Corporate Governance in context of Performance & Sustainability: A Case Study on Banking Industry in Bangladesh

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Abstract: The high profile bank scandals, for example, Hallmark, Bismillah Group, have intensely impacted the banking sector of Bangladesh and forced the legislator and policy makers to rethink the overall structure of the banking industry. These events had ignited the importance of implementing good corporate governance mechanisms for banking companies. Using the resource based theory, this paper examined the corporate governance mechanisms specifically the ownership monitoring mechanism, internal control monitoring mechanism (board independence and board size), and regulatory mechanism (capital adequacy ratio, non performing loans) influence on the bank performance. The sample of 48 banks (from 2010 to 2015) was collected from various secondary database. The regression analysis has been employed to accomplish the objective of this paper. Based on the results, regulatory monitoring mechanism was found to be a significant influence on bank performance. Findings from this paper would assist the Central Bank of Bangladesh and the Securities Commission to formulate strategies for the banking sector to fully comply with the standard corporate governance policies. In addition, banks in Bangladesh would be able to identify resources that need to be prioritized in attaining higher performance.

Keywords: Capital Adequacy Ratio (CAR), Return on Assets (ROA), Return on Equity (ROE), Nonperforming Loan (NPL), Corporate Governance (CG), Board Size & Diversity

I. Introduction & Background Of The Study

Banking Sector plays a vital role in GDP¹ of Bangladesh over the last few decades with a consistent level. The banking industry in Bangladesh is comprised of Nationalized, Private and Foreign Commercial banks. At present a total of 56 banks [4 SCBs, 39 PCBs, 4 DFIs & 9 FCBs] are performing its operation within Bangladesh with Tk. 9406.67 billion total assets and Tk. 8778.83 billion deposits². A sound and efficient banking system is one of most important preconditions to maintain effective role in economic development. Good Corporate Governance is one of the major tools to ensure sound and efficient banking system in Bangladesh. Corporate Governance ensures the interest of the stakeholders increasing accountability and efficiency in operations of organization. The primary aim of Corporate Governance is to enrich corporate accountability and transparency (Tahpa, 2008). Any pitfall in this industry indicates whether there is a weak and faulty framework of corporate governance or non-compliance of the governance guidelines. Considering the present scenario, a close scrutiny and taking corrective measures is required for this sector.

In recent years, Corporate Governance is being a widely discussed topic as the world faced major financial crisis in past few years. In 2008, the subprime crisis occurred in United States which results bankruptcy of many financial institutions all over the world. This vibration in financial market urges regulators to introduce stricter regulations and a complete review of corporate governance framework implemented in financial institutions. Banking Industry in Bangladesh also faced some scams in last few years including loan crisis by Hallmark and Bismillah Groups. Personal interest of directors at time for sanctioning loan, unprofessional attitude of bankers to analysis loan risks, weak framework of governance are mainly responsible for such crisis. Besides NPL to Total Loan ratio is increasing in banking industry at an alarming rate that indicates less sustainability of this industry³. At present day, if we see the corporate governance structure in Bangladesh, we may find that most of the major firms are run by family constitution. Family members are

¹ Total GDP contribution of Service Sector is 56.30% in 2016
² Source: Statistics Department data (June 2017), Bangladesh Bank
³ As per Bangladesh Bank, Total amount of default loan in BDT 739.04 billion which is 9.23 percent of the outstanding loans for March, 2017

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influential participants in Bank’s Board which may not be qualified to assume managerial responsibilities. This kind of framework may hamper the good governance practices rather it serve their personal benefits.

Several researches have been conducted on Corporate Governance and different comparisons have been made between institutions that practices good governance and institutions with weak corporate governance practices. Most of the research found that institutions that practice good corporate governance led improved performance in long run and results high profitability (Rehman R & Mangla IU; 2010).

This study investigates the relationship between corporate governance and performance & sustainability of the listed commercials banks in Bangladesh [excluding 4 SCBs & 4 DFIs]. The major area of this study covers how weak framework of governance or improper practices of governance affects operational efficiency as well as the long term sustainability of banks. The rest of the part discusses the Corporate Governance status and practices in the banking sector of Bangladesh.

II. Review Of Literature

Corporate Governance is the framework, guidelines, process and practices of operations and controls a company that helps to balance the interest of stakeholders. The main objective of the corporate governance is to develop and maximize the value of shareholders as well as to protect the interest of stakeholders through minimizing agency problem (Sir Adrian Cadbury Committee, 1994). Corporate governance increases the transparency, accountability and efficiency in operational procedure of a firm. J. Wolfenson, President of World Bank (1995) said that Corporate Governance is increasing the transparency, accountability and fairness of the corporate. Form this discussion, it is mentioned that a global and uniquely incorporated standard for corporate cannot be applied that it defined by local management and economics. The purpose of corporate governance is to enable efficient, well equipped and prudent management which can ensure long term success and sustainability of the company. Corporate governance is the system through a company is operated and controlled. Corporate governance is a combination of ways or procedures to bring the interest of investors into operations of the firm and ensure that firms run for the maximization of benefits of investors. Corporate governance injects framework, structures, systems, cultures into firm’s operation that engender efficient operation of firms.

2.1: Corporate Governance and performance of banks

A number of studies have been performed on corporate governance and bank’s performance and different indicators (e.g. Size of the board, Board Diversity, ownership composed by local of foreigners, percentage of outside directors, board meeting frequency) were used in order to identify this relationship. Velnampy and Nimalathasan (2008) identified firm size is positively related with bank’s profitability based on a research on Bank of Ceylon and Commercial Bank of Ceylon in Sri Lanka. S. Danoshana and T. Ravivathani (2014) found variables of corporate governance significantly affect business performance based on a study on 20 listed financial institutions in Sri Lanka. Claessen, Jang & Kim and Block (2006) studied rationality of corporate governance practices by organizations and it resulted that firms with good governance has high market value, higher profitability and lower cost of funds. Griffin et al. (2014) conducted a study to identify the relation among corporate governance practices; national culture and firm performance based on stock market and found that financial system of a country has a negative impact with transparent disclosure and minority shareholder protection. Adegbemi Babatunde et al. (2014) performed a study to find the impact of corporate governance on bank’s performance in Nigeria. This study found that ownership structure and board size has positive impact on ROE and good corporate governance practices are negatively related with company’s assets.

2.2: Corporate Governance and sustainability of banks

As definition of sustainability of banks is difficult to determine and sustainability of banks also depends on a lot of internal and external factors, so only a few studies have found on relationship between corporate governance and sustainability of banks. Major scholars define long-term viability and survival of the banks based on financial and operational efficiency of banks (J. Morduch et al., 2007; Demirguc- Kunt et al., 2007). Operational efficiency of an institution depends on management ability, good CG framework, less agency conflict etc (Myers and Hassanzadeh, 2013). Ameer and Othman (2012) conducted a paper on corporate governance and sustainability of banks and found that firms with good corporate practices has more ability to develop and maximize the value of shareholders as well as to protect the interest of stakeholders. The main objective of the corporate governance is to enable efficient, well equipped and prudent management which can ensure long term success and sustainability of the company. Corporate governance is the system through a company is operated and controlled. Corporate governance is a combination of ways or procedures to bring the interest of
investors into operations of the firm and ensure that firms run for the maximization of benefits of investors. Corporate governance injects framework, structures, systems, cultures into firm’s operation that engender efficient operation of firms.

III. Theoretical Framework And Development Of Hypothesis

Resource Based View (RBV) theory describes firm’s internal capacities is highly responsible to achieve sustainability through formulating strategy. Good governance mechanism works as a resource in the firm that result higher sustainability in long run. In corporate governance, Board is an important element and it protects the interest of outside directors [Fama, 1980 and Fama & Jensen, 19840]. With bigger size of board, firm can take efficient decision and thus more profitability occurs is expected. Board diversity increases board independence containing outside directors and non-executives which deliberates board decision. Capital adequacy ratio used to protect depositor’s interest and promote the strength and stability of financial institutions. At present its regulatory issue for all banks in Bangladesh to maintain minimum CAR. NPL to Loan ratio is used as a proxy for asset quality of bank and tends to identify problems in asset portfolio in loan segment.

3.1: Board Size Vs performance

Board size means total number of directors within the organization’s board (Enobakhane, 2010). As per bank company act 1991, maximum board member is 20 persons for any bank in Bangladesh. Large board size has potentiality to enhance performance due to more gather of knowledge and skills (Williams, 2002). Ramano et al. (2012) argue that larger board become less likely to function effectively as it faces poor coordination, lack of timely decision, bureaucratic & free riding problem. Yermack (1996) & Eisenberg et al. (1998) found negative relationship between board size and firm’s performance whereas recent studies found that there is no relationship between board size and firm’s performance (Shelah, 2011; Samad, 2007; Busta, 2007). Within this framework, we hypothesize the first hypothesis that

H1: Board size has significant impact on Bank performance

3.2: Board Diversity Vs Performance

Board diversity is measured by the number of independent directors and the number of families involved in the board. In Bangladesh, most of the banks appoint their family members on boards which restrict the recruitment of qualified independent directors (Romano and Guerrini, 2012). A study conducted by BIBM (2011) and found that around 67% board of PCBs are comprised by family members or influenced by one or two groups. Agrawal and Knoeber (1996) stated a negative relationship between board diversity and firm’s performance. They found that in most cases independent directors are appointed considering political factors which results negative performance of the bank due to lack of monitoring expertise. Dutta and Bose (2006) recommended family supremacy and poor regulatory oversight in Bangladesh suggest independent directors in order to protect the interest of minority shareholders. The second hypothesis can develop based on the proportion of number of independent directors and the number of families involved in the board.

H2: The proportion of number of independent directors and the number of families involved in the board has positively related with bank performance

3.3: Capital Adequacy ratio [CAR] Vs Performance and sustainability

Capital Adequacy Ratio (CAR) is the ratio that measures the financial strength of a bank expressing total capital to Risk Weighted Assets. CAR becomes a regulatory obligation for Bangladeshi banks introduced by BASEL accord in 1988. At present all banks have to maintain minimum 10% Capital relates to its Risk Weighted Assets which is regularly monitored by Bangladesh Bank.

Abba et al (2013) found that in both local and international banks, capital adequacy has a positive relationship with profitability. Banks with minimum CAR leads to high profit, healthy soundness and financial
stability (Flamini et al, 2009). Gering, Bratonivic (1993) suggested that banks main role is to arrange fund to absorb financial risks and sufficient capital is the prerequisite for growth of total assets. Minimum capital requirement limits the benefits of investment risks and influences bank’s ability to reach target profit level. We propose the following hypothesis based on above discussion.

H3: Capital Adequacy Ratio has significant positive impact on Bank performance & sustainability

3.4: NPL to Loan ratio Vs Sustainability

NPL to loan ratio measures ability of banks to absorb potential loss. It indicates the loan asset quality of the bank within its asset portfolio. Higher NPL to loan ratio indicates that asset of the bank do not service at optimum level and bank generates loss from its asset in lieu of income. In last 10 years, NPL to Loan ratio increased by 3.15% in banking sector in Bangladesh. Greenidge and Grosvenor (2010) found that inflation is the key factor of NPL and it progress financial and banking crisis. Guy (2011) suggested that asset quality is measured by NPL and NPL is related with failure and loss of financial institutions. NPL is closely associated with banking crisis and it results less sustainability of the banks causing lower asset quality (Waweru & Kalami, 2009). Considering the above, we hypothesize that

H4: NPL to Loan ratio adversely related with Banks sustainability

IV. Methodology

4.1: Research Philosophy, Research Approach and research method:

This study followed deductive approach of research. Deductive research uses existing theories for making hypotheses about the research and uses quantitative data for exploring results that support or not support the theory. It helps make law like generalizations of the research findings. Since, this research employed different quantitative variables and intends to prove the impact of corporate governance on performance & sustainability of commercial banks in Bangladesh deductive approach is a suitable one. The study also used quantitative method for data analysis.

4.2: Defining Model:

As the research intends to explore the impact of corporate governance on performance it needs define variables and model for making its analysis. The dependent variables of the research are Return on Assets (ROA) and Return on Equity (ROE) of commercial banks in Bangladesh. Both of the variables represent performance and sustainability of commercial banks of Bangladesh.

The independent variables of the research are Board Size, Board Diversity, CAR and NPL to Loan Ratio. Board size is measured by the number of directors in the Board. Board diversity is measured by the number of independent directors and the number of families involved in the board. CAR or capital adequacy ratio and NPL ratio are important influencers of performance as stated in the literature review. For analysis of data this research used multiple regression technique. As there are more than one independent variables, multiple regression is used in this study. The results were explained by using quantitative tools.

Therefore, by using these variables the research model stands as follows:

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + u \]

Where, Y is dependent variable,  
b= coefficients  
X= independent variables  
a= constant  
u=errors

4.3: Data Collection:

This research has been developed based on secondary data. The data were collected from annual reports and websites of scheduled commercial banks in Bangladesh from 2010-2015. The researcher used panel data for ensuring better result of the research. There are 56 scheduled commercial banks in Bangladesh. Out of these 56 banks 48 banks have been used in the study. We exclude 4 SCBs and 4 DFIs from this analysis.

V. Data Presentation, Summary & Research Results

5.1: Descriptive statistics results

Table 1 shows that mean and median are not the same for the entire variables which indicates that data is not normally distributed around the mean. Data gathering technique or data itself is responsible for this. Besides, CAR, NPL and Diversity are positively skewed & ROA, ROE and Board size are negatively skewed. On the other hand, Kurtosis of skewness of Diversity is negatively skewed. Based on the Kurtosis, it is shown that variables used in this study are not normally distributed.

```
<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>ROE</th>
<th>CAR</th>
<th>NPL</th>
<th>Size</th>
<th>Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.0069</td>
<td>0.0595</td>
<td>0.1123</td>
<td>0.0547</td>
<td>11.9385</td>
<td>0.3390</td>
</tr>
<tr>
<td>Median</td>
<td>0.009</td>
<td>0.088</td>
<td>0.110</td>
<td>0.050</td>
<td>12</td>
<td>0.290</td>
</tr>
<tr>
<td>Mode</td>
<td>0.0091</td>
<td>0.0498</td>
<td>0.108</td>
<td>0</td>
<td>13</td>
<td>0.25</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1%</td>
<td>18%</td>
<td>3%</td>
<td>4%</td>
<td>1.99</td>
<td>17%</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>13.334334</td>
<td>193.0014</td>
<td>9.15874</td>
<td>3.390486</td>
<td>0.2711009</td>
<td>-0.175929</td>
</tr>
<tr>
<td>Skewness</td>
<td>-2.717133</td>
<td>-12.9938</td>
<td>-0.116735</td>
<td>1.593104</td>
<td>0.031221</td>
<td>0.6348542</td>
</tr>
<tr>
<td>Range</td>
<td>0.0752</td>
<td>2.8533</td>
<td>0.2915</td>
<td>0.2018</td>
<td>11</td>
<td>0.76</td>
</tr>
<tr>
<td>Minimum</td>
<td>-0.0492</td>
<td>-2.5994</td>
<td>-0.0238</td>
<td>0</td>
<td>7</td>
<td>0.04</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.026</td>
<td>0.2539</td>
<td>0.2677</td>
<td>0.2018</td>
<td>18</td>
<td>0.8</td>
</tr>
<tr>
<td>Sum</td>
<td>1.78366</td>
<td>15.46091</td>
<td>29.2078</td>
<td>14.21556</td>
<td>3104</td>
<td>88.129</td>
</tr>
</tbody>
</table>
```

Table 1: Result of descriptive statistics for the period of 2010-2015

5.2: Hypotheses testing

5.2.1 Correlation matrix

```
<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>ROE</th>
<th>CAR</th>
<th>NPL</th>
<th>Size</th>
<th>Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>0.7131</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAR</td>
<td>0.7538</td>
<td>0.3425</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPL</td>
<td>-0.4183</td>
<td>-0.5640</td>
<td>-0.4817</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>-0.1276</td>
<td>-0.0239</td>
<td>0.1634</td>
<td>-0.2273</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>Diversity</td>
<td>-0.0095</td>
<td>0.0051</td>
<td>-0.2701</td>
<td>0.1372</td>
<td>-0.0690</td>
<td>1.0000</td>
</tr>
</tbody>
</table>
```

Table 2: Correlation Matrix

Correlation matrix shows significant relationship between CAR and ROA (75.38%) as well as NPL to Loan ratio and ROE (-66.40%). The observation in correlation matrix does not support that variables are not highly significant but it is not concluded.

5.2.2 Test of Heteroskedasticity

In order to find the significance of relationship between dependent variables and independent variables, Breusch-Pagan test and White test have been performed to test heteroskedasticity.

**Breusch-Pagan / Cook-Weisberg test for heteroskedasticity**

Ho: Constant variance

Variables: fitted values of logroa

<table>
<thead>
<tr>
<th>chi2(1)</th>
<th>2.43</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob &gt; chi2</td>
<td>0.0514</td>
</tr>
</tbody>
</table>

In Breusch-Pagan test, p-value is less than 0.05 [Prob > chi2 = 0.0514] which indicates null hypothesis is accepted. So from Breusch-Pagan test, it found that there is homoskedasticity.

**White’s test**

Ho: homoscedasticity

against Ha: unrestricted heteroskedasticity

<table>
<thead>
<tr>
<th>chi2(14)</th>
<th>3.106765</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob &gt; chi2</td>
<td>0.2116</td>
</tr>
</tbody>
</table>

In White’s test, p-value (p=0.2116) is greater than 0.05 which indicates null hypothesis is not rejected. It means homoscedasticity exists in variances of the distribution.
5.3: Model Selection

5.3.1 Hausman test

This analysis is performed based on panel data where both fixed effect and random effect regression are applicable. To identify the most appropriate model for panel data, we perform Hausman test that helps to determine that which effect will explain the result better in this case.

Test: Ho: difference in coefficients not systematic considering ROA as dependent variable

\[ \chi^2(4) = (b - B)'[(V_b - V_B)^{-1}](b - B) = 0.0000 \]

where \( V_b - V_B \) is not positive definite

Test: Ho: difference in coefficients not systematic considering ROE as dependent variable

\[ \chi^2(4) = (b - B)'[(V_b - V_B)^{-1}](b - B) = 0.0082 \]

where \( V_b - V_B \) is not positive definite

The test resulted in very low Chi2 value for both models [ROA and ROE as dependent variable] which indicates that in this case we only can use the fixed effect regression for the analysis.

5.4: Multiple Regression Analysis

Model 1: Multiple regression between Corporate Governance and ROA

The Model 1: In this case independent variables can describe almost 64.53% changes of the dependent variables. And we can conclude that the result is acceptable at 95% confidence level as the Probability is almost zero. So, the model is a good one.

<table>
<thead>
<tr>
<th>Car</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
<th>Lower 95%</th>
<th>Upper 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1769421</td>
<td>0.0377915</td>
<td>9.97</td>
<td>0.0000</td>
<td>0.3022489</td>
<td>0.4516354</td>
</tr>
<tr>
<td>Npl</td>
<td>0.0161149</td>
<td>1.22</td>
<td>0.0002</td>
<td>0.0098789</td>
<td>0.0421177</td>
</tr>
<tr>
<td>Size</td>
<td>-0.0007617</td>
<td>-3.21</td>
<td>0.453</td>
<td>-0.012314</td>
<td>-0.0002921</td>
</tr>
<tr>
<td>Diversity</td>
<td>0.0016943</td>
<td>0.75</td>
<td>0.0223</td>
<td>0.0061407</td>
<td>0.0027521</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.0241469</td>
<td>0.2160</td>
<td>-0.0353383</td>
<td>0.0129556</td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: ROA

Predictors: CAR, LTD ratio, Board Size, Board Diversity

Variables 1: From the model 1, we can see CAR, LTD ratio and board diversity has a positive effect on the ROA and in these three cases the P value of the result is lower than 0.05 indicating that this result can be accepted with 95% confidence level. Only board size has negative relation with ROA.

Model 2: Multiple regression between Corporate Governance and ROE

The Model 2: In case of ROE, independent variables can describe almost 60.42% changes of the dependent variables. And we can conclude that the result is acceptable at 95% confidence level.

<table>
<thead>
<tr>
<th>Car</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
<th>Lower 95%</th>
<th>Upper 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.152397</td>
<td>0.3579105</td>
<td>11.60</td>
<td>0.0000</td>
<td>3.450001</td>
<td>4.597993</td>
</tr>
<tr>
<td>Npl</td>
<td>0.4003601</td>
<td>3.21</td>
<td>0.0022</td>
<td>0.154096</td>
<td>0.6466241</td>
</tr>
<tr>
<td>Size</td>
<td>-0.0088393</td>
<td>-3.93</td>
<td>0.8127</td>
<td>-0.0132869</td>
<td>0.0027521</td>
</tr>
<tr>
<td>Diversity</td>
<td>0.012015</td>
<td>0.56</td>
<td>0.0954</td>
<td>0.0541254</td>
<td>0.0300954</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.2849431</td>
<td>-5.31</td>
<td>0.2930</td>
<td>-0.3909327</td>
<td>-0.1789536</td>
</tr>
</tbody>
</table>

Dependent Variable: ROE

Predictors: CAR, NPL to Loan Ratio, Board Size, Board Diversity
Variables 2: CAR, LTD and diversity has a positive effect on ROE as well as size of the board has negative effect on ROE and the P value of the CAR & NPL to loan ratio is lower than 0.05 and P value of diversity is higher than .05. Thus the relation between ROE and diversity of board can be acceptable at 90% confidence level. But we cannot reach in any confidence level for the relationship between ROE and size.

VI. Conclusion

Based on different analysis, it can be concluded that corporate governance has positive impact on performance and sustainability of banks in Bangladesh. But due to insufficient information and no gathering of other variables [residual figure], it is not fully concluded hypothesis. However, from the regression results it is concluded that CAR has shown positive impact on ROA & ROE. Board diversity shows board members must be independent and should be in different profession as well as other than family member in order to perform well. Despite size of the board has negative relation with both two performance indicators. NPL to loan ratio has negative relationship with performance and sustainability. Overall this study found that commercial banks of Bangladesh have not performing a long time if it would not ensure continuous improvement of corporate governance practices. The areas of corporate governance where need to improve for Bangladeshi banks are to build ownership and appoint independent directors of banks separation from personal interest & family members, loan needs to disburse complying Credit policy & guidelines, proper compliance of regulatory authority etc.

References


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