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The Regulating Outcome of the Board of Directors on Firm Value: An Evidence from Depositary Institutions of Bangladesh

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Abstract

The aim of this paper is to examine the relationship between the corporate board composition and Firm value of listed Depository Institutions (Banks and NBFIs) of Bangladesh. The study has been conducted for over ten years from 2009-2018.Pearson's correlation had been formulated to see the overall relationship among the variables used in the study. Afterward, Pooled OLS Regression was initiated along with fixed and random effect while the best model was selected based on the result given by Hausman fixed random test. The firm value was measured based on the popular accounting and financial performance measure- Tobin's Q and Return on Assets (ROA). Independent variables of the study are Board Size, Board Independence, Women directors in the boardroom, and Audit committee size of the firm. Nevertheless, several control variables, firm size, firm's debt, age, GDP growth rate, and the firm's inflation rate have been added to make the study more reliable. Pearson's correlation result depicted that the study's variable is related to each other and is free from multicollinearity and autocorrelation problem. Two different regression model was initiated with Tobin's Q and ROA as the dependent variable. Findings show that firm value has a significant relationship with Board Size, Presence of women directors on the board, and Audit committee size while we have not found any significant relationship with board independence.

Keywords: Corporate governance, Board composition, Firm value, Depository Institutions

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Introduction

In this paper, we look at the governance role at the firm value to support the debate in the governance if there is a connection between bank structures of corporate governance, which includes the board of director's individualities. Without a doubt, tax planning plays a significant role because it conveys an excellent charge for the banks and their shareholders. It is known that corporate governance is the most crucial factor of the bank. The previous literature has not explored the firm relationship value on the characteristics of the board of directors. In this report, we aim to analyze the impact on firm value depending on the board of directors' features in the Bangladesh circumstance. To increase shareholder wealth, allocate the resources, and improve the banks' performances, the board of directors plays a crucial role. The banks have their various governance structures and pursue various strategies for calculating the firm value (Wahab, et al., 2017). The study suggests that the managers are discouraged from taking risks and opportunities for the corporate governance structure. Taxation affects the firm value as it may interact with different types of corporate governance. Depending on the sample U.K. listed organization from 2005-2007, a study suggests a negative relationship between firm value and tax planning. However, a healthy relationship remains among those at the time when actions of corporate governance are incorporated (AICPA, 2019).

Literature review

Previous studies on the board of directors and firm value has some remarkable places in the corporate governance literature (Bowen, 2012). Most of the study tries to determine whether independent directors add any kind of economic value to the organization. Some of the studies suggested that the outside directors add tremendous value to the firm. However, outside directors do not engage themselves in regular day-to-day work (Khansalar, et al., 2015).

In simple meaning, the board of directors means the group of elected representatives of the firm's shareholders or organization (Batts, 2011). The board of directors sets guidelines for corporate management and oversight by meeting at a regular interval. Almost all the organization have a board of directors, and it is mandatory for public organizations. Typically, the board of directors makes decisions, and they took these decisions on behalf of the firm's shareholders as a fiduciary. Some regular works fall under a board of directors like distributing dividends, hiring executives, removing executives, compensating the executives, and options policies (Browning & Sparks, 2016). Also, the board of directors helps the organization set the goals and help the executives achieve the goals, support executives on the duties, and make sure that the organization has enough wealth at its disposal (Midanek, 2018).

The powers and structure of the board are varied from one organization to another. It is determined by the rules and regulations of the organization (Brown, 2006). On these rules and regulations, there should be some issues like how the board members will be elected, how many people will the part of the board, and the time frame when and how many times the board members will meet (Johnstone-Zehms, et al., 10th). However, there is no hard and fast rule for the board of directors' numbers though the range is 3 to 31. Some researchers have found that the ideal number of board of directors is seven. The directors should serve both shareholders and management's interests, and these interests can include not only internal members but also external members (MOSES, 2016)).

The director who considers the concern of significant shareholders, officials, and employees of the organization and the person whose experience adds value to the organization is known as the internal director (Moran & Kral, 2013). Inside directors are mostly C-level executives of the organization, so that they are not typically compensated frequently (Dravis, 2016). Most of the inside directors are significant shareholders or stakeholders like the union

legislative body. On the other hand, outside or independent directors do not engage themselves in the organization's regular works. Typically, they receive extra remuneration for attending board meetings (Taylor, 2013). These directors bring a goal or objective to the organization and resolve clashes of the organization that arises. There should be a balance between the inside directors and the independent directors (Kipkoech & Rono, 2016).

The value of a firm is also known as enterprise value. Generally, a firm's value is an economic theory that replicates the value of an industry or business (Baker, 2010). More specifically, it is value one has to pay to buy or take over the business entity. The firm's value is determined based on market value or, in some cases, on the book value (Maksum, 2018). Numerous ratios are considered to provide the best material is Tobin’s Q. Tobin’s Q delivers an overview of the vital aspects and the extent to which the market assesses the company from various features seen by outsiders, including investors (Inc., et al., 2020). Thus Tobin’s Q is a more rigorous measure of how effectively management makes use of economic resources. It is often difficult to determine whether high Tobin’s Q reflects the superiority of management or the benefits of having a patent Breally and Myers (2003) say that companies with high Tobin’s Q values classically have an excellent corporate brand image (Brealey & S.C., 2003). At the same time, companies with a value of Tobin's Q low are generally in a highly economical industry or a small starting industry (Madden, 2020).

For any financial institution in the world sound management system is the pre-requisite of strength and growth. To determine the management operating expenses' soundness to total expenses, total expenditure to total income, interest rate spread, and operating expenses per employee are the routine use of measurement though these are not actual measures (Stevenson, 2017). Apart from these, there are many issues like technical competences of the various level of management, the leadership of the dead of management maintains the rules and guidelines of the banking laws and regulations, the ability of the management in the implementation of the strategic plan, and taking actions timely, etc (Pearlson, et al., 2019).

A useful board that supervises strategy planning and putting into practice it becomes more vital to the organization (Blunden & Thirlwell, 2013) as it is known that they are accountable for the policy of the tax and also allocating the interest of the shareholders (Chapelle, 2019). A study from Jensen shows that a higher proportion of independent directors should be included in the boards as the shareholder's interest served better with it; the question of how corporate governance possibly will affect firm performance and performance remains an essential subject in the works on corporate governance (JENSEN, 1993).

Methodology

This study focuses on the Financial institutions (Banks, Non-Bank Financial Institutions) listed on the Dhaka Stock Exchange from 2008-2018. We obtained hand-collected data from annual reports, sourced from their company website and DSE library. Furthermore, our sample consists of yearly data of 53 firms over ten years (2009-2018). We have omitted the firms with missing variables, and thus our sample size stands as 518 firm years. We have considered Corporate Governance (C.G.) guidelines (Code) 2006 (Notification No. SEC/CMRRCD/2006-158/Admin/02-08), amendment on 2012 (Notification No. SEC/CMRRCD/2006-158/134/Admin/44) and 2018 (Notification No. SEC/CMRRCD/2006-158/2007/Admin/80) implemented by the Security and Exchange Commission, the regulator of the capital market of Bangladesh to perceive the changes (If any) related to Board characteristics. The following subsections include the definitions and measures of the variables used in the study.

Dependent variable

We have used Tobin's Q as a proxy of firm value following the literature of Demsetz & Villalonga (2001) and Thomsen, Pedersen, & Kvist (2006). Following these kinds of literature, we calculated Tobin's Q measure as a ratio of the firm's Book value over the firm's market value. Also, to measure the firm's financial performance, we have used Return on Assets (ROA) as another dependent variable.

Independent variables

Board Size

Jensen (1993) proposed that a smaller number of board members produces a more effective control mechanism. Changanti, Mahajan, and Sharma (1985) also suggested that smaller boards play a more critical control function, whereas larger boards have difficulty coordinating their efforts, which leaves managers free to pursue their own goals. However, a smaller board might be more comfortable for the CEO to influence, and a larger board would offer a greater breadth of experience. The impact of board size on the corporate control mechanism is not apparent, but the strongest arguments suggest that a smaller board would result in closer alignment with shareholder interests, which would increase risk-taking.

H1: There is a significant relationship between board size and firm value

Independent Directors

Outside directors are members of the board who are neither top executives, retired executives, former executives of the company, nor the CEO's relatives. Outside corporate lawyers employed by the firm and serve on the board are considered insiders since many have conflicts of interest (e.g., Vancil, 1987). I also measure the percentage of outside directors employed by manufacturing firms, savings and loans, banks, investment banking firms, venture capital firms, and insurance companies. In this study, several independent directors have been considered in the analysis.

H2: There is a significant relationship between the proportion of independent directors and firm value

Gender Diversity

In this study, Gender diversity is measured by female directors' presence on the board of each bank of the sample (Mateos de Cabo, Gimeno, & Nieto, 2012). The mean value of the financial variables in this study throughout 2007-2016 has been considered to avoid the possible commotion arising from arbitrarily choosing a particular year.

H3: There is a significant relationship between the presence of women directors in the board and firm value

Audit Committee Size

There is an argument that a larger audit committee is conducive to ethics disclosure because there is a possibility that an audit committee will include highly ethical members who could influence ethics disclosure (Persons, 2009). Previous studies (Dalton, Daily, Johnson, and Ellstrand., 1999) found a positive relationship between the size and monitoring function of the board that results in higher performance. According to Yang and Krishnan (2005), there is a negative association between audit committee size and earnings management. Xie et al. (2003) and Hussain Alkdai (2012) stated that there is no significant relationship between an audit committee's size and discretionary accruals. Hence, this study expects that the larger the size of audit committee members, the more effective they will be in monitoring the company and leading to ethics disclosure. Therefore, the following hypothesis is proposed:

H4: There is a positive relationship between Audit committee size and firm value

Research and Discussion

We report descriptive statistics of all variables in Table-1. The firm value ranges from .887 to 6.106 times. Average firm performance (ROA) is 8.3% ranging from negative 63.6% to 21.7%. The average board size is 13.07, and the firm has a minimum of 5 members to a maximum of 15 members. On average, firms have 14.4% independent directors, and 71.6% of firms have female directors in their board of directors. The audit committee size is 4.243, and firms have a maximum of 6 members in their audit committee. The mean of firm size is 10.92, implying an average firms' assets of Taka. 86813.5 million. The average total liabilities to total assets (DEBT) is 88.3% ranging from 8.01% to 183.1%. The average firm age is 2.384 years, ranging from 5 years to 46 years.

Table1- Descriptive Statistics (N=518)

Variables	Mean	Std. Dev.	Min	Max	Skew.	Kurt.
Tobin's Q	1.161	.385	.887	6.106	5.898	60.278
ROA	.083	.042	-.636	.217	-9.916	171.236
BDSIZE	13.077	3.594	5	27	.897	3.86
INDP	.144	.101	0	.5	.823	4.429
WoB	.716	.451	0	1	-.959	1.92
AUDSIZE	4.243	.951	2	6	-.244	1.745
SIZE	10.926	1.416	7.158	13.813	-.397	2.026
Debt	.883	.097	.081	1.831	-.847	33.451
Age	2.384	.721	2.547	4.987	-.255	3.069
GRATE	.065	.008	.051	.079	.169	2.371
INFRATE	.071	.019	.049	.115	1.06	3.078

Table-2 represents correlation coefficients for the independent variables used in the regression models to examine whether there are highly correlated variables. We find that the most substantial absolute value of correlation coefficients is 0.48. To further address the multicollinearity issue, we check the variance inflation factor (VIF) for all the dependent variables. The mean, and for each variable (Table-3), the VIF score is below the critical value of 10, implying no evidence of multicollinearity (Gujarati, 2008).

Table2- Pairwise Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) BDSIZE	1.00									
(2) INDP	-0.34***	1.00								
(3) WoB	-0.02	0.01	1.00							
(4) AUDSIZE	0.06	0.17***	-0.01	-0.04	1.00					
(5) SIZE	0.38***	0.07	-0.05	0.13***	-0.15***	1.00				
(6) Debt	0.16***	0.04	-0.10**	0.07	-0.14***	0.47***	1.00			
(7) Age	0.14***	0.12***	-0.06	-0.07*	-0.01	0.48***	0.21***	1.00		
(8) GRATE	-0.10**	0.47***	0.02	-0.04	0.27***	0.26***	0.17***	0.33***	1.00	
(9) INFRATE	0.10**	-0.38***	0.01	0.08*	-0.11**	-0.13***	-0.12***	-0.17***	-0.27***	1.00

**** p<0.01, ** p<0.05, * p<0.1*

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Table 3- Variance inflation factor

	VIF	1/VIF
SIZE	1.989	.503
GRATE	1.601	.625
INDP	1.599	.625
BDSIZE	1.486	.673
Age	1.394	.717
Debt	1.324	.755
AUDSIZE	1.23	.813
INFRATE	1.209	.827
WoB	1.019	.982
Mean VIF	***1.428***	.

Table 4- Regression Analysis

	Tobin's Q		ROA	
	OLS	Fixed Effect	OLS	Fixed Effect
BDSIZE	-.00438**	-.01428**	-.00031**	-.00051**
	(.00376)	(.00574)	(.00078)	(.00107)
INDP	.2749	.07288	-.08325	-.09934
	(.20214)	(.34907)	(.07671)	(.07075)
WoB	.02005*	.03523*	.00931*	.01381*
	(.03022)	(.04707)	(.00623)	(.01009)
AUDSIZE	.03094**	.032**	.00124	-.00104
	(.0133)	(.01516)	(.00287)	(.00158)
SIZE	-.06666***	-.08964	.00061	.03706*
	(.02454)	(.15476)	(.00398)	(.02011)
Debt	-1.37503**	-1.35616*	-.0929**	-.09307***
	(.62905)	(.76595)	(.04549)	(.02033)

Age	.00109	-.04427	-.00741*	-.00224
	(.02232)	(.0323)	(.00381)	(.00374)
GRATE	5.72719	7.65234	7.8189*	6.0996
	(6.94983)	(8.51346)	(4.49176)	(3.97673)
INFRATE	6.46642*	4.82298	4.59448**	5.49419**
	(3.50602)	(6.44972)	(2.09938)	(2.70285)
_cons	1.18604	1.66146	-.70049	-1.04112
	(.78536)	(1.47912)	(.44995)	(.66026)
Observations	518	518	518	518
R-squared	.53799	.46801	.27791	.32854
F-stat	11.21666	10.08497	15.08086	28.65841
Adj R^2	.52225	.44989	.25316	.30552

Standard errors are in parentheses

**** p<.01, ** p<.05, * p<.1*

The result indicates that the board size negatively impacts firm performance under both measures-Tobin's Q and ROA. The coefficient for board independence shows that the proportion of independent directors on the board does not significantly measure firm value. This result is consistent with the study of Al-Mamun et al. (2014) and Saleh et al. (2007). The result further indicates that the presence of women directors in the internal audit committee is significant at a 10% significance level under both measures. Also, the coefficient result of audit committee size shows a positive association with the firm value, which is also consistent with Al-Mamun et al. (2014) and Haniffa et al. (2006). The models we have used are statistically significant, and the adjusted R-Square is higher for every model. So, from our hypotheses stands as:

H 1	There is a significant relationship between board size and firm value	Accepted
H 2	There is a significant relationship between the proportion of independent directors and firm value	Rejected
H 3	There is a significant relationship between the presence of women directors in the board and firm value	Accepted
H 4	There is a positive relationship between Audit committee size and firm value	Accepted

Conclusion

According to the previous literature and the finding of this study, board size plays a vital role in decision-making in the firm's role, resulting in the firm's sound financial performance. So, firms should appoint a corporate board that has good potential and enriched background. Literature proves that board with women directors performs better than other firms. They say that the reason behind it is: they are more organized at work, and they intend to take more risks for gaining a competitive advantage. So, firms should consider this issue while arranging the construction board. Firms with higher assets can attain their targets and are financially sounder. So, firms should be more careful about utilizing their assets and making investment decisions. Audit committee size plays a vital role in determining firm value. Because it protects and controls the finance and accounting processes, also, they can give more expert advice to the firm in their decision-making process. At the same time, they should have close supervision over their value. Besides all these issues, this study consists of 530 firms, ten years of observation is giving a clear indication that the corporate board's composition has a significant impact on the firm's financial value. So, the firms should be more conscious regarding these issues.

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