Corporate Governance Mechanism and Financial Performance of Quoted Deposit Money Bank in Nigeria

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Abstract— The study examined how corporate governance mechanisms impact the financial performance of Nigeria's Quoted Deposit Money Bank, with a specific focus on the effect of board ownership. Given the study's scope, secondary data from 2014 to 2023 was utilized. To characterize the variables, descriptive statistics, a correlation matrix, and a normality test were conducted. A robust approach was applied to analyze the shortterm behavior of the model after confirming variable stationarity. The data was further analyzed using modified ordinary least squares (MOLS). Results indicated that board ownership had a negative but insignificant relationship with the financial performance of deposit money banks in Nigeria. Return on Assets (ROA) showed a positive and significant correlation with the performance of deposit money banks in Nigeria. Similarly, Return on Equity (ROE) and Tobin's Q were also positively and significantly related to the performance of these banks. The profit after tax margin (PATM) exhibited a positive and significant correlation as well. Additionally, the interaction between ROA and board size had a positive and significant effect. However, there was no significant impact observed from the interaction between ROA and board ownership on the performance of deposit money banks in Nigeria. As a result, the study suggests that when it comes to board size, organizations should carefully consider the membership of their boards to maintain the best balance of representation and effectiveness. While larger boards can bring a range of perspectives, they may also lead to challenges like added complexity and slower decision-making. Therefore, banks are encouraged to keep boards large enough to benefit from diverse expertise but not so large that it reduces efficiency. Regular evaluations of board composition and performance can help maintain this balance.

Index Terms— corporate governance, financial performance, deposit money bank.

1. Introduction

A. Background to the Study

Corporate governance is essential in influencing the performance and long-term viability of companies worldwide, especially in the banking sector, which is crucial for economic stability. Recent research highlights the need for strong corporate governance structures to ensure that organizations comply with legal, regulatory, and ethical standards. Effective corporate governance is often linked to better financial performance, increased investor confidence, and reduced

B. Statement of the Problem

The banking sector in Nigeria continues to face significant challenges in achieving optimal financial performance despite various regulatory and institutional reforms aimed at improving corporate governance. One of the primary problems is the inconsistent application of corporate governance practices across listed deposit money banks, which affects their financial outcomes. Key governance mechanisms such as board size, board ownership, board independence, and gender diversity are often not fully aligned with best practices, leading to inefficiencies and suboptimal performance (Aliyu & Abubakar 2023). Despite efforts by the Central Bank of Nigeria (CBN) to enhance corporate governance, the performance of many banks remains below expectations, as reflected in metrics such as return on assets (ROA), return on equity (ROE), Tobin's Q, and profit after tax margin (Herbert & Agwor, 2021).

C. Research Objectives

The primary goal of this study is to examine how corporate governance affects the financial performance of publicly listed deposit money banks in Nigeria. Specifically, the study seeks to:

- 1. Assess the impact of board size on the financial performance of quoted listed deposit money banks in Nigeria.
- 2. Identify how board ownership influences the financial performance of these banks.
- 3. Investigate the role of board independence in affecting the financial performance of quoted deposit money banks in Nigeria.
- 4. Evaluate the impact of board gender diversity on the financial performance of these banks.

agency problems (Almashhadani & Almashhadani, 2022). The banking industry, with its high degree of regulatory oversight, has been a focal point for corporate governance reforms, especially in developing economies like Nigeria. In this regard, issues such as board size, board independence, board ownership, and gender diversity on boards have garnered attention due to their potential impact on firm performance.

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D. Research Questions

This study seeks to address these research questions:

- 1. How does board size impact the financial performance of quoted listed deposit money banks in Nigeria?
- 2. What effect does board ownership have on the financial performance of these banks?
- 3. In what ways does board independence influence the financial performance of quoted deposit money banks in Nigeria?
- 4. To what extent does board gender diversity affect the financial performance of these banks?

E. Statement of Hypotheses

The following null hypotheses are proposed for this study:

 H_{01} : Board size has no significant impact on the financial performance of quoted deposit money banks in Nigeria.

 H_{02} : Board ownership has no significant influence on the financial performance of quoted deposit money banks in Nigeria.

 H_{03} : Board independence has no significant effect on the financial performance of quoted deposit money banks in Nigeria.

 H_{04} : Board gender diversity has no significant impact on the financial performance quoted of deposit money banks in Nigeria.

F. Scope of the Study

This study focuses on the corporate governance practices and financial performance of listed deposit money banks in Nigeria. The contextual scope of the study centers around the relationship between corporate governance variables, such as board size, board ownership, board independence, and board gender diversity, and how these governance mechanisms influence bank performance. The Nigerian banking sector was chosen due to its critical role in the economy and the increasing emphasis on governance reforms in this sector. The study seeks to contribute to the growing body of knowledge on the link between corporate governance and financial performance in emerging markets like Nigeria.

G. Conceptual Review

In this section of the research, we examine the concepts of corporate governance features with dependent variable and financial performance of Quoted deposit money bank.

H. Theoretical Review

There are so many theories that explain the relationship between corporate governance and firm performance. However, for the purpose of this study, we discuss the agency theory, the stewardship theory, and the resource dependency theory.

I. Theoretical Framework

This study is based on Agency Theory. Agency Theory provides a lens through which to analyze the intricate dynamics between stakeholders, particularly shareholders and agents like managers or board members, and their impact on organizational performance, notably within the banking sector (Almashhadani

& Almashhadani, 2022). One crucial aspect scrutinized by agency theory is board size. The theory suggests that larger boards may grapple with coordination challenges and free-rider effects, potentially leading to sluggish decision-making processes.

J. Empirical Review

Jite, Christine, and Joseph (2024) studied "corporate governance and organizational performance in Nigerian banking industry". The authors looked at the connection between commercial banks' organizational performance and corporate governance in Nigeria's Rivers State. Twenty-two (22) of these universities were studied using a cross-sectional research approach. The study's population consisted of management personnel who responded to the survey. In order to ascertain the moderating effect of organizational culture on the relationship between the predictor and criterion variables, they used partial correlation for the multivariate level analysis. They also collected and analyzed seventy-nine (79) copies of the questionnaire from the participants. The statistical tool Kendall's tub correlation coefficient was used to determine the relationship existing between the variables, and the p-value obtained was used to test hypotheses developed for the study. The results showed that organizational culture significantly moderates the relationship between the variables and that there is a significant relationship between the corporate governance dimensions board reputation and ability and organizational performance metrics, such as customer and employee retention.

2. Methodology

In this section, this study will delve into the fundamental methodologies, processes, and protocols necessary for conducting the study. It will encompass an in-depth examination of the research framework, the methodology for sample selection, the approach to data analysis, and the specifications of any models employed.

A. Theoretical Framework

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B. Research Design

The ex-post facto research design is used in this investigation. This is due to the fact that the data was obtained from a secondary source that the researcher is unable to alter. In employing the ex-post facto research design for this study, the approach hinges on analyzing data collected from a secondary source, which inherently precludes the researcher

from directly manipulating the variables under investigation. Ex-post facto research, also known as retrospective or correlational research, involves the examination of existing data to discern relationships between variables without intervening or controlling for them.

C. Population of the Study

The population of this study includes all of Nigeria's listed deposit money banks. As of December 2023, the Nigerian Exchange Group (NGX) lists 24 deposit money banks. These banks represent a critical segment of Nigeria's financial system, playing a central role in the country's economic activities by facilitating savings, investments, and the efficient allocation of resources. Because these banks are closely regulated and must adhere to governance frameworks established by regulatory agencies like the Securities and Exchange Commission (SEC) and the Central Bank of Nigeria (CBN), focusing on them offers a thorough overview of corporate governance practices within the banking industry.

D. Sampling Technique and Sample of the Study

This study used a filtering sampling technique since banks were included in the sample based on certain selection criteria. These criteria include the banks' listing on the Nigerian Exchange Group market from 2014 to 2023, as well as access to their annual financial reports during that time period. Furthermore, freshly listed banks will be omitted from the analysis. To summarize, only banks with all relevant data from their continuous existence during the study period were included in the sample. The total sample size includes 11 specified deposit money banks.

E. Sources of Data Collection

This study uses a secondary source of data gathering since the data will be gathered from stock exchange fact books and connected banks' annual financial reports for the periods. In this study we will employ secondary data source which has been justified by recent studies of Jayeola, Agbatogun & Akinrinlola (2017).

F. Model of Specification

The study is modeled after the work of Olaiya (2021) with slight modifications. The econometric model of this study is specified below:

ED=
$$\beta$$
o + β 1+ β ROA + β 2+ ROE (1)

Where:

ROA

ROE

TOBIN Q

PAMT

€t= error Terms

 β o = Constant

 β 1 and β 2 = constant of the respective variables.

T = Time

However, the study adapts the scholarly work of Olaiya (2021) by employing additional capital flight variables such as remittance outflow and other development assistance outflow,

Where:

ROA = Return on assets

ROE = Return on equity

TOBQ = Tobin Q

PATM = Profit after Tax margin

BODS = Board size

OWNS = Ownership structure

BODI = Ownership Insurance

BODG = Board gender diversity

EAPS = Earnings per Share

Putting equators (1) in an econometric form, it yields a submodel which ROA it + β 2 + ROEit + β 3+ TOBQit+ β 4 PATMit + β 5 BODS it + ϵ it (2)

+ bs bods it +eit

Table 1
Definition of research variables, measurement and Apriori expectation

S.No.	Variables	Measurements	Sources	Apriori Sign
Depen	dent Variable			
1	Return on Asset	Return on asset is measured as the ratio of profit after tax to total asset	Mayowa, Olusola & Olaiya (2021)	
2	Return on Equity	Return on asset is measured as the ratio of profit after tax to total equity	Naseem, Xiaoming, & Rehman (2017)	
3.	Tobin Q	Tobin's Q measures as the ratio of a firm's market value to the replacement cost of its assets.	Mayowa, Olusola & Olaiya (2021)	
4.	Profit after Margin	Profit after tax is divided by gross profits to calculate the profit before tax margin as a percentage.	Naseem, Xiaoming, &Rehman (2017)	
Indepe	endent Variables			
1	Board Size	A corporation's board size is calculated by adding up all of its directors, including the chairman, vice chairman, chief executive officer, managing director, executive directors, non-executive directors, and independent directors, but not the company secretary.	Mayowa, Olusola & Olaiya (2021)	+-
2	Board Gender Diversity	Board diversity in % is calculated by dividing the number of female directors by the overall board size.	Naseem, Xiaoming, & Rehman (2017)	+
3	Ownership Structure	The ownership structure in percentages is calculated by dividing directors' direct and indirect holdings by the outstanding shares.	Naseem, Xiaoming, &Rehman (2017)	+-
4	Board Independence	Board independence is calculated as the ratio of independent directors to total directors.	Olayiwola (2018)	+-
Contro	ol Variable			
5	Earnings Per share	Earnings Per share is measured as profit after tax to outstanding shares		

Source: Author's Compilation (2024)

Where:

 $\beta 0$ = Constant Term or intercept

 β 1- β 5 = Coefficient of the repressors

BODI = Board Independent

T = Current Time

€it = Scholastic disturbance (or error) term. it is assumed to normally and independent distributed with zero mean and constant variable representing all explanatory variable captured in Nigeria

3. Analysis of Results and Discussion of Findings

The dataset for this investigation is shown in Appendix B. However, the study conducts preliminary pre-regression analysis, such as descriptive statistics, correlation matrix, and normality test, and the findings are presented below.

A. Descriptive Analyses

The descriptive statistics for the relevant explanatory and dependent variables are examined in this study. The mean, standard deviation, maximum, and minimum of each variable are analyzed. The study's descriptive statistics are shown in Table 2 below.

Descriptive statistics								
Variable Obs		Mean	Std. Dev.	Min	Max			
Roa	110	2.003	1.204	.36	5.62			
Roe	110	15.211	6.631	2.62	32.08			
Tobq	110	2.36	1.501	.3	6.56			
Patm	110	28.583	17.951	3.82	69.88			
Bods	110	13.8	3.352	6	21			
Bown	110	17.243	13.729	0	44			
Bodi	110	62.096	15.236	18.75	93.75			
Bogd	110	21.138	13.216	0	71.43			
Eaps	110	2.892	2.193	.24	8.24			

Source: Author (2024)

The result from the descriptive statistics shows that the average Return on Asset (ROA) of approximately 2.003 suggests that, on average, companies are able to generate a 2% return on their assets, though there is considerable variability among firms. Similarly, the Return on Equity (ROE) averaging indicates a decent return on shareholder equity, although this too varies widely across the sample. The Tobin O (TOBO) averaging implies that, on average, companies are achieving a return of approximately times their initial investment, reflecting varying degrees of efficiency in capital utilization. Moreover, the Profit After Tax Margin (PATM) averaging 28.583% indicates that, on average, companies retain around of their revenue as profit after taxes, suggesting varying levels of profitability and cost management strategies among the firms.

B. Method of Data Analysis

Regression analysis, correlation, and descriptive statistics were used to examine the secondary data that was gathered. Descriptive statistics were used to assess the data's mean, maximum, minimum, and standard deviation as well as to determine whether the data was normal. By giving less weight to extreme values, robust regression seeks to produce estimates that are more stable and dependable than ordinary least squares (OLS) regression, which can be quite sensitive to such outliers. This makes it particularly useful in financial and corporate governance studies, where data irregularities such as extreme performance fluctuations or governance discrepancies may occur.

C. Data Analyses

Since the data are not normally distributed, the study initially uses the spearman rank correlation to test for a relationship between the independent and dependent variables. The table below displays the outcome:

D. Correlation Analysis

The Spearman Rank Correlation Coefficient (correlation matrix) was used in the study to examine the relationship between the variables, and the table below shows the findings.

The relationship between the corporate governance and bank performance proxies used in this study is displayed in the above table. The table specifically demonstrates a positive relationship between the dependent variable of return on asset, which is a measure of bank performance, and the independent variables of board size, board ownership, board gender diversity, and the control variable of earnings per share. However, the outcome demonstrates that, when expressed in terms of return on asset across the study period, the independent variable of board independence has a negative correlation with the dependent variable of bank performance.

E. Discussions of Findings

1) Board Size and Financial Performance of Quoted Deposit Money Bank

According to this study, bank performance, specifically, return on assets and profit after tax margin, is barely impacted negatively by board size. However, the results show that during the study period, the board's size had a statistically insignificant positive effect on bank performance as measured by return on equity and Tobin O. According to the results, the performance of the bank as measured by return on assets and profit after tax

Table 3

Correlation analyses									
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) roa	1.000								
(2) roe	0.935	1.000							
(3) tobq	0.934	0.859	1.000						
(4) patm	0.902	0.919	0.839	1.000					
(5) bods	0.108	0.176	0.121	0.079	1.000				
(6) bown	0.483	0.355	0.488	0.314	-0.043	1.000			
(7) bodi	-0.484	-0.503	-0.483	-0.417	-0.593	-0.204	1.000		
(8) bogd	0.079	0.150	0.146	0.239	0.219	-0.062	-0.211	1.000	
(9) eaps	0.793	0.845	0.738	0.926	0.026	0.245	-0.373	0.221	1.000

Source: Author (2024)

Table	e 4
:	

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	OLS-ROA	Robust-ROA	OLS-ROE	Robust-ROE	OLS-TOBQ	Robust-TOBQ	OLS-PATM	Robust-PATM
Bods	0.014	-0.002	0.281	0.249	0.010	0.007	-0.157	-0.087
	(0.669)	(0.955)	(0.110)	(0.176)	(0.818)	(0.833)	(0.620)	(0.800)
Bown	0.031***	0.019***	0.094**	0.079**	0.039***	0.020***	0.124	0.108
	(0.000)	(0.002)	(0.010)	(0.037)	(0.000)	(0.005)	(0.059)	(0.125)
Bodi	-0.009	-0.011	-0.055	-0.059	-0.012	-0.017**	0.018	-0.010
	(0.270)	(0.117)	(0.188)	(0.180)	(0.243)	(0.043)	(0.813)	(0.905)
Bogd	-0.002	-0.006	-0.013	-0.022	0.005	-0.003	0.170**	0.148**
_	(0.787)	(0.362)	(0.730)	(0.574)	(0.601)	(0.694)	(0.013)	(0.045)
Eaps	0.329***	0.284***	2.120***	2.181***	0.381***	0.474***	7.102***	7.006***
•	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Intercept	0.913	1.559	7.293	8.158	1.105	1.675	3.361	4.959
•	(0.352)	(0.073)	(0.155)	(0.131)	(0.386)	(0.095)	(0.716)	(0.619)
Observations	70	70	70	70	70	70	70	70
\mathbb{R}^2	0.656	0.619	0.691	0.672	0.626	0.750	0.861	0.838
VIF:	1.40		1.40		1.40		1.40	
Hettest	16.06{0.000}		4.61{0.032}		22.55 {0.000}		8.21 {0.004}	

Notes: p-values are in parentheses. *** p<.01, ** p<.05

Source: Author (2024)

margin throughout the study period will not be significantly impacted by the addition of one more board member. Nevertheless, the findings suggest that adding one more member to the board will have a negligible impact on the bank's performance, as assessed by return on assets and profit after tax margin, during the studied period.

2) Board Independence and Financial Performance of Quoted Deposit Money Bank

Furthermore, the findings that the level of board independence has a noteworthy adverse impact on bank performance, as measured by return on investment, imply that greater independence may result in decision-making procedures that prioritize shareholder returns less. This is consistent with the viewpoint of certain scholars, including Jite, Christine, & Joseph (2022), who contend that an excessive level of board independence can lead to slower decision-making and a lack of alignment with the interests of shareholders. This, in turn, may impede performance measures related to investment efficiency and returns.

3) Board Gender Diversity and Financial Performance of Quoted Deposit Money Bank

Finally, board gender diversity has a positive significant effect on bank performance when measured in terms of profit after tax margin suggesting that greater inclusion of women on boards can lead to enhanced financial outcomes, particularly in terms of profitability. This aligns with the perspective of scholars such as Hazzaa, Abdullah, & Dhahebi (2022) Mayowa, Olusola, & Olaiya (2021), who argue that diverse perspectives and experiences brought by gender-diverse boards can lead to better decision-making and innovation, ultimately contributing to improved financial performance, especially in terms of bottom-line measures like profit after tax margin.

4. Conclusion

The findings of this research offer insightful information on the intricate connections between financial performance and corporate governance traits. The impact of board ownership, gender diversity, and composition on financial outcomes has been studied across a range of indicators, including return on equity, return on investment, return on assets, and profit after tax margin. These findings shed light on the nuanced nature of corporate governance dynamics within the banking sector and their implications for performance metrics. Firstly, regarding board size, our study suggests that while larger boards may not significantly impact metrics like return on assets and profit after tax margin, they may have a positive, albeit insignificant, effect on metrics like return on equity and return on investment. This underscores the importance of considering the contextual factors that influence the relationship between board size and financial performance, as highlighted by prior research.

A. Recommendations

Based on the findings of this research, several recommendations can be proposed to enhance governance practices with the banking sector and improve overall financial performance.

- Regarding board size, it is recommended that deposit
 money banks carefully evaluate the composition of
 their boards to ensure an optimal balance between
 presentation and effectiveness. While larger boards
 may offer diversity of perspectives, they should be
 mindful of the potential drawbacks, such as increased
 complexity and slower decision-making processes.
- 2. In terms of board ownership, deposit money banks should consider the benefits of aligned ownership interests in driving financial performance. Concentrated ownership structures, where ownership is held by a few significant shareholders, that can promote strategic alignment and effective oversight.
- 3. Furthermore, the positive significant effect of board gender diversity on financial performance underscores the importance of promoting diversity and inclusion within corporate governance structure

References

- Abubakar, A. A., Yahaya, O. A., & Joshua, S. G. (2023). Board characteristics and financial performance. *Asian-Pacific Journal of Financial Studies*, 52, 7-19.
- [2] Adedeji, B. S., Ong, T. S., Uzir, M. U. H., & Abdul Hamid, A. B. (2020). Corporate governance and performance of medium-sized firms in

- Nigeria: does sustainability initiative matter?. Corporate Governance: The *International Journal of Business in Society*, 20(3), 401-427.
- [3] Akinleye, G. T., Olarewaju, O. M., & Fajuyagbe, S. B. (2019). Assessing the effects of corporate taxation on the investment policy of manufacturing firms in Nigeria. Folia Oeconomica Stetinensia, 19(2), 7-24
- [4] Alabdullah, T. T. Y., Ahmed, E. R., & Kanaan-Jebna, A. (2022). Corporate Governance System and Firm Financial Performance. *Acta Scientific Computer Sciences*, Volume, 4(6).
- [5] Al-Ahdal, W. M., Alsamhi, M. H., Tabash, M. I., & Farhan, N. H. (2020). The impact of corporate governance on financial performance of Indian and GCC listed firms: An empirical investigation. Research in International Business and Finance, 51, 101083.
- [6] Al-Homaidi, E. A., Almaqtari, F. A., Ahmad, A., & Tabash, M. I. (2019). Impact of corporate governance mechanisms on financial performance of hotel companies: Empirical evidence from India. *African Journal of Hospitality, Tourism and Leisure*, 8(2), 1-21.
- [7] Ali, A., Alim, W., Ahmed, J., & Nisar, S. (2022). Yoke of corporate governance and firm performance: A study of listed firms in Pakistan.
- [8] Ali, T., Hussain, S., & Waheed, A. (2021). Executive remuneration, corporate governance and corporate performance: Evidence from China. *Economic research-Ekonomska istrazivanja*, 34(1), 3092-3118.
- [9] Aliyu, A. A., sani, A. B., musbahu, bB A., & bakare, O. T. (2019). Effect of voluntary assets and income declaration scheme (VAIDS) on tax compliance in Nigeria. *UNILAG Journal of Business*, 5(2), 12-25.
- [10] Almashhadani, H. A., & Almashhadani, M. (2022). An overview of recent developments in corporate governance. *International Journal of Business* and Management Invention, 11(5), 39-44

- [11] Almashhadani, M., & Almashhadani, H. A. (2022). Does Corporate Governance Improve Corporate Profitability: Reviewing the Role of Internal Corporate Governance Mechanisms. *International Journal of Business and Management Invention*, 11(6), 07-11.
- [12] Almashhadani, M. (2021). A brief review of corporate governance structure and corporate profitability in a developed and developing economy: a review. *International Journal of Business and Management Invention*, 10(11), 42-46.
- [13] Baldacchino, P. J., Abela, J. P., Tabone, N., & Grima, S. (2021). Board of director diversify and its corporate governance implications in Maltese equity-listed companies.
- [14] Ballester, L., González-Urteaga, A., & Martínez, B. (2020). The role of internal corporate governance mechanisms on default risk: A systematic review for different institutional settings. *Research in International Business and Finance*, 54, 101293.
- [15] Bawaneh, S. S. (2020). Impact of corporate governance on financial institutions? Performance: A board composition case. Asian Economic and Financial Review, 10(1), 54.
- [16] Bruner, C. M. (2021). Corporate governance reform and sustainability imperative. *Yale LJ*, 131, 1217.
- [17] Buallay, A., Hamdan, A., & Zureigat, Q. (2017). Corporate governance and firm performance: evidence from Saudi Arabia. Australasian Accounting, Business and Finance Journal, 11(1), 78-98.
- [18] Eluyela, D. F., Akintimehin, O. O., Okere, W., Ozordi, E., Osuma, G. O., Ilogho, S. O., & Oladipo, O. A. (2018). Board meeting frequency and firm performance: examining the nexus in Nigerian deposit money banks. *Heliyon*, 4(10).