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## BOARD CHARACTERISTICS: IMPLICATIONS ON FINANCIAL PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA

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### ABSTRACT

The study examined the effect of board characteristics (BC) on financial performance (FP) of deposit money banks (DMBs) in Nigeria between 2012-2021(10years). The specific objectives of the study is to examine the relationship between the measures of board characteristics [Board Size (BS), Board Independence (BI), Board Gender Diversity (BGD) and Board Meeting (BM)] and [performance of deposit money banks proxy with Returns on equity (ROE)]. The focused 10 banks were drawn out of the 18 deposit money banks listed in the Nigerian Exchange Group. The quantitative technique of data analysis was adopted in this study, which comprises of descriptive statistics, correlation analysis and multiple regression analysis using OLS method. The findings revealed that BS, BGD and BM have insignificant relationship on ROE while BI had a significant effect. Finally, the study concluded that there is a significant relationship between BC and FP of DMBs in Nigeria. It is recommended that DMBs that wish to enhance their financial performance, especially post covid-19, should try to reduce their

board size to plus or minus ten, but with strict adherence to the regulatory guideline. This will ensure that the yearly huge expense on this is reduced and efficiency is guaranteed. This will have more positive influence on corporate performance.

**Keywords:** Board, Size, Performance, Diversity and Independence.

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## INTRODUCTION

One of the elements responsible for the failure of numerous banks in Nigeria is the current financial crisis in the banking sector of the Nigerian economy, which has been attributed to the abuse of corporate governance principles. For Nigeria's banking system to expand and develop, financial stability and performance are crucial (Benvolio and Ironkwe, 2022). Any country's progress depends on banks in three key ways. First off, banks are major drivers of growth and have a disproportionate amount of power in the financial systems. Second, the bulk of businesses in these emerging economies often turn to banks as one of their primary sources of financing (Ehiedu & Toria, 2022). Additionally, banks provide the mechanism for making payments and serve as the primary repository for the economy's savings. Consequently, the Nigerian banking sector would be crucial to the growth of the national economy (Faleye, Hoitash & Hoitash, 2021; Owolabi., Banisaye & Efuntade, 2021). Bank loans were the predominate source of debt financing in the economy and banks have been the primary sources of financing in the Nigerian financial market (Benvolio, et al, 2022).

Since the present corporate governance legislation, there have been significant changes to the board size, board structure, ownership structure, and financial disclosures in Nigeria (Onuorah & Imene, 2016). Similar to this, Di-Biase and Onorato (2021) think that previous failures in the majority of the industries were brought on by a lack of effective governance brought on by weak boards of directors in addition to and in conjunction with other factors that contributed to business space instability and corporate collapses in Nigeria. Since the board of directors serves as the highest governing body of the corporation, its qualities may also have ostensibly significant effects on company performance (Ahmed, Abdullahi, Suleiman and Janada, 2019). The preservation of shareholders' interests, together with revenue production, supervision, and the avoidance of financial crisis, etc., are the board of directors' main duties as the company's top governing body. The inference is that the board of directors is actively involved in developing the strategy and has full access to the data needed to conduct its oversight responsibilities (Haris, Yao, Tariq, Javaid & Ul-Ain, 2019). A bigger emphasis on boards' showing off value-adding initiatives for their banks appears to have taken place.

Any organisation would not be complete without its boards of directors. They carry out their responsibilities on behalf of the shareholders and guarantee that the company is profitable and able to continue operating as a continuing concern. They care about everything related to the organization's governance as a result, and they also want to make sure that the needs of the shareholders and other stakeholders are addressed (Hawkar, Akar, Wafa and Hero, 2021). One of the issues they deal with is ensuring high firm performance through monitoring and providing advice as necessary. In addition to being worried about their dividends, shareholders are also interested in the returns on their investments (Ehiedu, Odita & Kifordu, 2020). The size, independence, ownership, gender, age ratio of executive to non-executive directors, directors' education, and other board-related factors, among others, may all have an impact on the performance of the company (Okolie and Uwejean, 2022).

It is generally acknowledged that a company's performance may be significantly influenced by the characteristics of the corporate board. The function of boards of directors as one of the main pillars of corporate governance has been recognised by academics, accountancy professional organisations, practitioners, and policy makers for the past 20 years. According to certain researchers (Somathiloke, 2018; Assenga, Aly, & Hussainey, 2018), the diverse board of directors' characteristics have an effect on organisational performance since they have distinct orientations. In practise and research on corporate governance, board independence has recently gained attention. Studies on board composition, such as board size and board independence, have received more attention recently (Rafinda, Rafinda, Witiastuti, Suroso, & Trinugroho, 2018; Ganbo, Bello & Rimanshung, 2018; Furhan; Tabash., Almagtari & Yahya, 2020). According to several research (Okiro, 2016; Mohammed, Ahmod, and Khai), board diversity and organisational success are related (2018). According to Adegboyegun and Igbekoyi (2022), racial diversity on the board of directors may result in stronger corporate governance, which in turn boosts firm profits.

For the balance and comprehensive perspective it tends to bring to the table, guidelines for board diversity have been advocated. Board diversity includes the variety of entities on boards of organisations that include diversity in gender, skills, experience, qualifications, and ethnicity (Bairathi, 2019). The cultural legacy of Nigeria appears to support some inequality in terms of societal authority and governance (Okeyide, 2018). Hence, the continent of Africa's diversity across the landscape is still mostly in its infancy. The Securities and Exchange Commission has suggested board diversity as the second principle in the second section of its code of corporate governance, therefore some progress has been made in this area. However, as no quota has been set and no clear instructions have been given to ensure that board diversity in Nigeria will be implemented, this can only be taken as a proposal (Ehiedu & Brume-Ezewu, 2022).

The firm's financial planning department is crucial because it serves as the organization's backbone and determines whether the bank will continue to operate or not. Additionally, it would serve to reassure stakeholders and shareholders that they can trust the organization's financial reporting and retain their wealth (Ehiedu, Onuorah & Mbagwu, 2022). However, some board features might improve or hurt this bank's financial performance, hence the goal of this study is to find out how BC affects DMBs' financial performance in Nigeria. According to studies on the BC and FP of DMBs, there is a dearth of literature on the topic, and the majority of these studies used single, double, and triple variables to proxy board of director attributes. These studies' mixed and inclusive findings served as a benchmark for this investigation into how BC affects DMBs in Nigeria (Ehiedu, et al, 2022).

The issue of corporate governance (CG), which includes business conduct (BC), is crucial to the banking industry and has gained international attention. It is crucial for better services, a strengthening of financial intermediation with regard to banks, and the ability to conduct proper banking operations. The majority of fraud cases that result in the bankruptcy of several banks, as well as corporate failure and a decline in shareholder wealth, are the centre of attention and blamed on boards of directors (Ehiedu, 2022).

In Nigeria's banking industry, there were numerous reports of accounting irregularities in 2009. Due to the board of directors' poor oversight, institutions like Spring Bank, Fin Bank, Afri Bank, Union Bank, Oceanic Bank, and Intercontinental Bank suffered. Instead, the board gave

responsibility to top management, which was only interested in serving its own interests. Due to the financial crisis in Nigeria, board malfeasance among the merged institutions has become standard practise in the industry. Additionally, CG fails in many banks due to boards being misled by the executive when obtaining loans that are not secured and because they lack the experience to impose effective CG practises on the management. Given the aforementioned assertions, it is necessary to investigate how BC impacts Nigeria's listed banks' financial performance.

The board of directors is crucial in the management of banks and in setting the ethics, values, and culture of the business. Their duties are typically divided into monitoring and supervisory functions, all of which are focused on coordinating the interests of the board, the management, and other interest groups to guarantee that enterprises are successful in the present as well as the future. As a result, the literature has given and will continue to give a great deal of attention to BC as a sustainability issue that depends on enforcement and monitoring. Regulators, interest groups, and academics have given it a lot of investigation and attention, as seen by the substantial expansion in the empirical literature across accounting, economics, finance, and management literature from both local and global context.

Despite a significant increase in research on the broad concept of CG, there is little data from the Nigerian context on BC and their impact on performance using data of firms in all sectors other than the financial sector, with special consideration of board shareholding and board gender diversity which are significant monitoring attributes. Prior research has mostly concentrated on non-financial sectors, giving little thought to the board's monitoring features. Studies have been done on how BC affects a company's financial performance using multiple metrics like ROA, ROE, and EPS. As an illustration, Refinda et al. (2018) discovered a substantial inverse association between BS and ROA. Gambo, Bello, and Rimanshung (2018), however, did not discover any correlating association between BS and companies ROA. Foreign directorship does not significantly affect the FP of quoted banks in Nigeria, according to Okiro (2016) and Yermack (2021) in board diversity and FP (Panel Data Evidence from Listed DMBs in Nigeria). They also noted that the presence of foreigners on the board of banks in Nigeria will not improve their financial performance. The recent global economic crises' spillover effects are correlated with recent bad company performance. Effective strategic management and a diverse board foster an environment where group thinking is minimised, allowing for greater information processing, creative thinking, and the generation of novel ideas that contribute to better decision-making. The majority of research has focused on financial companies, including manufacturing and insurance companies. This analysis uses the years 2012 to 2021 to expand the quoted DMBs in Nigeria. The purpose of this empirical study is to close this information gap.

Again, despite the fact that numerous studies have been conducted in this area, none have used the same variable composition here in Nigeria, at least not to the researcher's knowledge. This study is more recent because it looks at a ten-year span from 2012 to 2021. It was necessary to start the study with a focus on the impact of BC [proxied with BS, BI, BGD, BM, and BQ] on FP [proxied with ROA] of DMBs in Nigeria due to the aforementioned study gap.

## REVIEW OF RELATED LITERATURE

### Conceptual Review

#### *Concept of Board Characteristics (BC)*

A group of individuals chosen to represent shareholders makes up a board of directors. A board of directors is a legal requirement for every publicly traded corporation. They serve as a company's governing body. The board of directors of a corporation is a crucial body that is in charge of the organization's administration as well as the adoption of strong corporate governance principles (Emeka-Nwokeji & Agubata, 2019). The interests of the board and management are brought into line with those of the shareholders and other stakeholders, which puts these businesses in a better position to achieve their goals and contribute to the economy (Okolie and Uwejean, 2022). Without compromising competence, independence, or integrity, the board of directors needs the right mix of skills and diversity to carry out their duties efficiently (Okolie et al, 2022). These are the so-called features or characteristics that play a significant role in the study of the connection between the performance of the boards and that of the companies, respectively.

Corporate BC convey and transcend every quality and aspect of a company's board that enables the effective and efficient pursuit or achievement of the interests of the numerous stakeholders (Pitambar, 2017). Both quantitative and intangible factors are used to assess the board's success or efficiency. The quantitative factors include board size, board independence, board shareholdings, board meeting frequency, board gender diversity, and board membership competency. On the other side, the qualitative or intangible factors cover things like making good decisions and creating positive values (Kamaludin, Ibrahim & Sundarasan, 2020). The shareholders appoint the members of a company's board of directors to manage the company's resources and carry out its goals. Because the investors are the principals who employ the directors to make decisions in their best interests, Lin, Luo, and Tang (2015) feel that this contract is akin to an agency contract. The goal of the investors is to increase profit while also assuring the survival of the business.

#### *Financial Performance (FP)*

FP refers to a company's capacity to produce revenue that, in relation to its capital base, outpaces costs. Notably, a strong and successful company can withstand negative shocks better and contribute more to the growth and stability of the financial system. Profitability was defined by Ongore and Kusa (2013) as the connection between a company's profits and the investments that enabled it to achieve those profits. They added that profitability ratios determine the efficiency with which a business turns its operations into profits. Profit margins assess an organization's capacity to turn sales into profits. The ability to generate net income from assets is assessed by ROA. To further on this, research has shown that lack of confidence in the banking sector's operational activities is detrimental to performance, which is often measured in terms of ROA, ROE, NPM, and PAT (Adigwe, Nwanna & John, 2016; Pitambar, 2017).

FP serves as a gauge for how efficiently or inefficiently an entity is using its resources. It gauges how well financial goals are being achieved (Kang, Ding & Charoenwong, 2021; Yermack, 2021). It evaluates the effectiveness with which a company uses its resources to generate profits. Surprisingly, FP measure is frequently used as a tool to quantify FP for two different reasons. The first reason is that profit always strongly correlated with an organization's long-

term goals, which are usually always exclusively financial. The second justification is that the FP measurements used offer a comprehensive picture of an organization's performance (Thomen & Pedersen, 2000). The ROE, ROA, and EPS of the company reflect these outcomes. Basically, the ability to generate income through the optimization of a firm's assets, ROE, which assesses how much profit is produced relative to shareholders' equity, and EPS, which shows the quota, may all be used to gauge the profitability of companies in the DMBs industry. Among other company metrics, ROE is a better gauge of profitability and a strong sign of corporate health since it reveals how well management is performing by displaying how much profit each dollar of common stockholders' equity produces (Aggei-Mensah, 2018; Nwaiwu & Amah, 2019; Nwaiwu & Joseph, 2020).

## **THEORETICAL FRAMEWORK**

### **Agency Theory**

Agency theory, which was put forth by Jensen and Mecklings in 1976, is where the study of corporate governance has its roots. In accordance with the principle, the principal appoints or assigns an agent to do a task. One party represents the other party in this form of connection. According to traditional agency theory, a problem occurs when the principal's and the agent's interests are not always in harmony ((Uwuigbe, 2011). The agency theory, which has its roots in economic theory and has taken centre stage in the corporate governance literature, has been emphasised with a particular emphasis on the principal-agent problem (Sami, Wang, and Zhou, 2009).

The thesis contends that the goals of organisational managers frequently clash with those of the true owners of the company. Therefore, corporate owners must link their financial benefits to the wages and other forms of compensation that the organization's executives get (Sami, Wang and Zhou, 2009). The time it becomes difficult to forecast how business administrators would act, at which point their compensation becomes a governance problem designed to encourage them to perform their tasks in the owners' best interests (Vo and Phan, 2013). The idea supports the selection of board members, their incorporation, and the use of enticing compensation packages, while the board oversees the managers through periodic reporting, evaluation, and acceptance of established rules (Uwuigbe, 2011).

Despite the fact that certain agency theory research claims that good governance can reduce agency costs and increase firm owners' profits, some other investigations' findings seem to support the opposite. The use of several organisational governance metrics may be one explanation for this divergence outcome, thus our study is based on this notion.

### **Resource Dependence Theory (RDT)**

The RDT emphasizes on the function of board directors in giving access to resources needed by the corporation, in contrast to the stakeholder hypothesis, which is based on ties with several groups for personal gain. The resource dependence theory is centred on how directors help company secure necessary resources through their connections to the outside world (Hillman, Canella and Paetzold, 2000). Information, skills, credibility, and access to key stakeholders including suppliers, purchasers, public policymakers, and social groups are some examples of these crucial resources for the business. Indeed, Johnson, Daily, and Ellstrand (1996) claim that those who support the resource dependency hypothesis are willing to accept the appointment of representatives from unaffiliated groups as a strategy for acquiring access to resources necessary for a firm's success. For instance, an outside director who is an engineer

would probably offer management or the board free professional advice. The availability of such resources improves organisational performance, a firm's productivity, and its ability to survive (Daily, Dalton & Canella, 2003).

### **Empirical Review**

The impact of corporate BC on the FP of conglomerates in Nigeria was examined by Okolie and Uwejean in 2022. Indicators of board characteristics included board size, independence, committee composition, meeting attendance, and board shareholdings. ROA was used to gauge board performance financially. Consequently, a sample of five quoted conglomerates was chosen over the course of the 10-year study period from 2011 to 2020. The annual reports of the chosen conglomerates' secondary data were used to collect it, and regression analysis was performed. The results show that conglomerates' FP in Nigeria was significantly influenced by the size, independence, and stock holdings of the board and audit committee. Board meetings, however, did not appear to have a major impact on Nigerian conglomerates' financial results. According to the study, in order to retain board independence as a tool or factor in the FP of conglomerates in Nigeria, there should be a suitable amount of synergy between board members and owners, as well as an acceptable level of accountability, transparency, and teamwork. To minimise the negative effects on the FP of conglomerates in Nigeria, board meetings should be held less frequently and concurrently.

The association between board composition and FP of quoted DMBs in Nigeria was examined by Benvolio and Ironkwe in 2022. All fourteen of Nigeria's listed commercial banks' annual financial reports were used to compile data on various board composition and firm market value factors for the years 2011 through 2021. In order to analyse the data, OLS regression analysis, descriptive statistics, the Hausman specification test, the likelihood ratio test, the panel stationarity test, the Lagrange multiplier test, the lag length selection criteria, and the panel auto-regressive distribution lag brand test were all used. The empirical findings show that board composition has a large impact on firm performance, accounting for around 85.1% of the entire variation in firm market value. The study finds that the composition of the board of directors has a significant impact on the performance of the company and advises the establishment of a strong and mandatory corporate governance structure to ensure that the board of directors is primarily made up of individuals who are both directly and indirectly independent from the company.

The impact of board diversity on the FP of Nigerian manufacturing enterprises was studied by Adegboyegun and Igbekoyi in 2022. The increased effort to build the best board possible with the ideal composition necessary to ensure company success serves as the driving force behind the study. Information was gleaned from the 2011 to 2020 annual reports of the chosen companies. The data were analysed using descriptive statistics and panel regression estimation methods. The results showed that board diversity has a negligible impact on performance, with the exception of diversity in financial competence, which has a beneficial impact on FP, and that there is a long-term association with business performance. Based on these findings, the study draws the conclusion that while diversity in terms of financial competence will affect company performance, diversity in terms of gender, ethnicity, and educational background will not significantly affect either firm performance or performance levels. Therefore, it is advised that larger steps be taken by Nigerian manufacturing companies to have a higher percentage of

board members with financial competence, and directors with certified financial expertise should be permitted to stay longer on the boards to ensure increased performance over time.

The effects of particular CG variables on the FP of particular quoted DMBs in Nigeria were studied by Eni-Egwu, Madukwe, and Ezeilo (2022). The study focuses more precisely on the associations between board size, board composition, gender diversity, and FP - ROE and ROA. From the audited annual accounts of ten specifically designated DMBs, information for the years 2010 through 2019 was gathered. Multiple regression analysis in SPSS version 21 and Smart PLS structural equation modelling (SEM) were used to give a robust analysis of the data and assure the use of three different methodologies. The results suggest that while gender diversity exhibited a favourable link and board composition showed a mixed relationship with corporate FP, board size and audit committee independence are negatively connected to FP. The report suggests, among other things, that businesses aim to lower the size of their board to plus or minus ten, as well as the number of outside (external or non-executive) board members, but strictly in accordance with the regulatory standard.

A study on BC's impact on FP was explored by Hawkar, Akar, Wafa, and Hero in 2021. With ROA serving as the dependent variable and FP of the organisation being represented by it, the study looked at board ownership, board independence, and board meetings as independent variables. In the period from 2005 to 2016, information was gathered from businesses in several industries. from Iraq's stock exchange and Iraqi securities commission. Multiple regression analysis was used with the data together with panel data. A favourable association between board independence and board ownership and FP was found in the data after using panel data and multiple regression analysis. However, it was shown that the company's ROA was adversely impacted by an increase in board meetings. The report made the suggestion that management of quoted firms retain having more independent and non-executive directors with ownership as this improved objectivity and assured alignment of interests between shareholders and the board.

In their 2020 study, Babatunde and Folorunsho looked at the impact of board size and independence on the performance of listed firms in Nigeria. Additionally, it investigated how the FP of listed firms in Nigeria was affected by board diligence and board diversity. These were done in order to investigate the connection between BC and FP of Nigerian traded companies. The study, which spanned the years 2009 to 2018, used secondary data from published annual reports and accounts of 35 specifically chosen listed companies on the NSE. In order to analyse the data, the regression techniques of Pooled OLS and Generalized Least Squares were used. The study's findings revealed that earnings per share and board independence do not significantly correlate, but that earnings per share and board size do significantly correlate negatively with a coefficient of -0.33 and a p-value of 0.0095 ( $>0.01$ ), and between earnings per share and board diligence, with coefficients of -0.43 and -0.48 and p-values of 0.02 ( $>0.05$ ) and 0.0095 ( $>0.01$ ), respectively. The study came to the conclusion that while board independence and gender diversity have no bearing on the success of quoted companies in Nigeria, board size and diligence do. It was suggested that boards be small, with members having a range of educational backgrounds and experiences, and holding regular meetings to discuss issues pertaining to business performance.

**Literature Gap:** The extant empirical literature above revealed a number of existing studies on the effects of BC on FP across different countries, regions, sectors, and time periods.

However, the widely conflicting and mixed outcomes mean that the issues have not been adequately resolved. BC mechanism in particular appears as a critical governing body that has not gained much attention and sufficient recognition despite the plethora of extant studies on the subject matter. The current study is aimed at filling up the apparent gap in the literature by including BC mechanisms into the model. The study also makes a difference by focusing on DMBs in Nigeria unlike the previous extant studies reviewed, which focuses on manufacturing firms. More also, the review of literature has shown that a lot of study has been conducted on the effects of BC on FP but most of the study are face with methodological problem of using one, two or three variables to measure board characteristics and omitting other important variables and most of their findings are mixed and contrast to each other. Finally, most of the studies omitted theoretical evaluation of the variables, all these now serves as literature gap that this study has filled

### RESEARCH METHODOLOGY

This study incorporated the Ex-Post Facto research design. Ex-Post Facto research design assists in providing answers to the who, what, when, where, and how questions connected to a specific study problem. In order to examine the Nigerian banking system, 10 selected banks' annual reports and accounts were collected as secondary data for the design.

In this work, data analysis using a quantitative approach was used. Utilizing E-VIEW 9.0 computer software, descriptive statistics, correlation analysis, and multiple regression analysis using the OLS method will be utilised to identify the type of relationship between the variables. The dependent variable is a linear function of the independent variables, according to the model's underlying assumptions.

The regression model was adapted from Eni-Egwu, Madukwe, and Ezeilo's study (2022), with modifications made to fit the study's variable. The following is the formulation of the model that states that measures of board characteristics (board size (BS), board independence (BI), board gender diversity (BGD), and board meeting (BM) are proxy measures for financial performance [proxied with Return on Asset (ROA)] and are significantly influenced by these measures;

$$ROA = f(BS, BI, BGD, BM)$$

$$ROA = \beta_0 + \beta_1 BS + \beta_2 BI + \beta_3 BGD + \beta_4 BM + E$$

Where; E = Error Term.  $\beta_0$  = Intercept  $\beta_1$ – $\beta_4$  = Coefficient of the Independent Variables and the a priori expectation is  $\beta_1, \beta_2, \beta_3, \beta_4$ , is lesser or greater than 0.

Table 1

#### Measurement and Predicted Signs

Variables	Measure	Type of Variable	Expected Sign
ROE	Net Profit / Total Asset	Dependent Variable	
BS	Is the total number of directors sitting on the board of a particular bank	Independent Variable	-/+
BI	Is the number of non-executive directors on the board and it is measured by the percentage of outside directors (non-executive directors) on the total board members	Independent Variable	+/-
BGD	Board gender diversity is the proportion of female to a number of directors.	Independent Variable	+/-

BM	Board meetings will be calculated as the number of meetings conducted by the board of directors per year.	Independent Variable	-/+
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Source: The researcher from data gathered, 2022.

## RESULT AND DISCUSSION

Table 2  
*Summary Statistics Output*

	ROE	BS	BI	BGD	BM
Mean	5.670398	13.64000	0.516605	0.198180	3.040000
Median	0.119076	14.00000	0.500000	0.200000	3.000000
Maximum	149.0832	20.00000	0.857143	0.416667	5.000000
Minimum	-3.943182	8.000000	0.166667	0.055556	2.000000
Std. Dev.	25.27803	2.721111	0.179075	0.066926	0.345826
Skewness	4.520321	0.337761	0.481335	0.207718	2.104239
Kurtosis	22.34558	2.635093	2.469479	3.294921	16.06045
Jarque-Bera	1880.937	2.456194	5.034105	1.081526	784.5272
Probability	0.000000	0.292849	0.080697	0.582304	0.000000
Sum	561.3694	1364.000	51.66051	19.81803	304.0000
Sum Sq. Dev.	62619.94	733.0400	3.174729	0.443426	11.84000
Observations	99	100	100	100	100

Source: Researchers Computation using E-VIEW 9.0, 2022.

Data for [BS, BI, BGD, and BM] during a ten-year period (2012–2021) and one dependent variable FP [proxied with ROE] were included in the data set, as shown in the table above. There were a total of 100 observations for the ten (10) DMBs stated in the NEG.

The BS range for the BS mentioned above is between 8.0000 and 20.0000. The BS has a mean value (MV) of 13.6400 and a standard deviation (SD) of 2.7211, where the BS is the total number of directors that are currently serving on a bank's board of directors. This suggests that the BS of the ten (10) banks that make up the Nigerian banking sector deviates from the mean value by up to 1,091.89% ( $13.6400 - 2.7211 = 10.9189 \times 100$ ). According to the summary data, the minimum and highest values for BI are 0.1667 and 0.8571, respectively. The average BI of the bank, as determined by the number of non-executive directors on the board and the proportion of non-executive directors on the total number of board members of the ten (10) banks in Nigeria, is 0.5166 with a SD of 0.1791. Since the SD value is lower than the MV, this result illustrates how quickly bank BI has increased throughout the years in comparison. According to this, BI is 17.91% volatile. The condensed data showed that the BGD ranged between 0.0556 and 0.4167 for both the minimum and maximum values. BGD is determined by the ratio of female directors to total directors, which is expressed as 0.1982 for the mean and 0.0669 for the SD. Comparatively, this result demonstrates that the BGD of the banks has increased with time because the SD value is lower than the MV. It follows that BGD is 6.69% volatile. Additionally, the aforementioned summary statistics demonstrate that BM's minimum and maximum values are 2.0000 and 5.0000, respectively. With a mean (average) value of 3.0400 and a standard deviation of 0.3458, the bank's BM is calculated as the number of board meetings held annually. Since the SD number is less than the mean value, the result in comparison demonstrates that the BM of the banks has increased with time. According to this, BM is 34.58% volatile. Additionally, as can be seen from the summary statistics above, ROE ranges from a low of -3.9432 to a maximum of 149.0832. The SD for the ROE statistic is

25.1561, while the average value is 5.6152. Comparatively speaking, this result demonstrates that bank ROE has slowly increased throughout the years due to the fact that the SD number is higher than the MV.

Finally, the SD shows that ROE is the most volatile variable and follows by BS. The kurtosis that measures the peakness of the distribution reveals that BS, BI and BGD are leptokurtic indicating that the distributions are peaked relative to normal distribution, while ROE and BM are platykurtic, which implies that the distribution of the variables are thick peaked in relative to normal distribution.

Table 3  
*The Correlation Matrix for the Variables under Study*

	ROE	BS	BI	BGD	BM
ROE	1.000000				
BS	0.090187	1.000000			
BI	0.176590	0.333091	1.000000		
BGD	0.006420	-0.458855	0.307080	1.000000	
BM	-0.025909	-0.264847	-0.074726	-0.029419	1.000000

Source: Researchers Computation using E-VIEW 9.0, 2022.

The correlation coefficient of ( $r=0.0902$ ) for BS, which is greater than the critical value of 0.05, this shows a strong positive correlation between BS and ROE. It's evident from the correlation coefficient of BS indicates that BS helps banks determine its ROE capacity. Table 3 above showed that the weak negative correlation coefficient between BI and ROE. The coefficient of correlation 0.1766 is greater than the critical value of 0.05, shows a statistical correlation between BI and ROE. This implies that there is a strong positive correlation between BI and ROE. In other words, increase in BI, will lead to an increase in ROE of the banks. The correlation result for BG and ROE shows a strong positive statistical correlation as it evident by the correlation coefficient. The coefficient of correlation of ( $r = 0.0064$ ) is greater than the critical value of 0.05, indicating a statistical strong positive correlation between BGD and ROE of the banks. This implies that an increase in female in the board of the banks would increase ROE of the banks. Table 3 above showed that the weak negative correlation coefficient between BM and ROE. The coefficient of correlation ( $r = 0.0259$ ) is lesser than the critical value of 0.05, indicating a statistical weak negative correlation between BM and ROE. This implies that banks with excessive board meeting during the year does not necessary determine their ability to generate more in terms of ROE.

Finally, the correlation matrix that is presented in Table 3, and it shows the absence of multi-co linearity among the variables since the correlation values are less than 0.7. Furthermore, the result shows the explanatory variables namely; BM has a negative strong correlation with ROE while BS, BI, BGD, have positive correlation with ROE in DMBs Nigeria.

Table 4  
*Redundant Fixed Effects Tests (RFET) Regression Results*

Effects Test	Statistic	d.f.	Prob.
Cross-section F	7.079499	(9,85)	0.0000
Cross-section Chi-square	55.378990	9	0.0000

Cross-section fixed effects test equation:  
Dependent Variable: ROE  
Method: Panel Least Squares  
Date: 09/19/22 Time: 20:57

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.182685	38.65846	0.211666	0.8328
BS	0.613008	1.149666	0.533205	0.5952
BI	26.05345	12.57997	2.071026	0.0478
BGD	35.01278	44.11306	0.793705	0.4294
BM	-1.413235	7.835283	-0.180368	0.8573
R-squared	0.339654	Mean dependent var		5.670398
Adjusted R-squared	0.115365	S.D. dependent var		25.27803
S.E. of regression	25.29335	Akaike info criterion		9.348145
Sum squared resid	60136.84	Schwarz criterion		9.479212
Log likelihood	-457.7332	Hannan-Quinn criter.		9.401175
F-statistic	0.970335	Durbin-Watson stat		0.945530
Prob(F-statistic)	0.427606			

Source: Researchers Computation using E-VIEW 9.0, 2022.

Panel data is used in this study to determine whether the data should be analyzed through random effect or fixed effect. For this purpose, I use the RFET criteria to check which model is more appropriate in this study.

H<sub>0</sub>: RFET is consistent and efficient.

H<sub>1</sub>: RFET model is inconsistent.

According to the RFET model is appropriate in this study. In testing the hypotheses of this study, the RFET OLS was chosen because of the RFET result shows Chi-Square of 55.378990 which is greater than 10 and the p-value of value of 0.0000 which is far lesser than the accepted level of significance of 0.05, this implies that the RFET OLS result is best for the panel data of the 10 DMBs selected for this study. More also, Table 4 above shows the level of significance for BS, BI, BGD and BM on ROE, which served as the basis for testing the hypotheses.

Records of BS and ROE's regression coefficient values. There is a significant positive co-existence between BS and ROE, with a coefficient of 0.6130. Additionally, it shown how well and strongly correlated BS and ROE are. The p-value of 0.5952 exceeds the 0.05 criterion of significance while falling short of the appropriate 95% confidence range. Inferred from this is that there is no statistically significant co-existence between BS and ROE. In light of this, the alternative hypothesis (H<sub>1</sub>) is disproved and the null hypothesis (H<sub>01</sub>) is accepted. Records of BI and ROE's regression coefficient values. BI and ROE are strongly positively co-existence, with a value of 26.0534. Additionally, it shown how strongly and favourably related BI and ROE are. A 95% confidence interval is appropriate if the p-value is less than or equal to 0.05, which is less than the p-value of 0.0478. This suggests that BI and ROE have statistically significant co-existence. As a result, alternative hypothesis (H<sub>2</sub>) is accepted and null hypothesis (H<sub>02</sub>) is rejected.

### Discussion of Results

Discussion of the results from the testing of hypotheses is covered in this section; it was done so with careful consideration for both theoretical and empirical reviews in the evaluation of related literature. This was achieved by contrasting and comparing the conclusions and recommendations of the empirical reviews with those of the theories.

**BS and ROE**

Table 4 above, regression coefficient value recorded for BS on ROE is 0.3861, with associated P-value of  $0.6130 > 0.05$ . This implies BS positive insignificant relationship with ROE. These results mean that each unit increase in the BS of DMBs will increase the ROE by 61.30%. This is consistent with the conclusions of Ahmed, Abdullahi, Suleiman, and Janada (2019) and Isah, Abdu, and Nuruddeen (2018), who believe that BS has no impact on DMBs' return on equity (ROE). This, however, contradicts the conclusions reached by Eni-Egwu, Madukwe, and Ezeilo (2022), Okolie and Uwejeyan (2022), and Olaoye and Adeyemi (2021). This discrepancy in conclusions may be attributable to the time scope of the data used for the analysis, which covered a period of 5 and 7 years and the study's domain, respectively.

**BI and ROE**

In addition, the regression coefficient value for BI on ROE in Table 4 above is noted as 26.0535, with a P-value of  $0.04780 > 0.05$ . This suggests that BI and ROE have a positive and meaningful relationship. According to this finding, the ROE will rise by 2605.35% for every unit increase in the BI of DMBs. The stakeholder theory, which addresses how company executives should act in their commercial environment and emphasises that shareholders' interests should be given precedence, is consistent with the positive significance of BI with respect to ROE. The results of Okolie and Uwejeyan (2022) and Hawkar, Akar, Wafa, and Hero (2021) are contrary to those of Babatunde and Folorunsho (2020), Emeka-Nwokeji and Agubata (2019), and are in line with Babatunde and Folorunsho (2020) and Babatunde and Folorunsho (2020), respectively. This may be because those studies were not conducted in Nigeria and those studies used aggregate data

**BGD and ROE**

In the Table 4 above, regression coefficient value recorded for BGD on ROE is 26.0534, with associated P-value of  $0.04294 > 0.05$ . This implies BGD significant relationship with ROE. The positive impact of BQ on the levels of ROE indicates the existence of sound audit quality via good agency relationships in DMBs in Nigeria. Additionally, the outcome is contrary to the agency theory's hypothesis of bad management, which links weak FP to riskier operations. This is consistent with earlier findings by Olaoye and Adeyemi (2021) and Isah, Abdu, and Nuruddeen (2018), but it is not consistent with Benvolio and Ironkwe (2022) and Adegboyegun and Igbekoyi (2022)'s findings. This discrepancy may be caused by the fact that those studies used different data sets, which could have led to different conclusions.

**BM and ROE**

In the Table 4 above, regression coefficient value recorded for BM on ROE is -1.4132, with associated P-value of  $0.8573 > 0.05$ . This implies BM significant relationship with ROE. These results mean that each unit increase in the BM of DMBs will decrease the ROE by 141.32%. It could be explained that banks that has an increase in BM has the experience to cope with ROE. This finding is in line with that of Olaoye and Adeyemi (2021), but it is at odds with those of Isah, Abdu, and Nuruddeen (2018). This discrepancy in results may be attributable to the fact that Isah, Abdu, and Nuruddeen's (2018) study was not conducted in Nigeria, and as a result, they used a different set of data that could have produced different findings.

**Summary of Findings**

The indications of the hypothesis test showed that:

1. There is no connection between BS and DMBs' ROE in Nigeria.

2. In Nigeria, there is a substantial co-existence between BI and ROE of DMBs.
3. In Nigeria, there is no substantial co-existence between BGD and DMBs' ROE.
4. In Nigeria, there is no significant co-existence n between BM and ROE of DMBs.

### **CONCLUSION AND RECOMMENDATIONS**

The research explored the effect of BC on FP of DMBs in Nigeria between the periods 2012-2021 (10years). The specific objective of the study is to examine the co-existence between the measures of BC [BS, BI, BGD and BM] and [FP of DMBs proxy with ROE]. The focus on the 10 banks were drawn out of the 18 DMBs listed in the NEG, but due to the difficulties in computing the ratios and time frame required to carry out this research, a sample of 10 banks have been drawn for this paper. The study concluded that there is a significant co-existence between BC and FP of DMBs in Nigeria. Based on the study findings, the following recommendations were proffered:

- 1) DMBs that wish to enhance their FP, especially post covid-19, should try to reduce their BS to plus or minus ten, but with strict adherence to the regulatory guideline. This will ensure that the yearly huge expense on this is reduced and efficiency is guaranteed. This will have more positive influence on corporate performance.
- 2) A follow-up to number one above is the need to also reduce the number of outside (external or non-executive) board members, but with compliance to the regulatory guideline.
3. There is need to rethink the dominance of outside director, the prescription that corporate boards should be dominated by outside director as contained in the Nigerian Securities and Exchange Commission Code of Best Practice for Nigerian quoted DMBs, and the CBN Code of good governance for Nigerian Consolidated Bank is influence by the agency theory, which argues that because managers are not owners but agents of owners, they have the incentive to pursue self-serving behaviour to the detriment of shareholders. This has necessitated the call for a board dominated by non-executive directors.
- 4) The study asserts that increased bank profitability significantly derives from good governance and, therefore, recommends maintaining adequate governance mechanisms to ensure that banks are profitably managed. For instance, the requirement for a substantial equity stake by directors of banking institutions should be sustained. By their unique nature, banks are highly levered institutions because of massive deposit liabilities in their portfolio. If banks are to run entirely on debt, the board's commitment to monitoring top management may be compromised. Minimum paid-up bank capital should be periodically reviewed to support the maintenance of optimum bank assets. Also, board size should be maintained at an optimal level to enhance performance.

### **References**

- Adegboegun, E. A., & Igbekoyi, E. O. (2022). Board Diversity and Financial Performance of Listed Manufacturing Firms in Nigeria. *Saudi Journal of Business and Management Studies*, 7(2), 50-60.
- Adigwe, P. K., Nwanna, I. O., & John, E. I. (2016). Effect of Corporate Governance Mechanism on the Financial Performance of Banks in Nigeria. *Journal of Social Development*, 5(2), 41-50.

- Ahmed, H. A., Abdullahi, B. A., Suleiman, A. B. & Janada, A. (2019). The effect of board characteristics on the financial performance of listed banks in Nigeria. *MAUTECH – Nigerian Journal of Accounting and Finance (NIJAF)*, 10(2), 1-9.
- Alfuma, H.O., Musa, S., Gold, N.O. & Usman, M.K. (2021). Board cognitive diversity and firm performance nexus: Evidence from Nigeria. *International Journal of Management Innovative and Entrepreneurial Research*, 6(2), 88-97
- Almontaser, A.Q., & Faudziah, H. (2018). The effect of board independence and board meeting on firm performance: evidence from Jordan. *Journal of Finance and Accounting*, 6(5), 105-109.
- Assenga, M.P., Aly, D., & Hussainey, K. (2018). The impact of board characteristics on the financial performance of Tanzanian firms. Corporate governance. *The International Journal of Business in Society*. Advance online publication. DOI:10.1108/CG-09-2016-0174.
- Babatunde, D. A., & Folorunsho, M. A. (2020). Board characteristics and firm's financial performance in Nigeria. *Dept of Economics, Unilorin Working Paper*, 01/05/2020.
- Basman, A. (2017). Does Corporate Governance Affects the Financial Performance? Analysis of Findings from Jordanian Bank. *International Journal of Business and Management*. 12(4), 1-7.
- Bedard, J., & Gedron, L. (2014). The Effect of Audit Committee Expertise, Independence, and Activity on Aggressive Earnings Management. *Journal of Accounting and Auditing*, 23(2), 13-35.
- Benvolio, J., & Ironkwe, U. I. (2022). Board composition and firm performance of quoted commercial banks in Nigeria. *International Journal of Business Management*, 5(1), 19-40.
- Blagat, S., & Black, B. (2012). The non-correlation between board independence and long-term firm performance. *Journal of Corporate Law*, 27(2), 231-274.
- Daily, C.M., Dalton, D.R., & Canella, A.A. (2003). Corporate Governance: Decades of Dialogue and Data. *Academy of Management Review*, 28(3), 371-382.
- Di-Biase, P., & Onorato, G. (2021). An international empirical survey of board characteristics and financial performance in the insurance industry. *Corporate Control and Ownership*, 18(3), 8-18.
- Ehiedu, C. V., Odita, O. A., & Kifordu, A. A. (2020). Financial integration and growth volatility nexus: The Nigeria experience. *Webology*, 17(2), 404-415.
- Ehiedu, V. C. (2022). Corporate finance alternative and shareholders' value creation in Nigeria. *International Journal of Academic Accounting, Finance & Management Research (IJAAFMR)*. *International Journal of Academic Research World (IJARW)*, 26-33.
- Ehiedu, V. C., & Brume-Ezewu, C. (2022). Corporate attributes and environmental social and governance (Esg) reporting among listed Nigerian firms: A sector-based evaluation. *International Journal of Management (IJM)*, 13, 430-440.
- Ehiedu, V. C., & Toria, G. (2022). Audit indicators and financial performance of manufacturing firms in Nigeria. *Linguistics and Culture Review*, 6(S1), 14-41.

- Ehiedu, V. C., Onuorah, A. C., & Mbagwu, O. N. (2022). Financial leverage and performance of listed oil and gas firms in Nigeria. *International Journal of Management (IJM)*, 14, 422-440.
- Emeka-Nwokeji, N. A., & Agubata S.N. (2019). Board Attributes and Corporate Performance: Evidence from Nonfinancial Firms in Nigeria. *Journal of Economics and Business*, 2(2), 205-217.
- Eni-Egwu, O. C., Madukwe, C. J., & Ezeilo, C. B. (2022). Impact of selected corporate governance variables on the financial performance of selected quoted deposit money banks in Nigeria. *ARRUS Journal of Social Sciences and Humanities*, 2(1), 32-46.
- Faleye, O., Hoitash, R. & Hoitash, U. (2021). The costs of intense board monitoring. *Journal of Financial Economics*, 101(1), 160-181.
- Farhan, N.H.S., Tabash, M.I., Almaqtri, F.A. & Yahya, A.T. (2020). Board composition and firms profitability: Empirical evidence from pharmaceutical industry in India. *Journal of International Studies*, 13(3),180- 194.
- Gambo, J., Bello, A., & Raimanshing, S. (2018). Effect of board size, board composition and board meetings on financial performance of listed consumer goods in Nigeria. *Canadian Center of Science and Education*, 11(6), 1-10.
- Hafsat, B. A., & Jibril, A. Z. (2021). Effect of Corporate Governance on the Financial Performance of Listed Deposit Money Banks (DMBS) in Nigeria. *International Journal of Management Sciences*, 9(1), 138–147.
- Hawkar, A. H., Akar, O. M., Wafa, R. M., & Hero, H. K. (2021). The Effect of Board Characteristics on Financial Performance: Case of Erbil. *Qalaai Zanistscientific Journal*, 6(4), 1014-1038.
- Hillman, A.J., Canella, A.A., & Paetzold, R.L. (2000). The Resource Dependency Role of Corporate Directors: Strategic Adaptation of Board Composition in Response to Environmental Change. *Journal of Management Studies*, 37(2), 235-255.
- Imade, O. G. (2019). Board gender diversity, non-executive director's composition and corporate performance: Evidence from listed firms in Nigeria. *African Journal of Business Management*, 13(9), 283-290.
- Isah, Y., Abdu, J. B., & Nuruddeen, A. A. (2018). Effect of corporate governance on financial performance of deposit money banks in Nigeria. *Journal of Finance, Accounting and Management*, 9(1), 41-56.
- Isik, O., & Ince, A.R. (2016). Board size, board composition and performance: An investigation on Turkish banks. *international Business Research*, 9(2), 74-84.
- Kajola, S. (2018). Corporate governance and firm performance: The case of Nigerian listed firms. *European Journal of Economic, Finance and Administrative Sciences*, 14, 16-28.
- Kamaludin, K., Ibrahim, I., & Sundarasan, S. (2020). A Middle Eastern viewpoint on the moderating effects of family business on audit committee diligence and firm performance. *International Journal of Economics and Management*, 14(2), 173–188.
- Kang. E., Ding, D.K., & Charoenwong, C. (2021). Investor reaction to women directors. *Journal of Business Research*, 63(8), 880-894.

- Lin, L., Luo, L., & Qingliang T. (2020). Gender diversity, independent directors, environment panel, and greenhouse gas declaration are all important factors to consider. *The British Accounting Review*, 47, 409–24.
- Mohamed, S., Ahmad, K., & Khai, K. (2018). Corporate governance practice and firm performance: Evidence from top 100 public listed companies in Malaysia. *Procedia Economics and Finance*, 35(10), 287-296.
- Musa, S. J. (2019). Corporate governance and financial performance of listed conglomerates in Nigeria. *Accounting Taxation Review*, 3(3), 1544-1557.
- Ntim, C. G., & Osei, K.A. (2011). The impact of corporate board meetings on corporate performance in South Africa. *African. Review of Economics and Finance*, 2(2), 83-103.
- Ogbo, A., & Enilolobo, E. (2021). Corporate board diversity and performance of deposit money banks in Nigeria. *International Journal of Humanities and Social Science*, 8(1), 112-120.
- Okeyide, O. D. (2018). *Diversity and performance: A case of board composition of firms on the Nigerian stock exchange*. (Ph.D. Thesis). Norwich Business School, UK.
- Okiro, K. O. (2016). The relationship between board size and board composition and financial performance: A study of quoted companies at the NSE (Unpublished MBA Project), University of Nairobi Organization for economic corporation and development.
- Okolie, O. A., & Uwejean, C. J. (2022). Board characteristics and financial performance of conglomerates in Nigeria. *European Journal of Business and Management Research*, 7(2), 12-18.
- Okoye, U. L., Olokoyo, F., Okoh, I. J., Ezeji, F., & Uzohue, R. (2020). Effect of corporate governance on the financial performance of commercial banks in Nigeria. *Banks and Bank Systems*, 15(3), 55-69.
- Olaoye, C. O., & Adeyemi, O. S. (2021). Corporate Governance and Performance of Deposit Money Banks in Nigeria, *International Journal of Management (IJM)*, 12(3), 422-440.
- Ongore, V. N., & Kusa, G. B. (2013). Determinants of Financial Performance of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues*, 3(1), 237-252.
- Onuorah, A. C., & Imene, F. O. (2016). Quality of corporate governance and financial reporting in a few Nigerian companies, *International Journal of Management Science and Business Administration*, 2(3), 7–16.
- Owolabi, T.J., Banisaye, T.O. & Efuntade, A.O. (2021). Board diversity & Financial performance of quoted firms in Nigeria. *International Journal of Economics, Business and Management Research*, 5(10), 46-70.
- Pitambar, L. (2017). Corporate Governance and Financial Performance in Nepal. *NCC Journal*, 3(1), 108-120.
- Rafinda, A., Rafinda, A., Witiastuti, R., Suroso, A., & Trinugroho, I. (2018). Board diversity, risk and sustainability of bank performance: Evidence from India. *Journal of Security and Sustainability Issues*, 7(4), 793-806.

- Sani, A. B., Aliyu, A. A., & Bakare, T. O. (2019). Effect of corporate governance on financial performance of deposit money banks in Nigeria. *Asian Journal of Economics, Business and Accounting*, 13(3), 1-11.
- Somathiloke. H. M. D. N. (2018). The effect of board characteristics on firm financial performance. *Global Scientific Journal*, 55(7), 569-593.
- Thomsen, S. & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, 21(6), 689-705.
- Uwuigbe, O. R. (2011). Corporate Governance and Financial Performance of banks: A study of listed banks in Nigeria (Unpublished PhD Thesis). Covenant University, Ogun State.
- Vo, D., & Phan, T. (2013). Corporate governance and firm performance: financial evidence for Vietnam. <http://www.murdoch.edu.au/school-of-management-and-governance-document/australian-conference-of-economists/corporate-governance-and-firm-performance.pdf>.