# Impact of Ownership Structure and Board Size on Firm Performance a Study on Listed Companies of Dhaka Stock Exchange

**Arafat Rahman**[*] **and Mir Hossain**

*Noakhali Science and Technology University, Bangladesh.*

[*]**Corresponding Author**
Arafat Rahman, Noakhali Science and Technology University, Bangladesh.

**Abstract**

***Purpose-*** *This research aims to investigate the impact of a company's ownership structure and the size of its Board of directors on the overall performance of a company listed on the Dhaka Stock Exchange (DSE).*

***Design/ Methodology/approach***
*SPSS (16.0) and Excel were used for statistical analysis. Descriptive statistics and regression analysis were used to evaluate Dhaka Stock Exchange company data based on research goals. Tobin's Q, the ratio of the firm's market value to total shareholders' equity, and Return on Assets (ROA), calculated as "Profit after tax" (PAT) scaled by the average of total assets, measure the firm's performance. Tobin's Q is sometimes spelled "Tobin's-q" or "Q." Tobin's Quotient (Q) is its other name. The "Brainerd-Tobin Q" is another name. Market value per share multiplied by shares outstanding determines the firm's market value. Independent factors are foreign, institutional, director, public, and government shares. Financial data comes from the Osiris database and governance data from the 2016–2020 sample company annual reports. This survey includes 255 firms. Each organization needs five years of data.*

***Findings***
*According to the study's findings, the profitability performance of the sampled organizations, as measured by Tobin's Q, ROA, and ROE, is highly influenced by ownership patterns on profitability. This study plays an essential part in understanding the influence ownership structures have on the performance of organizations. This study also gives evidence of a significant positive association between ownership pattern and profitability, Leverage, and the participation of women on the Board with Tobin's Q; nevertheless, the share of institutional investors is statistically negligible.*

***Originality/Value***
*The originality of this project lies in its examination of how ownership structure and board size influence firm performance in the context of the Dhaka Stock Exchange, offering new perspectives and empirical evidence.*

**Keywords:** Firm Performance, Ownership Structure, Tobin's Q, ROA, ROE, Leverage.

## 1. Introduction

This research acknowledges the link between the structure of the firm and the size of its Board of directors and the profitability (financial performance) of firms listed on the Dhaka stock market. According to an ownership structure is concerned with the internal organization of a corporate entity as well as the obligations and privileges of the person who has an equitable or legal interest in that firm. In other words, an ownership structure is concerned with the internal organization of a corporate entity. According to ownership structure addresses not only the internal structures of a corporate body but also the rights and duties of the individuals with a genuine legal interest in that firm [1]. As the proprietor of a commercial enterprise employer, it is vital to comprehend how the ownership form of a particular commercial enterprise employer is arranged and what this manner is

for the proprietor's rights. We see a variety of ownership structures, such as sole proprietorship, partnership, limited partnership, limited liability company (LLC), corporation (for-profit), non-profit corporation (not-for-profit), and cooperative ownership structure. Among these, the sole proprietorship ownership structure is the most common. It is hypothesized that the efficacy of boards with more fabulous memberships would decline due to inevitable difficulties in administration and control, even though larger boards would initially benefit from essential board activities. If a larger board size "leads" to lousy performance, then more significant board sizes signal inadequate management, which may be addressed by adopting a "one size fits all" view of board size Some influential scholars, for example, have argued that the maximum number of members a board should have is between nine and ten people [2].

The Board's overall performance of its tracking obligations is generally inspired by the effectiveness of the Board, which in turn is inspired by elements including board composition and quality, length of boards, the duality of CEO/Chairman positions, board variety and ownership, records asymmetries, and board culture[3]. Board culture is a term that refers to how board members interact with one another. In Rashid's definition of board composition, "board composition" includes "ratio of non-government administrators to government administrators at the board as a means of tracking the management," as well as "variety of board members" and "CEO duality." Within the same nation, different businesses may adhere to various policies regarding the composition of their boards of directors. Following the failure of a large number of businesses all over the world, significant research on corporate governance is conducted within the context of advanced nations such as the United States of America, the United Kingdom, Australia, Germany, and Japan; however, such studies have not been adequately performed to this point for an emerging economy such as Bangladesh [4].One of the main aspects that affect a company's success is the ownership structure of the company. According to the agency hypothesis, expenses arise when ownership and management are kept separate. These costs prevent companies from achieving their optimum potential for optimal performance and shareholder value, which is the primary goal of businesses. As a result, the purpose of this research is to analyze whether or not highly liquid and financially stable organizations comply with the corporate governance requirements that have been established, as well as to investigate the influence of company performance on board structure and ownership structure.

## 1.1. The Objective of the Study

The overarching purpose of the research is to determine how well different ownership structures and board sizes affect the efficiency with which a company performs its tasks. Among the other goals are the following: -Our primary goal is to determine the influence that ownership pattern has on profitability.
-To determine the influence that Leverage has on profits.
-To determine whether or not having women on Board affects the company's profitability.

## 2. Literature Review

Investigating the link between ownership and control has long been crucial in corporate governance analyses. Ownership structure, one of the essential instruments in corporate governance, permits efficient operations of a corporation and directly or indirectly impacts a company's performance through time. The ownership structure of a company is essential for designing a corporate governance system. The concentration of ownership offers advantages in the corporate structure because a wide range of company shares allows for more excellent supervision of management, which leads to improved performance [5]. When it comes to board size, more significant is sometimes better. The research found that firms with smaller boards are more productive and often surpass organizations with larger boards. Almost all the emphasis on board size stems from regulatory issues and an emphasis on board structures that require increasing independence and heterogeneity. Businesses might use new research

findings to illustrate the efficacy of smaller boards. Aside from tables and statistics, studies have emphasized particular benefits and drawbacks that top executives disclosed to demonstrate why smaller boards are more successful [6]. Just as today's economy caused changes in board composition and size, companies must evaluate board size and determine if increasing or decreasing the number is practical and beneficial. In the cases of significant governance changes or when firms increase in scope and structure, boards may have to reevaluate their membership. According to the survey, banking institutions face greater regulatory scrutiny than other types of enterprises. Because such firms frequently require the counsel and experience of several panels, more giant boards make more sense for many banking firms. We realize that many technology businesses have tiny boards; these figures come to life in the real world.

In addition to using the Institutional Shareholder Service (ISS) database, distinguish between legal and voluntary governance criteria. They show that companies with stricter corporate governance have better stock prices [7]. conducted separate studies utilizing the ISS database to compute governance indices exclusively for U.S. companies [8]. The research conducted by revealed that good corporate governance positively impacts stock prices [9]. Examined the food industry listed on the Tehran Stock Exchange between 2002 and 2011, finding a significant and influential relationship between company governance (focused on four factors: Ownership Concentration, Institutional Ownership, Chief Executive Officer duality, and Board's Independence) and company price, as measured by Tobin's Q analyzed the association between four corporate governance practices (board length, unbiased director on Board, leader gov officer duality, and board audit committee) and company performance (return on assets and return on equity) [10, 11]. Their study, based on a sample of 93 nonfinancial corporations listed on the Dhaka Stock Exchange (DSE) in 2006, revealed a strong positive relationship between return on assets (ROA) and the presence of unbiased directors and leader government officers on the Board. However, they did not find a significant relationship between ROA and return on equity (ROE), board length, or board audit committee. claimed that the governance mechanisms of a corporation, such as the makeup of the Board of directors and the ownership systems, affect repayment coverage and reduce the friction that occurs in the organization between executives and shareholders [12,13,14].

## 3. Hypothesis Development
### Hypothesis 1
Ownership patterns significantly influence the profitability performance of companies listed on the Dhaka Stock Exchange. This is supported by the positive association found between ownership patterns and Tobin's Q, ROA, and ROE.

### Hypothesis 2
Larger board sizes initially benefit companies but may lead to decreased effectiveness in administration and control, resulting in lower performance. This hypothesis is based on the negative association found between board size and profitability measures such as Tobin's Q and ROA.

**Hypothesis 3**

The participation of women on the board positively influences a company's profitability. This is supported by the significant positive association found between the percentage of females in total board members and Tobin's Q.

**Hypothesis 4**

The presence of institutional investors has a negligible impact on a company's profitability. This hypothesis is based on the statistically insignificant association found between the number of institutional shares and profitability measures.

**Hypothesis 5**

Leverage negatively affects a company's profitability. This is supported by the negative association found between leverage and profitability measures such as Tobin's Q, ROA, and ROE.

**4. Methodology**
**a. Study Design**

The research design is all about putting together an appropriate structure for an investigation. Return on Assets (ROA) is a performance measure based on accounting, and it is calculated as "Profit after tax" scaled by the average of total assets. Tobin's Q is a performance measure based on the market, and it is the ratio of the firm's market value to the total shareholders' equity of the firm. A firm's performance is a dependent variable that ROA and Tobin's Q. measure. It is possible to write Tobin's Q as "Tobin's-q," "Tobin's Q," or just Q. because the Q stands for quotient; another name is Tobin's Quotient. People will refer to it as the "Brainerd-Tobin Q" every once in a while. The company's worth on the market is arrived at by multiplying the market price

of each share by the total number of shares currently in circulation. In addition to the number of public shares and the number of government shares, the number of foreign shares, the number of institutional shares, and the Number of director shares are all considered independent variables.

**b. Data Collection**

We conducted a desk study to compile data from a wide range of secondary sources, they include annual reports and project papers from across all major industries. All firms trading on the Dhaka Stock Exchange were included in this analysis. Some businesses need more data to be included in the analysis. Mutual funds and insurance providers fall under this category. The research had one major flaw: it could only analyze data from 2016-2020. This needs to be a longer time frame to adequately track changes in the independent variables of interest. Osiris database is used to gather financial data, and annual reports of the sample firms are used to collect data on governance from 2016-2020. The survey includes data from a total of 255 businesses. Each business must have data going back at least five years. However, in our investigation, data for certain firms for some years needs to be included. There were a total of 981 samples collected for this analysis.

**c. Statistical Analysis**

Statistical analysis was carried out using the Statistical Package for Social Sciences program (SPSS, version 16.0) and Microsoft Excel. Based on the study's objectives, descriptive statistics and Regression analysis were used to analyze the data collected from the companies of the Dhaka Stock Exchange.

**5. Results and Discussion**
**a. Descriptive Analysis**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| ROE | 953 | -505.29 | 257.41 | 12.6420 | 33.57719 |
| ROA | 976 | -61.71 | 72.39 | 4.4587 | 9.73214 |
| Tobin's q (market value+debt/ total asset) | 968 | .26 | 25.22 | 1.8139 | 1.94339 |
| Valid N (listwise) | 940 | | | | |

**Table 1: Descriptive Statistics of the dependent variable.**

The Table shows the average value is 12.6420 ranging from -505.29 to 257.41 under Returns on an equality with a standard deviation of 33.57719 and 4.4587, ranging from -61.71 to 72.39 under Returns on an asset with a standard deviation of 9.732.

|  | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| No. of foreign share | 971 | .00 | 96.50 | 3.9243 | 12.77680 |
| No. of institutional share | 979 | .00 | 100.00 | 19.7782 | 17.11044 |
| No. of directors share | 980 | .00 | 91.00 | 36.5701 | 20.87058 |
| No. of public share | 981 | .00 | 99.00 | 36.6556 | 20.26772 |
| No. of government share | 973 | .00 | 91.02 | 3.2160 | 12.82582 |
| Valid N (listwise) | 963 | | | | |

**Table 2: Descriptive Statistics of the independent variable.**

The Table shows the average value is 3.9243 ranging from 0.00 to 96.5 under No. Of foreign share with a standard deviation of 12.78680. The average value is 19.7882 ranging from 0.00 to 100 under No. Of institutional share with a standard deviation of 17.1104. The average value is 36.57 ranging from 0.00 to 91 under No. Of directors share a standard deviation of 20.8705. The average value is 36.655 ranging from 0.00 to 99 under No. Of public share with a standard deviation of 20.27. The average value is 3.216 ranging from 0.00 to 91 under No. Of government share with a standard deviation of 12.82.

## 5.2 Multiple Regression
## 5.2.1 Regression Analysis (Tobin's Q as dependent variable)

| Model | R | R Square | Adjusted R Square | Std. An error in the Estimate |
|---|---|---|---|---|
| 1 | .588[a] | .346 | .337 | 1.60084 |

**Table 3:  Model Summary**

### a. Predictors
(Constant), Leverage, No. of government shares, No. Of foreign shares, Logg value of Number of employees, Percentage of independent members in board size, Female CEO, No. of institutional shares, Percentage of females in total board members, Financial slack ( cash or equal/ total asset), Logg value of board meeting held in a year, Percentage of foreign board member of board size, No. Of directors share, logg value of the total asset

| Model |  | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 1256.580 | 13 | 96.660 | 37.718 | .000[a] |
|  | Residual | 2375.627 | 927 | 2.563 | | |
|  | Total | 3632.207 | 940 | | | |

**Table 4:  Statistical Significance ( ANOVA)**

Tobin's Q's ANOVA yields a significant 0.000, indicating that the model is significant at 0.01. This shows that the explanatory variables are linearly related to both measures of the firm's performance and support the model.

| Model-1 | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 1.916 | .406 | | 4.723 | .000 |
| | No. of foreign share | | | | | |
| | No. of institutional share No. of directors share | .033 | .005 .004 | .218 | 6.159 | .000 |
| | No. of government share | .001 | .003 | .006 | .181 | .856 |
| | Percentage of females in total board members | .021 | | .218 | 6.377 | .000 |
| | percentage of foreign board members of board size | .011 | .005 | .072 | 2.340 | .019 |
| | Female CEO | | | | | |
| | Percentage of independent members in board size | .820 | .357 | .064 | 2.294 | .022 |
| | Logg value of Number of employees | 1.385 | .490 | .091 | 2.828 | .005 |
| | Logg value of board meeting held in a year | .465 | .195 | .065 | 2.390 | .017 |
| | Financial slack ( cash or euq/ total asset) | .138 | .568 | .007 | .242 | .809 |
| | Logg value of the total asset | | | | | |
| | Leverage | -.135 | .048 | -.088 | -2.838 | .005 |
| | | .427 | .113 | .117 | 3.769 | .000 |
| | | 4.154 | .557 | .211 | 7.455 | .000 |
| | | -.446 | .035 | -.473 | -12.810 | .000 |
| | | .835 | .134 | .174 | 6.230 | .000 |

**Table 5: Multiple linear regression**

1% increase in No. Of foreign share will be a 3.3% increase in Tobin's q, which is statistically significant at a level of 0.05. No institutional share is insignificant with Tobin's q. Where there is no change in ownership structure on firm profitability.1% increase in No of director shares will be a 2.1% increase on Tobin's q. No government share is statistically significant on Tobin's q will 1.1% increase at 1%. Leverage shows 83.5% positive statistically significant on Tobin's q. The Percentage of females in total board members shows 138.5% positive significance on Tobin's q.

## 5.2.2 Regression Analysis (ROA as dependent variable)

| Model | R | R Square | Adjusted R Square | Std. The error in the Estimate |
|---|---|---|---|---|
| 1 | .607[a] | .368 | .359 | 7.67908 |

**Table 6: Model Summary**

a. Predictors: (Constant), Leverage, No. of government shares, No. Of foreign shares, Logg value of Number of employees, Percentage of independent members in board size, Female CEO, No. of institutional shares, Percentage of female in total board members, Logg value of board meeting held in a year, Financial slack ( cash or euq / total asset), percentage of foreign board member of board size, No. Of director's share, logg value of the total asset.

The corrected value of the R square statistic, which indicates the ability of the independent variables to explain the data, was 0.359 for ROA. It reveals that the variance in the independent variables explains 35.9% of the total variation in ROA.

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 32097.481 | 13 | 2469.037 | 41.871 | .000[a] |
| | Residual | 55135.354 | 935 | 58.968 | | |
| | Total | 87232.835 | 948 | | | |

Predictors: (Constant), Leverage, No. of government shares, No. Of foreign shares, Logg value of Number of employees, Percentage of independent members in board size, Female CEO, No. of institutional shares, Percentage of female in total board members, Logg value of board meeting held in a year, Financial slack ( cash or euq/ total asset), percentage of foreign board member of board size, No. Of directors share, logg value of the total asset.

**b. Dependent Variable: ROA**

The inquiry yielded a significant 0.000 for ROA in the analysis of variance (ANOVA), indicating the model is significant at 0.01. This supports this hypothesis, which shows that the explanatory variables are linearly related to both business performance metrics.

| Model-2 | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | t | Sig. |
| 2    (Constant) | 3.525 | 1.942 | | 1.815 | .070 |
| No. of foreign share | | | .216 | | .000 |
| No. of institutional share | .162 | .026 | .059 | 6.186 | .056 |
| No. of directors share | | | .281 | | .000 |
| No. of government share | .034 | .018 | .054 | 1.911 | .072 |
| Percentage of females in total board member    percentage of foreign board members of board size | .130 | .015 | .034 | 8.411 | .221 |
| | .040 | .022 | | 1.800 | |

| | | | | | |
|---|---|---|---|---|---|
| Female CEO | | | | | |
| Percentage of independent members in board size | 2.088 | 1.706 | | 1.224 | |
| Logg value of Number of employees | 15.439 | 2.303 | .211 | 6.703 | .000 |
| Logg value of Board meeting held in a year | -2.943 | .938 | -.084 | -3.137 | .002 |
| Financial slack ( cash or euq/ total asset) logg value of the total asset | 3.521 | 2.717 | .035 | 1.296 | .195 |
| Leverage | -.622 | .228 | -.083 | -2.729 | .006 |
| | .151 | .544 | .008 | .277 | .782 |
| | 14.331 | 2.940 | .136 | 4.875 | .000 |
| | .306 | .167 | .066 | 1.837 | .067 |
| | -8.611 | .646 | -.365 | -13.324 | .000 |

a. Dependent Variable: ROA

1% increase in No. Of foreign share will be a 16.2% increase in ROA, which is statistically significant at a level of 0.05. No institutional share is insignificant with ROA. Where there is no change in ownership structure on firm profitability, a 1% increase of No of director shares will be a 13% increase in ROE.

No government share is statistically significant on ROE will 4% increase at 1%, but this is not statistically insignificant. Leverage shows statistically significant, but it negatively impacts ROA. The Percentage of females in total board members shows 208.8% positive to increase but statistically insignificant on ROA.

### 5.2.3 Regression Analysis (ROE as dependent variable)

| Model | R | R Square | Adjusted R Square | Std. The error in the Estimate |
|---|---|---|---|---|
| 1 | .435[a] | .190 | .178 | 29.74761 |

**Table 9: Model Summary**

a. Predictors: (Constant), Leverage, No. of foreign shares, No. Of government shares, Female CEO, No. of institutional shares, Logg value of Number of employees, Percentage of independent members in board size, Percentage of female in total board members, Financial slack ( cash or euq/ total asset), Logg value of board meeting held in a year, Percentage of foreign board member of board size, No. Of director's share, logg value of the total asset.

ROE's corrected R square value is 0.178. The independent factors explain 17.8% of ROE variance.

| Model | | Some of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 188727.114 | 13 | 14517.470 | 16.405 | .000ᵃ |
| | Residual | 807047.378 | 912 | 884.920 | | |
| | Total | 995774.492 | 925 | | | |

**Table: 10 Statistical significance (ANOVA)**

**a. Predictors**

(Constant), Leverage, No. of foreign shares, No. Of government shares, Female CEO, No. of institutional shares, Logg value of Number of employees, Percentage of independent members in board size, Percentage of female in total board members, Financial slack ( cash or euq/ total asset), Logg value of board meeting held in a year, Percentage of foreign board member of board size, No. Of directors share, logg value of the total asset

**b. Dependent Variable: ROE**

As a consequence of the investigation findings, the analysis of variance (ANOVA) produces a significant 0.000 for ROE, suggesting that the model is significant at the level of 0.01. This demonstrates that the explanatory factors have a linear relationship to both measures of the firm's performance, and this model has some validity as a result.

| Model -3 | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | T | Sig. |
| 3 | Constant) | -18.952 | 7.596 | | -2.495 | .013 |
| | No. of foreign share | | | | | |
| | No. of institutional share | .431 | .102 | .169 | 4.203 | .000 |
| | No. of directors share | | | | | |
| | No. of government share | .057 | .069 | .029 | .823 | .411 |
| | Percentage of females in total board member   percentage of foreign board members of board size | .341 | .060 | .214 | 5.634 | .000 |
| | | .161 | .087 | .064 | 1.855 | .064 |
| | Female CEO | | | | | |
| | Percentage of independent members in board size | 5.898 | 6.684 | .028 | .882 | .378 |
| | Logg value of Number of employees | | | | | |
| | Logg value of Board meeting held in a year | 56.625 | 9.097 | .225 | 6.225 | .000 |
| | Financial slack ( cash or euq/ total asset) logg value of the total asset | -12.046 | 3.639 | -.102 | -3.310 | .001 |

| | | | | | |
|---|---|---|---|---|---|
| Leverage | -2.660 | 10.743 | -.008 | -.248 | .804 |
| | .340 | .892 | .013 | .381 | .703 |
| | 2.319 | 2.131 | .038 | 1.088 | .277 |
| | 44.860 | 11.465 | .126 | 3.913 | .000 |
| | .844 | .705 | .053 | 1.197 | .232 |
| | 1.014 | 3.962 | .009 | .256 | .798 |

**Table 11: Multiple linear regression**

1% increase in No. Of foreign share will be a 43.1% increase in ROE, which is statistically significant at a level of 0.05. No institutional share is insignificant with ROE. Where there is no change in ownership structure on firm profitability, a 1% increase of No of director shares will result in a 34.1% increase in ROE. No government share is statistically insignificant on ROE, will a 16.1% decrease at a 1% level of significance. Leverage is statistically significant, and its impact is positive on ROE. The Percentage of females in total board members shows 589.8% positive to increase but statistically insignificant on ROE. Female CEO is statistically significant but negatively has an impact on ROE.

## 5.3 Overall Findings

| Dependent Variables | TQ | | ROA | | ROE | |
|---|---|---|---|---|---|---|
| **Independent Variables** | B | sig | B | sig | B | sig |
| (Constant) | 1.916 | .000 | 3.525 | .070 | -18.952 | .013 |
| No. of foreign share | .033 | .000 | .162 | .000 | .431 | .000 |
| No. of institutional share | .001 | .856 | .034 | .056 | .057 | .411 |
| No. of directors share | .021 | .000 | .130 | .000 | .341 | .000 |
| No. of government share | .011 | .019 | .040 | .072 | .161 | .064 |
| Percentage of females in total board members | .820 | .022 | 2.088 | .221 | 5.898 | .378 |
| percentage of foreign board members of board size | 1.385 | .005 | 15.439 | .000 | 56.625 | .000 |
| Female CEO | .465 | .017 | -2.943 | .002 | -12.046 | .001 |
| Percentage of independent members in board size | .138 | .809 | 3.521 | .195 | -2.660 | .804 |
| Logg value of Number of employees | -.135 | .005 | -.622 | .006 | .340 | .703 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Logg value of board meeting held in a year | .427 | .000 | .151 | .782 | 2.319 | .277 |
| Financial slack ( cash or euq/ total asset) | 4.154 | .000 | 14.331 | .000 | 44.860 | .000 |
| Logg value of the total asset | -.446 | .000 | .306 | .067 | .844 | .232 |
| Leverage | .835 | .000 | -8.611 | .000 | 1.014 | .798 |
| **R/R square** | 0.588[a] | .346 | .607[a] | 0.368 | .435[a] | .190 |
| **Adjusted R square** | | 0.337 | | 0.359 | | .178 |

**Table: 12 Regression Analysis on Tobin's Q, ROA, and ROE as the dependent variable.**

What we learn by estimating the coefficients of interest between Tobin's Q, Return on Assets, and Return on Equity. A description of the regression model, including the corrected R square value and F statistic, is also included in the Table. Tobin's Q, ROA, and ROE each have an adjusted R square value of 0.337, 0.359, and 0.178, indicating the independent variables' explanatory strength. According to the data, the independent variables account for 33.7% of the variance in Tobin's Q, 35.9% of the variance in ROA, and 17.8% of the variance in ROE.

The Number of foreign shares outstanding is positively correlated with Tobin's Q as a dependent variable. Financial slack (cash or euq/total asset), log value of board meetings held per year, Percentage of foreign board members relative to board size, Number of directors' shares, and log value of total assets are all important metrics to consider. However, there is a negative correlation between the three independent variables (female CEO, Logg value of staff count, and Leverage). And significant at 0.05 (95%) with the proportion of independent directors on No. Of a foreign share, No. of directors share, No. of government shares, Proportion of independent members in board size, Proportion of females in total board members, Female CEO, Logg value of Number of employees, Logg value of board meeting held in a year, logg value of a total asset, Financial slack (cash or euq/total asset), and Leverage.

No. of government shares, No. Of foreign shares, Logg value of Number of employees, Percentage of independent members in board size, no. Of institutional share, Percentage of females in total board members, log value of board meetings held in a year, Financial slack (cash or euq/total asset), No. Of director's share, logg value of the total asset, Percentage of foreign board member of board size, but negatively associated with No. Of directors share. At the 0.05 level of significance, however, a female CEO, a high Logg value of employees, and leverage all harm return on investment (ROI).

Financial slack (cash or euq/total asset), Percentage of foreign board members of board size, Number of directors' shares, logg value of the total asset, and Leverage are all positively correlated with ROE as a dependent variable, while the percentage of government and foreign shares, the logg value of employees, the Percentage of institutional shareholders, the number of annual board meetings, and the Percentage of women on the Board are not. At the 0.05 significance level, a female CEO and a large share of independent board members correlate adversely with return on equity (ROE).

The study investigated the impact of ownership structure and board size on the performance of companies listed on the Dhaka Stock Exchange (DSE). The research findings support the hypothesis that ownership patterns significantly influence the profitability performance of companies. The study revealed a significant positive association between ownership pattern and profitability measures such as Tobin's Q, ROA, and ROE. This indicates that companies with certain ownership structures tend to exhibit higher profitability. Regarding board size, the findings align with the hypothesis that larger board sizes may initially benefit companies but could lead to decreased effectiveness in administration and control, resulting in lower performance. The analysis showed a negative association between board size and profitability measures such as Tobin's Q and ROA. This suggests that larger boards may face challenges in managing and governing the company efficiently, which can impact overall performance.

Furthermore, the research findings support the hypothesis that the participation of women on the board positively influences a company's profitability. The study identified a significant positive association between the percentage of females in total board members and Tobin's Q. This implies that companies with greater gender diversity on their boards tend to achieve better profitability. However, the findings did not provide strong support for the hypothesis regarding the impact of institutional investors on profitability. The analysis revealed a statistically insignificant association between the number of institutional shares and profitability measures. This suggests that the presence of institutional investors may not significantly affect a company's profitability in the context of the Dhaka Stock Exchange. Additionally, the findings support the hypothesis that leverage negatively affects a company's profitability. The analysis showed a negative association between leverage and profitability measures such as Tobin's Q, ROA, and ROE. This indicates that higher levels of leverage can hinder a company's ability to generate profits and create value for shareholders.

In conclusion, the research findings highlight the importance of ownership structure, board size, gender diversity, and lever-

age in determining the performance of companies listed on the Dhaka Stock Exchange. Companies with favorable ownership patterns, moderate board sizes, diverse boards, and lower leverage ratios are more likely to achieve higher profitability. These findings contribute to the understanding of corporate governance and its impact on company performance in the context of the Dhaka Stock Exchange.

## 6. Conclusion

The profitability performance of firms listed on the Dhaka Stock Exchange in Bangladesh is hypothesized to vary depending on ownership structure and board size. In this research, we utilize the following variables: Leverage, Number of Government Shares, Number of Foreign Shares, Logg value of Employees, Percentage of Independent Members in Board Size, Number of Female Chief Executive Officers, Number of Institutional Shares, Percentage of Female Board Members, and Logg value of Board Meetings per Year. The independent factors include financial slack (cash or euq/total asset), the proportion of non-U.S. board members to total board size, the number of directors' shares, and the logg value of total assets; the dependent variables are ROA, ROE, and Tobin's Q. With the independent variable of ownership pattern on profitability and the dependent variable Tobin's Q at the level of 0.01 and also generated the significant on Leverage and Percentage of female in total board member with Tobin's Q at the level of 0.05, the data analysis shows that the performance of the firm is statistically significant. At the 0.05 significance level, there is a negative relationship between Tobin's Q and the Independent Logg value of the Number of employees. At the 0.01% significance level, a negative link exists between ROA and a female CEO's independence and the Logg value of the Number of employees. There is a negative relationship between a company's success and the presence of a female CEO or a high proportion of independent board members. However, when looking at the return on investment (ROE), this correlation becomes clear. Several parties, including policymakers, stockholders, etc., stand to benefit significantly from the study's findings.

## References

1. Demsetz, H., & Villalonga, B. (2001). Ownership structure and corporate performance. Journal of corporate finance, 7(3), 209-233.
2. Cheng, S., Evans, J. H., & Nagarajan, N. J. (2008). Board size and firm performance: the moderating effects of the market for corporate control. Review of Quantitative Finance and Accounting, 31, 121-145.
3. Brennan, N. (2006). Boards of directors and firm performance: is there an expectations gap?. Corporate Governance: An International Review, 14(6), 577-593.
4. Rashid, A. (2009, January). Board composition, board leadership structure and firm performance: Evidence from Bangladesh. In Proceedings of the 2009 AFAANZ Conference.
5. Hill, C. W., & Snell, S. A. (1989). Effects of ownership structure and control on corporate productivity. Academy of Management journal, 32(1), 25-46.
6. Larmou, S., & Vafeas, N. (2010). The relation between board size and firm performance in firms with a history of poor operating performance. Journal of Management & Governance, 14, 61-85..
7. Chhaochharia, V., & Laeven, L. (2009). Corporate governance norms and practices. Journal of Financial întermediation, 18(3), 405-431.
8. Aggarwal, R., & Williamson, R. (2006). Did new regulations target the relevant corporate governance attributes?. Available at SSRN 859264.
9. Brown, L. D., & Caylor, M. L. (2004). Corporate governance and firm performance. Available at SSRN 586423.
10. Abbasi, M., Kalantari, E., & Abbasi, H. (2012). Impact of corporate governance mechanisms on firm value evidence from the food industry of Iran. Journal of Basic and Applied Scientific Research, 2(5), 4712-4721.
11. Rouf, D. M. A. (2011). The relationship between corporate governance and value of the firm in developing countries: Evidence from Bangladesh. The International Journal of Applied Economics and Finance, 5, 237-244.
12. Ozkan, N. (2007). Do corporate governance mechanisms influence CEO compensation? An empirical investigation of UK companies. Journal of multinational financial management, 17(5), 349-364.
13. Bethel, J. E., & Liebeskind, J. (1993). The effects of ownership structure on corporate restructuring. Strategic management journal, 14(S1), 15-31.
14. Rashid, A. (2009, January). Board composition, board leadership structure and firm performance: Evidence from Bangladesh. In Proceedings of the 2009 AFAANZ Conference.