

# **AN EXAMINATION OF THE DETERMINANTS OF CORPORATE OWNERSHIP STRUCTURE IN AN EMERGING MARKET CONTEXT**

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## **Abstract**

*Using historical data, this study investigates the determinants of corporate ownership structure in an emerging economy in the context of two different but interactive policy directions (or reversal of policy) of market regulators. It also highlights the effectiveness of importing Anglo-Saxon governance models to emerging markets in the name of promoting 'good corporate governance'. Based on established literature, a single equation approach is applied on a pooled sample of 490 observations listed on the Dhaka Stock Exchange over eight years to identify whether measures of corporate performance and other governance factors do contribute in shaping ownership structure. The findings indicate that while there is support for reducing board ownership level, there is no such support for reducing Top 1 shareholder's ownership level. It suggests that the ownership restriction imposed by the SEC is unjustified and detrimental to firm performance/growth in emerging countries like Bangladesh. The study has implications for stakeholders, regulators and policy makers to revisit their attempts to limit the founder-family ownership holdings.*

## **Introduction and Motivation**

Corporate governance research has addressed the agency problem of the corporate firm arising from the divorce of ownership and control. A variety of internal and external governance mechanisms have been suggested in the literature to mitigate this problem to enhance corporate performance. Ownership structure is one such mechanism which has been subjected to

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considerable research, particularly in developed economies. Researchers have mostly been concerned about the relationship between ownership structure and performance.

Unlike developed market economies, ownership structure in emerging markets remains as the predominant corporate governance mechanism in the absence of strong legal system in protecting investors' right and effective market mechanism. This trend is similar to the governance models in Germany and Japan. However, unlike Japanese and German firms having dominant institutional owners, firms in most emerging markets including Bangladesh are controlled by highly concentrated founder-family owners (domestic and foreign) and/or government. Prior studies have identified distinct socio-economic environment in emerging economies as opposed to developed countries (Claessens, Djankov, Fan and Lang, 1999; Farooque, Van, Dunstan and Karim, 2007). Due to the legacy of historical conditions, most of the external governance mechanisms are virtually absent or ineffective in emerging economies. Among the internal mechanisms, the institutional setting of ownership structure has unique features. Therefore, an appreciation of ownership is important to understanding the governance mechanisms in an emerging market context of Bangladesh.

Based on 'shareholder theory of governance', this study is aimed at finding the role of board ownership and Top 1 shareholder's ownership, proxies for ownership structure, in Bangladesh in the context of agency conflicts between dominant concentrated shareholders and minority shareholders. As most Bangladesh firms are majority owned and controlled or managed by founders or family members, board ownership and Top 1 shareholder's ownership may be termed as the representative of founder / family ownership and / or businessmen / industrialists / entrepreneurs / investors in the domestic economy. Therefore, using historical data, investigation of their role has importance as core governance mechanisms in shaping agency costs. It is also important, either directly or indirectly, from two different (but interactive) policy perspectives. First, in recent years international donor agencies such as World Bank, IMF and ADB insisted that capital market regulators in Bangladesh embarked upon capital market and governance reforms in line with a Western governance model (Anglo-Saxon), disregarding home-grown unique features i.e. socio-economic environment of the country. To this end as part of corporate governance reform measures, Bangladesh Securities and Exchange Commission (BSEC) had taken a policy decision (in 2006) of limiting founder-family ownership level maximum of 10% of the outstanding shares of listed firms. Moreover, it limits the total number of directors' to a minimum of five and a maximum of twenty for listed firms with at least 10% or minimum of one member as an independent director. This directive was issued by the SEC in January and February 2006 (SECBD, 2006). Although it was claimed to have been done with the aim of promoting 'good corporate governance' in the corporate sector, the link between shareholdings and the number of directors with quality of governance is open to question. The inherent motivation of the paper is to examine, using historical data, the validity of such policy decision as part of World Bank and IMF sponsored ongoing structural adjustment programs to improve corporate governance mechanisms.

Second, it was observed that since mid-January 2007, the Government of Bangladesh (GOB) had been taking drastic action (i.e. criminal charges) against alleged corruption of top business elites and politicians. Imprisonment of a good number of business elites and politicians with or without law suits induced others to fly overseas leaving their business/industry at risk (Daily Prothom Alo, 6 July 2007). As a consequence, both domestic and foreign labour markets became vulnerable for the general people whereby they became unemployed and lost their purchasing power. In less than a year's time, corruption control measures paralyzed normal business activities and growth of the economy that ended up with an economic disaster of high inflation rate in recent history. In fact, the policy makers failed to realize that each alleged corrupt person is in fact an investor/entrepreneur in the domestic economy. It is also argued by some critics that, by and large, corruption is an unwanted by-product of market economy/capitalism. By default, some corruption may exist in any market-based economy (e.g. Enron, World Com case in USA). So, any drastic action rather than institutionalised standard legal process against such alleged corruption might be counter productive and have a severe impact on overall economic activities and price levels.

It was predicted that economic growth to reduce by 2% and price levels to rise more than double due to so-called combating corruption as well as natural disasters. In a recent document in February 2008, the central bank of the country did warn the government that private investment had declined noticeably due to the government's direct legal action against businessmen at a mass level and that no improvement was possible without heightened business confidence and socio-political stability (Daily Amar Desh, 10 February 2008). However, a reversal of the policy for not taking strict measures against the top businessmen / industrialists / entrepreneurs was taken later for the sake of rescuing fragile economy and improving growth and economic well being.<sup>1</sup> Because, it is noted that despite the corruption allegation, these businessmen possess enormous entrepreneurial ability and talent to contribute in enhancing employment, investment, and growth of the economy. Similar measures were undertaken in other countries as well, such as South Korea in the last decade or so. A particular interest or motivation of this paper is to evaluate and justify the above policy reversal of the Government of Bangladesh through empirical evidence on historical data showing the relationship between corporate ownership structure and performance and other governance mechanisms in operation in Bangladesh.

Considering these two policy perspectives discussed above, the paper further contributes to the more fundamental debate about the effectiveness of applying and/or transferring Anglo-Saxon corporate governance models to developing and emerging market economies including Bangladesh. This study argues that mere replication of a Western governance model without reflecting home-grown unique features (i.e. socio-economic environment of the country) may not be suitable for emerging markets like Bangladesh, thus assess whether the assumption of replication of models is a realistic one in disregarding the local contexts of the country.

The rest of the paper is structured as follows. Section 2 briefly reviews the literature that applies to highly concentrated ownership followed by development of the research

hypotheses. Section 3 provides details of methodology and data while Section 4 describes the findings. Finally, Section 5 provides the concluding remarks and policy implications of the study.

## **Theory, Literature Review and Hypotheses Development**

The separation of ownership from control or the image of the widely held corporation with a managerialist focus has stimulated an enormous body of literature since the seminal work of Berle and Means (1932), advancement of the concept of absentee ownership (Veblen, 1924) and the spread of the ideas of Adam Smith (1776). Jensen and Meckling (1976) formally explained the contractual view of the firm, popularly known as the agency problem. Studies argue for a number of ownership-based control mechanisms such as managerial, board of directors, concentrated individual or founder-family or state, blockholders and institutional shareholdings etc. However, a different type of agency problem may arise when each of these shareholders has full control over the firm (Shleifer and Vishny, 1997). La Porta et al. (1999) found evidence that except for strong shareholder protection, as those found in economies like the USA and the UK, relatively few firms were widely held in the rest of the world. Rather, firms were typically controlled by high concentration of ownership through families or the state. Large shareholdings in the form of majority ownership or pyramids, cross-shareholding, controlling owners or founders, and core investors were common in most countries. La Porta et al. (1999) found that Berle and Means's (1932) corporation was far from universal and was quite rare for some definitions of control. Even in the US, there was moderate to greater ownership concentration in the 1990s than there was during the period of Berle and Means's study (Holderness and Sheehan, 1988; Holderness et al., 1999).

Comparative studies have also shown that within OECD countries, ownership and control rights were increasingly concentrated in the hands of financial and non-financial institutions or individuals. Thus, widely-held firms appeared to be relatively uncommon except in a small number of countries (the US, the UK) or unless very large firms were considered. In contrast, family control was very common where family is the ultimate owner with control in Berle and Means's sense (La Porta et al., 1999). The predominant ownership pattern was family control, both in good and poor investor protection countries. Families often had control rights over firms significantly in excess of their cash-flow rights (La Porta et al., 1999). Founding family leadership and closely-held firms were common characteristics of publicly traded firms in Europe (Pedersen and Thomsen, 1999). Asian and South American countries were not different from this pattern. Founding family firms were corporations in which the original founder was the CEO or chairman or their descendents had a major role in managing the firm.

Empirical studies on family ownership and performance showed mixed evidence. Jacquemin and de Ghellinck (1980), James (1999) and Mishra et al. (2001) found significantly positive performance effects of family control. Hermalin and Weisbach (1991) also provided evidence of a positive relationship between performance and a

family-owned firm. McConaughy et al. (1998) showed a positive effect of founding family control in the US firms. They found that founding family controlled firms were more valuable than similar firms without founding family control. Founders and their descendants ran their firms more efficiently than CEOs without founding family ties. Kang (1998) reported that founding family owners enjoyed increased firm performance relative to their industry peers in US textile industry suggesting that founding family members were active monitors of their managers (Mishra et al., 2001). Morck et al. (1988) found a positive effect of founder-family in young firms only (as opposed to old firms), Jayaraman et al. (2000) in young and smaller closely-held firms, Nagar et al. (2000) in closely-held firms and Randoy et al. (2002) in closely-held firms in less competitive markets. Mishra et al. (2001) reported that family descendants were more valuable to generate firm value by the legacy of the successful family entrepreneur.

On the contrary, Gomez-Mijia et al. (2001) indicated managerial entrenchment and associated weaker performance in family-owned firms. Lauterbach and Vaninsky (1999) found that family firms in Israel under-perform than other firms. Claessens et al. (1999) also found a negative correlation between founding family firms and firm performance in their survey of nine East Asian Countries. They reported minority shareholder expropriation in these countries, especially in family controlled firms. Morck et al. (1988) identified the 'generation problem' by testing the influence of 'entrepreneurial talent' of founding family firms on performance in US and found that for old firms, performance reduced with the presence of founder-insider, whereas for young firms performance increased. Lane and Jameson (1993) reported that in a sample of small US firms, founding family controlled firms were younger than firms without such control. On the other hand, Claessens et al. (1999) found that many family controlled firms in East Asian countries were older and smaller. Kang (1998) documented that early generation family owners were associated with higher performance than their descendants. Mishra et al. (2001) indicated that older family firms perform more poorly than younger ones.

The above findings in the literature based on shareholder theory of governance, are clearly mixed and inconclusive. It is of interest to observe the direction of relation from different perspectives as indicated earlier in the context of an emerging economy environment derived from 'shareholder theory of governance' rather than 'stakeholder theory of governance'. Such preference of the theory is attributable to direct involvement of majority shareholders in the management of listed firms in emerging economies and developing an alternative governance system to fill the gap of an effective judicial system and market-based mechanisms.

Following the literature above, two alternative hypotheses are developed to test in this study, such as :

- H<sub>1</sub>: Board ownership and/or Top 1 shareholder's ownership is positively associated with firm performance.
- H<sub>2</sub>: Board ownership and/or Top 1 shareholder's ownership is associated with other governance variables.

In regards to the first hypothesis, if the findings show that board ownership and/or Top 1 shareholder's ownership are positively associated with measures of firm performance, it could be argued that agency conflict/cost is minimal as the interest of dominant concentrated shareholders and minority shareholders are aligned. Therefore, BSEC's attempt to reduce founder/family ownership up to 10% level for the sake of ensuring good corporate governance is not justifiable. Given that both types of ownerships are highly concentrated though termed as value enhancer, any unusual decrease of ownership level might have abnormal negative performance effects, which may not be conducive to handling agency conflict and/or improving financial performance. It will also appear to have an imbalance in governance mechanisms where founder/family ownership concentration plays a vital role of monitoring in the absence of an effective legal backing and other market-driven monitoring mechanisms (Shleifer and Vishny (1997)). It is because disappearing of ownership concentration from the governance mechanisms might create a vacuum in the absence of other viable internal mechanisms to replace ownership concentration. On the other hand, though indirectly, such positive association would indicate GOB's policy reversal of not taking stringent measures against top businessmen/industrialists for their alleged link to corruption for the sake of the brittle economy.

Similarly, with regard to second hypothesis, it is of interest to observe any significant association between board ownership (or Top 1 shareholder's ownership) and other governance variables such as institutional shareholdings, minority/public shareholdings, board size, debt ratio etc. For instance, a negative association between institutional, minority/public shareholdings with both board ownership and Top 1 shareholder's concentration is expected. On the other hand, a positive relationship is expected between board size and board ownership. However, a high concentration of ownership in the hands of a small number of shareholders restricts board membership and therefore, a negative association is predicted between board size and TOP-1 shareholder's ownership concentration. With regard to CEO horizon, it is reasonable to expect a positive relationship between CEO tenure and both board ownership and Top 1 shareholder's concentration. Again, it is expected that debt ratio is to have a positive effect on board ownership, but a negative effect on Top 1 shareholder's concentration. These will denote either the presence of alternative governance variables to replacing founder/family ownership concentration in an emerging market or the dominant presence founder/family ownership with minor role of other governance variables.

## **Methodology and Data**

In regards to research method, a regression model was developed for the study shown below to estimate the effect of performance and other governance mechanisms on ownership structure. This model would effectively generate the actual role of ownership structure in Bangladesh corporate sector.

**For Board Ownership:**

$$\begin{aligned}
 \text{BD-SHARE}_i = & \beta_0 + \beta_1 \text{ LOG-TOBIN'S } Q_i \text{ or LOG-MBVE}_i \text{ or ROA}_i + \beta_2 \text{ TOP-1} \\
 & \text{SHARE}_i + \beta_3 \text{ INST-SHARE}_i + \beta_4 \text{ MINORITY-SHARE}_i + \beta_5 \text{ BD-SIZE}_i \\
 & + \beta_6 \text{ CEO-HORIZON}_i + \beta_7 \text{ DEBT-Ratio}_i + \beta_8 (\text{DEBT-Ratio}_i)^2 + \beta_9 \\
 & \text{LOG-ASSETS}_i + \beta_{10} \text{ INVEST-Ratio}_i + \beta_{11} \text{ LIQUIDITY-Ratio}_i + \beta_{12} \\
 & \text{PROFIT-VOLATILE}_i + \varepsilon_i \quad \text{-----} \quad \text{(Model 1)}
 \end{aligned}$$

**For Top 1 Shareholder's Ownership:**

$$\begin{aligned}
 \text{TOP-1 SHARE}_i = & \beta_0 + \beta_1 \text{ LOG-TOBIN'S } Q_i \text{ or LOG-MBVE}_i \text{ or ROA}_i + \beta_2 \text{ BD-SHARE}_i \\
 & + \beta_3 \text{ INST-SHARE}_i + \beta_4 \text{ MINORITY-SHARE}_i + \beta_5 \text{ BD-SIZE}_i + \beta_6 \\
 & \text{CEO-HORIZON}_i + \beta_7 \text{ DEBT-Ratio}_i + \beta_8 (\text{DEBT-Ratio}_i)^2 + \beta_9 \text{ LOG-} \\
 & \text{ASSETS}_i + \beta_{10} \text{ INVEST-Ratio}_i + \beta_{11} \text{ LIQUIDITY-Ratio}_i + \beta_{12} \\
 & \text{PROFIT-VOLATILE}_i + \varepsilon_i \quad \text{-----} \quad \text{(Model 2)}
 \end{aligned}$$

For dependent variable, two different measures of ownership structure were used such as (1) board ownership and (2) Top 1 shareholder's ownership concentration. Board ownership and Top 1 shareholder's ownership represent highly concentrated founder-family ownership and/or businessmen / industrialists / entrepreneurs / investors in the domestic economy. With the exception of a few, most of the Top 1 shareholders is either the founder of the firm or descendant of the founder; most of the board members or directors are from the same family or a number of families (Farooque et al., 2007). On the other hand, for the independent variable of interest, three different measures of performance were used: (i) Tobin's Q, (ii) Market-to-book value of equity ratio (MBVE) and (iii) ROA. These performance variables did cover both market-based as well as accounting-based measures of performance. Natural log value for Tobin's Q and MBVE was used to normalise their distribution. Other independent variables were: institutional shareholdings, minority/public shareholdings, concentrated shareholdings [either board ownership (in model 2) or Top 1 ownership (in model 1) to use in alternative models above], board size, CEO human resource, debt ratio, debt ratio squared, log assets as firm size, investment ratio, liquidity ratio and profit volatility.<sup>2</sup> These variables are selected based on available literature on both developed and developing economies as well as relevant to emerging market context such as Bangladesh. Table 1 below reports variable definition, expected sign of the variables as per literature and estimation techniques used in the model.

Table 1: Variable Definition

Variable Label	Variable	Variable Definition	Predicted Sign of the Coefficient as per literature
<b><u>Dependent Variables:</u></b>			
BD-SHARE	Board ownership	Board shareholding as a % of total outstanding shares	
TOP-1 SHARE	Top 1 shareholder's ownership concentration	Top 1 shareholder's shareholding as a % of total outstanding shares	
<b><u>Explanatory Variables:</u></b>			
LOG-TOBIN'S-Q	Tobin's Q	(Market value of equity plus book value of debt) ÷ book value of total assets	+/-
LOG-MBVE	Market-to-book value of equity	Market value of equity ÷ book value of equity	+/-
ROA	Return on assets	EBIT ÷ book value of total assets	+/-
TOP-1 SHARE	Top 1 shareholder's ownership concentration	Top 1 shareholder's shareholding as a % of total outstanding shares	-
BD-SHARE	Board ownership	Board shareholding as a % of total outstanding shares	-
INST-SHARE	Financial institutional ownership	Institutional shareholding as a % of total outstanding shares	-
MINORITY-SHARE	Public ownership	Minority/public shareholding as a % of total outstanding shares	-
BD-SIZE	Board size	Number of directors on the board	+/-
CEO-HORIZON	CEO human resource	No. of years served as CEO	+
LOG-ASSETS	Firm size	Log total assets	+/-
DEBT-Ratio	Debt ratio	Debt ÷ total assets	+/-

(Continued)

(Con't Table 1)

(DEBT-Ratio) <sup>2</sup>	DEBT-Ratio Squared	(Debt ÷ total assets) <sup>2</sup>	+/-
INVEST-Ratio	Investment ratio	Capital expenditure ÷ total assets	+
LIQUIDITY-Ratio	Liquidity ratio	Cash flow ÷ total assets	+
PROFIT-VOLATILE	Firm-level risk	SD of return on equity	+

The study was based on an unbalanced pooled sample data set of listed firms in Dhaka Stock Exchange comprising 490 firm-years for the period of 1995 to 2002. In Bangladesh, most of the listed companies financial year end is 30 June of the year. These were all financial and non-financial listed firms after an extensive screening of the total population 1304 firm-years covering eight years. These periods of historical data were taken on a number of facts: beginning year 1995 was selected for one year after the introduction of new Companies Act in 1994 as well as the establishment of BSEC in late 1993 and its effective operation from 1994; ending year 2002 was selected to catch-up no change in securities regulation by BSEC due to Enron and other big corporate collapse in USA, Europe and Australia. It is observed that BSEC did make some major changes in securities regulation from late 2002 (such as, Acquisition of Substantial Shares, Merger and Takeover Rules 2002, Depository Act Amendment 2002, Restructuring of “Z” Group Companies 2002, Security Custodial Rules 2003, Depository (User) Regulation 2003 and Amendment 2006, Asset Backed Security Rules 2004, Insider Trading 2004, Margin Rules 2005, Public Issue Rules 2006, Right Issue Rules 2006 etc.) as a precaution and natural response to corporate collapse in Western countries (<http://www.sec bd.org/orderindex.html>). This indicates that 2002-2006 observed more regulatory regime in Bangladesh stock market. Therefore, the sample period was taken up to five years back from the so-called attempt of BSEC in 2006 in reducing founder/family ownership up to 10% level (and executed at a later period) to observe whether previously existed governance arrangements are sufficient to explain the role of ownership structure in Bangladesh without having any bias from changes in securities regulations. It is also free from expectation bias from the then new government sworn in late 2001. Therefore, the sample period would be considered as normal period of economic activities in Bangladesh corporate sector.

## Findings and Discussion

Descriptive statistics for both samples are presented in Table 2 below. Average mean (median) board ownership was 36% (43%) while Top 1 shareholder’s ownership was 25% (23%). Average mean (median) financial shareholding was 21% (18%) and minority/public shareholding 31% (30%). Mean/median Tobin’s

**Table 2 : Summary Statistics**

Variable Level	Mean	Median	S.D.	Minimum	Maximum
TOBIN'S Q	1.1888	1.003	0.743	0.070	7.460
MBVE	1.545	1.019	1.780	0.040	15.650
ROA	0.082	0.079	0.063	-0.180	0.360
BD-SHARE	0.356	0.431	0.208	0.000	0.687
TOP-1 SHARE	0.250	0.229	.0160	0.032	0.819
INST-SHARE	0.208	0.183	0.133	0.005	0.960
MINORITY-SHARE	0.308	0.301	0.160	0.009	0.763
BD-SIZE	8.760	7.000	6.689	3	37
CEO-HORIZON	10.710	9.000	7.451	1	32
DEBT-Ratio	0.591	0.608	0.215	0.030	1.00
INVEST-Ratio	0.051	0.016	0.089	0.000	0.790
LOG ASSETS	2.590	2.576	0.579	0.950	4.620
PROFIT-VOLATILE	0.189	0.035	0.764	0.000	7.760
LIQUIDITY-Ratio	0.067	0.058	0.068	-0.220	0.650

Q and MBVE were higher than 1 whereas ROA was less than 10%. Average mean board size was 9; CEO horizon was 11; debt ratio was 59% while investment ratio was 5%. Average firm liquidity ratio and firm-level risk were, respectively, 7% and 19%.

The correlation matrix for variables in Table 3 below indicated no sign of multi-collinearity among independent variables. The variance inflation factors (VIF) also did not indicate any multi-collinearity problem. To check normality and heteroskedasticity, residuals were plotted, respectively, in expected normal P-P plot and histograms against predicted values that the residual values were evenly distributed around zero for all levels of predicted values. Neither of these tests indicated any problem of heteroskedasticity.

### Regression Results for Board Ownership

Table 4 below shows that log Tobin's Q and log MBVE had significant negative associations with board ownership while the association of ROA with board ownership was negative but not significant. Thus, hypothesis 1 for board ownership was proved invalid. This suggested that performance (as measured by log Tobin's Q and log MBVE) determined board ownership and that increase in performance appears to have contributed to a decline in board ownership and *vice-versa*. In other words, board ownership seemed to be value destructive to the firm. However, year-by-year data (not reported) indicated that the rate of change in board ownership was negligible with that of firm performance, which validated the existence of entrenchment effect of board ownership in Bangladesh corporate sector.

Table 3 : Pearson Correlation

Variable	Log Tobin's Q	Log MBVE	ROA	Board Share holdings	Top 1 share holdings	Institutional Share holdings	Minority/public Share holdings	Board Size	CEO Horizon	Log Assets	Debt Ratio	Debt Ratio Squared	Invest Ratio	S.D. of ROE	Liquidity Ratio
Log Tobin's Q	1	0.893**	0.383**	-0.20**	0.294**	-0.111*	-0.224**	-0.13	-0.12**	-0.004	0.00	-0.008	0.112*	0.008	0.294**
Log MBVE		1	0.387**	-0.136**	0.267**	-0.164**	-0.231**	0.036	-0.128**	-0.063	0.11*	0.131**	0.098*	0.13**	0.268**
ROA			1	-0.137**	.0263**	-0.075	-0.182**	-0.002	-0.044	-0.062	-0.177**	-0.164**	0.139**	0.097*	0.804**
Board Shareholdings				1	-0.439**	-0.158**	-0.013	0.157**	0.352**	-0.312**	0.092*	0.078	-0.034	0.076	-0.133**
Top 1 shareholdings					1	0.094*	-0.392**	-0.312**	-0.228**	0.19**	-0.142**	-0.138**	0.098*	-0.03	0.193**
Institutional Shareholdings						1	-0.30**	-0.103*	-0.123**	0.116**	0.002	0.009	-0.059	0.021	-0.04
Minority/public Shareholdings							1	-0.06	0.172**	-0.077	-0.089*	-0.087	0.00	-0.031	-0.136**
Board Size								1	-0.195**	0.153**	0.221**	0.226**	-0.108*	0.086	0.05
CEO Horizon									1	-0.277**	-0.006	-0.028	-0.06	-0.051	-0.077
Log Assets										1	0.437**	0.426**	-0.107*	-0.074	-0.126**
Debt Ratio											1	0.974**	-0.217**	0.219**	-0.363**
Debt Ratio Squared												1	-0.213**	0.252**	-0.329**
Invest Ratio													1	-0.064	0.195**
S.D. of ROE														1	-0.015
Liquidity Ratio															1

Table 4 : Role of Ownership Structure (Board Ownership)

Variables	Board Ownership with Tobin's Q	Board Ownership with MBVE	Board Ownership with ROA
CONSTANT	0.701 (10.464)***	0.721 (10.699)***	0.706 (10.413)***
LOG TOBIN'S Q	-0.157 (-3.427)***		
LOG-MBVE		-0.073 (-2.953)***	
ROA			-0.193 (-0.894)
TOP-1 SHARE	-0.457 (-7.478)***	-0.456 (-7.379)***	-0.489 (-7.963)***
INST-SHARE	-0.255 (-4.146)***	-0.261 (-4.189)***	-0.228 (-3.692)***
MINORITY-SHARE	-0.370 (-6.564)***	-0.368 (-6.503)***	-0.351 (-6.183)***
BD-SIZE	0.002 (1.840)*	0.003 (1.913)*	0.002 (1.781)*
CEO-HORIZON	0.006 (5.759)***	0.006 (5.679)***	0.007 (6.024)***
DEBT-RATIO	0.205 (1.280)	0.151 (0.946)	0.169 (1.034)
(DEBT-RATIO) <sup>2</sup>	-0.114 (-0.833)	-0.052 (-0.373)	-0.096 (-0.691)
LOG-ASSETS	-0.084 (-5.187)***	-0.090 (-5.406)***	-0.080 (-4.860)***
INVEST- RATIO	0.052 (0.598)	0.053 (0.608)	0.033 (0.382)
PROFIT-VOLATILE	0.010 (0.959)	0.012 (1.141)	0.012 (1.145)
LIQUIDITY- RATIO	-0.176 (-1.363)	-0.191 (-1.479)	-0.140 (-0.665)
N	490	490	490
Adjusted R <sup>2</sup>	0.380	0.377	0.366
F-statistic	26.028***	25.621***	24.555***

(T values are shown in the parenthesis);

\*\*\* Significance at 1% confidence level using two-tailed test;

\*\* Significance at 5% confidence level using two-tailed test;

\* Significance at 10% confidence level using two-tailed test.

With respect to other variables reported in the board ownership equation in Table 4, it was observed that, as expected, Top-1 shareholder, institutional and minority/public ownership had significant negative influences on board ownership. This indicated that alternative ownership measures were available to replace high level of board ownership which was not value adding to firm performance, thus removing entrenchment effect of board ownership. However, in terms of substitution of board ownership, Top-1 shareholder was well ahead of other shareholders followed by minority/public shareholders. Again, as expected, CEO horizon and board size (at 10% level), had significant positive relationships with board ownership which implied higher board ownership to promoting higher board size and CEO tenure as complimentary to board ownership. Debt ratio and debt ratio squared had no significant relationships indicating that capital structure cannot mitigate entrenchment effect of board ownership. As for the control variables, log assets showed a significantly negative relationship but investment ratio, profit volatility, and liquidity ratio showed no significant relationships with board ownership in any measure of performance model. Thus, hypothesis 2 for board ownership was proved partly valid.

### Regression Results for Top 1 Shareholder's Ownership

Table 5 below shows the regression results for Top 1 shareholder's ownership concentration with the three performance measures. All the performance measures had a significant positive impact on Top 1 shareholding, consistent with the literature mentioned earlier. Thus, hypothesis 1 for Top 1 shareholder's ownership proved valid. This suggested that as performance increased, the shareholding of Top 1 shareholder also increased and *vice-versa*, indicating performance as a determinant of ownership concentration. In other words, Top 1 shareholder's ownership seemed to be value adding to the firm which coincided with the convergence of interest hypothesis of the agency theorists. It was observed that in most firms in Bangladesh, Top 1 shareholder was the founder of the firm or descendent or family owner who acted as the CEO of the firm or Chairman of the board or both (Farooque et al., 2007). The significant positive effect of performance measures on ownership concentration of number one shareholder of the firm was encouraging in the context of an emerging market economy in the sense that in emerging economies founder or family ownership acted as an alternative source of governance mechanisms.

Table 5 : Role of Ownership Structure (Top 1 Shareholder's Ownership)

Variables	Top 1 Shareholder's Ownership with Tobin's Q	Top 1 Shareholder's Ownership with MBVE	Top 1 Shareholder's Ownership with ROA
CONSTANT	0.481 (10.052)***	0.458 (9.488)***	0.488 (10.248)***
LOG TOBIN'S Q	0.092 (2.821)***		
LOG-MBVE		0.065 (3.746)***	
ROA			0.421 (2.806)***
BD-SHARE	-0.230 (-7.478)***	-0.225 (-7.379)***	-0.240 (-7.963)***
INST-SHARE	-0.150 (3.439)***	-0.133 (-3.008)***	-0.159 (-3.683)***
MINORITY-SHARE	-0.414 (-11.141)***	-0.403 (-10.862)***	-0.424 (-11.629)***
BD-SIZE	-0.007 (-8.613)***	-0.007 (-8.661)***	-0.007 (-8.347)***
CEO-HORIZON	-0.001 (-1.554)	-0.001 (-1.385)	-0.001 (-1.832)*
DEBT-RATIO	-0.082 (-0.724)	-0.052 (-0.461)	-0.094 (-0.823)
(DEBT-RATIO) <sup>2</sup>	-0.034 (-0.353)	-0.080 (-0.826)	-0.025 (-0.255)
LOG-ASSETS	0.053 (4.612)***	0.059 (5.066)***	0.050 (4.339)***
INVEST-RATIO	0.031 (0.504)	0.024 (0.398)	0.044 (0.721)
PROFIT-VOLATILE	0.012 (1.659)*	0.011 (1.435)	0.008 (1.133)
LIQUIDITY-RATIO	0.088 (0.964)	0.066 (0.730)	-0.176 (-1.196)
N	490	490	490
Adjusted R <sup>2</sup>	0.475	0.482	0.475
F-statistic	37.929***	38.902***	37.915***

(T values are shown in the parenthesis)

\*\*\* Significance at 1% confidence level using two-tailed test.

\*\* Significance at 5% confidence level using two-tailed test.

\* Significance at 10% confidence level using two-tailed test.

As regards the other variables reported in Table 5, it was found that, as expected, board, institutional and minority/public shareholdings showed consistent and significant negative relationships with Top 1 shareholding. This indicated that alternative ownership measures were available to replace high level of Top 1 shareholder's ownership, although it aligned with firm interest. However, in terms of substitution of Top-1 ownership, minority/public shareholders' was ranked first. Likewise, board size had a significant negative relationship with Top 1 shareholding, as anticipated. Although a significant positive relationship between CEO horizon and Top 1 shareholder's ownership concentration was expected, the observed insignificant negative relationship between them, except in ROA model (at 10% level), was contrary to expectation. One possible explanation could be that Top 1 shareholding and CEO horizon were perfect substitutes and most of the largest shareholders also acted as CEOs in the firms they own in Bangladesh. So, when CEO human capital increased for longer CEO horizon, the need for shareholding by CEO being the Top 1 shareholder reduced. Again, debt ratio and debt ratio squared had negative but insignificant relationships with Top 1 shareholder's ownership concentration for all measures of performance. This provided evidence that debt structure was not yet developed as a substitute governance mechanism in Bangladesh listed firms replacing Top 1 shareholder.

The control variables, investment ratio and liquidity ratio appeared to have no impact on Top 1 shareholder's ownership concentration. Profit volatility was significantly positive in the equation with log Tobin's Q as the measure of performance. Finally, log assets showed the expected significant positive relationship with Top 1 shareholder's ownership concentration in all measures of performance. Thus, hypothesis 2 for Top 1 shareholder's ownership was proved partly valid.

### **Discussion on Validity of the Model and Objectives of the Study**

The regression results in Tables 4 and 5 show reasonable adjusted R<sup>2</sup> values ranging from 37% to 48%, indicating quite satisfactory explanatory power of each model. Although not reported here, it became visible that the relative importance of variables in Tables 4 and 5 above varied depending on the ownership variable and the measures of performance used. The observed decline in adjusted R<sup>2</sup> was due to omission of each variable indicated the relative importance of each of them for the ownership regression.<sup>3</sup> It was apparent that, in addition to performance measures, a few other substitute governance variables were also closely associated with ownership structure of listed firms in Bangladesh.

The above results in Table 4 and 5 were also checked for fixed effects (i.e. with fixed-industry, fixed-firm/year and specific firm-type effects) and, in general, the results did not change except a few cases.<sup>4</sup> Thus, the results reported for the ownership structure equation in Tables 4 and 5 appeared to be robust. In addition, there remained a few significant industry effects, specific firm-type effects and only one particular year effect. These warrant proper treatment of determinants of ownership structure in the sample firms.

Further to analyse the results in relation to the objectives of the study (direct and indirect), it appeared that Top 1 shareholder did not incur any agency costs. It was, rather, the board members who did incur agency costs for the firm. Based on the evidence on historical data, BSEC should reconsider their policy direction of reducing founder/family ownership level as such policy did not fit the existing corporate features. To improve governance quality and corporate performance, BSEC needs to focus on reducing board ownership rather than Top 1 shareholder's ownership. The findings here also provide an impression that GOB's policy reversal (of not taking drastic action against top businessmen and elites for their links to corruption) was rightly undertaken to save the country from economic disaster caused by unprecedented drastic actions against top businessmen/industrialists/entrepreneurs/investors.

## **Conclusion and Implications**

This study investigated the role of ownership structure (i.e. board ownership and Top 1 shareholder's ownership), a proxy for founder/family ownership and/or businessmen/industrialists/entrepreneurs/investors in the domestic economy, in an emerging market context. The historical data analysis was conducted here to verify the validity of BSEC's move to founder/family ownership up to 10% level and to justify GOB's policy reversal of not taking criminal charges on corruption allegation against top businessmen and elites rather confiscation of illegal property/money through the 'Truth and Accountability Commission'.

The findings indicated that both measures of ownership structure have opposite relationship with the three measures of performance. That is, performance had a negative impact on board ownership while a positive impact on Top 1 shareholder's ownership. In addition, the regression results also documented that a number of ownership-based governance mechanisms were in operation in Bangladesh corporate sector to determine its ownership structure. However, the relationship between performance measures and ownership structure has important implications to an emerging economy – Bangladesh. In this respect, while there is support for reducing board ownership level, there is no such support for reducing Top 1 shareholder's ownership level. The latter evidence raises the question about the justification of BSEC's attempt to reduce ownership concentration level of the founder-family owners of the firm. While they enhance firm performance with a moderately high level of ownership (25%) showing alignment of interest to minority/public shareholders (i.e. mitigating agency problem as an ownership-based governance mechanism or founding-family leadership), any such reduction may be detrimental to firm value. On the other hand, this empirical evidence is consistent with the recent policy reversal of the GOB for not taking heavy handed action (i.e. criminal charge) against top businessmen and entrepreneurs for their alleged link to corruption for the sake of the national economy.

Finally, it can be argued that benefits associated with greater attention to governance issues in large firms do not necessarily translate directly to small and medium firms who indeed need unique structure and processes in place to grab those benefits.

Following the same logic, this study suggests that, for policy makers (e.g. BSEC), mere replication of Anglo-Saxon governance model without reflecting home-grown unique features may not be suitable for emerging markets, including Bangladesh, due to huge governance and institutional differences between developed and emerging economies. There is a need for a robust governance structure in emerging market economies that fit the socio-economic environment of the country concerned rather than simply transferring governance models from the West commonly driven by international donor agencies (World Bank, IMF and ADB). This structure should strike a balance between the home-grown unique features (such as Top 1 ownership concentration) and the good features of Western models to meet the challenge of strengthening governance mechanisms in emerging markets.

## **Notes**

- <sup>1</sup> It is planned and later implemented that instead of taking criminal charges, a financial penalty as well as confiscation of illegal property/money may be imposed through the formation of an 'Truth and Accountability Commission' headed by a former High Court Justice of the country.
- <sup>2</sup> For brevity of the paper, these variables and their related literature are not discussed here
- <sup>3 & 4</sup> For brevity, these results are not reported here but are available from the author upon request.

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