PROJECT REPORT

ON

THE EFFECT OF BOARD & AUDIT COMMITTEE CHARACTERISTICS ON BANK PERFORMANCE IN BANGLADESH

Submitted to

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Submitted by

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LETTER OF TRANSMITTAL

June 25, 2024

Dr. Mohammad Tariq Hasan
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RE: Submission of Project Report

Dear Sir,

It gives me utmost elation to present before you my project titled "Effect of Board and Audit Committee Characteristics on Bank Performance in Bangladesh" for the purpose of completion of my degree requirements.

It has helped me delve into the intricacies concerning board and audit committee features of 20 DSE listed banks where data has been collected from annual reports and the online sources exclusively. I may add that this dissertation has helped me gain much needed exposure into the world of accounting research which aligns prudently with my own major. I extend my gratitude to your unwavering support throughout the study period. I would also extend my apologies if you find any discrepancies in the report and hope to work on more papers with you in the near future.

Yours sincerely,
Faiyaz Bin Zulfiqar
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DECLARATION OF THE STUDENT

By submitting this dissertation, I, Faiyaz Bin Zulfiqar, hereby declare that I have partially fulfilled the requirements for a Bachelor of Business Administration degree at United International University. The dissertation is titled "The Effect of Board and Audit Committee Characteristics on Bank Performance in Bangladesh".

Under the supervision of Dr. Mohammad Tariq Hasan, from the Faculty of the School of Business and Economics (SoBE), I completed this original work. It has not been submitted for consideration for any other degree, diploma, or title that is comparable.

ACKNOWLEDGEMENT

I would like to extend my utmost gratitude to Almighty Allah, without whom I would not have had the epiphany to take small steps into the academic research field. Moreover, I am indebted to my parents for supporting my education throughout time. Lastly, I would like to thank my supervisor, Dr. Mohammad Tariq Hasan, whose unwavering guidance has been pivotal to the writeup of this dissertation.

ABSTRACT

By investigating the effects of board and audit committee characteristics—such as size, experience, diversity, and independence—on the financial performance of Dhaka Stock Exchange listed banks, this study contributes to academic literature in Bangladesh's banking industry. Examining the connection between these traits and the banks' financial performance is the motivation of the study. The study found no significant issues with neither multicollinearity, normality, nor autocorrelation using a multiple panel Ordinary Least Square (OLS) regression model on 120 firm years of panel data from sample banks' annual reports and conducted diagnostic tests beforehand. The stakeholder theory is supported by the results, which show that audit committee independence has a significant positive effect on bank performance as proxied by Tobin's Q. Tobin's Q was not significantly impacted by any other board or audit committee features, and only one hypothesis was supported viz. audit committee independence by the lack of significant effects on bank performance also proxied by net income before taxes. The paper suggests that independent audit committees be given special emphasis by Bangladeshi regulatory bodies. By boosting public trust in the financial sector, these committees shield creditors and depositors, discourage opportunistic financial reporting, and facilitate good governance banking practices in Bangladesh.

Keywords: Corporate Governance, Audit Committee Independence, Board Characteristics, Bank Performance, Dhaka Stock Exchange (DSE), Panel Data Analysis, Bangladesh.

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List of Abbreviation

TBQ - Tobin's Q Ratio

NIBT - Net Income Before Tax

BDSZ - Size of the board

BDEX - Competence of the Board

BMF - Frequency of Board Meetings

GD - Board Diversity

BDIN - Board Independence

ACSZ - Size of the Audit Committee

ACEX - Competence of the Audit Committee

ACMF - Frequency of Audit Committee Meetings

ACGED - Audit Committee Diversity

ACIN - Audit Committee Independence

FSZ – Firm Size

LEV - Leverage

AQ - Audit Quality

GRT - Deposit Growth

LDR - Loan-to-Deposit Ratio

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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

In the dynamic landscape of banking, the composition and effectiveness of corporate boards and audit committees have a significant impact on company goals, risk management procedures, and, eventually, bank performance. It becomes crucial to recognize the complex relationship between board and audit committee characteristics and bank performance in the context of Bangladesh's banking industry, where stability and expansion are of utmost priorities. This study aims to investigate this key relationship between the bank performance of Bangladeshi listed banks and the characteristics of their boards and audit committees. In any organization, the board of directors is essential in setting the strategic direction, supervising risk, and defending the interests of stakeholders. The importance of effective corporate governance—exemplified by the structure and interactions of the board—cannot be stressed enough in the context of the banking industry, where stability, trust, and careful decision-making are critical. Over the last thirty years, beginning with the 1997 currency crisis, the corrupt and deceitful conduct of their board of directors has been the cause of numerous financial scandals involving credible businesses, including WorldCom (2002), Xerox (2002), and Enron (2001) many more (IFAC, 2003). Boards are expected to perform a variety of tasks, such as recruiting and firing management, monitoring management to reduce agency costs, supplying and authorizing access to resources, training the CEO, as well as determining the bank's strategic direction. Initiating organizational change and facilitating procedures that uphold the organization's mission are other duties that boards have (Bathula, 2008). A strong board can have a significant financial impact on the success of the company. In addition to securing crucial assets and acting as a link between the company and the outside world, they also actively participate in a firm's strategic decision-making process (Kemp, 2006).

Numerous Bangladeshi banks have faced dire consequences due to unethical practices from their board and audit committee members. Between 2009 and 2013, the board of directors of Basic Bank of Bangladesh authorized loans totaling BDT 45,000 million, of which 95% were found to be fraudulent. Over 14 individuals associated with Basic Bank were implicated in this scheme, comprising 5 higher authorities (Uddin, 2018). Additionally, in an investigation conducted by the Central Bank into defaulted loans at Farmers Bank, both the Chairman of the Board and the Chairman of the Audit Committee were found guilty. Numerous occurrences also underscore the necessity of an effective audit committee. For instance, between 2007 and 2011, the internal audit committee categorized the Ruposhi Bangla branch of Sonali Bank as a "low-risk" branch. However, a subsequent inquiry conducted by a parliamentary committee uncovered deficiencies in the audit committee's execution of its responsibilities (Kamal and Begum, 2018).

The Corporate Governance Code (2018) of Bangladesh stated that a company, listed with any prevailing stock exchange in Bangladesh, shall not have less than five (05) members and more than twenty (20) members on the board. The guideline also mentions that the independent directors of a company will be at least one-fifth (1/5) of the total directors on board, to ensure an effective representation of independent directors on their Boards. The code also mandates that all listed companies establish an audit committee as a sub-committee of the board, consisting of a minimum of three members. Among these members, there must be at least one independent director, and one member should possess expertise in accounting or related financial management, with a minimum of ten years of relevant experience (Hasan, Molla, & Khan, 2019; Hasan & Rahman, 2020).

The extent to which these board and audit committee characteristics impact banks' financial performance is still an issue that holds both academic research and practical importance. This paper attempts to close this gap by methodically analyzing how different board attributes—specifically, board size, expertise, frequency of meetings, board diversity, and board independence—and different audit committee characteristics—namely, their size, member experience, frequency of audit committee meetings, committee diversity, and independence—affect important financial performance indicators like net income and Tobin’s Q of the listed banks. This research aims to offer significant insights for policymakers, regulators, investors, and banking professionals by utilizing strong empirical methodology and deriving conclusions from theoretical frameworks and empirical evidence.

1.2 Problem Statement

Bangladesh's banking industry is facing numerous obstacles in the midst of rapid economic growth and evolving regulatory frameworks. Concerns about the governance frameworks of listed banks and their potential effects on financial performance exist, even though these institutions are a vital to economic growth. By examining the connection between board and audit committee characteristics and financial performance in the context of listed banks on the DSE, this study seeks to address this urgent issue. Finding out how different corporate board and bank’s audit committee characteristics—including size, experience, diversity, and independence—affect important financial performance measurements, like net income and Tobin's Q, is the main focus of the problem statement. There is a deficiency of empirical data about this link in the particular setting of Bangladesh's banking industry, which calls for a thorough investigation to close this gap.

1.3 Research Questions

In light of the crucial role governance frameworks have in banks' financial performance in the context of Bangladesh's economic expansion, the following research questions will be investigated in this study:

i) What is the relationship between board characteristics (board size, board expertise, frequency of board meetings, board diversity, and board independence) and Financial Performance (net income before tax and Tobin’s Q) for banks listed on DSE?

ii) What is the relationship between audit committee characteristics (audit committee size, audit committee expertise, frequency of audit committee meetings, audit committee diversity, and audit committee independence) and Financial Performance (net income before tax and Tobin’s Q) for banks listed on DSE?

1.4 Research Objectives

In order to fill a research gap concerning the banking industry in Bangladesh, this study attempts to empirically examine the effects of board and audit committee characteristics—such as size, experience, diversity, and independence—on the financial performance of listed banks on the Dhaka Stock Exchange. Accordingly, the objectives are as follows:

i. To investigate the relationship between board characteristics and financial performance of the DSE listed banks in Bangladesh.

ii. To examine the relationship between audit committee characteristics and financial performance of Bangladeshi banks listed on DSE.

1.5 Motivation of the Study

The motivation for this study comes from the need to understand how board characteristics influence the financial performance of the banking sector in Bangladesh. Since the nation's banking industry is a key component of its economic growth, it is crucial to understand the particulars of corporate governance and how it affects financial results in order to promote stability and long-term prosperity. The research seeks to offer practical insights that can guide corporate governance practices and strategic decision-making that are specific to Bangladesh's banking sector and, ultimately, increase its competitiveness and resilience in the international market.

1.6 Scope of the Study

The scope of this study covers an examination of the effects of board attributes, such as size, competence, frequency of meetings, diversity, and independence, and audit committee characteristics such as size, expertise, meeting frequency, diversity in the committee, and audit committee independence on financial performance metrics, particularly net income and Tobin's Q, in the listed banks of Bangladesh's Dhaka Stock Exchange.

1.7 Limitations of the Study

This study only includes 20 listed banks on DSE out of 61 scheduled banks. Moreover, the study period covers only 120 firm years. The period before and after that has not been taken into consideration. Moreover, other proxies of Bank performance as ROE which is evident in extant literature has not been taken into consideration. Moreover, unified equations consisting of both board and audit committee characteristics were regressed on both the market and accounting measure models of bank performance.

CHAPTER TWO: REVIEW OF THE LITERATURE

2.1 Introduction

This study investigates the relationship between the financial performance of Bangladeshi listed banks and the characteristics of their boards and audit committees. The board of directors plays a crucial role in setting strategic direction, supervising risk, and defending stakeholder interests. The banking industry, where stability and expansion are of utmost priorities, is particularly affected by the corrupt and deceitful conduct of its board of directors. Several Bangladeshi banks have faced dire consequences due to unethical practices from their board and audit committee members. Between 2009 and 2013, the board of directors of Basic Bank of Bangladesh authorized loans totaling BDT 45,000 million, of which 95% were found to be fraudulent. Additionally, an investigation conducted by the Central Bank into defaulted loans at Farmers Bank found both the Chairman of the Board and the Chairman of the Audit Committee guilty. The Corporate Governance Code (2018) of Bangladesh mandates that all listed companies establish an audit committee as a sub-committee of the board, consisting of a minimum of three members. The extent to which these board and audit committee characteristics impact banks' financial performance is still an issue that holds both academic research and practical importance (Hasan, Hossain, Rekabder, Molla, & Ashif, 2022; Hasan & Rahman, 2020). This paper aims to close this gap by methodically analyzing how different board attributes (board size, expertise, frequency of meetings, board diversity, and board independence) and different audit committee characteristics (size, member experience, frequency of audit committee meetings, committee diversity, and independence) affect important financial performance indicators like net income and Tobin's Q for banks listed on the DSE.

2.2 Theory Development

Researching the complex relationship between board qualities, audit committee (AC) characteristics, and financial performance of Bangladeshi banks listed on the Dhaka Stock Exchange (DSE), this paper is based on established theoretical frameworks. Choosing the right theories not only establishes a strong base for our research, but also steers our analysis towards meaningful interpretations of the data. This paper specifically examines 'Agency theory' and 'Stewardship theory', highlighting their contrasting viewpoints. One of the most convincing theories is based on agency theory, which proposes shareholders seek to enhance company value and performance by entrusting these duties to managers who are expected to prioritize the shareholder's interests. Conflicts can occur because principals (shareholders) and agents (managers) have different goals. Given that our research centers on the relationship between board and audit committee structure (representing principals) and bank performance (represented by managers), agency theory forms the basis of our investigation. Despite agency theory being widely used in empirical studies examining the impact of board characteristics and AC characteristics on bank performance, findings have often been inconclusive and contradictory. The reason for this might be the boards and audit committees placing too much emphasis on monitoring rather than acknowledging the managers' stewardship role, which prioritizes the company's interests over personal gain. Hence, it is essential to involve additional theoretical viewpoints like stewardship theory to achieve a more complete grasp of the current dynamics. In contrast to agency theory, stewardship theory argues that managers act as stewards, prioritizing shareholders' long-term interests over their own personal benefit. Stewards show internal drive, dedication, and accountability to the organization.

2.3 Board Characteristics and Financial Performance

2.3.1 Board Size and Financial Performance

It is widely implied in current literature that the size of a firm's board of directors has a significant impact on its financial performance. Several studies have found a positive relationship between the board size and financial performance or profitability (Khalifa et al., 2020; Nawafly & Alarussi, 2016; Johl et al., 2015; Fariha et al., 2021; Muttakin & Ullah, 2012 (Hasan et al., 2022; Hasan et al., 2019). They have concluded that a larger board can result in better decision-making processes and higher firm performance. This is also supported by the research dependency theory, which states that large boards provide significant networks, business acumen, and abilities that strengthen a firm's resources and improve performance. Conversely, a minority of studies propose that smaller boards may be conducive to enhanced profitability, suggesting an inverse relationship between board size and firm performance (Silva & Hewage, 2022; Jermias & Gani, 2013). Based on the insights gleaned from existing research, the hypothesis is formulated as follows –

H1a: Board size has a significant positive association with the financial performance of the banks.

2.3.2 Board Expertise and Financial Performance

Board expertise, defined as the presence of financial or accounting experts within the board, has been identified in several studies as significantly positively correlated with firm performance (Nawafly & Alarussi, 2016; Johl et al., 2015; Hasan et al., 2019). This correlation highlights how important expert board members are in promoting improved decision-making processes and ultimately enhancing firm performance. Effective corporate governance depends on the expertise of the board of directors, particularly in areas such as accounting, finance, and auditing (Nawafly & Alarussi, 2016). Hence, it is hypothesized that –

H1b: Board expertise has a significant positive association with the financial performance of the banks.

2.3.3 Frequency of Board Meetings and Financial Performance

The frequency of board meetings is commonly seen as an indicator of board diligence. Supporters believe that a frequent board meeting leads to improved financial performance for the company (Khalifa et al., 2020; Fariha et al., 2021). According to this perspective, holding more board meetings results in regular in-depth discussions regarding organizational plans, which improves the board's ability to successfully lead the company. On the contrary, Johl et al.'s (2015) study conducted in Malaysia revealed a significant negative relationship between board meetings and firm performance. Despite such discrepancies, the prevailing notion emphasizes the importance of board diligence in fostering organizational commitment, thereby potentially bolstering firm financial performance. Hence –

H1c: There exists a significant positive relationship between the frequency of board meetings and bank performance.

2.3.4 Board Diversity and Financial Performance

Board diversity indicates the presence of female directors on the board. A considerable body of literature suggests a significant positive relationship between board diversity and firm performance (Martínez & Álvarez, 2019; Meca et al., 2014; Onyekwerea & Babangidab, 2022; Brahma et al., 2020; Mgbame et al., 2020; Rashid and Pervin, 2019). This viewpoint is supported by theories such as Agency Theory, Resource Dependency Theory, and Gender Role Theory. According to these theories, female directors bring fresh perspectives to complex issues, are more inclined to ask questions, demonstrate participative leadership, and exhibit higher levels of meeting attendance and preparation (Mgbame et al., 2020; Rashid and Pervin, 2019). However, conflicting findings exist, with studies such as those by Darmadi (2011) and Fariha et al. (2021) indicating a significant negative relationship between board diversity and firm performance. Despite these inconsistencies, the prevailing evidence suggests that the inclusion of female directors on the board is associated with enhanced firm performance. Thus, we hypothesis the following –

H1d: There is a significant positive association between female directors on the board and bank performance.

2.3.5 Board Independence and Financial Performance

Board independence is characterized by the presence of independent directors on the board. Most of the research find a significant positive relationship between them

(Nawafly & Alarussi, 2016; Jermias & Gani, 2013; Martínez & Álvarez, 2019; Meca et al., 2014; Rashid and Pervin, 2019; Muttakin & Ullah, 2012). This perspective finds support in the agency theory and resource dependency theory. According to agency theory, independent directors serve as effective monitoring mechanisms for management, thereby reducing opportunistic behaviors and ultimately enhancing company performance. Additionally, as per resource dependency theory, independent directors bring in expanded networks and valuable knowledge of resources, which are expected to positively contribute to a company's performance. However, conflicting findings exist, with studies by Onyekwerea & Babangidab (2022) and Fariha et al. (2021) indicating a significant negative relationship between board diversity and firm performance. As per the agency theory, we may hypothesize –

H1e: Board independence has a significant positive association with the financial performance of the banks.

2.4 Audit Committee Characteristics and Financial Performance

2.4.1 Audit Committee Size and Financial Performance

Some studies show that the presence of a large audit committee facilitates robust oversight, enhances governance quality, fosters transparency and disclosure practices, and improves efficiency by leveraging additional resources to address complex issues (Nawafly & Alarussi, 2016; Ashari & Krismiaji, 2019; Alqatamin,2018; Hasan et al., 2019; Rahman et al., 2019). This positive relationship is supported by both agency theory and resource dependency theory. On the other hand, several studies have shown significant negative association of AC size with financial performance (Haddad et al., 2021; Jalahma, 2022; Jermias & Gani, 2013; Fariha et al., 2021; Meah et al., 2021). Accordingly, this study hypothesizes that –

H2a: Audit committee size has a significant positive association with the financial performance of the banks.

2.4.2 Audit Committee Expertise and Financial Performance

Studies by Haddad et al. (2021), Silva & Hewage (2022), Salehi et al. (2017), Khalifa et al. (2020), Nawafly & Alarussi (2016), and Ashari & Krismiaji (2019) consistently highlights a strong positive correlation between audit committee expertise and firm performance. Supporting this are both agency theory and resource dependency theory. Agency theory suggests that committee members equipped with qualifications and expertise in accounting, auditing, and finance significantly elevate the quality of the committee's work, thus facilitating more effective decision-making processes and fostering transparency in reports. Additionally, resource dependency theory argues that managerial expertise, particularly among non-executives, serves as a catalyst for attracting resources, ultimately contributing positively to profitability. Hence –

H2b: There is a significant positive relationship between audit committee expertise and bank performance.

2.4.3 Frequency of Audit Committee Meetings and Financial Performance

Based on the agency theory, it should be noted that the frequency of AC meetings can be beneficial to the organization only if the benefits gained from an additional meeting exceed the cost incurred for that particular meeting (Silva and Hewage, 2022). On the other hand, there are researchers that consider AC meetings not necessarily useful due to the limited time non-executives spend with the company and consider such time could be better utilized for a more meaningful exchange of ideas with the management (Haddad et al., 2021; Oudat et al., 2021; Jermias & Gani, 2013; Rahman et al., 2019; Meah et al., 2021). Also, frequent meetings involve managerial time and increase travel expenses, administrative support requirements and committee members' meeting fees. This may affect enterprise activities within the firm as resources are being channeled towards less productive activities (Johl et al., 2015). In light of these findings, the proposed hypothesis is –

H2c: There exists a significant negative relationship between the frequency of audit committee meetings and bank financial performance.

2.4.4 Audit Committee Diversity and Financial Performance

The presence of female members on the AC, has garnered attention in research examining its impact on financial performance. Several feminist economists argue that women are more inclined to be neutral in moral judgements and behavior than are men. Studies by Alqatamin (2018) and Mgbame et al. (2020) have identified a significant positive relationship between audit committee diversity and firm performance. Drawing from the resource dependency theory, women members have different perspectives and demand different information from men. The inclusion of female directors brings diverse perspectives and experiences to the AC, leading to more comprehensive decision-making processes. Building upon this evidence, the proposed hypothesis is –

H2d: A significant positive association exists between female directors on the audit committee and bank performance.

2.4.5 Audit Committee Independence and Financial Performance

AC independence, defined as the presence of independent directors on the audit committee, has shown an ambiguous relationship with firm performance in previous studies. Several studies have identified a significant positive relationship between AC independence and firm performance (Orjinta & Evelyn, 2018; Saat, 2015; Salehi et al., 2017; Khalifa et al., 2020; Nawafly & Alarussi, 2016; Ashari & Krismiaji, 2019; Alqatamin, 2018). This association is reinforced by the principles of agency theory, which suggest that independent directors provide effective monitoring mechanisms for management, thereby reducing opportunistic behaviors and ultimately enhancing company performance. Moreover, the Corporate Governance Code (2018) of Bangladesh requires every listed company to form an audit committee under the board, consisting of at least three members and including one independent director. Hence, the hypothesis stands as –

H2e: Audit committee independence has a significant positive association with the financial performance of the banks.

CHAPTER THREE: METHODOLOGY

3.1 Research Framework

The objective of this study is to investigate the relationship between board characteristics and financial performance of the Dhaka Stock Exchange (DSE) listed banks in Bangladesh (H_1). Additionally, to examine the relationship between audit committee characteristics and financial performance of Bangladeshi banks listed on DSE (H_2). The study is done in two layers: Initially, on the basis of the literature assessment of various research articles linked to Board Characteristics, Audit Committee Characteristics and Financial Performance and lastly, on the basis of empirical data analysis, which is gathered from published annual reports of the listed banks in DSE. The theoretical framework of the study is shown in Figure 1, which consists of all the variables i.e., independent and dependent.

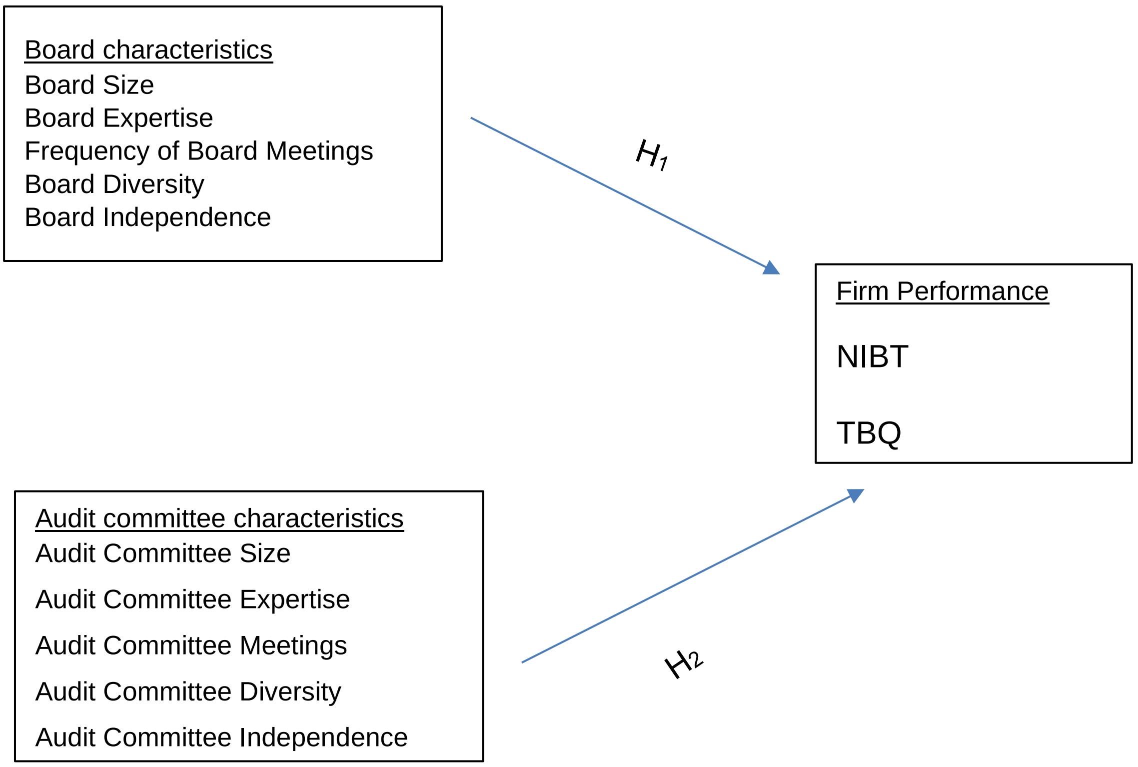

Figure 1: Study Framework

3.2 Data Collection and Screening

The study focused on relevant data from the listed banks of Dhaka stock exchange (DSE) annual reports and covers 6 (six) years of data from 2017 – 2022. There were 2 (two) simple criteria upon which banks were chosen: Banks must be listed in DSE and have active participation in the capital market for both study periods. Following this, we found a total of 61 scheduled banks in Bangladesh who operate under full control and supervision of Bangladesh Bank which is empowered to do so through Bangladesh Bank Order, 1972 and Bank Company Act, 1991 as per the website of the central bank, Bangladesh Bank. Out of 61 scheduled banks, 36 are listed on the Dhaka Stock Exchange (DSE). From this, 20 banks have been selected for our study as per convenient sampling and annual reports were screened for collecting relevant 6 years of data to be used for our empirical analysis based on independent, dependent and control variables which is discussed afterwards. This results in a total of 20*6=120 bank years of study period. It is to be noted that state-owned, specialized, and unlisted banks are excluded from our study.

Table 1: List of the banks in the study

SL. NO.	Name	SL. NO.	Name
1	BRAC Bank	11	EXIM Bank
2	Dutch-Bangla Bank	12	Global Islami Bank
3	Shahjalal Islami Bank	13	IFIC Bank
4	AB Bank	14	Islami Bank Bangladesh
5	First Security Islami Bank	15	Jamuna Bank
6	Al-Arafah Islami Bank	16	Mercantile Bank
7	Bank Asia	17	Mutual Trust Bank
8	City Bank	18	One Bank
9	Dhaka Bank	19	The Premier Bank
10	Eastern Bank	20	Prime Bank

3.3 Research Model

This paper utilizes one Multiple Panel Regression Model with the Ordinary Least Square (OLS) approach in order to examine the relationship between board characteristics and audit committee characteristics on bank performance, adhering to similar use of this model in extant literature (Hasan et al., 2022; Hasan et al., 2019; Hasan & Rahman, 2020)

Model 1: Board Characteristics, audit committee characteristics and Bank Performance

$$TBQ_{it} = \beta_o + \beta_1 BDSZ_{it} + \beta_2 BDEX_{it} + \beta_3 BMF_{it} + \beta_4 GD_{it} + \beta_5 BDIN_{it} + \beta_6 ACSZ_{it} + \beta_7 ACEX_{it} + \beta_8 ACMF_{it} + \beta_9 ACGED_{it} + \beta_{10} ACIN_{it} + \beta_{11} FSZ_{it} + \beta_{12} LEV_{it} + \beta_{13} AQ_{it} + \beta_{14} GRT_{it} + \beta_{15} LDR_{it} + \varepsilon_{it} \qquad 3.3.1$$

Model 2: Board Characteristics, audit committee characteristics and Bank Performance

$$NIBT_{it} = \beta_o + \beta_1 BDSZ_{it} + \beta_2 BDEX_{it} + \beta_3 BMF_{it} + \beta_4 GD_{it} + \beta_5 BDIN_{it} + \beta_6 ACSZ_{it} + \beta_7 ACEX_{it} + \beta_8 ACMF_{it} + \beta_9 ACGED_{it} + \beta_{10} ACIN_{it} + \beta_{11} FSZ_{it} + \beta_{12} LEV_{it} + \beta_{13} AQ_{it} + \beta_{14} GRT_{it} + \beta_{15} LDR_{it} + \varepsilon_{it} \qquad 3.3.2$$

3.4 Variable Definition and Measurement

To study the influence of board characteristics and audit committee characteristics on bank performance, this paper has set the dependent variables in two perspectives. Net income before tax (NIBT) follows the accounting perspective and as per previous studies, Tobins' Q ratio (Fariha et al., 2021; Rashid & Pervin, 2019; Jalahma, (2022); Saat, 2015; Jermias & Gani, 2013) is taken to represent the capital market perspective as the proxies of bank performance. These are run against corporate governance components. There are ten (10) independent variables of this study are divided into two where 6 of them i.e., board size (BDSZ), board expertise (BDEX), frequency of board meetings (BMF), gender diversity (GD), board independence (BDIN), represent board characteristics. On the other hand, audit committee size (ACSZ), audit committee expertise (ACEX), audit committee meetings (ACMF), audit committee gender diversity (ACGED) and audit committee independence (ACIN) represent audit committee characteristics as per multitude of prior studies (Hasan & Rahman, 2019, 2020; Hasan, Rahman, Sumi, Chowdhury, & Miraz, 2020; Hasan, Rekabder, Hasan, & Kuri, 2023; Molla, Hasan, Miraz, Azim, & Hossain, 2021). Additionally, this study includes five (5) control variables as per extant literature viz. firm size (FSZ), leverage (LEV), audit quality (AQ), deposit growth (GRT) and loan-to-deposit ratio (LDR) (Hasan, 2020; Hasan & Chakraborty, 2011; Hasan & Rahman, 2017; Hasan, Ullah, & Huq, 2011; Mahmud, Hasan, & Ashif, 2014).

Table 2: Variables used in the study

Name of The Variable	Symbol	Explanation
Tobin's Q	TBQ	Market value of shares plus book value of liabilities divided by total assets.
Net Income Before Tax	NIBT	Net income before tax and other provisions.
Size Of the Board	BDSZ	Number of directors present in the board.
Competence Of the Board	BDEX	The proportion of finance/accounting/law or other experts who are members of the board.
Frequency Of Board Meetings	BMF	Number of meetings held by the board of directors in a year.
Gender Diversity	GD	Number of female directors on the board.
Board Independence	BDIN	Number of independent non-executive directors on the board.
Size of the Audit Committee	ACSZ	Number of members in the audit committee of the board.
Competence of the Audit Committee	ACEX	The proportion of finance/accounting/law or other experts who are members of the board audit committee.
Frequency of Audit Committee Meetings	ACMF	Number of meetings held by the audit committee of the board in a year.
Audit Committee Gender Diversity	ACGED	Number of female directors on the board audit committee.
Audit Committee Independence	ACIN	Number of independent non-executive directors on the board audit committee.
Firm Size	FSZ	Logarithm of total assets

Leverage	LEV	Proportion of total liabilities to total shareholders' equity
Audit Quality	AQ	Dummy variable where if audit by big4 accounting banks represents 1, otherwise 0.
Deposit Growth	GRT	Comparison of total bank deposits in the current year to its previous year.
Loan-To-Deposit Ratio	LDR	Total loans and advances divided by total deposits.

CHAPTER FOUR: ANALYSIS AND FINDINGS

4.1 Descriptive analysis

Every research data point comes from the banks' annual report covering the years 2017 through 2022. This paper comprises of two (2) proxies of bank performance as NIBT and TBQ as well as ten (10) corporate governance elements presented in two segments and five (5) control variables. Table 3 provides the study variables' descriptive analysis, including the mean, median, standard deviation, minimum, and maximum. Our results portray NIBT in the banking sector of Bangladesh to have a mean value of 9.602431 with standard deviation 0.2662243 where minimum value is 8.745071 and maximum value is 10.16414. For TBQ, mean value is 0.9946346 with a minimum value of 0.9328084 and maximum value of 1.230387 and standard deviation is 0.0366346, identical to findings of Fariha et al., 2021 in Bangladesh and Coleman & Biekpe, (2008) in Ghana. It can be seen that standard deviation is higher for NIBT than TBQ, showing greater earning fluctuations for banks compared to its stock valuations. Board characteristics is proxied as Size of the board (BDSZ) where mean is 13.625 with minimum members of 6 and maximum members of 20, Competence of the Board (BDEX) with mean of 2.075 spread across 0 to 11 experts, meeting frequency (BMF) with mean of 19.13333 spread across 5 to 61 meetings in a year independent directors (BDIN) having mean of 2.775 between 1 to 7 members, female directors on the board (GD) is presented as dummy variable where 0 shows no female directors on the board and 1 if there is a female director on the board with mean 0.7333333. This is in line with prior studies (Khalifa et al., 2020; Martínez & Álvarez, 2019; Hasan et al., 2019 and Fariha et al., 2021).

Additionally, audit committee characteristics are represented by committee size (ACSZ) having mean of 4.141667 spread across 3 to 6 members, audit committee accounting, finance or judicial expertise (ACEX) with mean of 1.000 between 0 to 4 experts on audit committee, meeting frequency (ACMF) with mean of 8.058333 between 3 to 24 meetings in a year, independent directors of board presence in the committee (ACIN) with mean of 2 ranging from 1 to 3 members and female directors on the audit committee (ACGED) is shown as dummy variable where 0 indicates no female directors and 1 indicates presence of female directors on the committee with mean 0.4166667. This shares similarity to the studies of Hasan et al. (2019) and Meah et al. (2021) in Bangladesh and Oudat et al. (2021) in Bahrain and Meca et al. (2014) in Spain. Lastly, 5 (five) control variables have been used viz. bank size (FSZ) with mean of 11.53309 spread across 10.89836 and 12.26436, Debt-to-Equity ratio (LEV) with mean of 14.70106 between 7.252269 and 28.45074, whether audited by Big4 firms (AQ) shown as a dummy variable where 1 if yes and 0 otherwise, growth in deposits (GRT) with mean 11.20716 range from -5.63 to 60.8 percentage and Loan-to-deposit ratio (LDR) with mean 84.89725 between 64.3 to 109.97. This follows multitude of studies (Hasan et al., 2019; Saat, 2015; Ashari & Krismiaji, 2019 and Haddad et al., 2021).

Table 3: Descriptive Statistics

Variables	Mean	Std. Deviation	Minimum	Maximum
NIBT	9.602	0.266	8.745	10.164
TBQ	0.995	0.037	0.933	1.230
BDSZ	13.625	4.582	6	20
BDEX	2.075	2.242	0	11
BMF	19.133	8.339	5	61
BDIN	2.775	1.156	1	7
GD	0.733	0.444	0	1
ACSZ	4.142	0.882	3	6
ACEX	1.000	0.987	0	4
ACMF	8.058	3.174	3	24
ACIN	2.000	0.485	1	3
ACGED	0.417	0.495	0	1
FSZ	11.533	0.202	10.898	12.264
LEV	14.701	4.007	7.252	28.451
AQ	0.167	0.374	0	1
GRT	11.207	8.543	-5.63	60.8
LDR	84.897	7.092	64.3	109.97

4.2 Correlation matrix

The results of the study variable's correlation are summarized in Table 4. The Pearson pair-wise correlation test (Fariha et al., 2021; Charkrobarty & Bhattacharjee, 2016) has been used to investigate the relationship between the variables under study. Finding issues with multicollinearity between the variables under study is another benefit of correlation analysis. A test to determine whether or not the independent variables are correlated is called multicollinearity (Fariha et al., 2021). A high degree of multicollinearity suggests that the data collection has a collinearity issue. From the table, it can be seen that competence of the audit committee (ACEX) and competence of the board (BDEX) shows the highest correlation which is 81.23% at 1% significance level. It suggests that there is a very high positive association between the audit committee's and the board's competency. On the other hand, the lowest correlation is observed between board meeting frequency (BMF) and leverage (LEV) at -48.38% with 1% significance level. It suggests a negative medium association between leverage and board meetings, entailing that organizations that hold board meetings more frequently typically have lower leverage. It is worth mentioning that a majority of the study variables posits a weak correlation. As the highest correlation value is less than 0.9, it may be conferred that among the variables in the model exists no multicollinearity issue. (Molla et al., 2021)

Table 4: Correlation Matrix

	NIBT	TBQ	BDSZ	BDEX	BMF	BDIN	GD	ACSZ	ACEX	ACMF	ACIN	ACGED	FSZ	LEV	AQ	GRT	LDR
NIBT	1.000	-															
TBQ	-	1.000															
BDSZ	0.0875	-0.1567***	1.000														
BDEX	0.3746*	0.0703	0.2269**	1.000													
BMF	0.2030**	0.3284*	-0.3367*	0.0179	1.000												
BDIN	0.4323*	0.0898	0.4410*	0.4735*	0.3136*	1.000											
GD	-0.0214	0.1431	-0.0785	-0.2414*	0.1617***	0.1113	1.000										
ACSZ	0.1054	-0.1389	0.7327*	0.0031	-0.2299**	0.2376*	-0.0744	1.000									
ACEX	0.3333*	0.0589	0.1505	0.8123*	-0.0276	0.3241*	-0.1917**	-0.0482	1.000								
ACMF	0.2020**	0.1947**	-0.1817**	0.1623***	0.2486*	-0.0353	-0.0485	-0.1230	0.2655*	1.000							
ACIN	0.1525***	0.1484	0.2722*	0.0773	0.1558***	0.5247*	0.3121*	0.1768***	0.2281**	0.0928	1.000						
ACGED	-0.0360	-0.0053	-0.2417*	-0.1495	0.2063**	-0.0551	0.5096*	-0.0208	-0.2407*	0.1021	-0.0000	1.000					
FSZ	0.6614*	0.0571	-0.0307	0.5462*	0.1179	0.3034*	-0.2910*	-0.0599	0.5397*	0.2110**	-0.0768	-0.1719***	1.000				
LEV	-0.0206	-0.2597*	0.1669***	0.1335	-0.4838*	-0.0714	-0.2016**	-0.0015	0.1038	-0.3066*	-0.0977	-0.2551*	0.3393*	1.000			
AQ	0.2251**	0.4151*	-0.1299	0.0751	0.1625***	-0.0291	0.0674	0.0552	-0.0455	-0.0083	-0.1389	0.0302	0.0466	-0.1369	1.000		
GRT	0.0733	0.0878	-0.0050	0.0399	-0.0079	0.0040	0.0656	0.0981	-0.0980	0.0383	0.0649	0.2001**	-0.1884**	-0.0168	0.1261	1.000	
LDR	-0.0920	-0.0238	0.0297	-0.1626***	-0.0398	-0.1546***	-0.0623	0.0877	-0.1782***	-0.0461	-0.1790***	-0.1830**	-0.0121	0.2044**	0.0090	-0.0271	1.000

Significant at *1%, **5%, ***10% level of significance

TBQ - Tobin's Q Ratio; NIBT - Net Income Before Tax; BDSZ - Size of the board; BDEX - Competence of the Board; BMF - Frequency of Board Meetings; GD - Board Diversity; BDIN - Board Independence; ACSZ - Size of the Audit Committee; ACEX - Competence of the Audit Committee; ACMF - Frequency of Audit Committee Meetings; ACGED - Audit Committee Diversity; ACIN - Audit Committee Independence; FSZ - Firm Size; LEV - Leverage; AQ - Audit Quality; GRT - Deposit Growth; LDR - Loan-to-Deposit Ratio

4.3 Diagnostic test

4.3.1 Normality Test

The results of the normality test for residual data indicate that the data are regularly distributed in Figure 2 and do not exhibit any abnormalities.

(bin = 10, start = −.63052273, width = .09050531)

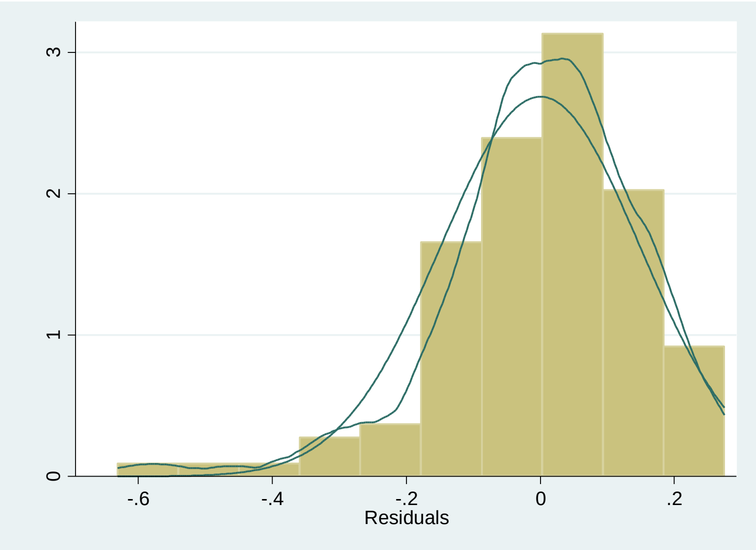

Figure 2: Normal distribution of residual

The identical result of the Jarque-Bera normality test (Saat, 2015; Salehi et al., 2017; Coleman & Biekpe, 2008; Onyekwerea & Babangidab, 2022) is also shown in Table 4, where the null hypothesis is accepted due to an insignificant p-value. As p-value is not sig. Accept null hypothesis, means data is normal. A P-value less than 0.05 is deemed to be statistically significant, meaning the null hypothesis should be rejected in such a case. A P-Value greater than 0.05 is not considered to be statistically significant, meaning the null hypothesis should not be rejected.

4.3.2 Autocorrelation Test

In order to verify that there is no serial autocorrelation, the study also performed the Wooldridge test for autocorrelation in line with prior studies (Hasan et al., 2019; Haddad et al., 2021; Salema, 2023). Because the p-value is negligible, the null hypothesis is accepted. Accordingly, P value is not sig. as null hypothesis

ACCEPTED, that means there is no serial correlation among independent variables. The results can be seen in Table 5.

Table 5: Test of normality and autocorrelation

Name of the Test	Outcome
Jarque-Bera normality test	Jarque-Bera normality test: 68.42 Chi(2) 1.4e-15 Jarque-Bera test for Ho: normality
Wooldridge test for autocorrelation in panel data	H_0: no first-order autocorrelation F(1, 19) = 3.089 Prob > F = 0.0949

4.4 Regression model analysis

Two (2) components of corporate governance, board characteristics (Size of the board, Competence of the Board, frequency of board meetings, board diversity and board independence) and audit committee characteristics (audit committee size, Competence of the Audit Committee, frequency of audit committee meetings, audit committee diversity and audit committee independence) have been regressed against model 1 and model 2, which are two proxies for bank performance: Net income before tax (NIBT) and Tobins' Q (TBQ). Table 6 shows the adjusted R2 value for the two models that is 0.2424 and 0.6088 accordingly, significant at 1% level. This indicates that about 24.42% of the variation in the bank performance measured by TBQ can be explained by corporate governance proxies in model 1 and 60.88% of the variation in bank performance measured by NIBT in model 2. From table 6, amongst all the independent variables in model 1 and model 2, only audit committee independence has a positive and significant relationship with TBQ. This means that for the sample banks used in the convenience sample, more independent directors on the audit committee results in better bank performance. This supports extant study findings of different scholars (Nawafly & Alarussi, 2016; Ashari & Krismiaji, 2019; Alqatamin, 2018). Hence, H2e is approved. However, it is to be noted that board size, competence of the board, frequency of board meetings, and board diversity have positive relationship with TBQ but it is not statistically significant in Model 1. Similar findings are reported in some extant studies when these variables were used as proxies of firm performance in different applications (Onyekwerea & Babangidab, 2022; Rashid & Pervin, 2019; Alqatamin, 2018; Meah et al., 2021). Hence, these results do not support their hypotheses in model 1. Conversely, all of board independence, size of the audit committee, competence of the audit committee, frequency of audit committee meetings and audit committee diversity has negative but insignificant relationship with TBQ. Similar findings are also found in some extant literature (Johl et al., 2015; Khalifa et al., 2020; Hasan et al., 2019, Fariha et al., 2021). Hence, their hypotheses are rejected in Model 1.

From the control variables, only audit quality has a significant positive relationship with TBQ in model 1. This is supported by extant literature (Meah et al., 2021; Ashari & Krismiaji, 2019; Rahman et al., 2019). Other control variables do not posit statistically significant results. In model 2, all of board size, board independence, board diversity, frequency of audit committee meetings and audit committee independence have a positive relationship with NIBT but it not statistically significant. Scholars have presented similar findings in the academic literature (Onyekwerea & Babangidab, 2022; Rashid & Pervin, 2019; Hasan et al., 2019; Khalifa et al., 2020; Hasan et al., 2019). These results do not support their hypotheses in model 2. Conversely, all of competence of the board, frequency of board meetings, size of the audit committee, competence of the audit committee and audit committee diversity has negative relationship with NIBT but it is not significant in model 2. (Hasan et al., 2019; Meah et al., 2021, Khalifa et al., 2020). Hence, all of their relative hypotheses are not supported in model 2. From the control variables, firm size, audit quality and deposit growth have positive and significant effect on NIBT while leverage has a significant and negative effect in model 2.

Table 6: Regression Results

$TBQ_{it} = \beta_o + \beta_1 BDSZ_{it} + \beta_2 BDEX_{it} + \beta_3 BMF_{it} + \beta_4 GD_{it} + \beta_5 BDIN_{it} + \beta_6 ACSZ_{it} + \beta_7 ACEX_{it} + \beta_8 ACMF_{it} + \beta_9 ACGED_{it} + \beta_{10} ACIN_{it} + \beta_{11} FSZ_{it} + \beta_{12} LEV_{it} + \beta_{13} AQ_{it} + \beta_{14} GRT_{it} + \beta_{15} LDR_{it} + \varepsilon_{it}$ (1)

$NIBT_{it} = \beta_o + \beta_1 BDSZ_{it} + \beta_2 BDEX_{it} + \beta_3 BMF_{it} + \beta_4 GD_{it} + \beta_5 BDIN_{it} + \beta_6 ACSZ_{it} + \beta_7 ACEX_{it} + \beta_8 ACMF_{it} + \beta_9 ACGED_{it} + \beta_{10} ACIN_{it} + \beta_{11} FSZ_{it} + \beta_{12} LEV_{it} + \beta_{13} AQ_{it} + \beta_{14} GRT_{it} + \beta_{15} LDR_{it} + \varepsilon_{it}$ (2)

Variables	Expected Sign	Model 1_TBQ as DV	Model 2_NIBT as DV
BDSZ	+	0.0010822	0.0080696
		(0.0013405)	(0.0069999)
BDEX	+	0.0014185	-0.0108708
		(0.0030533)	(0.0159439)
BMF	+	0.000634	-0.0041477
		(0.000528)	(0.002757)
BDIN	+	-0.0050793	0.0258716
		(0.0049302)	(0.0257449)
GD	+	0.0088562	0.0647907
		(0.0092326)	(0.0482114)
ACSZ	+	-0.0093262	-0.0149739
		(0.0059048)	(0.0308342)
ACEX	+	-0.0040552	-0.0320597
		(0.0065785)	(0.0343521)
ACMF	-	0.0007463	-0.0009991
		(0.0011451)	(0.0059798)
ACIN	+	**0.0181584***	0.0730355
		(0.0092446)	(0.048274)
ACGED	+	-0.0099364	-0.0223378
		(0.0083054)	(0.0433694)
FSZ		0.0310372	**1.246964*****
		(0.0248781)	(0.1299099)
LEV		-0.0018739	**-0.0230395*****
		(0.0011278)	(0.0058894)
AQ		**0.0381465*****	**0.1178564****
		(0.0087974)	(0.0459387)
GRT		0.0003452	**0.0066579*****
		(0.0003806)	(0.0019876)
LDR		0.0001978	-0.000248
		(0.0004601)	(0.0024028)
Constant		0.6194827	-4.675396
		(0.2787348)	(1.455515)
R-squared		**0.3379**	**0.6581**
Observations		120	120
No. of Company		20	20
Prob > F		**0.0001**	**0.0000**

Standard errors in parentheses

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

TBQ - Tobin's Q Ratio; NIBT - Net Income Before Tax; BDSZ - Size of the board; BDEX - Competence of the Board; BMF - Frequency of Board Meetings; GD - Board Diversity; BDIN - Board Independence; ACSZ - Size of the Audit Committee; ACEX - Competence of the Audit Committee; ACMF - Frequency of Audit Committee Meetings; ACGED - Audit Committee Diversity; ACIN - Audit Committee Independence; FSZ - Firm Size; LEV - Leverage; AQ - Audit Quality; GRT - Deposit Growth; LDR - Loan-to-Deposit Ratio

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

5.1 Conclusion

This study aims to delve into the relationship between the qualities of boards and audit committees and the financial performance of Bangladeshi listed banks, considering the issues surrounding bank governance and the extant studies in this field. Accordingly, it looks at how the size, experience, frequency of meetings, independence, diversity, and independence of the board and audit committee as proxies of board and audit qualities affect the market valuation and profitability of Dhaka Stock Exchange listed Bangladeshi banks. The paper examined the effects of board and audit committee characteristics on the DSE-listed Bangladeshi banks' financial performance. These associations were investigated using a multiple panel regression model with data from sample banks' annual reports. Pearson paired correlation matrix, Normal distribution of residual, Jarque-Bera test and Wooldridge test were used to check for multicollinearity, normality and autocorrelation in panel data as diagnosis and no such issues were found in the study variables. In summary, the only factor that significantly positively affects Tobin's Q, a measure of superior capital market performance indicator, is audit committee independence. This backs the stakeholder theory emphasis of our study. For Tobin's Q, other attributes of the board and audit committee did not reach statistical significance. There was no statistically significant association between any of the board or audit committee features and net income before taxes. This results in only one hypothesis of the study to be supported. These results imply that the qualities of the board and audit committee might not be very indicative of the financial success of Bangladeshi banks that are listed on the DSE.

5.2 Research Implications

The study contributes to extant literature on corporate governance and suggests Bangladesh's regulatory bodies to stress the value of having independent directors on audit committees. Independent audit committees serve as a shield against financial reporting that is opportunistic. This keeps creditors and depositors safe from unintentionally making investments in dubious banks. Moreover, investment and economic expansion are fostered when the public has confidence in the soundness of the financial sector. The preservation of public confidence is greatly aided by independent audit committees.

5.3 Suggestions for Future Research

Further research may explore alternative indicators of corporate governance such as ownership structure and connections of board members in national politics or alternative use of proxies of bank performance such as ROA and ROE may be favorable. Additionally, future scholars may take a larger bank sample over an extensive study period to make the findings of the study more robust.

REFERENCES

Al-Absy, M., & Hasan, M. (2023). Impact of the board of directors' characteristics on firm performance: A case of Bahraini listed firms. *Problems and Perspectives in Management*, *21*(1), 291–301. https://doi.org/10.21511/ppm.21(1).2023.25

Al-Jalahma, A. (2022). Impact of audit committee characteristics on firm performance: Evidence from Bahrain. *Problems and Perspectives in Management*, *20*(1), 247–261. https://doi.org/10.21511/ppm.20(1).2022.21

Al-Matari, E. M., Al-Swidi, A. K., Fadzil, F. H., & Al-Matari, Y. A. (2012). The Impact of board characteristics on Firm Performance: Evidence from Nonfinancial Listed Companies in Kuwaiti Stock Exchange. *International Journal of Accounting and Financial Reporting*, *2*(2), 310. https://doi.org/10.5296/ijafr.v2i2.2384

Alqatamin, R. M. (2018). Audit Committee Effectiveness and Company Performance: Evidence from Jordan. *Accounting and Finance Research*, *7*(2), 48. https://doi.org/10.5430/afr.v7n2p48

Ashari, S., & Krismiaji, K. (2020). Audit Committee Characteristics and Financial Performance: Indonesian Evidence. *EQUITY*, *22*(2), 139–152. https://doi.org/10.34209/equ.v22i2.1326

Bathula, H. (2015). *Board Characteristics and Firm Performance: Evidence From New Zealand*.

Bhattacharjee, S., & Bhattacharjee, S. (2016). *Board Characteristics and Firm Performance Evidence from Listed Companies in Bangladesh*.

Brahma, S., Nwafor, C., & Boateng, A. (2020). Board gender diversity and firm performance: The UK evidence. *International Journal of Finance & Economics*, *26*(4), 5704–5719. https://doi.org/10.1002/ijfe.2089

Chijoke-Mgbame, A. M., Boateng, A., & Mgbame, C. O. (2020). Board gender diversity, audit committee and financial performance: evidence from Nigeria.

Accounting Forum, *44*(3), 262–286. https://doi.org/10.1080/01559982.2020.1766280

Darmadi, S. (2011). Board diversity and firm performance: The Indonesian evidence. *Corporate Ownership and Control*, *8*(2), 450–466. https://doi.org/10.22495/cocv8i2c4p4

De Silva, O., & Hewage, Y. (2022). THE IMPACT OF BOARD SIZE AND AUDIT COMMITTEE CHARACTERISTICS ON FIRM'S FINANCIAL PERFORMANCE: EVIDENCE FROM LICENSED COMMERCIAL BANKS IN SRI LANKA ARF INDIA. *Global Journal of Accounting and Economy Research*, *3*(1), 5–34. https://doi.org/10.46791/gjaer.2022.v03i01.02

Fariha, R., Hossain, Md. M., & Ghosh, R. (2021). Board characteristics, audit committee attributes and firm performance: empirical evidence from emerging economy. *Asian Journal of Accounting Research*, *7*(1), 84–96. https://doi.org/10.1108/ajar-11-2020-0115

García-Meca, E., García-Sánchez, I.-M., & Martínez-Ferrero, J. (2015). Board diversity and its effects on bank performance: An international analysis. *Journal of Banking & Finance*, *53*, 202–214. https://doi.org/10.1016/j.jbankfin.2014.12.002

Haddad, A., El Ammari, A., & Bouri, A. (2021). Impact of Audit Committee Quality on the Financial Performance of Conventional and Islamic Banks. *Journal of Risk and Financial Management*, *14*(4), 176. https://doi.org/10.3390/jrfm14040176

Islam, M., Shahriar, K., & Lee, Y. (2022). The impact of board characteristics on firm's financial performance: A study on non-bank financial institutions of Bangladesh. *International Journal of Science and Business*, *12*(1). https://doi.org/10.5281/zenodo.6655003

Jermias, J., & Gani, L. (2014). The impact of board capital and board characteristics on firm performance. *The British Accounting Review*, *46*(2), 135–153. https://doi.org/10.1016/j.bar.2013.12.001

Johl, S. K., Kaur, S., & Cooper, B. J. (2015). Board Characteristics and Firm Performance: Evidence from Malaysian Public Listed Firms. *Journal of Economics, Business and Management*, *3*(2), 239–243. https://doi.org/10.7763/joebm.2015.v3.187

Kanakriyah, R. (2021). The Impact of Board of Directors' Characteristics on Firm Performance: A Case Study in Jordan. *Journal of Asian Finance*, *8*(3), 341-0350. https://doi.org/10.13106/jafeb.2021.vol8.no3.0341

Khalifa H, A. M. G., Natoli, R., & Zuhair, S. (2020). The Impact of Board and Audit Characteristics on the Financial Performance of UAE Listed Firms. *International Journal of Accounting and Financial Reporting*, *10*(2), 60. https://doi.org/10.5296/ijafr.v10i2.16481

Kyereboah-Coleman, A., & Biekpe, N. (2007). The relationship between board size, board composition, CEO duality and firm performance: Experience from Ghana. *Corporate Ownership and Control*, *4*(2), 114–122. https://doi.org/10.22495/cocv4i2p11

Masum, M., & Khan, M. (2019). Impacts of Board Characteristics on Corporate Performance: Evidence from Bangladeshi Listed Companies. *International Business and Accounting Research Journal*, *3*(1), 47–57. https://doi.org/10.15294/ibarj.v3i1.54

Meah, M. R., Sen, K. K., & Ali, Md. H. (2021). Audit Characteristics, Gender Diversity and Firm Performance: Evidence from a Developing Economy. *Indian Journal of Corporate Governance*, *14*(1), 48–70. https://doi.org/10.1177/09746862211007244

Muttakin, M., & Ullah. (2012). *CORPORATE GOVERNANCE AND BANK PERFORMANCE: EVIDENCE FROM BANGLADESH*.

Nawafly, A., Saleh Alarussi, A., & Intan, T. (2016). *Impact of Board's Characteristics, Audit Committee Characteristics Over Firm Performance*.

Onyekwere, S. C., & Babangida, N. I. (2021). Board Diversity and Firm Performance: Panel Data Evidence from 12 Selected Commercial Banks in Nigeria. *Daengku:*

Journal of Humanities and Social Sciences Innovation, *2*(1), 28–53. https://doi.org/10.35877/454ri.daengku587

Orjinta, H., & Evelyn, N. (2018). EFFECT OF AUDIT COMMITTEE CHARACTERISTICS ON PERFORMANCE OF NON-FINANCIAL FIRMS: EVIDENCE FROM A RECESSED ECONOMY. *International Journal of Innovation and Applied Studies*, *24*(1), 289–298.

OUDAT, M. S., ALI, B. J. A., & QESHTA, M. H. (2021). Financial Performance and Audit Committee Characteristics: An Empirical Study on Bahrain Services Sector. *Journal of Contemporary Issues in Business and Government*, *27*(02). https://doi.org/10.47750/cibg.2021.27.02.453

Pervin, R. (2019). *Board Characteristics and Firm Performance: Evidence from Listed Banking Institutions of Bangladesh*.

Pucheta-Martínez, M. C., & Gallego-Álvarez, I. (2019). Do board characteristics drive firm performance? An international perspective. *Review of Managerial Science*, *14*(6), 1251–1297. https://doi.org/10.1007/s11846-019-00330-x

Rahman, Md. M., Meah, M. R., & Chaudhory, N. U. (2019). The Impact of Audit Characteristics on Firm Performance: An Empirical Study from an Emerging Economy. *The Journal of Asian Finance, Economics and Business*, *6*(1), 59–69. https://doi.org/10.13106/jafeb.2019.vol6.no1.59

Saat, B. salisu kallamu N. A. M. (2015). *Asian Review of Accounting*.

Salehi, M., Tahervafaei, M., & Tarighi, H. (2018). The effect of characteristics of audit committee and board on corporate profitability in Iran. *Journal of Economic and Administrative Sciences*, *34*(1), 71–88. https://doi.org/10.1108/jeas-04-2017-0017

Salema, S. M. K. (2023). Ownership Structure, Board Characteristics and Firm Performance: Evidence from Bangladesh. *International Journal of Economics and Finance*, *15*(3), 35. https://doi.org/10.5539/ijef.v15n3p35

Sobhan, R. (2021). Board Characteristics and Firm Performance: Evidence from the Listed Non-Banking Financial Institutions of Bangladesh. *International Journal of Management, Accounting and Economics*, *8*(1), 2383–2126.

Tariq Hasan, M., Shahansha Molla, M., & Khan, F. (2019). *Effect of Board and Audit Committee Characteristics on Profitability: Evidence from Pharmaceutical and Chemical Industries in Bangladesh*.

Dilrangi, A., Udayarathna, R., Pathiraja, M., Madhubhashini, P., & Bandara, D. (2018). *THE EFFECT OF LEVEL OF DEPOSITS ON FINANCIAL PERFORMANCE - A STUDY ON LISTED COMMERCIAL BANKS IN SRI LANKA*.

Yahya, A. (2021). Impact Of Non-Performing Loans, Loan to Deposit Ratio and Education Diversity on Firm Performance of Indonesia Banking Sectors. *REVIEW of INTERNATIONAL GEOGRAPHICAL EDUCATION*, *11*(3). https://doi.org/10.48047/rigeo.11.3.10

Hasan, M. T. (2020). The effect of IFRS adoption on earnings management and the moderating role of corporate governance: evidence from Bangladesh. Doctor of Philosophy Doctoral.

Hasan, M. T., & Chakraborty, M. (2011). Evaluation of Auditors' Compliance with ISAs: Evidence of Bangladesh. hypothesis, 21.

Hasan, M. T., Hossain, M. K., Rekabder, M. S., Molla, M. S., & Ashif, A. S. M. (2022). IFRS adoption and real earnings management in Bangladesh: The role of board characteristics. Cogent Business & Management, 9(1), 2094587.

Hasan, M. T., Molla, M. S., & Khan, F. (2019). Effect of board and audit committee characteristics on profitability: Evidence from pharmaceutical and chemical industries in Bangladesh. Finance & Economics Review, 1(1), 64-76.

Hasan, M. T., & Rahman, A. A. (2017). IFRS Adoption and earnings management: A review and justification of earnings management model for developing countries. ELK ASIA PACIFIC JOURNAL OF FINANCE AND RISK MANAGEMENT, 8(3), 43-60.

Hasan, M. T., & Rahman, A. A. (2019). Conceptual framework for IFRS adoption, audit quality and earnings management: The case of Bangladesh. International Business and Accounting Research Journal, 3(1), 58-66.

Hasan, M. T., & Rahman, A. A. (2020). The role of corporate governance on the relationship between IFRS adoption and earnings management: Evidence from Bangladesh. International Journal of Financial Research, 11(4), 329-345.

Hasan, M. T., Rahman, A. A., Sumi, F. R., Chowdhury, A., & Miraz, M. (2020). The moderating role of audit quality on the relationship between IFRS adoption and earnings management: Evidence from Bangladesh. International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), 10(03), 9141-9154.

Hasan, M. T., Rekabder, M. S., Hasan, M. M. U. H., & Kuri, P. K. (2023). Board influence on accruals management and the role of ownership structure: Evidence from Bangladesh. Asian Economic and Financial Review, 13(8), 559-575.

Hasan, M. T., Ullah, M. E., & Huq, M. M. (2011). Credit Rating: A Tool for Evaluating Bank Performance. IST Journal on Business and Techonology, 3(1-2), 184-197.

Mahmud, M. T., Hasan, M. T., & Ashif, A. S. M. (2014). Determinants of job satisfaction: A comparative study in the banking sector of Bangladesh. International Journal of Economics and Empirical Research (IJEER), 2(1), 22-28.

Molla, M. S., Hasan, M. T., Miraz, M. H., Azim, M. T., & Hossain, M. K. (2021). The influence of directors' diversity and corporate sustainability practices on firm performance: Evidence from Malaysia. The Journal of Asian Finance, Economics and Business, 8(6), 201-212.