also served as board Chair of the board (Kholeif, 2008), while both WorldCom and Global Crossing separated the positions of CEO and board Chair; although, the role of board Chair was a powerful position within these firms, the holder of this position did not have the ability to control corporate wrongdoings within these firms (Petra, 2005).

Over the past few decades an overwhelming proportion of research on CEO duality is conducted in the context of developed economies with sophisticated financial and legal systems except a handful studies on less developed and emerging economy. Given the increased attention on CEO duality and its impact on firm performance and considering Bangladesh as an emerging economy, this study examines if the CEO duality influences the firm economic performance in Bangladesh. Although the CEO duality is very common in the Bangladesh corporate sector, ironically there is no published study on CEO duality and firm performance in Bangladesh. The key motivation of this study is to explore if the dual leadership structure works well in a developing country, such as Bangladesh. This study is similar to the paper by Elsayed (2007) in the context of Egypt. However, this study differs from that paper in terms of institutional context and in terms of research methods. Doidge *et al* (2007) argue that due to differences in institutional settings, corporate governance practices may vary widely across countries and across firms. Unlike Egypt, the recent corporate governance regulation in Bangladesh requires the clear differentiation between the executive and non-executive (independent) directors. In terms of research method, the sample size of this study is relatively large and it used the 2 Stage Last Square Regressions. This study may contribute to the literature and ongoing debate of CEO duality and firm performance.

The remainder of the paper is organized as follows. Section two presents the background literature of this study. Section two presents the institutional background of CEO duality in Bangladesh. Section three presents the earlier studies on CEO duality. Section four presents the 'theoretical rationale' and presents the hypothesis. Section five presents the methodological issues. The section six presents the empirical findings. The final section makes the discussion and draws a conclusion.

INSTITUTIONAL BACKGROUND OF CEO DUALITY IN BANGLADESH

The CEO non-duality, which separates the executive function of the board from its monitoring function, is commonly found in two-tier board, which is most common in continental Europe, such as Finland, Germany, Holland and the Netherlands (Tricker, 1994; Maassen, 2002). In such a board, the management functions of the board mostly oversee the operational issues and headed by Chief Executive Officer (CEO) and supervisory functions of the board deals with the strategic decisions and oversee the management function of the board headed by Chairperson as non-executive director (Solomon, 2007). The CEO duality is very unusual in two-tier boards as the CEO is the part of the executive board and has no seat in the supervisory board; such supervisory function of the board is formally independent from the executive (management) function.

The CEO duality, which combines the executive function of the board with monitoring function, is commonly found in the one-tier board, which is most common in Anglo-Saxon or Anglo-American countries, such as the United States, the United Kingdom and Canada, Australia, New Zealand, both the executive and the non-executive directors perform duties together in one organizational layer. In such a board there may be any combination of executive and non-executive directors (Maassen, 2002; Solomon, 2007; van Veen and Elbertson, 2008).

Unlike the corporate boards in continental Europe, traditionally[1] the corporate board in

Bangladesh is a one-tier board or management board; both the executive and the non-executive directors perform duties together in one organizational layer. Further, in most of the companies in Bangladesh, board is heavily dominated by the sponsor-shareholders who generally belong to one family-the father as the chairperson and the son as the CEO (Sobhan and Werner, 2003); the CEOs are the representative of the sponsor-shareholders, family members of the sponsor-shareholders. Their qualification and expertise does not always prevail in appointing them into the firm. Due to huge dominance of family on the corporate board it is very difficult to separate these two functions. Therefore, there are many incidences of CEO duality in Bangladesh corporate sector. Sometimes the largest shareholder acts a board Chair and imposes the duality (also acts as CEO). The recent corporate governance regulation[2] requires a board size of be 5-20 members, an independent director in the board (at least $1/10^{th}$ of the total board members or minimum one). However, it does not compulsorily require the structural independence (or CEO non-duality). It also leads to some incidences of CEO duality in some listed companies. Furthermore, structural independence does not always prevail the organizational or industry practice.

EARLIER STUDIES ON CEO DUALITY

Due to huge debate and controversy on CEO duality and its impact on corporate performance there is comparatively a large number of empirical studies. The evidence is mixed and non-conclusive. Some studies found a significant positive relationship between CEO duality and firm performance implying that combined leadership structure (CEO duality) is associated with better firm performance than those with independent leadership structure (CEO non-duality) supporting the stewardship theory (such as Davidson *et al*, 1990; Donaldson and Davis, 1991; Finkelstein and D'Aveni, 1994; Boyd *et al*, 1997; Brickley *et al*, 1997; Sridharan and Marsinko, 1997; Coles *et al*, 2001; Tian and Lau, 2001; Lin, 2005). In sharp contrast, another set of studies found a significant negative relationship between CEO duality and firm performance implying that combined leadership structure (CEO duality) is not beneficial for performance supporting the agency theory (such as Berg and Smith, 1978; Rechner and Dalton, 1991; Pi and Timme, 1993; Daily and Dalton, 1994b; Daily and Dalton, 1994c; Daily and Dalton, 1995; Worrell *et al*, 1997; Simpson and Gleason, 1999; Kula, 2005). The other studies found a non significant relationship (no correlation) between CEO duality and firm performance (such as Chaganti *et al*, 1985; Rechner and Dalton, 1989; Daily and Dalton, 1992; Daily and Dalton, 1993; Daily and Dalton, 1994a; Baliga *et al*, 1996; Daily and Dalton, 1997; Dalton *et al*, 1998; Harris and Helfat, 1998; Fosberg, 1999; Judge *et al*, 2003; Abdullah, 2004; Wan and Ong, 2005; Braun and Sharma, 2007; Elsayed, 2007; Lam and Lee, 2007; Iyengar and Zampelli, 2009). Furthermore, there are numerous studies (such as Boyd, 1995; Donaldson and Davis, 1991; Brickley *et al*, 1997; Elasyed, 2007) which attempted to explore the industry specific impact of CEO duality and firm performance suggesting that CEO duality and firm performance are contingent and varies across industries. The earlier studies can be criticized on the premise that many of the earlier studies have shown inconsistent results; nearly all the research did not control for industry influence or other corporate governance mechanisms as moderating variables.

THEORITICAL RATIONALE AND HYPOTHESIS DEVELOPMENT

There are two extreme theoretical underpinnings so far seen in the literature in explaining the CEO duality and firm performance. These are agency theory (such as Fama, 1980; Jensen and Meckling, 1976; Eisenhardt, 1989) and stewardship theory (such as Davis *et al*, 1997).

Agency theorists argue that there is an inevitable conflict between the parties, such as principals and agents. This theory assumes that an individual is self-interested and self-opportunist, rather than altruistic. Consistent with this view CEO duality (the combined leadership structure) leads to the consolidation of power and authority which may promote CEO entrenchment by weakening or reducing the monitoring effectiveness of the board (Solomon, 2007). Such a powerful CEO may be driven by self-interest, and unless restricted from doing otherwise, will undertake self-serving activities that could be detrimental to the economic welfare of the principals (Deegan, 2006). "CEO duality diminishes the monitoring role of the board of directors over the executive manager, and this in turn may have a negative effect on corporate performance" (Elsayed, 2007: 1204). Therefore, agency theory suggests a negative relationship between CEO duality and firm performance (Boyd, 1995).

In sharp contrast stewardship theory holds an optimistic view of human (managerial behavior) arguing that the agents are not necessarily motivated by individual goals, rather they are motivated to work in the interest of their principal (Barney, 1990; Donaldson, 1990a, 1990b; Donaldson and Davis, 1991; Davis *et al*, 1997). Consistent with this view, stewardship theorist suggests the consolidation of power of the executives. In other words the best stewardship role by the CEO can only be exercised only when the role of the CEO and Chair of the board is combined, (Donaldson and Davis, 1991; Ong and Lee, 2000). Therefore, stewardship theory suggests a positive relationship between CEO duality and firm performance (Boyd, 1995).

This study considers that due to the separation of ownership and control, the agent may be driven by self-interest. Therefore, this study is conducted within the *'agency theory'* perspective arguing essentially that the CEO duality will reduce the firm performance. Hence the following hypothesis is offered in the null form:

Hypothesis 1: *CEO duality is negatively related to firm performance.*

METHODOLOGICAL ISSUES

Sample Selection

Based on the availability of company annual reports, this study considers 93 non-financial firms listed in Dhaka Stock Exchange for the period of 2000-2009, representing the 39.57% of the total listed companies as on 31st December 2009. It is also the 63.70% of the total non-financial companies representing almost 55% of the market capitalization of total non-financial companies as on that date. The sample also consists of variety of industries as per the classification of 'Standardized Industrial Classification' (SIC) Code (table 2). Dependant upon the availability of company annual reports, a total of 825 observations was made.

The audited financial report was the basis for obtaining the company's accounting information, such as EBIT, total assets, total liabilities and equities, preferred stock. The CEO duality, board composition and board size data were obtained from the respective company's directors' report. Market value of the closing share price was collected from Dhaka Stock Exchange web page (www.dsebd.org) and from the 'Monthly Review' of Dhaka Stock Exchange. The ownership data were obtained from notes to the financial statement, 'Corporate Governance Compliance Report' of the respective company and from the 'Monthly Review' of Dhaka Stock Exchange.

Year	Number of firms in the sample	Observed firm years
2000	93	92
2001	93	93
2002	93	93
2003	93	93
2004	93	93
2005	93	93
2006	93	93
2007	93	91
2008	93	78
2009	93	6
Total		825

The categorization of the sample reveals that there is approximately 47.52 percent incidence of CEO duality. This percent is closer to earlier research, such ah as Braun and Sharma (2007) which reported 55% of duality incidence. This figure is higher than Japanese, United Kingdom, Italian and Belgian Companies as firms in these countries only have 10-20 percent CEO duality (Kang and Zardkoohi, 2005). However, this figure is lower than that of U. S. firms as firms in these countries have 75-80 percent CEO duality (Rechner and Dalton, 1991; Donaldson and Davis, 1991; Brickley *et al*, 1997; Kang and Zardkoohi, 2005). Even this figure is fairly lower than that of Egypt which has almost 80 percent CEO duality (Elsayed, 2007; Kholeif, 2008).

Table 2. Industry classification of the sample

Year	Number of firms in the sample	Observed firm years
Agricultural Production-Corps	12	105
Agricultural Production-Livestock	1	9
Fishing, Hunting and Trapping	3	25
Non-Metallic Minerals, Except Fuels	1	9
Food and Kindred Products	1	9
Textile Mill Products	30	265
Paper and Allied Products	2	18
Printing and Allied Products	1	9
Chemicals and Allied Product	18	161
Petroleum and Coal Products	2	17
Leather and Leather Products	4	37
Stone, Clay and Glass Products	4	36
Primary Metal Industries	2	18

Electronic and Other Electric Equipment	4	36
Miscellaneous Manufacturing Industries	3	27
Automotive Dealers and Service Station	2	19
Real Estate	2	16
Holding and Other Investment Offices	1	9
Total	93	825

Table 3. Incidence of CEO Duality in the sample

Number of firms in the sample	Incidence of CEO Duality	Incidence of CEO Non-Duality	Observed firm years
93	392	433	825

Variable Definitions

Dependent Variable: Firm Performance

There are two performance measures so far seen in corporate governance literature. One group used the accounting performance measure such as profit margin or Return on Sales (Rechner and Dalton, 1989; Abdullah, 2004), Return on Assets (Rechner and Dalton, 1991; Daily and Dalton, 1992; Daily and Dalton, 1993; Pi and Timme, 1993; Daily and Dalton, 1994c; Boyd, 1995; Boyd *et al*, 1997; Tian and Lau, 2001; Abdullah, 2004; Elsayed, 2007; Lam and Lee, 2008; Elsayed, 2009; Kholeif, 2008), Return on Equity (Berg and Smith, 1978; Donaldson and Davis, 1991; Rechner and Dalton, 1991; Daily and Dalton, 1992; Daily and Dalton, 1993; Baliga *et al*, 1996; Fosberg, 1999; Tian and Lau, 2001; Abdullah, 2004; Lam and Lee, 2007; Kholeif, 2008; Elsayed, 2009), Earnings per Share (EPS) or Price Earnings Ratio (Daily and Dalton, 1992; Daily and Dalton, 1993; Daily and Dalton, 1994c; Abdullah, 2004), stockholders return (Rechner and Dalton, 1989), corporate bankruptcy (Chaganti *et al*, 1985; Daily and Dalton, 1994a; Daily and Dalton, 1994b; Daily and Dalton, 1995) and financial distress (Simpson and Gleason, 1999). The other group used the market based performance measure, such as Tobin's Q (Elsayed, 2007; Elsayed, 2009) and Shareholder's Wealth (Donaldson and Davis, 1991).

Both the performance measures have merits and demerits. Accounting performance measures (1) are subject to manipulation; (2) may systematically undervalue assets; (3) financial accounting returns are difficult to interpret in the case of multi-industry participation by firms (Dalton *et al*, 1998). Such measures may not reflect the all agency costs (Wiwattanakantang, 2001: 334); may give misleading signals (Kaplan and Norton, 1992). In order to apply stock market performance, the stock prices must reflect the true value of the firm (Lindenberg and Ross, 1981). In a similar vein, stock market performance may not be effective in some developing and emerging economies as the capital market in those countries is not well developed and inefficient (Lindenberg and Ross, 1981; Khanna and Palepu, 1999; Joh, 2003).

Keeping this in mind this study uses both the Return on Assets (ROA) and Tobin's Q as firm performance measures (dependent variable). Consistent with Yammeesri and Lodh (2004), Yammeesri *et al* (2006), Rashid and Lodh (2008), Return on Assets (ROA) is calculated as the Earnings before Interest and Taxes (EBIT) scaled by the book value of total assets. Tobin's Q is the ratio of the market value of the firm to the replacement cost of their assets.

Independent Variable: CEO Duality

The CEO duality is the situation when the chair of the board and the CEO or Managing Director holds the same position. Consistent with earlier studies, the CEO duality variable is a binary and defined as a variable of CEOD, which is equal to be one (1) if the post is hold by same person as the CEO and board Chair, otherwise zero (0).

Control Variables

A number of control variables, such as board size, ownership structure, debt ratio, firm size, firm age and firm growths are considered. Board size has number of implications for board functioning and thereby firm performance (Raheja, 2005; Coles *et al*, 2008; Bennedsen *et al*, 2008). A smaller board is manageable and plays a controlling function, whereas a larger board is non-manageable, may have greater agency problems and may not be able to act effectively leaving management relatively free (Chaganti *et al*, 1985; Jensen, 1993; Hermalin and Weisbach, 2003). "Larger boards were assumed to have directors with diverse educational and industrial backgrounds and skill and with multiple perspectives that improves the quality of action taken by the firm……as board size increased, CEO domination of the board become more difficult and directors were in improved position to exercise their power in governing the corporation" (Zahra and Pearce II, 1989: 311). A variable BDSIZE is considered as the natural logarithms of total board members.

Corporate ownership structure is one of the most important factors in shaping the corporate governance system of any country. It is argued that ownership structure plays a key role in determining firm's

objectives, shareholders wealth and how managers of a firm are disciplined (Jensen, 2000; Yammeesri and Lodh, 2004; Yammeesri *et al*, 2006). Ownership structure plays a key role as a good monitor in countries where the investor's protection is weak (Shleifer and Vishny, 1997; La Porta *et al*, 1998; La Porta *et al*, 2000; Boubakri *et al*, 2005). CEO duality with the presence of managerial ownership may align the interest of CEO with that of shareholders (Barnhart and Rosenstein, 1998; Kholeif, 2008). Elsayed (2007: 8) argues that, "board leadership structure and managerial ownership can be considered as substitutive corporate governance mechanisms". Institutional investors also have a professional interest in developing the firm's corporate governance (Nandelstadh and Rosenberg, 2003), and can identify key indicators in determining performance in the emerging market. This is because they prefer to work inside the firms to change policies of firms in their portfolio (Baysinger and Butler, 1985: 107; Gibson, 2003). Institutional investors can control the decisions and actions taken by CEO and limit the power of CEO when CEO and board Chair positions are combined (Kholeif, 2008). Following this and consistent with Kula (2005), Elsayed (2007) and Kholeif (2008), this study also considers directors (DIROWN) and institutions (INSTOWN) ownership as the control variable to identify the impact of ownership on board leadership structure and firm performance. Debt may act as disciplinary device, may reduce the shareholder-debtholder agency problem and may influence the performance (e. g. Jensen and Meckling, 1976). This study considers the control variable debt to identify the impact of debt on firm performance. Debt ratio is calculated as total debt scaled by total assets. Firm size is an important variable in influencing firm performance. Large firms have more capacity to generate internal funds (Short and Keasey, 1999); large firms have a greater variety of capabilities (Majumdar and Chhibber, 1999); large firms may also have problems of coordination, which may negatively influence its performance (Williamson, 1967). This study considers the natural logarithm of total assets as firm size (SIZE). Firm performance may also be influenced by firm age; the older firms are likely to be more efficient than younger firms (Ang *et al*, 2000). A variable of AGE is defined as the natural logarithm of the number of years firm have been listed on the stock exchange.

EMPIRICAL ANALYSIS

Descriptive Statistics

The descriptive statistics of the variables are presented in table 4. It reveals that on an average there is a 47 percent incidence of CEO duality. The average board size is 6.19 ranging from minimum 3 directors to maximum 12 directors. The average director ownership is 43 percent ranging from 0 to 98 percent. The average institutional ownership is 18 percent which ranges from 0 to 58 percent. The average debt ratio is 73 percent ranging from 2 percent to 562 percent. The average firm age in the sample is 14.15 years, ranging from less than 2 year to 32 years. The mean profitability control variable for Return on Asset (ROA) is 6 percent, ranging from negative 149 percent to 34 percent. The mean profitability control variable for Tobin's Q is 117 percent ranging from 17 percent 623 percent.

Table 4. Descriptive statistics of the variables (N=825)

Variables	Mean	Minimum	Maximum	Std. Deviation	Skewness	Kurtosis
Return on Assets (ROA)	0.06	-1.49	0.34	0.10	-5.32	82.27
Tobin's Q	1.17	0.17	6.23	0.65	2.54	9.99
CEO duality	0.47	0.00	1.00	0.50	0.10	-1.20
Board Size (BDSIZE)	6.19	3.00	12.00	1.91	0.55	-0.24
Director Share Ownership (DIROWN)	0.43	0.00	0.98	0.17	-0.09	0.75
Institutional Share Ownership (INSTOWN)	0.18	0.00	0.58	0.16	0.49	-0.84
Debt Ratio (DEBT)	0.73	0.02	5.62	0.53	3.57	20.19
Firm Age (AGE)	14.15	2.00	32.00	1.55	-0.62	0.27
Firm Size (SIZE)	5.98	2.44	9.87	1.49	-0.05	-0.24
GROWTH	0.24	-1.00	104.33	3.69	27.36	771.03

For performing statistical analysis, there is a necessity to meet the assumptions of statistical analysis, such as normality, heteroscedasticity and multicolinearity. Coakes and Steed (2001) argue that the violations of normality are of little concern, when the sample size is large (greater than 30). The skewness and kurtosis from the descriptive statistics above reveal that most of the variables are normally distributed and there are minimum violations of normality. Further, the P-P plots of all the variables show a little deviation from the fitted lines and Q-Q plots form a 45 degree line for all variables, implying

that the normality assumption is not violated. Finally, Shapiro-Wilk statistic does not reject the null hypothesis of normality ($p < 0.001$). Also, the descriptive statistics do not reveal any sign of heteroscedasticity in the sample data.

Multicolinearity refers to high correlations among the independent (or explanatory) variables or it is a condition when the independent variables are significantly correlated with one another. When the high degree of correlation is found among the independent variables, these variables must be removed. The SPSS automatically removes the independent variable which is significantly correlated with other independent variables in OLS regression and indicates the regression model to be invalid under 2SLS regression. No such problems were seen in this analysis. Further, the correlation matrix of the explanatory variables (in table 6) shows that there is no strong correlation between the variables as correlation coefficients are very small (less than 0.75 or negative) and Variance Inflation Factor (VIF) is less than 10 (Gujarati, 2003). Therefore all the variables can be considered for the analysis.

Regression Model Specification

In order to examine the relationship between CEO duality and firm performance, the following model is developed:

$$Y_{i,t}=\alpha+\beta_1 CEOD_{i,t}+\beta_2 BDSIZE_{i,t}+\beta_3 DIROWN_{i,t}+\beta_4 INSTOWN_{i,t}+\beta_5 DEBT_{i,t}+\beta_6 AGE_{i,t}+\beta_7 SIZE_{i,t}+\beta_8 GROWTH_{i,t}+\varepsilon_{i,t}$$

Where, $Y_{i,t}$ is alternatively $ROA_{i,t}$, and Tobin's $Q_{i,t}$ for *i*th firm at time *t*. $CEOD_{i,t}$ is the CEO duality for *i*th firm at time *t*, $BDSIZE_{i,t}$ is the board size for *i*th firm at time *t*, $DIROWN_{i,t}$ and $INSTOWN_{i,t}$ is the percentage of shares owned by directors/sponsors and institutions respectively for *i*th firm at time *t*, $TDTA_{i,t}$ is the total debt to total assets for *i*th firm at time *t* and, $AGE_{i,t}$ is the firm's age for *i*th firm at time *t*, $SIZE_{i,t}$ is the firm's size for *i*th firm at time *t*. α is the intercept, β is the regression coefficient and ε is the error term. The above model is regressed by using 'The Statistical Package for Social Science' (SPSS). In this analysis, no endogeneity problem occurred as 2SLS regression is used by using instrumental control variables which have automatically eradicated such a problem. The problem of endogeneity may be relevant if the parameters are estimated by using an OLS (Ordinary Least Square) regression in the context of time series analysis. In this study, the data is pooled for nine (9) year period from different organizations and, therefore, this problem is not applicable.

Empirical Results

Table 5 presents the 2SLS regression analysis of the relationship between the CEO duality and corporate performance (such as ROA and Tobin's Q). The Adjusted R squared and F-statistic being significant ($F < 0.001$) indicates the model is overall fit. The result indicates that there is a negative (but not significant) relationship between CEO duality and firm performance under ROA performance measure. However, there is a significant negative relationship (although it is very weak, the coefficient is only 0.099) between CEO duality and the firm performance under Tobin's Q. Therefore, there is an ample evidence to support the hypothesis.

The result also indicates that 'board size' and 'director ownership' have significant positive explanatory power in influencing firm performance under all the performance measures. Institutional ownership has significant negative explanatory power in influencing firm performance under Tobin's Q. Debt has significant negative explanatory power in influencing firm performance under ROA performance measure; whereas it has significant positive explanatory power in influencing firm performance under Tobin's Q performance measure. Other control variables, such as firm age and firm size have significant positive explanatory power under all the performance measures.

Table 5. Influence of CEO duality and firm performance under different performance measures

	Dependent Variables			
	(a)		(b)	
	ROA		**Tobin's Q**	
Intercept	-0.046		-1.018	***
	(-1.639)		(-7.038)	
CEOD	-0.002		-0.099	**
	(-0.313)		(-3.046)	
BDSIZE	0.032	**	0.365	***
	(3.091)		(6.960)	
DIROWN	0.058	**	0.178	*
	(3.163)		(1.882)	
INSTOWN	0.011		-0.203	*
	(0.547)		(-1.960)	
Debt	-0.069	***	0.811	***

	(-11.300)		(25.853)	
AGE	0.014	*	0.302	***
	(1.937)		(8.114)	
SIZE	0.006	**	0.025	**
	(2.713)		(2.172)	
Adjusted R^2	0.193		0.541	
GROWTH	0.000		-0.003	
	(-0.386)		(-0.584)	
F-Statistic	**25.554**	***	**121.909**	***
Observations	**825**		**825**	

The *t*-tests are presented in the parentheses. * p < 0.10; ** p < 0.010; *** p < 0.001.

The ROA model of this study confirms the earlier studies (such as Chaganti *et al*, 1985; Rechner and Dalton, 1989; Daily and Dalton, 1992; Daily and Dalton, 1993; Daily and Dalton, 1994a; Baliga *et al*, 1996; Dalton *et al*, 1998; Harris and Helfat, 1998; Fosberg, 1999; Judge *et al*, 2003; Abdullah, 2004; Elsayed, 2007) implying that CEO duality has no influence on firm performance. The Tobin's Q model of this study confirms the earlier studies (such as Rechner and Dalton, 1991; Pi and Timme, 1993; Daily and Dalton, 1994b; Daily and Dalton, 1994c; Daily and Dalton, 1995; Worrell *et al*, 1997; Simpson and Gleason, 1999; Kula, 2005) implying that there is a significant negative relationship between CEO duality and firm performance.

Table 6. CEO duality and firm performance: Correlation matrix of the explanatory variables

		1	2	3	4	5	6	7	8	VIF
1	**CEOD**	1.000								1.103
2	**BDSIZE**	0.025	1.000							1.124
3	**DIROWN**	-0.116	-0.023	1.000						1.142
4	**INSTOWN**	0.093	-0.037	0.295	1.000					1.133
5	**Debt**	-0.074	-0.091	0.031	0.051	1.000				1.151
6	**AGE**	0.200	-0.180	-0.063	0.033	-0.103	1.000			1.096
7	**SIZE**	0.081	-0.265	0.091	-0.022	0.327	0.016	1.000		1.237
8	**GROWTH**	-0.043	-0.011	-0.009	0.012	0.007	-0.020	0.019	1.000	1.003

Many prior studies (such as Boyd, 1995; Dalton *et al*, 1998; Worrell *et al*, 1997; Kang and Zardkoohi, 2005; Braun and Sharma, 2007; Lam and Lee, 2008; Kholeif, 2008; Elsayed, 2009; 2010) argue that, duality may be negatively related to performance in some situations but may be positively related in some other situations. Further, "the appropriate board leadership structure is more likely to vary across firms, industries and countries" (Elsayed, 2010: 2). There is a combination of different industries in the sample and the industry effect of duality and performance is unknown (Donaldson and Davies, 1991; Dahya and Travlos, 2000; Mak and Li, 2001; Elsayed, 2007). Following this argument and consistent with Boyd (1995), Sridharan and Marsinko (1997), Dahya and Travlos (2000), Donaldson and Davis (1991), Elsayed (2007) this study further examines the industry specific impact on CEO duality and firm performance. The above model is modified by adding industry dummies for two-digit industrial classification (SIC) codes. Table 7 presents the regression coefficients of the relationship between the CEO duality and corporate performance (both for ROA and Tobin's Q model) following the control of the models by industry dummies.

Table 7. Influence of industry on CEO duality and firm performance under different performance measures

	Number of firms	Observed firm years	Percent of CEO duality	(a) ROA	(b) Tobin's Q
Agricultural Production-Corps	12	105	50.00	0.034 ** (3.190)	0.149 ** (2.824)
Agricultural Production-Livestock	1	9	88.89	-0.042 ** (-2.760)	-0.019 (-0.253)
Fishing, Hunting and Trapping	3	25	74.29	-0.003 (-1.542)	0.003 (0.285)
Non-Metallic Minerals, Except Fuels	1	9	00.00	0.004 * (1.863)	0.006 (0.556)
Food and Kindred Products	1	9	00.00	-0.005 ** (-3.266)	-0.012 * (-1.713)
Textile Mill Products	30	265	57.19	0.030 * (2.500)	-0.026 (-1.526)
Paper and Allied Products	2	18	00.00	0.002 * (2.389)	0.000 (0.095)
Printing and Allied Products	1	9	00.00	0.003 * (2.233)	0.007 (1.199)
Chemicals and Allied Product	18	161	36.65	0.002 *** (4.894)	0.013 *** (8.310)
Petroleum and Coal Products	2	17	00.00	0.001 (1.489)	0.022 *** (5.792)
Leather and Leather Products	4	37	00.00	0.002 *** (4.204)	0.008 ** (3.468)
Stone, Clay and Glass Products	4	36	55.56	0.001 * (1.857)	0.010 *** (4.058)
Primary Metal Industries	2	18	50.00	-0.001 * (-1.779)	0.004 (1.425)
Electronic and Other Electric Equipment	4	36	58.33	0.001 ** (2.881)	0.018 *** (8.513)
Miscellaneous Manufacturing Industries	3	27	96.29	0.000 (-.8700)	0.004 * (1.896)
Automotive Dealers and Service Station	2	19	73.68	0.001 ** (2.832)	0.006 ** (3.141)
Real Estate	2	16	50.00	0.000 (-1.266)	-0.001 (-0.818)
Holding and Other Investment Offices	1	9	100.00	0.000 (-0.709)	0.007 ** (3.256)
Total	**93**	**825**			

The *t*-tests are presented in the parentheses. * $p < 0.10$; ** $p < 0.010$; *** $p < 0.001$.

The results suggest that, CEO duality most frequently occurs in the industries, such as Agricultural Production-Livestock, Fishing, Hunting and Trapping, Electronic and Other Electric Equipment, Miscellaneous Manufacturing Industries, Automotive Dealers and Service Station and Holding and Other Investment Offices. CEO non-duality most frequently occurs in the industries, such as Non-Metallic Minerals, Except Fuels, Food and Kindred Products, Paper and Allied Products, Printing and Allied Products, Petroleum and Coal Products and Leather and Leather Products.

The CEO duality is positively related under both the performance measures in six (6) industries: Agricultural Production-Corps; Chemicals and Allied Product; Leather and Leather Products; Stone, Clay and Glass Products; Electronic and Other Electric Equipment and Automotive Dealers and Service Station. The CEO duality is negatively related under both the performance in one (1) industry: Food and Kindred Products. The CEO duality is positively related under ROA performance measures in three (3) industries: Textile Mill Products; Paper and Allied Products and Printing and Allied Products. The CEO duality is positively related under Tobin's Q performance measures in three (3) industries: Petroleum and Coal Products; Miscellaneous Manufacturing Industries and Holding and Other

Investment Offices. CEO duality does not influence firm performance under any performance in two (2) industries: Fishing, Hunting and Trapping and Real Estate.

DISCUSSION AND CONCLUSION

This study investigated if the CEO duality influences firm performance in Bangladesh. It also examined the interaction of industries in influencing the relationship between CEO duality and firm performance. The finding is that there is a non-significant negative relationship between CEO duality and firm performance under accounting performance measure and significant negative relationship under market performance measure. Although much needs to be explored on CEO duality and firm performance, the finding of this study implies that independent leadership structure (CEO non-duality) is beneficial for firm economic performance in Bangladesh. The dual leadership structure reduces the board's ability to exercise the governance function in the context of Bangladesh supporting the agency theory.

Further, the interaction terms of the industry dummies reveal that CEO duality and firm performance vary across industries. This is consistent with the argument that the CEO duality is not a random phenomenon (Kang and Zardkoohi, 2005); it varies across firms depending on the industry specific characteristics (Boyd, 1995; Brickley *et al*, 1997; Dahya and Travlos, 2000; Mak and Li, 2001; Elsayed, 2007). Although CEO duality "has been blamed for poor performance and slow response to change in firms such as General Motors, Digital Equipment Corporate and Goodyear Tire and Rubber" (Boyd, 1995: 301) or some of the CEOs are found to be in involved in corporate malpractice that led to the corporate scandals in USA, it does not necessarily mean that CEO duality is a bad governance structure (Kang and Zardkoohi, 2005). The cost and benefits of different leadership structures may vary across firms or industry (Brickley *et al*, 1997; Mak and Li, 2001; Elsayed, 2007) or "because the practice is prevalent in the industry" (Kang and Zardkoohi, 2005, 794). CEO duality is good for some firms, while it is opposite for other firms (Boyd, 1995; Brickley *et al*, 1997; Elsayed, 2007); "a particular firm may adopt CEO duality under an appropriate or inappropriate organizational condition" (Kang and Zardkoohi, 2005: 786).

The theoretical implication of this study is that CEO duality and firm performance is contingent; no single leadership structure is universal; both the leadership structure has cost and benefits. It is beneficial in some situation supporting the stewardship theory while it is not in other situations supporting the agency theory.

This study may have some limitations. Such as, the data were mainly collected from the company annual report. As the accounting standards are very poor in developing countries, the annual report may not truly represent the company's state of the affairs and performance. Further, the data are collected from the large number of observation of different corporate entities ignoring the underlying differences in organizations as in no way two organizations (even in the same industry) are same (Deegan, 2006). The extreme value of some observed variables, such as EBIT, accumulated profits of a few firms for certain years may severely impact the outcome of this study.

This study is conducted within the agency theory (or stewardship, which is in fact opposite to agency theory) perspective. As Bangladesh enacted the corporate governance best practices (Corporate Governance Notification) which requires independent directors to be appointed in the board. Therefore, further study may be conducted on CEO duality on firm performance by controlling the duality for other corporate governance effect, such as outside independent directors. The theoretical foundation such study may be the 'resource dependence theory' arguing the presence of outsiders (outside independent directors) in the board will ensure the board independence and such board may enhance organization legitimacy and performance by providing information and resources (Zahra and Pearce II, 1989; Gopinath *et al*, 1994; Maassen, 2002).

Notes

[1] This is also due to common law tradition of the country (as opposed to civil law); Bangladesh is a common law country. The two-tier board is common in civil law countries (Rose, 2005).

[2] The regulatory body Securities and Exchange Commission Bangladesh announced the "Corporate Governance Notification 2006". Although it is based on comply or explain basis, it is considered as the corporate governance best practices for the listed firms in Bangladesh.

References

1. Abdullah, S. N. (2004), Board Composition, CEO Duality and Performance among Malaysian Listed Companies, *Corporate Governance*, 4 (4): 47-61.
2. Alchian, A. and Demsetz, H. (1972), Production, Information Costs and Economic Organization, *American Economic Review*, 62: 777-795.
3. Ang, J. S.; R. A. Cole and J. W. Lin (2000), Agency Cost and Ownership Structures, *The Journal of Finance*, 55 (1): 81-106.
4. Baliga, B.; Moyer, C. and Rao, R. (1996), CEO Duality and Firm Performance: What's the Fuss? *Strategic Management Journal*, 17: 41-53.
5. Barney, J. B. (1990), The Debate Between Traditional Management Theory And Organizational Economics: Substantive Differences or Inter Group Conflict, *The Academy of Management Review*, 15 (3): 382-393.
6. Barnhart, S. and S. Rosenstein (1998), Board Composition, Managerial Ownership, and Firm

Performance: An Empirical Analysis, *The Financial Review*, 33 (4): 1-16.
7. Baysinger, B. D. and H. N. Butler (1985), Corporate Governance and the Board of Directors: Performance Effects in Board Composition, *Journal of Law, Economics and Organization*, 1 (1): 101-124.
8. Bennedsen, M; Kongsted, H. C. and Nielsen, K. M. (2008), The Casual Effect of Board Size in the Performance of Small and Medium Sized Firms, *Journal of Banking and Finance*, 32 (6): 1098-1109.
9. Berg, S. V. and S. K. Smith (1978), CEO and Board Chairman, A Quantitative Study of Dual vs. Unitary Board Leadership, *Directors and Boards*, 3 (1): 70-87.
10. Boubakri, N.; J. Cosset and O. Guedhami (2005), Post Privatization of Corporate Governance: The Role of Ownership Structure and Investor Protection, *Journal of Financial Economics*, 76 (2): 369-399.
11. Boyd, B. K. (1995), CEO Duality and Firm Performance, A Contingency Mode, *Strategic Management Journal*, 16 (3): 301-312.
12. Boyd, B. K., Howard, M. and Carroll, W. O. (1997), CEO Duality and Firm Performance: An International Comparison, In H. Thomas, D. O'Neal and M. Ghertman (eds), *Strategy, Structure and Style*, Chichester: John Wiley & Sons, 23-39.
13. Braun, M. and A. Sharma (2007), Should the CEO also be Chair of the Board? An Empirical Examination of Family Controlled Public Firms, *Family Business Review*, 20 (2): 111-126.
14. Brickley, J. A.; Coles, J. and Jarrell, G. (1997), Leadership Structure: Separating the CEO and Chairman of the Board, *Journal of Corporate Finance*, 3: 189-220.
15. Chaganti, R. S.; V. Mahajan and S. Sharma (1985), Corporate Board Size, Composition and Corporate Failures in the Retailing Industry, *Journal of Management Studies*, 22 (4): 400-417.
16. Coakes, S. J. and L. G. Steed (2001), *SPSS Analysis without Anguish*, John Wiley and Sons Australia Ltd.
17. Coles, J. W.; McWilliams, V. B. and Sen, N. (2001), An Examination of the Relationship of Governance Mechanisms to Performance, *Journal of Management*, 27 (1): 23-50
18. Coles, J.; N. Daniel and L. Naveen (2008), Boards: Does One Size Fit All? *Journal of Financial Economics*, 87 (3): 329-356.
19. Dahya, J. and Travlos, N. G. (2000), Does the One Man Show Pay? Theory and Evidence on the Dual CEO Revisited, *European Financial Management*, 6 (1): 85-98.
20. Daily, C. M. and D. R. Dalton (1992), The Relationship between Governance Structure and Corporate Performance in Entrepreneurial Firms, *Journal of Business Venturing*, 7 (5): 375-386.
21. Daily, C. M. and Dalton, D. R. (1993), Board of Directors Leadership and Structure: Control and Performance Implications, *Entrepreneurship Theory and Practice*, 17: 65-81.
22. Daily, C. M. and D. R. Dalton (1994a), Corporate Governance and the Bankrupt Firm: An Empirical Assessment, *Strategic Management Journal*, 15: 643-654.
23. Daily, C. M. and D. R. Dalton (1994b), Bankruptcy and Corporate Governance: The Impact of Board Composition and Structures, *Academy of Management Journal*, 37 (6): 1603-1617.
24. Daily, C. M. and Dalton, D. R. (1994c), Corporate Governance in the Small Firm: Prescriptions for CEOs and Directors, *Journal of Small Business Strategy*, 5: 57-68.
25. Daily, C. M. and Dalton, D. R. (1995), CEO and Director Turnover in Failing Firms: The Illusion of Change, *Strategic Management Journal*, 16 (5): 393-401.
26. Daily, C. M. and D. R. Dalton (1997), Separate, But Not Independent: Board Leadership Structure in Large Corporations, *Corporate Governance: An International Review*, 5 (3): 126-136.
27. Dalton, D. R.; C. M. Daily; A. E. Ellstrand and J. L. Johnson (1998), Meta-Analytic Review of Board Composition, Leadership Structure and Financial Performance, *Strategic Management Journal*, 19 (3): 269-290.
28. Dalton, D. R.; C. M. Daily; A. E. Ellstrand and J. L. Johnson (1998), Meta-Analytic Review of Board Composition, Leadership Structure and Financial Performance, *Strategic Management Journal*, 19 (3): 269-290.
29. Davis, J. H.; F. D. Schoorman and L. Donaldson (1997), Towards a Stewardship Theory of Management, *Academy of Management Review*, 22 (1): 20-47.
30. Davidson, W. N.; Worrell, D. L. and Cheng, L. (1990), Key Executive Succession and Stockholder Wealth: The Influence of Successor's Origin, Position, and Age, *Journal of Management*, 16: 647-664.
31. Deegan, C. (2006), *Financial Accounting Theory*, Second Edition, Sydney: McGraw Hill Australia Pty Ltd.
32. Doidge, C.; G. A. Karolyi and R. M. Stulz (2007) Why do Countries Matter So Much for Corporate Governance? *Journal of Financial Economics*, 86 (1): 1-39.
33. Donaldson, L. (1990a), The Ethereal Hand: Organizational Economics And Management Theory, *The Academy of Management Review*, 15 (3): 369-381.
34. Donaldson, L. (1990b), A Rational Basis for Criticisms of Organizational Economics: A Reply to Barney, *The Academy of Management Review*, 15 (3): 394-401.
35. Donaldson, L. and J. H. Davis (1991), Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns, *Australian Journal of Management*, 16 (1): 49-69.
36. Eisenhardt, K. M. (1989), Agency Theory: An Assessment and Review, *The Academy of Management Review*, 14 (1): 57-74.
37. Elsayed, K. (2007), Does CEO Duality Really Affect Corporate Performance, *Corporate Governance: An International Review*, 15 (6): 1203-1224.
38. Elsayed, K. (2010), A Multi-theory Perspective of Board Leadership Structure: What Does the Egyptian Corporate Governance Context Tell Us? *British Journal of Management*, 21 (1): 1-20.
39. Fama, E. F. (1980), Agency Problem and the Theory of the Firm, *Journal of Political Economy*, 88 (2): 288-308.
40. Finkelstein, S. and D'Aveni, R. (1994), CEO Duality as a Double-Edged Sword: How Boards of Directors Balance Entrenchment Avoidance and Unity of

Command, *Academy of Management Journal*, 37 (5): 1079-1108.
41. Finkelstein, S. and D. C. Hambrick (1996), *Strategic Leadership: Top Executives and Their Effects on Organization*, West Publishing Company, Minneapolis/St. Paul.
42. Fosberg, R. H. (1999), Leadership Structure and CEO Compensation, *American Business Review*, 17: 50-56.
43. Gibson, M. S. (2003), Is Corporate Governance Ineffective in Emerging Markets? *Journal of Financial and Quantitative Analysis*, 38 (1): 231-250.
44. Gopinath, C.; J. I. Siciliano and R. L. Murray (1994), Changing Role of the Board of Directors: In Search of a New Strategic Identity, *The Mid-Atlantic Journal of Business*, 30 (2): 175-85.
45. Goyal, V. K. and Park, C. W. (2002), Board Leadership Structure and CEO Turnover, *Journal of Corporate Finance*, 8: 49-66.
46. Gujarati, D. (2003), Basic *Econometrics*, 4th edn, New York: McGraw-Hill.
47. Harris, D. and Helfat, C. E. (1998), CEO Duality, Succession, Capabilities, and Agency Theory: Commentary and Research Agenda, *Strategic Management Journal*, 19: 901-4.
48. Hermalin, B. E. and M. S. Weisbach (2003), Board of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature, *Economic Policy Review*, 9 (1): 7-26.
49. Iyengar, R. J. and Zampelli, E. M. (2009), Self-Selection, Endogeneity, and the Relationship Between CEO Duality And Firm Performance, *Strategic Management Journal*, 30: 1092-1112.
50. Jensen, M. C. (1993), The Modern Industrial Revolution, Exit and the Failure of Internal Control Systems, *The Journal of Finance*, 48 (3): 831-880.
51. Jensen, M. C. and W. J. Meckling (1976), Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, *Journal of Financial Economics*, 3 (4): 305-360.
52. Jensen, M. (2000), *A Theory of the Firm: Governance, Residual Claims, and Organizational Forms*, Harvard University Press, Cambridge.
53. Joh, S. W. (2003), Corporate Governance and Firm Profitability: Evidence from Korea before the Financial Crisis, *Journal of Financial Economics*, 68 (2): 287-322.
54. Judge, W. Q., I. Naoumova and N. Koutzevol, (2003), Corporate Governance and Firm Performance in Russia: An Empirical Study, *Journal of World Business*, 38 (4): 385-396.
55. Kakabadse, A. K..; N. K. Kakabadse and R. Barratt (2006), Chairman and Chief Executive Officer (CEO): That Sacred and Secret Relationship, *Journal of Management Development*, 25 (2): 134-150.
56. Kang E. and A. Zardkoohi (2005), Board Leadership Structure and Firm Performance, Corporate *Governance: An International Review*, 13 (6): 785-799.
57. Kaplan, R. S. and D. P. Norton (1992), The Balanced Score Card- Measures that Drive Performance, *Harvard Business Review*, 70 (1): 71-79.
58. Khanna, T. and K. G. Palepu (1999), Emerging Market Business Groups, Foreign Investors, and Corporate Governance, *NBER Working Paper # 6955*, National Bureau of Economic Research, Massachusetts.
59. Kholeif, A. (2008), CEO Duality and Accounting Based Performance in Egyptian Listed Companies: A Reexamination of Agency Theory Predictions, in Uddin, S. and M. Tsamenyi (eds), *Research in Accounting in Emerging Economies*, 8: 211-237.
60. Kula, V. (2005), The Impact of the Roles, Structure and Process of Boards on Firm Performance: Evidence from Turkey, *Corporate Governance: An International Review*, 13 (2): 265-276.
61. La Porta, R.; F. Lopez-de-Silanes; A. Shleifer and R. W. Vishny (1998), Law and Finance, *Journal of Political Economy*, 106 (6): 1113-1155.
62. La Porta, R.; F. Lopez-de-Silanes; A. Shleifer and R. W. Vishny (2000), Investor's Protection and Corporate Governance, *Journal of Financial Economics*, 58 (1): 3-27.
63. Lam, T. Y. and Lee, S. K. (2008), CEO Duality and Firm Performance: Evidence from Hong Kong, *Corporate Governance*, 8 (3): 299-316.
64. Lindenberg, E. B. and S. Ross (1981), Tobin's Q Ratio and Industrial Organization, *Journal of Business*, 54 (1): 1-31.
65. Lin, Y. (2005), Corporate Governance, Leadership Structure and CEO Compensation: Evidence from Taiwan, *Corporate Governance: An International Review*, 13 (6): 824-835.
66. Maassen, G. F. (2002), *An International Comparison of Corporate Governance Models*, Third Edition, Spencer Stuart, Amsterdam, Netherlands.
67. Majumdar, S. K. and P. Chhibber (1999), Capital Structure and Performance: Evidence from a Transition Economy on an aspect of Corporate Governance, *Public Choice*, 98 (3-4): 287-305.
68. Mak, Y. T. and Y. Li (2001), Determinants of Corporate Ownership and Board Structure: Evidence from Singapore, *Journal of Corporate Finance*, 7: 235-256.
69. Nandelstadh, A. V. and M. Rosenberg (2003), Corporate Governance and Firm Performance: Evidence from Finland, *Working Paper Number 497*, Swedish School of Economics and Business Administration.
70. Ong, C. H. and S. H. Lee (2000), Board Functions and Firm Performance: A Review and Directions for Future Research, *Journal of Comparative International Management*, 3 (1): 3-21.
71. Pearce II, J. A. and S. A. Zahra (1991), The Relative Power of Board of Directors: Association with Corporate Performance, *Strategic Management Journal*, 12 (2): 135-153.
72. Petra, S. T. (2005), Do Outside Independent Directors Strengthen Corporate Boards? *Corporate Governance*, 5 (1): 55-64.
73. Pi, L. and Timme, S. G. (1993), Corporate Control and Bank Efficiency, *Journal of Banking and Finance*, 17 (2-3): 515-530.
74. Raheja, C. (2005), Determinants of Board Size and Composition: A Theory of Corporate Boards, *Journal of Financial and Quantitative Analysis*, 40 (2): 283-306.
75. Rashid, A. and S. C. Lodh (2008), The Influence of Ownership Structures and Board Practices on Corporate Social Disclosures in Bangladesh, in Uddin, S. and M. Tsamenyi (eds), *Research in Accounting in Emerging Economies*, 8: 211-237.
76. Rechner, P. L. and D. R. Dalton (1989), The Impact of CEO as Board Chairperson on Corporate

Performance: Evidence vs. Rhetoric, *Academy of Management Executive*, 3 (3): 141-144.
77. Rechner, P. L. and D. R. Dalton (1991), CEO Duality and Organizational Performance: A Longitude Analysis, *Strategic Management Journal*, 12 (2): 155-160.
78. Rose, C. (2005), The Composition of Semi-Two Tier Corporate Boards and Firm Performance, *Corporate Governance: An International Review*, 13 (5): 691-701.
79. Shleifer, A. and R. W. Vishny (1997), A Survey of Corporate Governance, *The Journal of Finance*, 52 (2): 737-783.
80. Short, H. and K. Keasey (1999), Managerial Ownership and Performance of Firm-Evidence from UK, *Journal of Corporate Finance*, 5: 79-101.
81. Simpson, W. G. and Gleason, A. E. (1999), Board Structure, Ownership, and Financial Distress in Banking Firms, *International Review of Economics and Finance*, 8 (3): 281-292.
82. Sobhan, F. and Werner, W. (2003), *A Comparative Analysis of Corporate Governance in South Asia: Charting a Roadmap for Bangladesh*, Dhaka: Bangladesh Enterprise Institute, Available http://www.bei-bd.org/documents/cg%201.pdf (Accessed on 5th July 2005).
83. Solomon, J. (2007), *Corporate Governance and Accountability*, Second Edition, Chichester: John Wiley and Sons Ltd.
84. Sridharan, U. V. and Marsinko, A. (1997) CEO Duality in the Paper and Forest Products Industry, *Journal of Financial and Strategic Decisions*, 10 (1): 59-65.
85. Tian, J. J. and C. Lau (2001), Board Composition, Leadership Structures and Performance of Chinese Shareholding Companies, *Asia Pacific Journal of Management*, 18: 245-263.
86. Tricker, R. I. (1994), *International Corporate Governance: Text Readings and Cases*, Prentice Hall, Singapore.
87. van Veen, K. and Elbertson, J. (2008), Governance Regimes and National Diversity in Corporate Boards: A Comparative Study of Germany, the Netherlands and the United Kingdom, *Corporate Governance: An International Review*, 16 (5): 386-399.
88. Wan, D. and Ong, C. H. (2005), Board Structure, Process and Performance: Evidence from Public Listed Companies in Singapore, *Corporate Governance: An International Review*, 13 (2): 277-290.
89. Williamson, O. E. (1967), Hierarchical Control and Optimum Firm Size, *Journal of Political Economy*, 53 (2): 123-138.
90. Wiwattanakantang, Y. (2001), Controlling Shareholders and Corporate Value-Evidence from Thailand, *Pacific-Basin Finance Journal*, 9 (4): 323-362.
91. Worrell, D. L.; Nemec, C. and Davidson, W. N. (1997), One Hat too Many: Key Executive Plurality and Shareholder Wealth, *Strategic Management Journal*, 18 (6): 499-507.
92. Yammeesri, J. and Lodh, S. C. (2004), Is Family Ownership a Pain or Gain to Firm Performance? *Journal of American Academy of Business*, 4 (1-2): 263-270.
93. Yammeesri, J.; Lodh, S. C. and Herath, S. K. (2006), Influence of Ownership Structure and Corporate Performance Pre-Crisis: Evidence from Thailand, *International Journal of Electronic Finance*, 1(2): 181-199.
94. Zahra, S. A. (1990), Increasing the Board's Involvement in Strategy, *Long Range Planning*, 23 (6): 109-117.
95. Zahra, S. A. and J. A. Pearce II (1989), Board of Directors and Corporate Financial Performance: A Review and Integrative Model, *Journal of Management*, 15 (2): 291-334.