THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

# Corporate Governance and Performance of Deposit Money Banks in Nigeria

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***Abstract:***
*This study looks at the relationship between corporate governance and the financial performance of deposit money banks in Nigeria. Ex-post facto resign design was used for the study. The population of this study is all deposit money banks listed on the Nigeria stock exchange as at 31st December 2019. Using judgmental sampling techniques, 10 listed deposit money banks were selected and their annual reports of 10 years (2009 – 2018) were used to collect needed data. Three (3) hypotheses were formulated and tested using multiple regression approach. The findings of the study revealed that board size has a significant positive impact (β= 0.006; p < 0.05) on financial performance (measured as ROA) of deposit money banks. Also, board independence has a negative significant effect on financial performance (β = -0.010; p < 0.05). While board meeting frequency has no significant influence on financial performance. The study suggests that the CBN policy on board size should be maintained and also recommends that having better level of experience and knowledge in banking and financial matters should be a major consideration in the appointment of non-executive directors.*

***Keywords:*** *Board characteristics, board independence, financial performance, board size, frequency of board meetings*

## 1. Introduction

The discovery of financial scandals in some world-renowned organizations dealt a shocking blow to the global financial market and greatly hampered the growth of developing economies. These scandals led to the failure of notable organizations such as Enron, World com etc. Nigeria also was not spared in the crises of financial scandals. The country witnessed cases of financial scandals in some companies such as Cadbury Plc, Afribank plc, Intercontinental bank Plc, Oceanic bank plc. This led to the collapsed of most of the companies which also has its effect on the economy of the country. The alarming rate of business failures and the revelations of the involvement of board of directors in most of the reported cases aroused stakeholders' interest for the call of sound corporate governance (Ogbechie, 2012). Sanusi (2010) posit that the financial crises that rocked the Nigeria banking sector in 2009 was partly occasioned by failure in corporate governance.

Corporate governance (CG) is the totality of mechanism employed for the effective and efficient running of an organization. Organization for Economic Co-operation and Development (OECD, 2004) stated that corporate governance is the mechanisms that aligned together the concern of shareholders and other stakeholders and that also ensure the board of directors and executives perform their roles in a way that protect the interest of all stakeholders. It is a structure that establishes an efficient and effective board and procedures that will lead to optimal decision-making for all stakeholders (Muganda & Umulkher, 2015). Due to their role as provider of fund, subject of corporate governance of banks is highly paramount especially in developing economy. The weakness of corporate governance in banks was a foremost feature that led to the financial crises of 2009 in Nigeria (Sanusi, 2010). Muganda and Umulkher (2015) stated that to win the trust and confidence of the public, banks need to have in a sound system of corporate governance. This according to them is paramount for the effective performance of the banking sector and the entire economy. Weak CG has been the reason why some banks failed leading to huge loss of funds to stakeholders.

### *1.1. Statement of Problem*

The modern days practice of having ownership of businesses separated from its management led to agency problem, a situation in which the agent seeks its own interest rather than pursuing the owners' interest. Due to the divergent interest between shareholders and management known as agency problem, there is possibility that the organization performance will be adversely affected. These conflicts of interest among stakeholders makes the needs for corporate governance inevitable (Muganda & Umulkher, 2015). According to Nanka-Bruce (2009) the aim of corporate governance is to unite the interests of firm stakeholders.

Nigeria has witnessed the collapsed of some banks in recent years caused majorly by weakness/failure of the corporate governance. Banks that are seen as vibrant and strong such as Oceanic Bank Plc, Intercontinental Bank Plc, Afribank Plc, Diamond Bank Plc, Skye Bank Plc were suddenly subjected to take-over and merger to the surprised of investors, customers and the general public. Investigations of the Central Bank of Nigeria (CBN) on some of these banks led to the sack of five (5) Chief Executive Officers (CEOs) in 2009. Mallam Sanusi Lamido, the then CBN governor stated in 2010 that the banks did not failed but some identified people committed some acts that destroyed the banks and brought them to their knees.

In order to mitigate against this problem, there is need for some monitoring mechanism. Monitoring mechanism are the corporate governance tools or code to ensure that agency problem is tackled and financial performance improves. These monitoring mechanisms include: board attributes, audit committee characteristics, ownership structure and external audit.

Several literatures exist on corporate governance and financial performance of enterprise in Nigeria with most using some combinations of the corporate governance monitoring mechanisms to test financial performance (Ibe et al 2017; Olayiwola, 2018; Ogege & Boulopremo, 2014; Eluyela et al. 2018; Akeem et al. 2014; Martin & Herrero 2018) all having different conclusions. Because of the divergent views of previous studies on the effects of corporate governance mechanism on financial performance, this study intends to determine the effects of board characteristics (which is one of the corporate governance mechanism) on financial performance.

### *1.2. Research Objectives*

The aim of this study is to examine the effect of board characteristics (which is measured by board size, board independence and numbers of meeting) on financial performance (which is measured by Return on Assets).

Specifically, the study aims at achieving the following objectives:

- To ascertain the impact of board size on the return on assets of deposit money banks in Nigeria.
- To determine the effect of board independence on the return on assets of deposit money banks in Nigeria.
- To evaluate the influence of frequency of board meetings on the return on assets of deposit money banks in Nigeria.

### *1.3. Research Questions*

This study will attempt to provide answers to the following questions:

- Does board size have any impact on the return on assets of deposit money banks in Nigeria?
- Is there any effect of board independence on the return on assets of deposit money banks in Nigeria?
- Does frequency of board meetings have any influence on the return on assets of deposit money banks in Nigeria.

### *1.4. Research Hypotheses*

This study will test the following hypotheses:

- $H_{o1}$: Board size does not significantly impact Returns on Assets (ROA)
- $H_{o2}$: Board independence has no significant effect on ROA
- $H_{o3}$: Frequency of board meetings will not significantly influence ROA

### *1.5. Scope of the Study*

The scope of this study covers all deposit money banks listed on the Nigerian Stock Exchange.

### *1.6. Significance of the Study*

The study is significance because it seeks to highlights the effect of board attributes on the financial performance of deposit money banks in Nigeria. The findings will assist policy makers in the banking sector in Nigeria especially the CBN, the shareholders and banks' board of directors to know the effects of board attributes on financial performance and for them to be able to take appropriate decisions along that line.

## 2. Conceptual Review

### *2.1. Corporate Governance*

Corporate governance is the totality of mechanism employed for the effective and efficient running of an organization. It is the monitoring mechanisms between the owners of the organization and the way it is being managed. The Central Bank of Nigeria (CBN) 2014 claimed that the word corporate governance applies to the regulations, procedures, or laws by which organizations are run, supervised and governed.

Corporate governance entails the maintenance of harmonious relationships among all stakeholders of an organization (Chowdary, 2003). Ibe et al (2017) opined that weak corporate governance would result to weak organizational performance. Corporate governance is a mechanism that minimized the problem of divergent of goals between manager and shareholders. Banks in Nigeria are governed by the guidelines of the CBN code of corporate governance.

### *2.2. Board Characteristics*

Saleem, Alifiah and Tahir (2015) asserted that board characteristics refer to the basic features of a board. They opined that a board is a make-up of directors acting as overseer to an organization management in order to safeguard the benefits of all stakeholders of the organization. According to Fama and Jensen (1983) the board of directors is the supreme decision maker of an organization. Saleem et al. (2015) stated that board characteristics can be categorized into board size, board independence, board composition and meeting frequency.

A board of directors represents the owners of a company and its primary responsibility is to ensure that the business is effectively managed. Lin (2005) stated that the board was empowered to select the CEO and other executives, to decide their salaries, to track the CEO's and executives' actions and, if necessary, to deprive any of the executives and the CEO of their position. Boards should be willing and keen to track management as employee delegates according to organization philosophy (Yermack, 1996).

*2.3. Board Size*

The board composition is the combined number of people (Executive and Non-Executive Directors) on the board of any organization, according to Sanda, Mukailu and Garba (2008). The board's efficiency and also the organization's success rely solely on the board's number and quality of members, so it is very essential to have a board of ideal size (Ogbechie, 2012; Kajola 2008). In accordance to AbuGhazaleh et.al (2012), the size of the board affects the quality of consideration among participants, and the board's ability to reach an appropriate business decision. Kiel and Nicholson (2003) claimed that the size of the board is critical to the success of the board and enhanced firm results. Scholars, however, have yet to come to terms with what might be considered the ideal size of the board. Some researchers called for reduced board size while others argued in favor of big board size.

The 2014 CGC of the CBN stipulates that a bank's board should be at least five (5) and a limit of twenty (20). Vafeas (2005) said board size is critical for successful decision making and has a nonlinear relationship with firm efficiency.

Fodio et al. (2013) claimed that the benefits of small boards are that it is easy to manage effective communication between members, and also small boards. Effective communication with members of the board can eliminate misunderstandings and also promote the prompt filing of financial reports. A limited group provides better oversight in financial reporting, as it is less cumbersome and linked to higher market values (Aygun et al., 2014; Iraya et al., 2015). Bebchuk and Fried (2010) expressed the view that broader boards need more effort and time to build group cohesion and consensus, and may face certain internal connectivity and teamwork challenges and, as a result, they may not be very active and cautious at limiting executive influence.

*2.4. Board Independence*

CBN (2014) Corporate Governance Framework for banks stipulated that non-executive directors should be a considerable number of board members. It is much more likely that a board with more non-executive members will be independent of management than one dominated by executive officers and therefore more likely to protect the rights of other stakeholders (Ogbechie 2012; David et. al. 2007). According to Alzoubi and Selamat (2012), a board with a large number of non-executive members will be able to effectively monitor and control the administration, thereby helping to reduce the expenses of the business and improving the quality of financial reporting. In terms of predictability of earnings and consistency of earnings, non-executive directors improve the earnings efficiency of the company (Bita and Bazaz, 2010).

Gordini (2012) estimates that there are 950 Italian companies that have positive relationships between non-executive directors and results (ROA and ROE). Bebchuk and Weisbach (2010) reported a high percentage of the board's increased freedom from outside management, and their findings also suggest that board independence has a positive effect on firm performance. Khan and Awan (2012) concluded that a significant direct association exist between performance measures and non-executive officers. They believed that this positive relationship indicates that managers ' actions can be easily controlled by outside supervisors and this fits with the resource dependence and department theories view. Bozec (2005) did, however, note an indirect link between success and independent directors.

*2.5. Board Meeting*

Ronen and Yaari (2006) claimed that it is the duty of the company's directors to attend the board meeting, thus granting them the right of voting on key decisions. More regular board meetings boost board efficiency (Conger et al., 1998) and reduce the likelihood of bribery (Chen et al., 2008). According to Vafeas (1999), the company's operating efficiency will increase through periodic board meetings, and more attempts will be made to track the quality of financial reports. Likewise, Bita and Bazaz (2010) reported that, in terms of predictability of earnings and consistency of earnings, the frequency of the board meetings improves the earnings efficiency of the company.

*2.6. Financial Performance*

According to Ibe et al. (2017), businesses need to earn profit through their activities to survive and grow over a long period of time. The success of the strategy and judicial use of money for an entity is calculated by the financial results reported at the end of a fiscal year by the company. Kajola (2008) said firm performance is an important principle that connotes how a firm's financial resources are used prudently to accomplish its overall goal. Pandey (2010) claimed that adequate income must be obtained, the company must be maintained, creditors must be able to obtain funds for expansion and growth and contribute to the social overheads for the welfare of the society.

*2.7. Financial Performance Indicators*

Financial performance indicators are the tools used to analyze and evaluates an organization's performance. Financial performance indicators can be classified into two, these are accounting based and market-based indicators. Accounting based indicators measures profitability and they include return on assets (ROA), return on equity (ROE), and net income. Market based indicators are stock return and Tobin's Q (Li, 2013).

*2.8. Return on Assets (ROA)*

Return on total assets (ROA) is a significant indicator of growth of business operations of an entity. Return on Assets (ROA) is used to evaluate how well a company has used its assets in generating profits. According to Rosikah (2018) ROA is used to measure a company capability to create profits using owned assets. ROA is often used as a tool to measure the rate of return on total assets after interest expense and taxes, (Brigham & Houston, 2001). Mohd, Muammar and Ainatul (2014) stated that ROA is a financial ratio that measure the degree to which the assets have been used to generate profits. The higher the Return on Assets (ROA) is, the better the company's performance.

2.8.1. Calculation of Return on Assets

According to Brigham and Houston (2001), return on asset (ROA) is calculated by comparing available net profit to total assets.

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$$

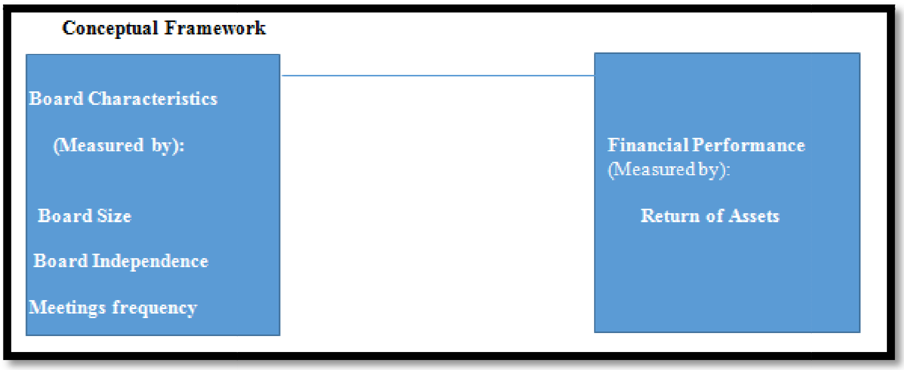


*Figure 1: Conceptual Framework for Board Characteristics and Financial Performance*
*Source: Authors, 2020*

Because of the divergent views of previous studies on the effects of corporate governance on financial performance, this study attempts to determine the effects of some corporate governance variables on financial performance. This study's dependent variable is financial performance and it will be calculated using accounting-based performance measurement. The performance metric based on accounting shall be calculated using Return on Asset (ROA). ROA as a benchmark for financial performance tests management's overall effectiveness and gives an idea of how efficient management is to use its assets to generate revenue (Al-Manaseer et al., 2012).

The independent variable is the characteristics of the board which are determined by the size of the board, independence of the board and meeting frequency.

## 3. Theoretical Review

The effect of corporate governance structures on the financial performance of companies has been clarified using specific analytical viewpoints (Muganda & Umulkher, 2015). The agency theory, stakeholder theory, and resource dependence theory are the most popular of these theories (Maher & Anderson, 1999).

*3.1. Agency Theory*

This is a theory that examined the principal agent relationship that exists between owners of organizations and those managing it. It is a theory by Alchian and Demsetz (1972) and later expatiated by Jensen and Meckling (1976). The modern-day business practice that separates ownership from management bring about what is known as agency problem. This is a case where executives followed goals which are not in line with the owners ' interests. The agent aims to accomplish his personal goals at the detriment of the client, according to agency philosophy. Managers would always seek their own self-interests and profits rather than the capital maximizing shareholder priorities. To mitigate the issue of the principal agent, improved oversight and management systems need to be put in place to help to ensure that executives follow shareholder objectives instead of their own interests alone. The philosophy of corporate governance saw a conflict between owners and corporate managers according to Jensen and Meckling (1976). The shareholders ' main goal is to get a decent return on their investment but the managers may vary and choose to follow other objectives such as improving reputation and providing more perquisites for the job. Fama and Jensen (1983) argued that owing to their first-hand access to information and the widely scattered existence of the shareholders, managers held a superior role over the shareholders. Consequently, the only choice available to shareholders is to have respected members in the company, such as the board. The board of directors is an essential body formed from the executives to protect the shareholders ' interests against any manipulation. Fama and Jensen (1983) suggest that it is important to have a system to distinguish decision-making authority for decision-making control in order to mitigate the issue that resulted from the division of ownership and control of the firms. According to them, this would reduce the effect of the issue of the corporation and guarantee the accomplishment of the goal of the shareholders by effective control of the power and management decisions based on themselves. According to Habbash (2010), corporate governance frameworks are used to balance the needs of all partners together and to constrain managers ' opportunistic actions to address organization problems. Corporate governance is a method that leads against the problem of the business and offers shareholders confidence that their needs will be pursued by managers. According to Tandelilin et al. (2007), the agency theory provided a number of strategies for minimizing the firm's agency problem, such as determining the correct board structure (in terms of size, class, competence and competency), successful audit committee, and the possibility of dismissal. From the perspective of organization philosophy, corporate governance enhances organizational efficiency through solving problems for agencies by tracking management practices, managing self-centered management habits, and reviewing the financial reporting process (Habbash, 2010).

*3.2. Stakeholder Theory*

Stakeholder theory is a theory propounded by Edward Freeman which states that an organization must seek to maximize value of its stakeholders. Stakeholder theory is an extension of the agency theory, with the argument that an organization must create value for shareholders, customers, suppliers, employees, communities, banks and individuals, including interest groups related to social, environmental and ethical considerations (Freeman et al., 2004). Freeman (1984) defined a stakeholder as any group or individual affected by or that can affect the attainment of an organization's goal. These individuals or groups are vital to the existence of the organization (Freeman 2004). Stakeholder theory argues that the best organizations are ones with committed suppliers, customers, employees and management. The managers are expected to manage the organization for the benefit of its stakeholders.

*3.3. Resource Dependency Theory (RDT)*

The theory originated in the 1970s with the publication of The External Control of Organizations: A Resource Dependence Perspective by Jeffrey Pfeffer and Gerald R. Salancik. RDT is based on the idea that resources are key to organizational success and that access and control over resources is a basis of power. The resource dependency theory emphasizes the role of board of directors in providing access to resources needed by the firm (Abdullah & Valentine, 2009). According to this theory the primary function of the board of directors is to provide resources to the firm. Therefore, when directors are considered as resource providers, various dimensions of director diversity clearly become important such as gender, experience, qualification and the like. According to Abdullah and Valentine (2009), directors bring resources to the firm, such as information, skills, business expertise, access to key constituents such as suppliers, buyers, public policy makers, social groups as well as legitimacy. Boards of directors provide expertise, skills, information and potential linkage with environment for firms (Ayuso & Argandona, 2007). The resource-based approach notes that the board of directors could support the management in areas where in-firm knowledge is limited or lacking. Wang (2009) stated that the resource dependence model implies that the board of directors could be used as a mechanism to form links with the external environment in order to support the management in the achievement of organizational goals. Arguing from resource dependence theory, Ferreira (2010) also submitted that the involvement of outside directors is key to prosperity of the firm because they connect it to suppliers, financiers, expert advice and counsel.

**4. Empirical Review**

Olayiwola (2018) analyzed the role of CG on the financial performance of listed companies in Nigeria using a sample of 10 companies from the 2010 to 2017. The study concluded that the board's attribute impacts financial performance substantially. In fact, the study finds there is a significant adverse association between the size of the board and the net profit margin. A strong positive association between board composition and net profit margin was also identified.

Martin and Herrero (2018) conducted a study on the role of board composition from 2010 to 2015 using 81 listed Spanish firms. They confirmed that size of boards will have a negative impact on the company's business performance and board independence is negatively significant with financial performance. Hanh, Ting, Kweh and Hoanh, (2018) explores the impact of frequency board meetings on the financial performance of the listed companies using 94 companies listed on the Ho Chi Minh Stock Exchange from 2013 to 2015. They discovered that the frequency of the board meeting wields a negative effect on the study enterprises' financial performance. The frequency of board meetings is equal to low performance.

Eluyela, Akintimehin, Okere, Ozordi, Osuma, Oladipo, Ilogho and Oladipo (2018) also investigate the effect of CG on the firm efficiency of deposit money banks in Nigeria by the Board meeting and board size. They reported a positive association with frequency of board meetings and firm performance and that board size has a significant and marginal effect on firm results.

Ibe et al (2017) explored the effect of a CG system on the financial performance of Nigerian insurance companies using 20 companies and found that the size of the board has a negative and significant impact on shareholder return while the board's independence and net profit margin have a significant positive relationship. They specifically stated that there is no significant positive association between the remuneration of executive directors and the ROA but the remuneration of non-executive directors has a significant negative impact on the ROA.

Muganda and Umulkher (2015) analyzed the connection between the system of corporate governance and the profitability of banks in Kenya. 42 Commercial banks used as examples for the analysis, based on their audited financial statements for 2014. In their research, they found that board size has a significant inverse connection with financial performance. Mohamed et al (2014) in their study on the Arabian Peninsula. The research sample was 50 banks which used their 2011 results. The study concluded that board size has a significant positive relationship with financial performance.

Sarpong-Danquah et al (2018) carried out a research to consider the link between CG and performance of quoted manufacturing firms in Ghana, selected 11 manufacturing firms and analyzed their financial report for the years 2009 to 2013. The study findings are that there is a strong positive link between board independence and equity return, and no statistical relationship between board size and ROE.

Akeem, Terer, Temitope and Feyitimi (2014) find no proof of corporate governance and results in another report of insurance companies in Nigeria. The research used a survey of three insurance companies from 2002 through 2008 a seven-year duration. Their research reported that a calculation of financial performance by board size and board structure does not impair ROE. In addition, Saravanan (2012) study on manufacturing companies in India reveals that board size has a significant direct effect on financial performance.

## 5. Research Methods

The resign design used for this study was the ex-post facto research design. Panel data was used to conduct this research. This method entails using data of different entities observed across time. The period of this study is from 2009 to 2018.

### *5.1. Population of Study*

The population for this study is all deposit money banks listed on the Nigerian stock exchange as at 31st December 2019.

### *5.2. Sampling Technique and Sample Size*

This study makes use of sample size of ten (10) deposit money banks listed on the Nigerian stock exchange. The sampling technique used in selecting the banks is the judgmental sampling and the requirements for selection are based on bank size, customers and branch spread. The selected banks are First Bank of Nigeria Ltd, UBA, Union Bank of Nigeria Plc, GTB, Zenith Bank, WEMA Bank, FCMB, Sterling Bank, Access Bank and Fidelity Bank.

### *5.3. Data Collection*

The data used for this study was the secondary data and they are collected from the annual reports of the selected banks for the period 2009 to 2018. The annual reports were retrieved from the chosen banks' web sites. The data used for analysis in this study include reports on the board characteristics (represented by board size, board independence and number of board meetings), financial results (measured by returns on Assets) and bank age.

### *5.4. Definition and Measurement of Variables*

#### 5.4.1. Independent Variables

Board Size (BDSIZE): number of board members
Board Independence (BDIND): number of non-executive members on the board
Frequency of board meetings (BDFREQ): Number of times board met in a year

#### 5.4.2. Dependent Variable

Return on Assets (ROA): ratio of Net Income before Tax to Total Assets

#### 5.4.3. Control Variable

Bank Age (BKAGE): Bank years

### *5.5. Model Specification*

Regression analysis model for this study is described below.

The model regressed the independent and control variables against the dependent variable and the result of this model was used to measure the ability of these variables to fulfill this study's objective. This observation was also used to evaluate the first, second and third hypotheses. The regression model is shown in equation 1 below.

$ROA_{it} = \beta_0 + \beta_1 BDSIZE_{it} + \beta_2 BDIND_{it} + \beta_3 BFREQ_{it} + \beta_4 BKAGE_{it} + e_{it}$ ..........................1

The intercept is represented by $\beta_0$, the coefficients are represented by $\beta_1 - \beta_4$ and e is the error.

### *5.6. Multiple Regression Analysis*

The link between ROA and board characteristics variables were estimated using OLS.

*5.7. Descriptive Statistics*

| Variable | Minimum | Maximum | Mean | Std. Dev. |
|---|---|---|---|---|
| Main Variables | | | | |
| ROA | -0.252 | 0.082 | 0.018 | 0.039 |
| BD SIZE | 7 | 20 | 14.43 | 2.713 |
| BD IND | 3 | 12 | 8.68 | 1.651 |
| BFreq | 3 | 13 | 6.63 | 2.368 |
| Control Variable | | | | |
| BK AGE | 19 | 57 | 35.1 | 12.106 |
| | | | | |

*Table 1: Descriptive Statistics*
*Source: Authors' Computation, 2020*

The table 1 shows that the ROA which represents banks ' financial performance varied from-0.252 to 0.082 with a mean of 0.018 and a standard deviation of 0.039. The table further showed that the board size of the banks varied from 7 to 20, this is consistent with section 2.2.1 of the CBN CGC which states that the board size of the bank must be at least 5 and a maximum of 20. The number of non-executive members on the board ranges from 3 to 12, meaning that the majority of board members are non-executive directors and this is consistent with the CBN guideline in section 2.2.3 of the corporate governance code. The table shows that the boards met between 3 to 13 times in a year, with a mean of 6.63 and a standard deviation of 2.368. The table shows the banks age is between 19 and 57 years.

*5.8. Correlation Analysis*

| Variables | ROA | BDSIZE | BDIND | BFREQ | BKAGE |
|---|---|---|---|---|---|
| ROA | 1.0000 | | | | |
| BDSIZE | -0.0550 | 1.0000 | | | |
| BDIND | -0.2490 | 0.7709 | 1.0000 | | |
| BFREQ | -0.1074 | 0.2750 | 0.2174 | 1.0000 | |
| BKAGE | -0.2831 | 0.3921 | 0.4606 | 0.0200 | 1.0000 |

*Table 2: Inter-Correlation Matrix*
*Source: Authors' Computation, 2020*

The results of Table 2 above show the association that exist between variables. From the table it can be depicted that ROA to some extent is associated to the independent and control variables. All variables are negatively linked with ROA.

*5.9. Regression Results*

| Test | Chi-square | P-value |
|---|---|---|
| Jacque bera | 4.99 | 0.0823 |
| Wald | 4553.09 | 0.0000 |
| Wooldridge | 0.221 | 0.6495 |

*Table 3: Robustness Check for Fixed Effect Model*
*Source: Authors' Computation, 2020*

Based on the assumption of linear regression of normality of residual. The study carried out normality test using Jacque Bera test at 5%, the result ($x^2$ = 4.99, P > 0.05) is not significant which implies that the residual is normally distributed. Further on assumption of homoscedasticity, the study carried out a modified Wald test and the result ($x^2$ = 4553.09, P < 0.0000) is significant which reveal the presence of heteroskedastic. Wooldridge test for auto correlation in panel data was conducted at 5% and the result (F = 0.221, P > 0.05) shows there is no autocorrelation among the variables.

| | Chi-square | P-value |
|---|---|---|
| Hausman Test | 26.22 | 0.0001 |

*Table 4: Hausman Specification Test*
*Source: Authors' Computation, 2020*

Due to the panel nature of the data, Hausman test was conducted. Evidence from the test (Table 4) revealed that fixed effect model is preferred. As a result of the problem of heteroskedastic noted earlier, the regression was run using the panels corrected standard errors (PCSEs) to take care of the issue.

| Variables | Model 1 |
|---|---|
| Main variables | |
| Constant | 0.062(3.73)* |
| BDSIZE | 0.006 (3.63)* |
| BDIND | -0.010(-3.51)* |
| BFREQ | -0.002(-1.21) |
| Control variable | |
| BKAGE | -0.001(-2.82)* |
| R2 | 0.163 |
| F Value | 18.50 |
| P Value | 0.0010 |

*Table 5: Fixed Effect Model Table*
*Source: Authors' Computation, 2020*
*Note: 1. Value of the T Statistics in Parenthesis*
*2. Level of Significant Is at 5%*

## 6. Interpretation and Discussion of Findings

Table 5 is the outcome of the fixed effect model. The result of the F-ratio ($F = 18.50$, $P<0.05$) indicates that the model is suitable enough to explain the changes in ROA. The value of the R2 is 0.163, this implies 16.3% of changes in the return of assets (ROA) are explained by the independent and control variables. Others findings of this study are discussed as follow:

### *6.1. Board Size and Financial Performance*

Table 5 shows that board size ($\beta= 0.006$; $p < 0.05$) has a positive significant effect on financial performance (ROA), which means that board size is a critical factor in enhancing financial performance. This result does not agree with the first hypothesis ($H_{01}$). It therefore means that the number of directors on a board will significantly impact on the financial performance of the organization. This implies that an increase in the number of board of directors will bring a marginal increase of 0.6% in financial performance. This is so because of the variety of knowledge and expertise that each board member will bring to fore in decision making. This finding is in line with Saravana (2012), Eluyela et al. (2018) and Mohammed et al. (2014) who discovered that board size improves performance

### *6.2. Board Independence and Financial Performance*

Board independence ($\beta = -0.010$; $p < 0.05$) also has a negative significant link with financial performance. This means that the number of non-executive members on the board will influence financial performance but the relationship is negative. This inverse relationship could be due to some factors. Firstly, non-executive directors are on the board to provide independent, objective and constructive views and also monitoring role that performing these functions could slow down or delay decision making and secondly, not having the specific and relevant knowledge, professionalism and experience in banking and financial business. These could limit their efficiency hence the inverse relationship with financial performance.

Based on this result the second hypothesis ($H_{02}$) was rejected. This suggests that board independence does influence ROA. The finding is similar to findings of the studies done by Das (2017), Martins & Herrero (2018).

### *6.3. Frequency of Board Meeting and Financial Performance*

BFREQ ($\beta = -0.002$; $p > 0.05$) has no significant influence on financial performance (ROA) which means that the number of times the board met in a year does not influence financial performance. This result supports the third hypothesis ($H_{03}$) hence the study failed to reject this hypothesis. This finding agreed with the finding of prior work by Hanh et al. (2018) and contrary to Eluyela et al. (2018).

## 7. Conclusion

This study examined the effect of board characteristics on the financial performance of deposit money bank in Nigeria. Data from the annual reports of ten (10) banks were collected for the period 2009 – 2018. This study offers empirical proof of the link between board's attributes and return on assets. This study identified that board size motivates the ROA. Also, the number of non-executive members on the Board affects ROA inversely. The study did not, however, identify any connection between numbers of board meetings and ROA.

## 8. Recommendations

Centered on the findings of this study, the following recommendations are advanced:

- The descriptive statistics shows that the average board size of deposit money banks in Nigeria is 14 members, with a minimum of 7 and maximum of 20 members. Based on the findings of this study which shows a positive significant relationship of board size with financial performance, this study therefore supports the CBN policy on deposit money banks board size and suggest that the policy be maintained.

- Based on the findings that board independence has a negative significant effect on ROA. This study suggests that the policy makers should find means of making non-executive directors more effective in their contributions to the organization by ensuring they possess adequate knowledge and experience in banking and financial matters so that they can positively influence financial performance.
- Also, non-executive director should carefully consider the likely time commitment involved in performing their roles in such way that decision making is not delayed.

**9. References**


i. Abdullah, H., & Valentine, B. (2009). Fundamental and ethics theories of corporate governance. *Middle Eastern Finance and Economics*, 4, 89-96.
ii. AbuGhazaleh, N.M., Qasim, A & Roberts, C. (2012). The determinants of Web-based investor relations activities by companies operating in an emerging economy. *Journal of Applied Business Research*, 28 (2), 209-225
iii. Al-Manaseer, M.F., Al-Hindawi, R.M., Al-Dahiyat, M.A., & Sartawi, I.I. (2012). The Impact of Corporate Governance on the Performance of Jordanian Banks. *European Journal of Scientific Research*, 67(3), 349-359.
iv. Alzoubi, E.S., & Selamat, M.H. (2012). The effectiveness of corporate governance mechanisms on constraining earning management: Literature review and proposed framework. *International Journal of Global Business*, 5(1), 17-35.
v. Akeem, L.B., Terer, K, E., Temitope, O. A. & Feyitimi, O. (2014). Measuring impact of corporate governance on the performance of the Nigerian insurance company. *International Journal of Economics, Commerce and Management*. II(11), 1-17
vi. Ayuso, S. & Argandona, A. (2007). Responsible corporate governance: Towards a stakeholder's board of directors. IESE business school, working paper No. 701.
vii. Aygun, M., Ic, S. & Sayim, M. (2014). The Effects of corporate ownership structure and board size on earnings management: Evidence from Turkey. *International Journal of Business and Management,* 9(12), 123-132.
viii. Bebchuk, L. A., & Fried, J. M. (2010). Paying for long-term performance. *University of Pennsylvania Law Review*, 158(1).
ix. Bebchuk, L. A., & Weisbach, M. S. (2010). The state of corporate governance research. *The Review of Financial Studies*, *23*(3), 939-961.
x. Bita, M., & Bazaz, M.S. (2010). The effect of corporate governance on earnings quality: Evidence from Iran. *Asian Journal of Business and Accounting*, 3(2), 71-100.
xi. Bozec, R. (2005). Boards of directors, market discipline and firm performance. *Journal of Business Finance & Accounting*, *32*(9-10), 1921-1960.
xii. Brigham, E. F., & Houston, J.F, (2001), Financial Management, Translation by Erlangga Publishing Team. Eight Edition, II Book. Erlangga Publishing, Jakarta.
xiii. CBN (2014), Code of Corporate Governance for Banks and Discount Houses in Nigeria.
xiv. Chen, J., Duh, R., & Shiue, F.N. (2008). The effect of audit committees on earnings-return association: Evidence from foreign registrants in the United States. *Corporate Governance: An International Review,* 16(1), 32-40.
xv. Chowdary, N.V. (2003). *Corporate Governance in Emerging Markets Volume 1*. Corporate Governance, ICFAI Press Hyderabad.
xvi. Conger, J.A., Finegold, D., & Lawler, E. (1998). Appraising boardroom performance. Harvard Business Review, 76(1), 136-148.
xvii. David, F., George, S.B. & David, H. (2007). Corporate Boards and Company Performance: Review of Research in Light of Recent Reforms. *Journal Compilation,* 15(5).
xviii. Das, S.K. (2017). Impact of Corporate Governance Mechanisms on Firm's Performance: A Study on Listed Conventional Banks. *Asian Business Review,* 7(1)
xix. 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
xx. Fama, E. & Jensen, M. (1983). Separation of ownership and control. *Journal of Law Economics*, 26(2), 301-325
xxi. Ferrreira, D. (2010). Board diversity. In H K Baker, R Anderson (eds.). Corporate governance: a synthesis of theory research and practice. London: John Wiley and Son Inc, India.
xxii. Fodio, M.I., Ibikunle, J. & Oba, V.C. (2013). Corporate governance mechanisms and reported earnings quality in listed Nigerian insurance firms. *International Journal of Finance and Accounting*, 2(5), 279-286.
xxiii. Freeman, R., Wicks, A. & Parmar, B. (2004). Stakeholder Theory and "The Corporate Objective Revisited". Organization Science, 15 (3), 364–369
xxiv. Freeman, R.E (1984). "Strategic Management: A stakeholder Approach". Boston, MA: Pitman.
xxv. Freeman, R.E (2004). "A Stakeholder Theory of Modern Corporations", *Ethical Theory and Business*, 7th edn
xxvi. Gordini, N. (2012). The impact of outsiders on small family firm performance: Evidence from Italy. *World Journal of Management*, *4*(2), 14-35.
xxvii. Habbash, M. (2010). The effectiveness of corporate governance and external audit on constraining earnings management practice in the UK. Doctoral thesis, Durham University. Available at: http://etheses.dur.ac.uk/448/
xxviii. Hanh, L.T., Ting, I.W.K, Kweh, Q.L. & Hoanh, L.T.H. (2018). Board Meeting Frequency and Financial Performance: A Case of Listed Firms in Vietnam. *International Journal of Business and Society,* 19(2), 464-472
*xxix.* Ibe, H.C., Ugwuanyi, G.O., & Okanya, O.C (2017). Effect of Corporate Governance Mechanisms on Financial Performance of Insurance Companies in Nigeria. *Journal of Finance and Accounting, 5(3), 93-103*

xxx. Iraya, C., Mwangi, M. & Munchoki, G.W. (2015). The effect of corporate governance practices on earnings management of companies listed at the Nairobi securities exchange. *European Scientific Journal*, 11(1), 169-178.
xxxi. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, *3*(4), 305-360.
xxxii. Kajola S.O (2008). Corporate Governance and Firm Performance: The Case of Nigerian Listed Firm. *European journal of economics, finance and administrative science*, ISSN 1450-2275 (14).
xxxiii. Khan, A., & Awan, S. H. (2012). Effect of board composition on firm's performance: A case of Pakistani listed companies. *Interdisciplinary Journal of Contemporary Research in Business*, *3*(10), 853-863.
xxxiv. Kiel, G. & Nicholson, G. (2003). Board Composition and Corporate Performance: How the Australian Experience Informs Contrasting Theories of Corporate Governance. *Corporate Governance: An International Review,* 11 (3), 189–205.
xxxv. Li, L. (2013). Market-based vs. accounting-based performance of banks in Asian emerging markets. *Asian Journal of Business Research*, special edition
xxxvi. Lin, Y.F. (2005). Corporate governance, leadership structure and CEO compensation: Evidence from Taiwan. *Corporate Governance: An International Review*, *13*(6), 824-835.
xxxvii. Maher, M. & Andersson, T. (1999). Corporate governance: effects on firm performance and economic growth, OECD, 1-51.
xxxviii. Martín, C.J.G. & Herrero, B. (2018). Boards of directors: composition and effects on the performance of the firm, *Economic Research-Ekonomska Istraživanja*, 31(1):1015-1041,
xxxix. Mohd, H., Muammar, K., & Ainatul, U (2014). Influence analysis of Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin (NPM), Debt to Equity Ratio (DER), and current ratio (CR), against corporate profit growth In Automotive in Indonesia Stock Exchange. *International Journal of Academic Research in Business and Social Sciences,* 4(12)
*xl.* Muganda, M.M., & Umulkher, A.A (2015). Corporate Governance Mechanisms and Financial Performance of Commercial Banks in Kenya. *IOSR Journal of Business and Management,* 17(3), 25-40
xli. Nanka-Bruce, D. (2009). Corporate governance and multi-functional performance. European doctoral programme in entrepreneurship and small business management, Spain. Available at http://tdx.cat/bitstream/handle/10803/3975/dnb1de1.pdf?sequence=1.
xlii. OECD (2004), OECD Principles of Corporate Governance, Organization for Economic Co-operation and Development.
xliii. Ogbechie, C. I. (2012). Key determinants of Effective Boards of Directors-Evidence from Nigeria. Brunel Business School. Brunel University, London.
xliv. Ogege, S. & Boloupremo, T. (2014). Corporate Governance and Financial Performance of Banks: Evidence from Nigeria. *ACTA UNIVERSITATIS DANUBIUS,* 10(3)
xlv. Olayiwola, K.T (2018). The Effect of Corporate Governance on Financial Performance of Listed Companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 6(9), 85-98
xlvi. Pandey I.M. (2010). *Financial Management*. 10th edition, Vikas Publishing House PVT LTD, Jangpura, New Delhi
xlvii. Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper & Row.
xlviii. Ronen, J., & Yaari, V. (2006). Earnings Management: Emerging Insights in Theory, Practice, and Research. Vol. 3. New York: Springer Verlag.
xlix. Rosikah, Dwi, K.P., Dzulfikri, A.M., Muh, I.A., & Miswar, R. (2018). Effects of Return on Asset, Return on Equity, Earning Per Share on Corporate Value. *The International Journal of Engineering and Science*, 7(3), 06-14
l. Saleem, F., Alifiah, M.N., & Tahir, M.S. (2016). The Effectiveness of Monitoring Mechanisms for Constraining Earnings Management: A Literature Survey for a Conceptual Framework. *International Journal of Economics and Financial*, 6(3)
li. Sanda, A.U, Mikailu, A.S., & T, Garba, (2005). Corporate Governance Mechanisms and Firm Financial Performance in Nigeria. *African Economic Research Consortium (AERC) Research Paper 149*, Nairobi.
lii. Sanusi, L. S. (2010). The Nigerian banking industry – what went wrong and the way forward. Text of the Convocation Lecture by Mr Sanusi Lamido Sanusi, Governor of the Central Bank of Nigeria, to mark the Annual Convocation Ceremony of Bayero University, Bayero University, Kano, 26 February 2010.
liii. Saravanan, P. (2012). Corporate governance and company performance: A study with reference to manufacturing firms in India.
liv. Sarpong-Danquah, B., Gyimah, P., Afriyie, R.O. & Albert Asiamah, A. (2018). Corporate Governance and Firm Performance: An Empirical Analysis of Manufacturing Listed Firms in Ghana. *Accounting and Finance Research*, 7(3)
lv. Tandelilin, E., Kaaro, H., & Mahadwartha, P. (2007). Corporate Governance, Risk Management, and Bank Performance: Does Type of Ownership Matter? (EADN working paper No. 34).
lvi. Vafeas, N. (1999). Board meeting frequency and firm performance. *Journal of Financial Economics,* 53(1), 113-142.
lvii. Vafeas, N. (2005). Audit committees, boards, and the quality of reported earnings. *Contemporary Accounting Research*, 22(4), 1093-1122.
lviii. Wang, Y. (2009). Board Independence and Firm Performance: Evidence from ASX-Listed Companies. A Thesis Submitted for the Degree of Doctor of Philosophy. Available at:

http://researchbank.swinburne.edu.au/vital/access/manager/Repository/swin:14387

lix. Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of financial economics*, *40*(2), 185-211.