

Board of Director's Size, Independence and Performance: An Analysis of Private Commercial Banks in Bangladeshi

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Internal governance systems in banks and their effects on performance have recently given attention by the regulatory authority of the banking industry, i.e. by the Bangladesh bank (The Central bank of Bangladesh). On the basis of importance of the governance structure on the performance, this paper examines the impact of board size and independent directors on the performance of local private commercial banks in Bangladesh. In order to capture the real scenario, the study has included 28 (out of 30) commercial banks operating in the private sector, which are listed in the two stock exchanges of the country. An individual regression model is used to examine this relationship over the years 2005-2009. The results show, statistically, significant positive relation between Bangladeshi banks' board size and their performances in terms of Tobin's Q, but no significant relation in terms of ROE and ROA. In addition, a statistically significant positive relationship was found between the proportion of independent directors on the bank board and the performance of banks.

Keywords: Board size and composition, Independent directors, Tobin's Q, Commercial Bank performance in Bangladesh.

JEL classification: G21, G28, G30, G32

1. Introduction

The performance of financial market is not only important for their shareholder's but also important for the entire economic system as financial market considered as the brain of an economic system (Stiglitz 1994, p.23). For better performance of the financial firm, the board of directors' role in the banking industry is not only important for the shareholders, but also for other stakeholders importantly for depositors and regulators. As a financial institution banking firm provide financial services to their customers in relatively low transaction cost and offer them diversified investment opportunities which enhance their investments and savings capacity (Mishkin, 2004, pp29-31). On the other hand, banking firms' deals with public fund, for which it is obligatory for the regulatory authority to monitor their activities. Although regulators do so through deposit insurance, even though sometime it create moral hazard problem for which regulation is inevitable (Mishkin, 2004, pp 262-263).

The size and composition of the board of directors constitute of the most essential corporate governance themes and have caught the attention of academics and regulators alike. Most of the literatures on governance assert that smaller and more outsider-dominated boards are better in corporate management and, thus, contribute positively to corporate performance. Hermalin and Weisbach (2003) argue that the

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consensus in the economic literature is that an increase in board size will have a negative effect on firm performance. For instance, Jensen (1993) argues that as board size increases, boards become less effective at monitoring management because of free-riding problems amongst directors and increased decision-making time.

However, Andres, P., and Vallelado, E. (2008) shown that bank board composition and size are related to directors' ability to monitor and advise management, and that larger and not excessively independent boards might prove more efficient in monitoring and advising functions, and create more value. Adams and Mehran (2005) find that banking firms with larger boards do not underperforms their peers in terms of Tobin's Q. Belkhir (2004) finds increasing the number of directors in banking firms does not undermine performance on the basis of Tobin's Q and return on assets.

With respect to board composition, agency theory suggests that a greater proportion of outside directors will be able to monitor any self-interested actions by managers and so will minimize the agency costs (Fama and Jensen, 1983; Fama, 1980). Busta (2007) examined a sample of 69 listed banks from France, Germany, Italy, Spain and UK over the period 1996-2005 indicated that banks with a higher presence of non-executives (i.e., independent directors) in their boards perform better in terms of the market-to-book value. Many other research also support the existence of independent director in the board for better performance of the banking firm (Helen 2003, Andres and Vallelado , 2008).

In the context of present analysis, the above consideration has some implications that justify analyzing the impact of board size and composition on bank performance. This article identifies the impact of the director's behavior in the performance of private commercial banking industry in Bangladesh. The objective of the study is to identify the relationship between the board of director's size and performance of private banking firms in Bangladesh. To provide a more complete look at these governance issues, we use all listed private commercial banks where a wide range of management, ownership and board structures are present. Although public commercial banks owns the most of the banking share in Bangladesh, this study only concentrate on the ownership structure of the private commercial banks. The government nominated directors governs the public commercial banks and their governance structure is totally different from private commercial banks in Bangladesh. The study also excludes the foreign banks, as their governance and performance are monitored by their parent companies and according to international standard. We collect much of our data from the financial report and DSE to gain a detailed look at various parts of the bank governance framework and the financial information that influence the financial performance, such as their ROE, ROA and Tobin's Q. Therefore, the finding of this study will contribute to the existing literature on bank board size, and their impact on bank performance literature, especially in the context of developing countries.

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This study contributes to the existing bank board and performance literature. Firstly, it is the first to explore the relationship between bank board size, independent directors and performance of Bangladeshi commercial bank after the prudential regulation issued by the BB regarding “fit and proper test criteria” of board of directors in 2003 and the appointment of directors from the depositors of the banking companies, rule 2008. Secondly, the selected sample period 2005-2009, when most of the banking firm enlisted in the stock exchanges to raise their capital. Finally, with calculation of Tobin’s Q the study tries to identify the investor’s perception regarding the governance of the banking industry in Bangladesh.

The remainder of this paper is divided into five sections. Section two briefly describes the Bangladeshi commercial banking system with specific emphasis on board governance reforms since 1982. Section three reviews the literature on board size, independence and performance and then formulates the hypotheses. Section four presents the data used in the study and the methodology. Section five presents the results and finally, section six concludes the paper.

2. Banking Industry in Bangladesh

The financial sector in Bangladesh mostly consists of commercial banks, non-bank financial institutions, specialized financial institutions and microfinance institutions as a informal financial firm. The commercial banks Bangladesh are comprised of public (4), private (30) and foreign (6) commercial banks. Among the total 30 private commercial bank, 29 are listed in country’s two stock exchanges namely Dhaka and Chittagong stock exchange. Both conventional (interest based) and Islamic banks (profit sharing principle) operated under the supervision of Central bank of the country which is named at Bangladesh Bank.

Table 1: List of ownership structure of Bangladeshi bank (in percentage)

	Name of Banks	Sponsor/ director	Public	Govt.	Fore ign	Institutions
1.	AB Bank Ltd.	13.97%	66.8%	0.57%	0%	18.66%
2.	National Bank Ltd.	29.31%	58.6%	0	2.08 %	10.01%
3.	The City Bank Ltd.	12.5%	61.35%	0	0	26.15%
4.	IFIC Bank Ltd.	8.62%	58.63%	32.75 %	0	0
5.	UCB Bank Ltd.	43.35%	50.42%	6.23%	0	0
6.	Pubali Bank	11.3%	64.15%	0%	0%	24.55%
7.	Uttara Bank	0%	95.77%	0%	0%	4.23%
8.	Eastern Bank	3.43%	85.83%	0%	0	10.74%
9.	National Credit and Commerce Bank Ltd	46.39%	32.09%	0%	0.3 %	21.22%
10	Prime Bank Ltd.	43.13%	35.3%	0%	6.62 %	14.95%

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11	Southeast Bank Ltd.	28.88%	47.35%	0%	0%	23.78%
12	Dhaka Bank Ltd.	56%	22.67%	0	0.24%	21.09%
13	Dutch Bangla Bank Ltd	61.32%	13.01%	0	25.67%	0
14	Mercantile Bank Ltd.	53.68	38.40%	0	0	7.92%
15	Standard Bank Ltd.	45.2%	34.2%	0	0	20.6%
16	One Bank Ltd.	51.67%	48.33%	0	0	0
17	Mutual Trust Bank Ltd	41.59%	27.55%	0	0	30.86%
18	Premier Bank Ltd.	49%	51%	0	0	0
19	Bank Asia Ltd.	0	73.22%	0	0	26.78%
20	Trust Bank Ltd.	60.01%	20.88%	0	0	19.11%
21	Jamuna Bank Ltd.	62.35%	27.11%	0	0	10.54%
22	BRAC Bank Ltd.	50%	45.93%	0	0	4.07%
23	Islami Bank Bangladesh Ltd	42.56%	27.66%	0.001%	22.3%	7.48%
24	ICB Islamic Bank Ltd.	61.48%	12.45%	0	0%	26.07%
25	Al-Arafah Islami Bank Ltd.	49.33%	34.67%	0	0	16%
26	Social Islami Bank Ltd.	28.19%	53.64%	0	0	18.17%
27	EXIM Bank Ltd	44.98%	26.01%	0	3.02%	25.99%
28	First Security Islami Bank Ltd.	51.67%	48.33%	0	0	0
29	Shahjalal Islami	46.98%	53.02%	0	0	0
30	Bangladesh Commerce Bank Ltd.	Not listed	Not listed	Not listed	Not listed	Not listed

Source: Dhaka Stock Exchange. Till 31st Dec, 2010.

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In order to increase competition in the banking sector, during the year 1982 Government of Bangladesh took the initiative to denationalize two public (Pubali bank and Uttara Bank) commercial banks (Ahmed 2006). At the same period, government issued license to establish banking firm in the private sector. Therefore, during the period 1982 to 1990, a large no of commercial banks were established in the private sector (first generation commercial banks). Later on, during 1990s government issued a large no of licenses to the private sectors, and because of that licensing private sector banking industry become altogether 30 in number.

In order to increase the investors confidence and reduce informational asymmetry among the concerned parties Bangladeshi banks are abide to follow some corporate governance rules imposed by the Bangladesh bank (BB) and the Securities and Exchange Commission (SEC) of Bangladesh. First of all regarding the appointment of the board of directors, Bangladesh bank required under the Bank companies Act 1991, that the scheduled bank operated in the Bangladesh should have maximum of 13 directors in their board and a person can be a board member for only one bank.

Secondly, the SEC required the board size of the listed companies should be within minimum of 5 people to maximum of 20 people. In order to increase the core competencies of the board, SEC also required the listed companies' board of directors should select an independent director in the board as at least one tenth (1/10) of the total number of the company's board of directors, subject to a minimum of one person. The independent director is defined as a person who a) does not hold any share or less than 1% share of the total paid up capital of the company, b) who is not connected with the company's promoters or directors or shareholder who holds one percent (1%) or more than one percent (1%) shares of the total paid-up shares of the company on the basis of family relationship; c) who does not have any other relationship, whether pecuniary or otherwise, with the company or its subsidiary/associated companies, who is not a member, director or officer of any stock exchange, and d) who is not a shareholder, director or officer of any member of stock exchange or an intermediary of the capital market. However, under the Bank Companies Act 1991 Bangladesh Bank required that the banking firm should appoint the depositor directors from the depositors of the banking companies (Rule 2008). Therefore, according to "prudential regulations for banks"- selected issues, updated by BB till June 2009 stated that banking firm should have maximum of 13 board of directors and 2 depositor directors selected by the 13 members of board. Since the selection criteria of the depositor director is same as the criteria of the independent directors except for the depositor directors' condition of being a depositor of the concerned bank, we are considering depositor director as independent directors. In order to avoid the conflict of interest (agency problem) between the directors and the CEO, their role and responsibilities should be clearly explained. For selecting board members, independent directors/depositor directors, chief executive officers, and advisors Bangladesh Bank developed '*Fit and Proper Test*' criteria.

3. Literature Review and Hypothesis Development

Sound governance provides improvement when the company is under-performing due to poor management (Lipton and Lorsch, 1992). Therefore for the better performance of the banking firm, corporate governance works as a remedy to overcome managerial inefficiency. According to the corporate governance theories (Levine, 2003; Caprio and Levine, 2002; Macey and O'Hara, 2003) board of directors and its committees are responsible for ensuring some specific responsibilities. Some of them are i) Disclosure of accurate, timely and reliable information to shareholders. ii) Setting key targets of the Bank and monitoring progress towards achievement of such targets. iii) Approval of major policy decisions and long term strategic plans to achieve key objectives in an efficient and effective way. iv) Ensuring appointments of right people in key management positions with appropriate compensation package and to evaluate their performance to encourage long term success of the Bank. v) The Board must be satisfied that sufficient risk management systems are in place to mitigate core risks of the bank and that there are adequate checks and balances in the internal control system to protect the value and quality of assets of the Bank.

Based on the above function of directors we have done literature on two aspects. Section 3.1 discusses on relationship between board size and performance and section 3.2 discusses on relationship between independent directors and performance of banking firm.

3.1 Relationship Between Board Size and Performance

Existing literatures viewed both positive and negative relationship between board size and performance. Most of the scholars argued that in order to reduce free rider problem in banks' operation smaller size board are more effective than larger boards (Lipton and Lorsch, 1992, Jensen 1993, Coles, Daniel and Naveen 2007, Pathan, Skully and Wickramanayake 2007). Although most of these studies have been done for the developed economy where we can expect a strong regulatory framework which can protect the minority shareholders right. At the same time, liquid and efficient stock market works as a take over threat for the directors to behave in favor of the minority investors (Reference on capital market take over threat).

On the other hand, Belkhir (2004), Adams and Mehran (2005) proved that a positive relationship exists between the board size and performance of banking firm by using Tobin's Q as performance indicator for BHC (Bank Holding companies). More recently, Andres and Vallelado (2008) examined information on the characteristics of the boards of directors for 69 commercial banks operating in Canada, US, UK, Spain, France and Italy over the period 1995-2005. After controlling for the ownership structure, the weight of the banking industry, or differences in the regulatory and institutional setting, they found that the inclusion of more directors is positively associated with performance, which is measured by Tobin's Q, ROA and shareholder market return (SMR). All of these studies done for the BHC and for the market where active merger and acquisition works as a market threat for the directors. Moreover,

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empowering private monitoring of banks yields the greatest benefits in developed countries that have in place legal and institutional systems that work well (Beck, Demirgüç-Kunt and Levine, 2005). However, none of the existing literature on board size and performance considered the missing market (less efficient market, absence of legal protection of the investors) in the developing economies.

On the basis of the above literature review and given the large board size in the Bangladeshi banking industry and a relatively less efficient capital market structure (no active takeover threat or M&A) a positive relationship may be expected between the Bangladeshi bank board size and performance.

Hypothesis 1: Bank board size is positively related to their performance in terms of ROE, ROA and Tobin's Q.

3.2 Independent Directors and Bank Performance

The official definition of independent directors is, 'directors who hold no posts in the company other than the position of director, and who maintain no relations with the listed company and its major shareholder that might prevent them from making objective judgment independently' (CSRC, 2001, article 1.1).

Some argued that existence of independent directors does not have any effect on the performance of a banking firm (Pi and Timme, 1993; Bhagat and Black, 1999, Adams and Mehran, 2004). On the other hand, Helen (2003) argued that for the better performance of the independent directors in the board five factors (independence, remuneration, qualification, assurance and autonomy) are essential (for the system to work effectively). Andres and Vallelado (2008) argued that inclusion of outside directors improves value, inline with board size. Therefore, their study concluded that with an optimum combination of executive and non-executive directors is more adequate to create value for the firm than excessively independent boards, because efficient boards would require the presence of executive directors, whose knowledge of the bank could complement non-executive directors' ability.

Hypothesis 2: The proportion of independent directors on the board is positively related with bank's performance.

4. Data and Variables

4.1. Data

The data covers the Bangladeshi private commercial banks over the five year period 2005-2009. Public commercial banks (Sonali, Janata, Agrani and Rupali Banks) and foreign commercial banks are excluded from the study to ensure a uniform sample for comparability and ease of interpretation purpose. For the purpose of measuring the effect of board size on performance we have included 28 out of 29¹listed private

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commercial banks only. Our study excludes Bangladesh Commerce Bank Ltd., a private commercial bank that is not listed in the stock exchanges.

In any case, as previously mentioned, the private commercial banks are the major providers of financial services in Bangladesh. The five year sample period covered the information on banks' board size and independent directors and accounting information. It contains 28 banks (excluding ICB Islami bank) from 2005-2009 consists of 28*5 bank-year observations.

4.2 Variables and Statistics

$$DependentVariable = \alpha + \beta_1 BS + \beta_2 ID + \beta_3 Size + \beta_4 Leverage + \beta_5 NPL + \varepsilon \dots (1)$$

We measure bank performance by calculating ROA as the income after taxes and provision, divided by the total assets. ROE is calculated as the ratio of profit after taxes and provision divided by the total shareholder's equity. We also used another bank performance measure which is known as the firm market-to-book value ratio (Tobin's Q). We calculate it as the book value of total assets minus the book value of common equity plus the market value of common equity divided by the book value of total assets as the usual proxy for Tobin's Q². Many other studies use either this measure or a similar one as the dependent variable in research on board effectiveness (e.g., Adams and Mehran, 2005; Belkhir 2004, Caprio and Levine, 2002), and in a broader sense, in research on the effectiveness of board composition for the financial firms. BS is the board size measured as the total number of directors on the board as at the end of each year. ID board independence measured as the ratio of the number of independent directors or depositor directors on the board size. In order to understand the behavior of directors on the performance of the banking firm the study used the effect of size, leverage and performance of loan as control variable. SIZE is bank size computed as the natural logarithm of the bank's average total assets. LEVERAGE is measured as the ratio of total debt to total bank assets. Due to the global recession and internal political uncertainty of 2007 & 2008 in the country many industries and business enterprises could not run properly & had to incur huge loss and turned non-performing which is a major cause of increase in classified loan. Therefore, the study has included NPL as the bank's non-performing loan, which is the ratio of non-performing loans to gross loans. In our view, the inclusion of NPL as an independent variable to identify the effect on bank performance is relatively important variable for developing countries, which was not considered in previous studies.

5. Results

5.1 Descriptive Statistics

Table 2: Descriptions of Variables

Performance measures	
Return on Equity (ROE)	Ratio of net profit after tax and provision to the total equity as at the end of each year.
Return on Asset (ROA)	Ratio of net profit after tax and provision to the total asset at the end of each year.
Tobin's Q	Ratio of firm market to book value measured by the book value of total assets minus the book value of common equity plus the market value of common equity divided by the book value of total assets.
Board Characteristics	
Board Size (BS)	Total number of directors on the board as at the end of each year.
Ratio of Independent Directors(RID)	Ratio of the number of independent directors to the board size as at the end of each year.
Control Variables	
ASSETS	The average total assets at the end of each year.
LEVERAGE	Ratio of total debt plus equity to the total assets at the end of each year.
NPL	The ratio of non-performing loan to total loans as at the end of each year.

Table 3 presents some descriptive statistics for the variables used in this study. The mean ROE is 0.1845, the minimum is 0.0024 and maximum is 0.3256. Similarly the mean of ROA is 0.0149, the minimum is 0.0013 and maximum is 0.0408. Regarding the Tobin's Q mean is 1.1068 and min and max is 1.0317 and 1.2671 respectively. On average the BS of the banking sector is 12.99 i.e. 13 and min and max is 6.4 and 17.6 respectively. Regarding ratio of independent director's average is 0.0403 and min and max are 0 and 0.1812. The mean of Bangladeshi commercial banks total asset or size is Tk523.177 billion, minimum is Tk. 268 billion and maximum is Tk. 1947.35 billion. The mean NPL is 0.0389, the min is 0.0053 and the maximum is 0.1115. The mean leverage is 0.1033, min is 0.0580 and the maximum is 0.0629.

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Table 3: Descriptive Statistics

Variables	ROE	ROA	Tobin's Q	BS	RID	Asset	LVR	NPL
MEAN	0.1845	0.0149	1.1068	12.99	0.04	52317793690	0.1033	0.0389
Median	0.1902	0.0142	1.0959	13.4	0.03	45952231624	0.0925	0.0374
StDEV	0.0698	0.0067	0.0559	2.69	0.04	31938253696	0.0444	0.0213
MIN	0.0024	0.0014	1.0317	6.4	0	26877316778	0.0581	0.0054
MAX	0.3256	0.0408	1.2671	17.6	0.18	194735498758	0.2630	0.1115

5.2 Univariate Analysis

Table 4: Pearson Pair-Wise Correlation Matrix of the Variables

		ROE	ROA	Tobin's Q	BS	RID	Assets	Lratio	NPL
ROE	Correlation	1							
ROA	Correlation	.608	1						
	Sig. (2-tailed)	.001	.						
Tobin's Q	Pearson	-.405	-.304	1					
	Correlation								
	Sig. (2-tailed)	.033	.116	.					
BS	Pearson	.171	.208	-.312	1				
	Correlation								
	Sig. (2-tailed)	.385	.289	.106	.				
RID	Pearson	-.052	-.040	.369	-.687	1			
	Correlation								
	Sig. (2-tailed)	.793	.840	.053	.000	.			
Assets	Pearson	.035	-.011	-.142	.006	.064	1		
	Correlation								
	Sig. (2-tailed)	.859	.956	.471	.975	.746	.		
Lratio	Pearson	.033	.022	.030	-.206	.151	-.089	1	
	Correlation								
	Sig. (2-tailed)	.868	.910	.878	.293	.444	.651	.	
NPL	Pearson	-.210	-.222	.297	.030	-.107	.019	-.171	1
	Correlation								
	Sig. (2-tailed)	.282	.257	.125	.879	.588	.925	.385	.

Table 4 presents the Pearson's pair-wise correlation matrix between variables of interest along with their corresponding significance level. The matrix shows a positive and statistically significant correlation between both bank performance measures –

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ROE and ROA. However, there is statistically significant negative correlation exists between the ROE and ROA - and Tobin's Q.

We found a positive but not statistically significant correlation between the ROE and ROA with board size (BS). In case of correlation between Tobin's Q with BS they have negative statistical significant relationship. Moreover, both measures of performance ROE and ROA are negatively correlated with board independence measure (RID), but the relationship is not statistically significant. In case of Tobin's Q with independent directors measures (RID) the results show a positive significant correlation.

Consistent with expectations, NPL is found negatively correlated with both ROA and ROE, but the relationship is not statistically significant. Regarding, NPL with Tobin's Q correlation is positively significant. Finally, we found a statistically significant negative correlation between bank BS and the independent director (RID) measures. In order to avoid the possibility of multicollinearity bias we included the Ratio of ID to BS, instead of no of independent directors.

5.3 Multivariate Analysis

Table: 5
ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.004	1	.004	.782	.385(a)
	Residual	.128	26	.005		
	Total	.132	27			

a Predictors: (Constant), BS

b Dependent Variable: ROE

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.127	.067		1.907	.068
	BS	.004	.005	.171	.884	.385

a Dependent Variable: ROE

Table:5 reports the regression analysis of ROE on board size (BS). It shows that the coefficient on BS is positive as predicted and statistically significant. This means that the larger boards are more effective in monitoring bank managers which is consistent

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with the findings of Andres and Vallelado (2008). Thus our first hypothesis i.e board size is positively related to bank's performance is supported.

Table: 6
ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.000	1	.000	.070	.793(a)
	Residual	.131	26	.005		
	Total	.132	27			

a Predictors: (Constant), RID

b Dependent Variable: ROE

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.188	.019		9.863	.000
	RID	-.089	.336	-.052	-.265	.793

a. Dependent Variable: ROE

Table: 6 report the regression analysis of ROE on ratio of independent directors (RID). It shows that the coefficient on the RID is negative, but not statistically significant.

Table: 7
ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.000	1	.000	.032	.859(a)
	Residual	.131	26	.005		
	Total	.132	27			

a Predictors: (Constant), Assets

b Dependent Variable: ROE

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Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.180	.026		6.908	.000
	Assets	.000	.000	.035	.180	.859

a Dependent Variable: ROE

Table: 7 show the correlation on bank assets (size) which is not statistically significant.

Table: 8

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.000	1	.000	.028	.868(a)
	Residual	.131	26	.005		
	Total	.132	27			

a Predictors: (Constant), Lratio

b Dependent Variable: ROE

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.179	.035		5.189	.000
	Lratio	.052	.308	.033	.168	.868

a Dependent Variable: ROE

In table: 8, leverage is found to be positively related with bank performance as expected but the coefficient is not statistically significant.

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Table 9:
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.006	1	.006	1.205	.282(a)
	Residual	.126	26	.005		
	Total	.132	27			

a Predictors: (Constant), NPL

b Dependent Variable: ROE

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.211	.028		7.619	.000
	NPL	-.689	.628	-.210	-1.098	.282

a Dependent Variable: ROE

Tobin's Q on BS

In table: 9 the coefficient on NPL is negative and statistically significant. This implies that increase in NPL leads to decrease in ROE of banking firm.

Table: 10
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.008	1	.008	2.799	.106(a)
	Residual	.076	26	.003		
	Total	.084	27			

a Predictors: (Constant), BS

b Dependent Variable: Tobinsq

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Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.191	.051		23.173	.000
	BS	-.006	.004	-.312	-1.673	.106

a Dependent Variable: Tobinsq

The relationship between ROA on each independent variable separately gives the same result as ROE. Table: 10 show that the coefficient on board size (BS) is positive and statistically significant with Tobin's Q. This implies that increase in BS leads to increase in Tobin's Q of banking firm.

Table: 11
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.012	1	.012	4.105	.053(a)
	Residual	.073	26	.003		
	Total	.084	27			

a Predictors: (Constant), RID

b Dependent Variable: Tobinsq

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.086	.014		76.419	.000
	RID	.507	.250	.369	2.026	.053

a Dependent Variable: Tobinsq

In table 11 the coefficient on RID is positive and statistically significant. This implies that increase in RID leads to increase in Tobin's Q of banking firm. In the same way we found positive and statistically significant relationship between the Tobin's Q on Assets, TQ on LRatio and TQ on NPL.

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Table: 12

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.011	5	.002	.400	.844(a)
	Residual	.121	22	.005		
	Total	.132	27			

a Predictors: (Constant), NPL, Assets, BS, Lratio, RID

b Dependent Variable: ROE

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.107	.132		.815	.424
	BS	.007	.007	.250	.878	.390
	RID	.164	.487	.096	.337	.740
	Assets	.000	.000	.047	.229	.821
	Lratio	.063	.334	.040	.188	.853
	NPL	-.661	.683	-.202	-.967	.344

a Dependent Variable: ROE

In table 12 multiple regression result show that the coefficient of BS, RID, Assets, Lratio effect positively on ROE, but NPL only has negative effect. However, the relationship between the independent variables with ROE is not statistically significant.

Table: 13

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	5	.000	.539	.745(a)
	Residual	.001	22	.000		
	Total	.001	27			

a Predictors: (Constant), NPL, Assets, BS, Lratio, RID

b Dependent Variable: ROA

Kutubi

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.005	.013		.415	.682
	BS	.001	.001	.330	1.173	.253
	RID	.026	.046	.160	.571	.574
	Assets	.000	.000	.004	.019	.985
	Lratio	.005	.032	.031	.146	.885
	NPL	-.066	.065	-.209	-1.018	.320

a. Dependent Variable: ROA

Table: 13 shows the multiple regression result which explain that the coefficient of BS, RID, Assets, Lratio effect positively on ROA, but NPL only has negative effect. However, the relationship between the independent variables with ROA is not statistically significant.

Table: 14

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.023	5	.005	1.631	.194(a)
	Residual	.062	22	.003		
	Total	.084	27			

a. Predictors: (Constant), NPL, Assets, BS, Lratio, RID

b. Dependent Variable: Tobinsq

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.088	.094		11.568	.000
	BS	-.002	.005	-.090	-.352	.728
	RID	.460	.348	.335	1.322	.200
	Assets	.000	.000	-.126	-.685	.500
	Lratio	.010	.238	.008	.043	.966
	NPL	.890	.488	.339	1.823	.082

a. Dependent Variable: Tobinsq

Kutubi

In table:14 the multiple regression result shows that the coefficient of BS, RID, Assets, Lratio, NPL effect positively on Tobin's Q, and the relationship between the independent variables with the Tobin's Q is statistically significant.

6. Conclusion

This paper examines the relationship between size and independence of the bank boards and their effect on performance in Bangladeshi private sector listed banking firms. The study contributes to the existing literature from different perspectives. As our knowledge goes, it is the first research in Bangladesh where governance issues have been checked in understanding performance variables. Moreover, the study covers 28 out of 29 listed private banking companies. The study covers the most recent period, the year 2005- 2009, when most of the regulatory decisions were taken by the Bangladesh Bank and Securities and Exchange Commission of Bangladesh.

Using 'univariate' analysis we have found negative statistical significant correlation between Tobin's Q with BS. However, the result does not show any significant correlation between the board size and the performance measures of ROE and ROA. That indicates that the higher the board size, lower the Tobin's Q or we can conclude that bigger board-size does not influence the behavior of investors positively. In case of Tobin's Q with independent directors measures (RID) the results show a positive significant correlation. But we didn't find any significant correlation between ROE and ROA with board independence (RID).

Using panel fixed effects model, we found statistical significant relation between Bangladeshi banks' board-size and their performance for Tobin's Q, but not for ROE and ROA. This result suggests that larger boards are more effective in decision-making and managing managers from the view point of investors, but we could not suggest any relation in terms of ROE and ROA.

In testing hypothesis: 2 we again have found that inclusion of independent directors does not affect the performance of the banks in terms of ROE and ROA, but it does significantly affect the Tobin's Q. The focus on this relationship is important as the previous studies failed to show this niche. The indication of the study is quite important for the potential investors in banking firms. Although the existence of independent directors does not affect the ROA and ROE, the investors prefer to have independent directors on the board, which possibly increases their confidence regarding the board decisions.

These findings explain that individual Bangladeshi banks may enhance performance by increasing board size, up to the limit defined by the regulatory authorities. At the same time increase in ratio of independent directors in the board does not necessarily show a positive result for the banking performance in terms of ROE and ROA. We cannot, however, undermine the importance of independent bank directors for the Tobin's Q. The study indicates a way for further research on the impact of independent directors on the governance and performance of banking firms generally.

Endnotes

¹ We have excluded the ICB Islamic Bank, a private listed commercial bank, is a problem bank according to the Central Bank of Bangladesh.

² Tobin's Q higher than 1 represents overvaluation of stock and less than 1 represents undervaluation of stock.

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