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BOARD ATTRIBUTES, CORPORATE GOVERNANCE COMPLIANCE AND CAPITAL ADEQUACY OF COMMERCIAL BANKS IN NIGERIA

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Abstract

This study investigated the effect of board attributes and corporate governance compliance on the capital adequacy of commercial banks in Nigeria, focusing on eight banks with international licenses as of 31 December 2023 over the period 2013–2023. Adopting an ex-post facto research design, data were obtained from the published annual reports of the sampled banks and analyzed using both descriptive and inferential statistical techniques. The findings reveal that board meetings and corporate governance compliance exert a significant negative influence on capital adequacy, while board size has a negative but statistically insignificant effect. The results suggest that larger boards and more frequent meetings do not necessarily translate into stronger capital positions, thereby calling for a critical reassessment of existing governance strategies. Furthermore, higher levels of corporate governance compliance were not found to enhance banks' capital base. The study recommends that bank boards periodically evaluate the effectiveness of meetings and reassess board size to strike a balance between diverse expertise and efficient decision-making. It contributes to the literature by providing fresh empirical evidence on governance compliance and capital adequacy within the Nigerian banking sector.

1.1 Introduction

Globally, the banking industry plays a pivotal role in every economy as it facilitates financial intermediation, asset allocation, and economic growth. This suggests that the banking industry is at the center of all business activities. However, as competition in the business world has become highly intense, scholars have advocated for efficient corporate governance mechanisms. According to Nwanne and Okonkwo (2019), an efficient corporate governance mechanism is crucial for building public confidence and encouraging long-term investments. Edeh and Iwedi (2024) stressed that robust corporate governance practices can influence the financial health and stability of commercial banks. This is because international operations introduce additional complexities in governance, requiring banks to adhere to diverse regulatory frameworks, manage cross-border risks, and maintain transparency and compliance across multiple jurisdictions.

Overall, a well-structured board is not only capable of providing strategic guidance but also ensures adherence to regulatory requirements and ethical standards, thus fostering trust among stakeholders and enhancing corporate financial performance (Ohre & Jeroh, 2024; Nwanne &

Okonkwo, 2019). It is in recognition of these benefits that the Financial Reporting Council of Nigeria (FRCN) released the Nigerian Code of Corporate Governance 2018 (the Code), which seeks, inter alia, to institutionalize the highest standards of corporate governance best practices and in promoting public awareness of essential corporate values and ethical practices that will enhance the integrity of the Nigerian corporate landscape. Unlike the 2016 Code, which stressed strict compliance, the 2018 Code emphasizes the "Apply and Explain" approach to implementation (Olayimika, Olaniwun & Olaniwun, 2019).

Consistent with existing empirical documentation and corporate governance codes, key corporate board structure include, but are not limited to, the frequency of board meetings and board size. As expected, the more frequently board members meet, the higher the firm's performance tends to be. This is because strategic policies aimed at improving firm performance are formulated during board meetings (Amanamah, 2024). Another critical board structure is board size (i.e., the total number of board members). Board size is a critical measure because a larger board can bring more diverse perspectives and expertise, which might improve decision-making and risk management. Furthermore, a larger board may provide more effective oversight and monitoring of management practices, enhancing the bank's ability to identify and address potential risks and weaknesses (Jeroh, 2023). However, Ohre and Jeroh (2024) noted that governance does not depend solely on board size but also on the quality of its members, and the effectiveness and efficiency with which board members perform their duties.

One major inference from the above is that it is very crucial to use board meetings, board size and corporate governance compliance as variables when examining their effect on capital adequacy because this factor directly influences how effective a bank manages its capital. Frequent board meetings ensure regular oversight and timely decision-making on capital issues, such as the current need for all commercial banks in Nigeria to improve their capital base, likewise an adequate board size provides diverse expertise and effective oversight structures for capital management, while corporate governance compliance ensures adherence to regulatory standards and promotes transparency and accountability in capital management. Overall, these variables contribute to a robust framework for maintaining and enhancing capital adequacy, which is vital for the financial stability and soundness of Nigerian commercial banks.

On the other hand, capital adequacy is a critical non-conventional measure of firm performance/soundness. This measure is essential for the banking industry because banking activities rely on confidence. An indicator of a board's efficiency is ensuring that the bank maintains a high capital base. A high capital base and low levels of bad debt serve as a buffer during economic crises, rather than return on assets or return on equity (Ozili, 2018; Ali & Puah, 2018). Based on this background, there is a need to investigate the effect of board attributes and corporate governance compliance on the capital adequacy of commercial banks with international licenses in Nigeria.

1.2. Statement of the Problem

Despite the various regulatory frameworks and guidelines related to corporate governance codes, existing empirical documentation in the Nigerian context has not clearly explained the implications and direction of the relationship between corporate governance compliance and bank capital adequacy. Numerous studies conducted in both developed and developing countries have reaffirmed that an efficient board is a critical factor for improving firm performance, empirical research specifically addressing commercial banks with international authorizations is limited (see the studies by Ohre and Jeroh, 2024; Islam & Islam, 2022; Naim & Aziz, 2022; Habtoor, 2022; Ebimobowei, 2022; Herbert & Agwor, 2021; Adedeji & Ajulu, 2020; Onyema & Precious, 2019; Abdulkarim, Yusuf & Isah, 2020; Boshnak, 2021). This study deviates from the aforementioned research by focusing on the effect of board meetings, board size and corporate governance compliance on capital adequacy of commercial banks with international licenses.

For instance, the studies by Ohre & Jeroh (2024), Islam & Islam (2022), Naim & Aziz (2022), Habtoor (2022), Ebimobowei (2022), Herbert & Agwor (2021), Adedeji & Ajulu (2020), Abdulkarim, Yusuf, and Isah (2020), and Boshnak (2021) primarily focused on how board attributes affect firm performance or values but did not examine how corporate governance compliance might also influence firm performance. Similarly, the study by Zulfikar, Lukviarman, Suhardjanto, Ismail, DwiAstuti, and Meutia (2020), which investigated the effect of board characteristics (board of commissioners' institutions) on corporate governance compliance, did not relate governance compliance to firm performance. Moreover, the corporate governance model they developed may not be effective in the Nigerian context due to differences in regulatory policies. The need to develop a corporate governance model suitable for the Nigerian context is a central focus of this research.

Lastly, this study deviates from existing empirical research by using capital adequacy as a measure of financial performance/soundness. Edeh and Iwedi (2024) and Oppusunggu and Simbolon (2021) have noted that conventional financial performance measures, such as return on assets and earnings per share, may be insufficient in the current global crisis. This underscores why policymakers in the banking industry place more emphasis on the CAMELS rating model rather than conventional financial performance variables (Yusuf & Tijani, 2019; Onyema & Precious, 2019). Another issue addressed by this study is overcoming methodological weaknesses by employing a more robust and appropriate analytical tool. To address these issues, the current study aims to examine the effects of board attributes and corporate governance compliance on the capital adequacy of commercial banks with international authorization, using the panel corrected standard errors (PCSE) model.

1.3. Objectives of the Study

The main objective of the study is to investigate the effect of board attibutes and corporate governance compliance on capital adequacy of commercial banks in Nigeria. Specifically, the study seeks to:

i. examine the effect of frequency of board meetings on capital adequacy of commercial banks with international license in Nigeria.
ii. determine the effect of board size on capital adequacy of commercial banks with international license in Nigeria.
i. determine the extent corporate governance compliance affect the capital adequacy of commercial banks with international license in Nigeria.

1.4. Research Questions

In line with the specific objectives stated above, the following research questions have been raised to guide this current study

i. To what extent does frequency of board meetings affect capital adequacy of commercial banks with international license in Nigeria?
ii. To what extent has board size affect capital adequacy of commercial banks with international license in Nigeria?
iii. To what extent has corporate governance compliance affect the capital adequacy of commercial banks with international license in Nigeria**?**

1.5. Research Hypotheses

In line with the specific objectives of this study, the following hypotheses have been formulated in their null form:

$H0_1$: frequency of board meetings have no significant effect on capital adequacy of commercial banks with international license in Nigeria.

$H0_2$: board size has no significant effect on capital adequacy of commercial banks with international license in Nigeria.

$H0_3$: Corporate governance compliance has no significant effect on capital adequacy of commercial banks with international license in Nigeria.

2.0. REVIEW OF RELATED LITERATURE

2.1. Board Attributes

2.1.1. Frequency of Board Meetings

Board meetings are typically held to direct, monitor, and evaluate company policies. Through these meetings, sensitive issues affecting a company's continuity are discussed. Amanamah (2024) asserts that more frequent board meetings enable the board to promptly identify and address issues, including those related to disclosure and compliance. Consequently, frequent board meetings are expected to lead to better managerial decision-making. However, Haque (2015) argues that board meetings have a minimal effect on firm performance.

2.1.2. Board Size

Board size, which refers to the total number of directors on a bank's board, plays a crucial role in determining the effectiveness of corporate board members and, by extension, the bank's soundness. An optimal board size provides effective oversight, diverse expertise, and balanced decision-making, all of which contribute to better capital management and enhanced financial stability. However, if board size is not managed properly, it can lead to potential inefficiencies. Thus, an optimal board size enhances banks' governance practices and strengthens their overall soundness and stability.

Existing corporate governance codes and prior research suggest that, for efficiency, the optimal size of a company's board should range between a minimum of 5 members and a maximum of 9 members (Jeroh, 2018; Lawal & Yahaya, 2024). In practice, data from the annual reports of some firms in Nigeria indicate that board sizes can extend to as many as 15 to 17 members. While the SEC code prescribes a minimum of 5 members for a corporate board, it does not set a maximum limit. Consequently, companies are permitted to have larger boards if deemed necessary.

2.2. Corporate Governance Compliance

The term “corporate governance compliance” entails strict adherence to principles, laws, regulations, and ethical standards governing a firm's operations and interactions with stakeholders. It encompasses the processes, practices, and structures by which a company is directed and controlled, and it reflects the extent to which firms adhere to the corporate governance code. The corporate governance code (2018) aims to institutionalize the highest standards of corporate governance best practices in Nigerian companies and promote public awareness of essential corporate values and ethical practices that enhance the integrity of the Nigerian corporate landscape. The Code's most impactful innovation is its “Apply and Explain” approach, which requires companies to demonstrate how their activities meet the intended outcomes of corporate governance specifications, as opposed to the mandatory compliance approach adopted by the previous Nigerian Code of Corporate Governance.

In summary, the Nigerian Corporate Governance Code 2018 emphasizes transparency, accountability, and integrity in corporate practices. Key provisions include board independence, ethical conduct, stakeholder engagement, and disclosure requirements. The Code encourages boards to adopt best practices for effective oversight, risk management, and sustainable business operations. It applies to all public companies, regulated private companies, and other entities operating in Nigeria, promoting responsible corporate behavior and investor confidence in the Nigerian market. Bognár and Benedek (2022) argue that higher compliance with corporate governance codes leads to increased value creation for shareholders and protection of community interests. They believe that banking management, adhering to relevant regulations, enhances the discipline of owners and management entities, thereby increasing compliance with corporate governance.

To determine the extent of compliance, this study developed a corporate governance compliance model using the corporate governance code principles presented in Appendix 1 of this research. The scoring method involves preparing a corporate governance compliance checklist based on the annual report. This scoring method is unweighted, meaning each item on the checklist is considered equally important.

2.3. Capital Adequacy

Capital adequacy is a fundamental metric used in assessing a bank's financial health and resilience by testing a bank’s capacity to meet liabilities and counteract credit and operational risks effectively. Under extant laws, international banks and Domestic Systemically Important Banks (D-SIBs) are mandated to maintain a CAR of 15%, while other banks, including national and regional ones, must uphold a CAR of 10% (Yusuf & Tijani, 2019; Onyema & Precious, 2019; Iheanyi & Sotonye, 2017).

In view of the CBN’s move to ensure that the banking sector is adequately positioned to absorb risks prevalent in its operations in the financial market, the capital adequacy is an important compliance requirement for banks to bear in mind, especially in the face of the new minimum share capital requirements (Yusuf & Tijani, 2019; Onyema & Precious, 2019). Ali and Puah (2021) added that high capital reserves and low bad debt serve as buffers for the banking industry during economic crises, which conventional measures like return on assets or return on equity do not adequately capture.

2.4. Conceptual Model

The conceptual framework shown in Fig. 2.1 illustrates the causal effects between the dependent variable, capital adequacy and the independent variables, board meetings, board size and corporate governance compliance.

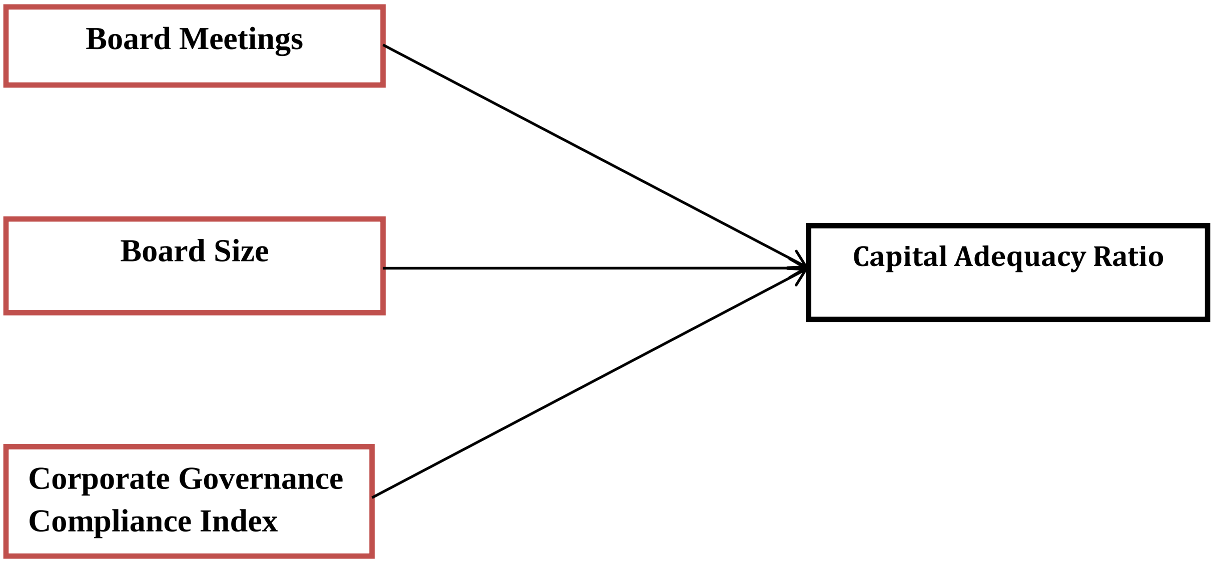


Figure 2.1 : Conceptual model of the study
Source: Researchers' Framework (2024)

2.5. Theoretical Framework

This study is anchored in stewardship theory, developed by Donaldson and Davis in 1991. Stewardship theory offers a unique perspective on corporate governance, emphasizing that leaders and managers, as stewards, should act diligently to enhance shareholder value. Originating from a seminar in 1976, the theory highlights the role of stewards in preserving and maximizing shareholder wealth by effectively managing company performance. Stewards are entrusted with safeguarding shareholders' interests and ensuring their profitability (Ogune & Okolie, 2024).

This theory is relevant to this study because aligning board meetings and board size with stewardship theory enables banks to enhance their governance practices, improve decision-making, and ensure financial stability. Frequent board meetings align with stewardship theory by providing regular oversight and decision-making opportunities, allowing stewards to manage the bank's resources responsibly, monitor performance, and address financial challenges swiftly, which enhances capital management, risk handling, and overall financial stability. Meanwhile, an optimal board size supports stewardship theory by offering diverse expertise and effective oversight. A larger board brings a broader range of skills and knowledge for informed decision-making and risk management and facilitates the establishment of specialized committees for critical areas such as capital management and risk oversight. This improves the bank's ability to maintain adequate capital levels and overall stability. Additionally, adherence to corporate governance codes fosters transparency and accountability, further contributing to financial stability and soundness.

2.6. Empirical Studies

Qadorah, and Fadzi (2018) investigated the relationship between board of directors' characteristics namely (board size and CEO duality) and firm performance among Jordanian listed firms. Firm performance is measured using return on assets (ROA). This study covers industrial listed firms on the Amman Stock Exchange, Jordan for the year 2013 as a sample. Multiple regression analysis is used to test the hypotheses and to examine the relationship between board of directors' characteristics namely (board size and CEO duality) and firm performance. The findings showed that board size is significantly and positively related to ROA. On the other hand, CEO duality is significantly and negatively related to ROA.

Islam and Haque (2019) appraised the compliance of Corporate Governance standards issued from Bangladesh Securities & Exchange Commission (BSEC) by state owned commercial banks (SOCBs) in Bangladesh. Annual reports in 2015 of five (5) state owned commercial banks have been used to conduct this research. Dichotomous and Partial compliance method are used to find out the compliance of corporate governance standards by SOBCs in Bangladesh. First 94 variables are found out from Bangladesh Securities and Exchange Commission's is (BSEC) notification. Secondly, 94 variables are converted into 7 main variables by using STATA. Then cross tabulation and descriptive statistics are done by using SPSS and STATA to explore the compliance of standards issued from BSEC by SOCBs. The study shows that compliance of corporate governance standards by SOCBs in Bangladesh is not satisfactory that is 35% to 97% and one has shown the lowest compliance rate that is 35%.

Okere, Eluyela, Lawal, Oyebisi, Eseyin , and Olabisi Popoola (2019) examined the relationship between foreign expatriates on board and financial performance of deposit money banks in Nigeria. Applying panel methodology for the period of 2008 to 2016 as well as other econometric analysis such as descriptive analysis, correlation analysis and Hausman test, the findings revealed a positive but insignificant relationship exist between foreign expatriates on board and financial performance of sampled deposit money banks in Nigeria.

Zulfikar, Lukviarman, Suhardjanto, Ismail, DwiAstuti, and Meutia (2020) examined the influence of board characteristics (board of commissioners' institutions) on corporate governance compliance in the Indonesian banking from 2010 to 2015. Purposive sampling was used as the sampling technique, resulting in 195 observations. To test this study's hypotheses, multiple regression was applied as the data analysis method. The results revealed that the size of the board of commissioners, the proportion of independent commissioners, the experience of commissioners, and the size of the audit committee were factors that encouraged management in the banking industry to improve their firms' corporate governance compliance.

Aluchna and Kuszewski(2020) examined the effect of corporate governance compliance on value of quoted firms in Poland using a unique sample of 155 companies listed on the Warsaw Stock Exchange during the period 2006–2015, with hand-collected data from declarations of conformity. The study adopted the panel regression approach. The study reported that, a negative and statistically significant relation between corporate governance compliance and company value.

Adedeji and Ajulu (2020) examined the relationship between corporate governance and the performance of selected Nigerian banks over a five-year period from 2014 to 2018. Utilizing the regression analysis, they observed a positive and significant correlation between corporate governance variables such as board size and the presence of female directors with market price per share. However, a negative relationship was identified between corporate governance disclosure index and market price per share, while the number of executive directors negatively affected stock performance.

Khanifah, Hardiningsih, Darmaryantiko, Iryantik and Udin (2020) examined the effect of corporate governance disclosure on bank performance by building a corporate governance disclosure index (CGDI) for 10 Islamic banks operating in Iran, Saudi Arabia and Malaysia. The data used in this study are secondary data taken from annual reports and sourced from the official websites of each banks include Iran Exchange, Stock Market Quotes and Financial News, and Bursa Malaysia. This study uses content analysis of the annual bank report within five years (2014-2018). The results show that Islamic banks comply with 72.4% of the attributes discussed in the CGDI. The most frequently reported and disclosed elements are board structure and audit committee. The regression results provide evidence that Islamic banks with a higher level of corporate governance disclosure reported high operating performance measured by ROA. In contrast to the expectation, the financial performance of ROE and Tobins'q are not significantly related to the disclosure of sharia bank governance.

Jeroh (2020) examined the influence of corporate attributes on firm value by drawing inference from Nigerian listed entities from 2010 – 2018. Analysis was done using relevant statistical tools and findings indicate that the selected measures of corporate attributes had significant influence Tobin’s Q and share price; but this was not the case for when firm value was measured using the ratio of share price to book value.

In Saudi Arabia, Boshnak (2021) assessed how corporate governance measures (board independence, size, meeting frequency of corporate boards and audit committees, ownership concentration, CEO duality) affect both the financial, operational and market-based performance measures of companies. Data from 210 listed firms in Saudi Arabia were examined over a period of 3 years (2017 – 2019) and analysis was based on the regression technique. Findings proved amongst others that board independence, board size, CEO duality, audit committee size and meeting frequency, all exhibit inverse relationship with Tobin’s Q ratio and other performance measures (ROA and ROE); whereas, the frequency of board meetings and ownership concentration positive influence on Tobin’s Q.

Khalil and Ben Slimene (2021) examined the effect of Board of Directors’ characteristics on the financial soundness of Islamic banks. Regression analysis is applied to test the effect of the Board of Directors’ characteristics on the financial soundness of Islamic banks, using a panel data set of 67 Islamic banks covering 20 countries from 2005 to 2018. The Z-score indicator is used to evaluate the Islamic banks’ soundness. To check the robustness of the results, the research uses other dependent variables (*CAMEL*) than the Z-score. The main results show that the presence of an independent non-executive director negatively impacts the financial soundness of Islamic banks, while the chief executive officer duality practice has a positive effect on it. Other characteristics of the Board of Directors (foreign director, institutional director and chairman with a Shari’ah degree, interlocked chairman and the Board of Directors’ size) do not significantly impact the financial soundness of Islamic banks.

Ebimobowei (2022) appraised the value of Nigerian deposit money banks were affected by corporate governance practices from 2010 to 2020. Data from 6 banks were obtained from the annual reports of the sampled banks for the 11-year period. Three types of analysis were used to test the data: univariate, bivariate, and multivariate. Findings indicate that the value of Nigerian banks (as measured by Tobin’s Q) is favorably and significantly influenced by the ownership structure, gender diversity, board meetings, board independence, and their respective board sizes.

Usman and Yahaya (2023) investigated the impact of board characteristics on firm value in

Nigeria using 112 sampled NGX listed companies during the financial years 2009–2021. OLS pooled data regression model is applied for testing the hypotheses. In addition, an effort has been made to investigate the overall scope of share price in a broader context through a comprehensive analysis of share price across industry sectors, size and individual company-specific characteristics. The results indicate that board size, board independence and board share ownership have significant effects on firm value in Nigeria. Also, firm listing age and firm size have significant effects on firm value in Nigeria.

Manini and Abdillahi (2023) examined the relationship between board attributes (board independence, board meeting frequency, board gender diversity, and board size) and the firm value of listed companies in Kenya.Fixed effects panel data regression was applied to 618 firm-year observations from 58 firms listed on the Nairobi Securities Exchange (NSE) from 2010 to 2021.The results show that all board attributes had no significant effect on firm value.These findings challenge theoretical assumptions related to agency and resource dependency theories.

Ohre and Jeroh (2024) analysed the effect of board attributes on the value of 50 listed firms in Nigeria over a 12-year period (2010-2021). The study adopted the quantitative design and analysis was based on regression technique alongside other relevant and descriptive statistics. Outcome of the analysis proved that while board independence was found to have exerted significant influence on the overall value of listed firms in Nigeria, variables like board diversity, diligence, and size could not exert significant influence on the value of listed Nigerian firms

Agunobi, Akuand Irene (2024) examined the effect of corporate governance on performance of Nigerian deposit banks. Multiple regression model was adopted as the methodology for this study. Return on average assets (ROAA) was adopted as the proxy for bank performance and liquidity ratio (LR) was adopted as proxy for corporate governance. Secondary data sourced was based on 20 years (2001 – 2020). From the regression result, corporate governance has a positive and significant impact on bank performance.

Edeh and Iwedi (2024) investigated the impact of corporate governance on the stability of domestically significant banks in Nigeria over the period of thirteen (13) years from 2010 to 2022. Drawing on time series data sourced from the annual reports of these banks and the Nigerian Exchange fact books, the research employed an expo-facto research design. Various analytical techniques were applied. The panel random effect regression technique was employed to unveil the short-term effects with a 95% confidence interval. They evidenced that board representation and Audit Committee Independence exerted positive effect on Capital Adequacy of Banking firms in Nigeria though only board representation was statistically significant. Meanwhile, Board Size, Board Activism, and Audit Committee Meetings exerted negative effect on Capital Adequacy of Banking firms in Nigeria.

Bukari, Agyemang, and Bawuah (2024) investigated the effects of corporate governance (CG) attributes on firm value (FV), considering the moderating effect of ESG performance. The study utilized a quantitative research methodology sourcing data from 362 manufacturing companies from Sub-Saharan Africa from 2010 to 2022. The study employed the Common Correlated Effects Mean Group (CCEMG) and the Augmented Mean Group (AMG). The findings indicate that regarding board diversity attributes, both gender diversity and the presence of foreign nationals exhibit positive associations with FV. Regarding board structural attributes, independent boards and board size also influenced FV positively. However, CEO duality shows a negative association with FV. Regarding the process attributes, holding regular board meetings enhances FV, while low meeting attendance negatively affects FV.

Bhatia and Khurana (2024) investigated the relationship between certain key attributes of the board of directors as their international experience, tenure, age, independence and size and internationalization strategies of firms in an emerging economy. The study uses random effects panel Tobit regression on a data set of 418 Indian companies spanning over a time frame of nine years from fiscal year (F.Y.) 2009–2010 to F.Y. 2017–2018. Board members substantially associate with internationalization choices of emerging economy firms. Specifically, board members with extensive international experience, shorter tenure, higher age, greater independence and larger board size are associated with high level of internationalization in these firms.

3.0. RESEARCH METHODOLOGY

This study adopted an ex post facto research design, relying on historical data obtained from audited financial statements of listed Nigerian commercial banks with international authorization licenses as at 31 December 2023. The population comprised eight banks—Access Bank Plc, Fidelity Bank Plc, First City Monument Bank Plc, First Bank of Nigeria Plc, Guaranty Trust Bank Plc, Union Bank of Nigeria Plc, United Bank for Africa Plc, and Zenith Bank Plc. Given the small population size, a census sampling technique was employed, covering all eight banks over an eleven-year period from 2013 to 2023.

Data were sourced exclusively from the banks' published annual reports. The selected period captures the post-IFRS reporting era and key corporate governance reforms in Nigeria. The data were analyzed using descriptive and inferential statistics, including mean and standard deviation, correlation analysis, and relevant diagnostic tests. Hypotheses were tested using Panel-Corrected Standard Errors (PCSE) regression to address issues of autocorrelation and heteroscedasticity. All analyses were conducted using E-Views 9.0 to ensure robust and reliable estimates.

3.1. Model Specification

In the light of the conceptual model which is based on the specific objectives of this study, the following econometric model was designated to inform the analytical step for testing the hypotheses of the study.

$CAR_{it} = \beta_0 + \beta_1 BOMT_{it} + \beta_2 BOSZ_{it} + \beta_3 CGCR_{it} U_t$
Where:
CARit = Capital Adequacy ratio at time t
BOMTit = Board meetings at time t
BOSZit = Board Size at time t
CGCRit = Corporate Governance Compliance ratio at time t
β_0= Constant
$\beta_1 - \beta_3$= Beta Coefficients

3.3 Measurement of the Study Variables

Table 3.1: Operationalization of Variables

Variable Names	Acronym	Variable Type	Measurement of Variables	Source	Apriori Expectations
Capital Adequacy Ratio	CAR	Dependent	(Capital / Risk-Weighted Assets) × 100%	Ali and Puah (2021); Ozili (2018)	Nil
Board Meetings	BOMT	Independent	Number of times the board of directors meets on yearly basis	Amanamah (2024)	Positive
Board size	BOSZ	Independent	Total numbers of Board Member	Jeroh (2018); Lawal and Yahaya (2024)	Negative
Corporate Governance Compliance	CGCR	Independent	$CGCR = \frac{Total\ Corporate\ Governance\ Item\ \ Available\ in\ the\ Annual\ Report}{Overall\ 7\ Corporate\ Governance\ Disclosure\ Score\ stated\ in\ Appendix}$ If any of the Corporate Governance item stated in Appendix is available in the annual report, such bank is scored 1 otherwise 0.	Author	Positive

Note: CGCR = Corporate Governance compliance Rate. If the bank has all 7 items, it is fully compliant at 100%. If none are present, it is 0%. Meanwhile, if the CGCR is between 0% and 100%, it is termed partial compliance.
Source: Authors Compilation based on literature, 2024.

4.0 RESULTS AND DISCUSSIONS

4.1 Data Presentation

This section is dedicated to the presentation and analysis of data sourced from the annual reports of sampled banks from 2013 to 2023. Here, the sourced data were analyzed using descriptive statistics and correlation analysis to show the relationship between the variables. The main regression estimates used in testing the research hypotheses is the Panel-Corrected Standard Errors (PCSE) regression analysis. Data used for the analysis is presented in appendix (see appendix section for detailed data used).

4.2 Data Analysis

4.2.1 Descriptive Statistics

Prior to running the main regression, the researchers first examined the behavioural characteristics in the data series of the study using both descriptive statistics and correlation analysis. While the descriptive statistics accounted for the average (mean), highest value (maximum), least (minimum) value and the degree of volatility from the mean (standard deviation), and the observations, the correlation analysis accounted for the degree and direction of linearity between the dependent and among the independent variables. The result estimate for both the descriptive and correlation analysis are presented in table 1 and 2, respectively.

Table 4.1: Descriptive Statistics

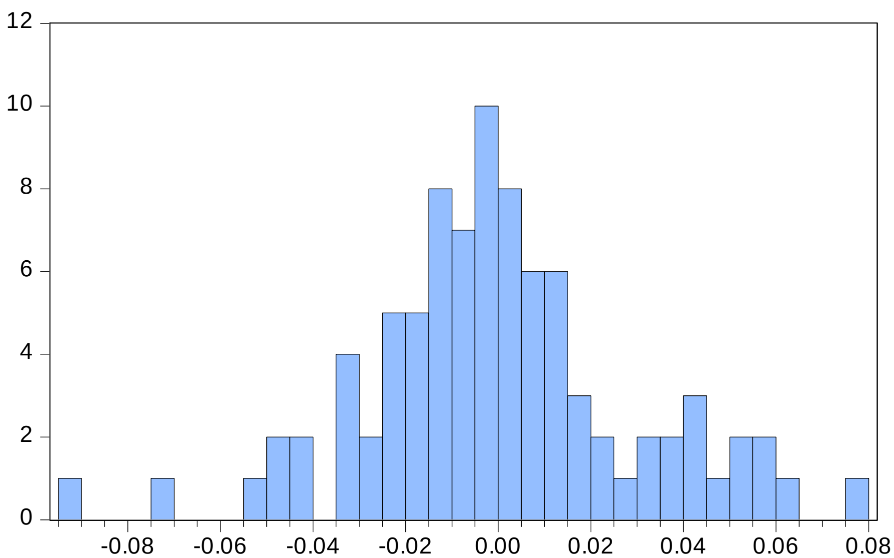
	CAR	BOMT	BOSZ	CGCR
Mean	18.79%	7	15	94.15%
Maximum	32.60%	16	23	100.00%
Minimum	10.66%	1	6	71.43%
Std. Dev.	3.69%	3	4	9.10%
Observations	88	88	88	88

Source: Fieldwork (E-Views Version 9.0) (2024)

Based on the summary statistics in table 4.1, the estimated average value of Risk-weighted Capital Adequacy Ratio (CAR) is around 18.79%, with a standard deviation of 3.69%. The analysis of the deviation indicates low dispersion. Meanwhile, the highest Risk-weighted Capital Adequacy Ratio (CAR) is 32.60% and lowest Risk-weighted Capital Adequacy Ratio (CAR) is 10.66% which is below the minimum Risk-weighted Capital Adequacy Ratio (CAR) of 15% stipulated by the CBN. The low Risk-weighted Capital Adequacy Ratio (CAR) was recorded by first bank Nigeria Plc in 2018 while UBA recorded the maximum Risk-weighted Capital Adequacy Ratio (CAR) of 32.60% in 2023.

Furthermore, the average board meetings and board size are 7 times and 15 respectively but deviated by 3 and 4 respectively. The maximum board meeting of 16 is an indication that one or more commercial banks with international presence board of directors had a total of 16 meetings in a given financial year; whereas, the minimum value of board meeting is 1, it means that there are banks whose Boards met just once in a whole year. However, the lowest values observed for board size was 6.

Lastly, the highest corporate governance compliance index of 100% and least CGCR of 71.43% suggests that majority of the commercial banks with internationalization presence complied with both the corporate governance code and SEC code while discharging their fiduciary roles. All the regressor reported low variation suggesting low variations in the nature of data collated across the different banks (refers figure 4.1)



Series: Residuals	
Sample 1 88	
Observations 88	
Mean	-2.30e-05
Median	-0.001261
Maximum	0.077666
Minimum	-0.094485
Std. Dev.	0.029211
Skewness	-0.013941
Kurtosis	3.950516
Jarque-Bera	3.315611
Probability	0.190557

Figure 4.1: Normality Test
Source: Econometric Views version 9.0 (2024)

4.2.3 Correlation Analysis

The Pearson Correlation Coefficient was employed to investigate the relationship between board size, board meeting, corporate governance compliance and capital adequacy of Nigerian banks because the data followed a normal distribution curve.

Table 4.2: Correlation Analysis

	CAR	BOMT	BOSZ	CGCR
CAR	1.0000			
BOMT	-0.3675	1.0000		
BOSZ	0.0076	0.2125	1.0000	
CGCR	-0.2390	-0.0843	-0.2324	1.0000

Source: Econometric Views Version 9.0 (2024)

Table 4.2 illustrates the correlation coefficients among the variables of interest: Capital Adequacy Ratio (CAR), Board Meetings (BOMT), Board Size (BOSZ), and Corporate Governance Compliance (CGCR). A negative correlation of -0.3675 indicates a moderate inverse relationship between board meetings and capital adequacy. This suggests that an increase in the frequency of board meetings may be associated with a decrease in capital adequacy. Board size showed a weak positive correlation of 0.0076 with Capital adequacy. The negative correlation of -0.2390 between capital adequacy and corporate governance compliance indicates an inverse relationship, suggesting that higher compliance might be associated with lower capital adequacy. With respect to the association between the independent variables, a positive correlation of 0.2125 shows a weak direct relationship between board meetings and board size. In addition, we found that the association between board size, board meeting and corporate governance compliance is negative and weak. Importantly, the correlation coefficients between all pairs of the independent variables were below the threshold of 0.80 (see Ukolobi and Jeroh, 2020); thus indicating the absence of multicollinearity issues among the variables in the dataset used in this study. To further validate this, the models were subjected to variance inflation factors (VIF) and tolerance values (TOV) as evidenced in table 4.3:

Table 4.3: Multi-collinearity Tests

Multi-collinearity Tests	BOMT	BOSZ	CGCR	Average
VIF	1.0487	1.1007	1.0585	1.0693
TOV=1/VIF	0.9536	0.9085	0.9447	0.9356

Source: E-Views version 9.0 Output (2024)

From Table 4.3, the corresponding VIF values for the independent variables ranged from 1.0487 to 1.1007; with a mean VIF of 1.0693 which falls below the maximum threshold of 10 (mean VIF=1.0693< 10). This result confirms the outcome of the pearson correlation, thus leading to the conclusion that the study's dataset does not have the problem of multicollinearity. This indicates that two or three of the proxies for the study's independent variable can be in the same model without producing inconsistent results.

4.3 Test of Hypotheses

This sub-section is set to provide a test for the various hypotheses formulated for the purpose of this study in order to achieve the objectives set out for the study. Accordingly, each of the hypotheses is tested:

Table 4.5: Panel-Corrected Standard Errors (PCSE) regression analysis

Dependent Variable: CAR			**Obs=88**	
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.323575	0.035757	9.049379	0.0000
BOMT	-0.003624	0.001361	-2.663835	0.0093
BOSZ	-0.000593	0.001261	-0.470037	0.6396
CGCR	-0.109812	0.032491	-3.379702	0.0011
R-squared	0.573864	Mean dependent var.		0.187898
Adjusted R-squared	0.535685	Durbin-Watson stat.		1.984265
F-statistic	9.792393	Prob(F-statistic)		0.000000

Source: Econometric Views Version 9.0 (2024)

$H0_1$: Board meetings has no significant effect on capital adequacy of commercial banks with international license in Nigeria

Since the p-value (0.0093) is less than 0.05, we reject the null hypothesis. This suggests that board meetings (BOMT) have a significant effect on the capital adequacy of commercial banks with international licenses in Nigeria.

$H0_2$: Board size has no significant effect on capital adequacy of commercial banks with international license in Nigeria

Since the p-value (0.6396) is greater than 0.05, we accept the null hypothesis. This indicates that board size (BOSZ) does not have a significant effect on the capital adequacy of commercial banks with international licenses in Nigeria.

$H0_3$: Corporate governance compliance has no effect on capital adequacy of commercial banks with international license in Nigeria

Since the p-value (0.0011) is less than 0.05, we reject the null hypothesis. This indicates that corporate governance compliance (CGCR) has a significant effect on the capital adequacy of commercial banks with international licenses in Nigeria.

4.4. Discussions of Results

Here, attention was placed on the practical implication of each finding based on the regression result tested in the previous sub-section.

4.4.1 Board Meetings (BMET) and Capital Adequacy (CAR)/Soundness

Table 4.5 evidenced that, board meetings exerted a negative significant effect on the Capital Adequacy (CAR)/Soundness of Commercial banks with international license. The negative and statistically significant coefficient for board meetings suggests that an increase in board meetings is associated with a decrease in CAR. This might imply that frequent meetings do not necessarily translate to better capital management or could be indicative of other issues affecting capital adequacy. The above result conforms to the findings of Edeh and Iwedi (2024) that found that board activism/meetings exerted negative significant effect on capital Adequacy of Banking firms in Nigeria. This suggests that an increase in board meetings is linked to decrease bank soundness minimally. Furthermore the result also refute the submissions of the stewardship theory which stresses that frequent board meetings allows stewards to manage the bank's resources responsibly, monitor performance, and address financial challenges swiftly, which enhances capital management, risk handling, and overall financial stability.

4.4.2. Board Size (BOSZ) and Capital Adequacy (CAR)/Soundness

Table 4.5 indicates that, board size (BOSZ) reduces the CAR of commercial banks with international authorization. By implication, larger board size (BOSZ) will reduce CAR of sampled commercial banks with -0.000593 units. By implication, a larger board size tends to decrease the CAR of these banks, suggesting that expanding the board size might not contribute positively to capital adequacy. By extension, too large a board might lead to inefficiencies and diluted accountability. The p-value for BOSZ is 0.6396, which is greater than 0.05, indicating that the effect of board size on CAR is not statistically significant. This result implies that an increase in board size do not have a substantial effect on the capital adequacy of commercial banks with international licenses in Nigeria. The lack of a significant effect for board size suggests that simply increasing the number of board members does not improve capital adequacy. This finding is consistent with studies of Edeh and Iwedi (2024) whom reported that, Board Size and Audit Committee Meetings exerted negative and insignificant effect on capital Adequacy of domestically significant banks in Nigeria. However, it contradicts the findings of Khalil and Ben Slimene (2021) that evidenced that the Board of Directors' size does have a significantly impact the financial soundness of Islamic banks. Again, the findings refute the claims of the stewardship theory which suggests that a larger board brings a broader range of skills and knowledge for informed decision-making and risk management and facilitates the establishment of specialized committees for critical areas such as capital management and risk oversight. This improves the bank's ability to maintain adequate capital levels and overall stability.

4.4.3 Corporate Governance Compliance (CGCR) and Capital Adequacy (CAR)/ Soundness

Table 4.5 reported a negative coefficient value of -0.109812. The negative effect of corporate governance compliance on CAR suggests that higher levels of CGCR are associated with lower capital adequacy. In terms of statistical significance, CGCR reported a p-value of 0.0011, which is significantly below 0.05, indicating that corporate governance compliance has a significant negative effect on CAR. This suggests that higher levels of CGCR are associated with lower capital adequacy, which might reflect inefficiencies or issues within governance practices that adversely impact financial stability. The negative significant effect of CGCR on CAR is surprising and may indicate that higher compliance does not necessarily equate to better financial soundness. This could suggest that compliance practices might be more formalistic than substantive, or that compliance efforts are not aligned with effective capital management. The results are generally consistent with research by Adedeji and Ajulu (2020) & Aluchna and Kuszewski (2020) who found that the more banks comply with the corporate governance codes, the less efficient they become. Also, Islam and Haque (2019) evidenced that the extent of compliance of corporate governance standards by the five (5) sampled state owned commercial banks (SOCBs) in Bangladesh was not satisfactory. However, Khanifah, et'al (2020) evidenced that Islamic banks with a higher level of corporate governance disclosure reported high operating performance but was not the case in the terms of ROE and Tobins' Q. This suggests that the extent to which compliance affect solvency/efficiency is dependent on the variable used. However this result contradicts the submissions of the stewardship theory which stresses that adherence to corporate governance codes fosters transparency and accountability, further contributing to financial stability and soundness.

5.0. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

Despite the presence of various regulatory frameworks and guidelines concerning corporate governance codes, there remains a gap in the empirical literature regarding their specific implications for bank soundness in Nigeria. This research aimed to address this gap by investigating the effects of board meetings, board size, and corporate governance compliance on the capital adequacy of commercial banks with international licenses in Nigeria. The study used several statistical techniques, including descriptive statistics, correlation matrix, multi-collinearity tests, and Panel-Corrected Standard Errors (PCSE). Consequently, the major findings of this study are discussed below:

i. Board meetings exerted a negative significant effect on the Capital Adequacy (CAR)/Soundness of commercial banks with international authorization license.
ii. Board size exerted a negative insignificant effect on Capital Adequacy (CAR)/Soundness of commercial banks with international authorization license.
iii. Corporate governance compliance exerted a negative significant effect on Capital Adequacy (CAR)/Soundness of banks with international authorization license.

5.2. Conclusion

This study centers on the effect of board size, board meetings and corporate governance compliance on capital adequacy of commercial banks with international licence in Nigeria. The scope of the research provided a detailed review of related empirical literature of extant studies on board size, board meetings and corporate governance compliance in relation to capital adequacy. The stewardship theory was used to underpin the study. In line with the major findings, the study conclude that larger board size and frequent board meetings do not straightforwardly translate to improved capital adequacy, thus prompting a reassessment of governance strategies. In addition, higher corporate governance compliance depletes the capital base of commercial banks.

5.3. Recommendations

Based on these outcomes of this study, it was recommended that:

i. To ensure that frequent board meetings result to higher capital base, bank management are advised to seek for feedback from board members on meeting effectiveness and areas of concern.
ii. Management of the commercial banks needs to consider revising board size policies with regard to changes in board size. Additionally, the board should continuously seek to review and refresh its composition to ensure that new ideas and experiences are added to its decision-making processes. This is important because most of the sampled commercial banks reported nearly yearly changes in board size during the periods under review.
iii. Management of the commercial banks should align their compliance efforts with practical measures that directly enhance bank soundness. They should also endeavor to Incorporate feedback mechanisms into their corporate governance compliance model.

5.4. Contributions to Knowledge

The study has contributed to knowledge in the following ways:

i. The study contributes to the existing literature by providing new evidence on compliance practice in the context of capital adequacy of Nigeria listed commercial banks and the effect of individual guidelines principle of corporate governance codes. in addressing structural challenges facing the Nigerian banking industry.
ii. This research advanced extent empirical documentations by evidencing that mere adherence to corporate governance codes does not suggests that the bank has a high capital base. This contribution underscores the reason why the authors developed a corporate governance compliance rate/index.
iii. This research contributes to the development of more effective corporate governance policies by revealing the complex dynamics between board size, board meetings and capital adequacy.

REFERENCES

Abdulkarim, H. Yusuf, A.&Isah, U. (2020).Board Composition, Board Size and Market Value of Listed Industrial Goods Companies in Nigeria. *International Journal of Research and Innovation in Social Science*, 4(12), 14-19.

Adedeji, E.A. & Ajulu, B.O. (2020). Impact of corporate governance on the performance of selected banks in Nigeria. *The Journal of Accounting and Management*, 11(1), 87-101.

Agunobi, C, Aku, A.S., & Irene, I. (2024).Corporate governance effect on bank performance in Nigeria. *AFIT Journal of Marketing Research*, *3*(1), 90-95

Ali, M., & Puah, C. H. (2018). Does bank size and funding risks effects banks' statbility? A lesson from Pakistan, *Global Business Review*, *19*(5), 1166-1186.

Aluchna, M., &Kuszewski, T. (2020). Does corporate governance compliance increase company value? Evidence from the best practice of the board. *Journal of Risk and Financial Management*, *13*(10), 242.

Amanamah, R. B. (2024). Examining the moderating role of firm characteristics in the corporate governance-financial reporting quality nexus: Evidence from a developing country. *Business Ethics and Leadership*, *8*(1), 28-44.

Bhatia, A., & Khurana, M. (2024). Unlocking the relationship between board of directors' attributes and international diversification in Indian firms. *Review of International Business and Strategy*. https://doi.org/10.1108/RIBS-11-2023-0128

Bognár, F., Szentes, B., & Benedek, P. (2022). Development of the PRISM risk assessment method based on a multiple AHP-TOPSIS approach. *Risks*, *10*(11), 213.

Boshnak, H. A. (2021). Corporate governance mechanisms and firm performance in Saudi Arabia. *International Journal of Financial Research*, *12*(3), 446-465.

Bukari, A., Agyemang, A. O., &Bawuah, B. (2024).Assessing the moderating role of ESG performance on corporate governance and firm value in developing countries. *Cogent Business & Management*, *11*(1), 2333941.

Ebimobowei, A. (2022). Corporate governance characteristics and firm value of deposit money banks in Nigeria. *British Journal of Management and Marketing Studies*, *5*(2), 109–129. doi:10.52589/bjmms-rbdlyevj

Edeh, M. B., & Iwedi, M. (2024). Corporate governance and soundness of banking firms in Nigeria. *African Banking and Finance Review Journal*, *10*(10), 1-13.

Habtoor, O. S. (2022). Board attributes and bank performance in light of Saudi corporate governance regulations. *Journal of Risk and Financial Management*, *15*(10), 441.doi:10.3390/jrfm15100441.

Herbert, W. E., & Agwor, T. C. (2021).Corporate governance disclosure and corporate performance of Nigerian banks. *Journal of Research in Emerging Markets*, *3*(3), 14-36.

Iheanyi, I.H. &Sotonye, I. (2017). Assessing the performance of Nigeria's bank through camel model. *Journal of Accounting and Financial Management, 3*(1), 14-22

Islam, M. T., & Islam, M. A. (2022). Dynamic association between board independence and firm profitability: The moderating role of director ownership. *Journal of Management Economics Studies*, *4*(3), 389–399.

Islam, M. N., & Haque, M. Z. (2019). An assessment of compliance with corporate governance standards by state owned commercial banks in Bangladesh. *Journal of Green Business School*, *2*(1), 27-47.

Jeroh, E. (2018).The effect of board and ownership structure on the financial performance of listed firms. *Nigerian Journal of Management Sciences, 6*(2), 196-205.

Jeroh, E. (2020). Corporate financial attributes and the value of listed financial service firms: The Nigerian evidence. *Academy of Accounting and Financial Studies Journal*, *24*(2), 1-13.

Jeroh, E. (2020). Firms attributes, corporate social responsibility disclosure and the financial performance of listed companies in Nigeria. *Asian Economic and Financial Review*, *10*(6), 727.

Jeroh, E. (2023). The moderating effect of tax aggressiveness on the relationship between corporate governance and real earnings management: Evidence from listed Nigerian firms. *International Journal of Management & Entrepreneurship Research*, *5*(5),314-325.

Khalil, A., & Ben Slimene, I. (2021). Financial soundness of Islamic banks: does the structure of the board of directors matter? *Corporate Governance: The international journal of business in society*, *21*(7), 1393-1415.

Khanifah, K., Hardiningsih, P., Darmaryantiko, A., Iryantik, I., & Udin, U. D. I. N. (2020). The effect of corporate governance disclosure on banking performance: Empirical evidence from Iran, Saudi Arabia and Malaysia. *Journal of Asian Finance, Economics and Business*, *7*(3), 41-51.

Lawal, D., &Yahaya, O. A. (2024).The role of firm complexity in the nexus between board size and financial performance. *European Management Journal*, *42*, 288-298.

Manini, M. M., &Abdillahi, U. A. (2023). Board Attributes and Firm Value of Kenya's Quoted Firms. *American International Journal of Business Management*, *6*(8). 94-105.

Naim, H., & Aziz, T. (2022). Board characteristics impact on the firm performance in the Indian context. *Journal of World Economy: Transformations & Transitions*, *2*(5),19. doi:10.52459/jowett25191022

Nwanne, T. F. I., & Okonkwo, E. J. (2019).Corporate Board Characteristics and Deposit Money Banks (DMBs) Performance in Nigeria for the period 2008-2017. *Archives of Business Research*, *7*(5), 75-95.

Ogune, O., & Okolie, A. F. (2024). Board of directors ‘characteristics and the profitability of listed banks in Nigeria. *Gulf Journal of Advance Business Research*, *2*(1), 55-67.

Ohre, K. A.& Jeroh, E. (2024). Board attributes and the value of corporate entities in Nigeria. Asian *Journal of Management and Commerce*; *5*(1), 05-10

Olayimika, P., Olaniwun, S. & Olaniwun, A.O. (2019. The Nigerian code of corporate governance 2018: An ethical approach to the Nigerian corporate governance system?

Onyema, J. I. & Precious, O. (2019). Financial soundness of deposit money banks in Nigeria: The camels model approach. *Journal of Finance and Marketing*, *3*(1), 22-55.

Oppusunggu, L. S., &Simbolon, I. P. (2021). The Bank Soundness in Indonesia: Risk and Corporate Governance. *Golden Ratio of Finance Management*, *1*(1), 01-12.

Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsaistanbul review*, *18*(4), 329-340.

Qadorah, A. A. M., & Fadzil, F. H. B. (2018). The relationship between board size and CEO duality and firm performance: Evidence from Jordan. *International Journal of Accounting, Finance and Risk Management*, *3*(3), 16-20.

The Nigerian Code of Corporate Governance (2018). The Nigerian Code of Corporate Governance: Highlights and Implications .

Ukolobi, O. I.& Jeroh, E. (2020). Constructs of ownership structure and the financial performance of listed corporate entities: A canonical correlation and multivariate analyses. *Journal of Academic Research in Economics*, *12*(2), 260-276.

Usman, S. O., & Yahaya, O. A. (2023). Effect of board characteristics on firm value in Nigeria. *Journal of Economics and Finance*, *47*(1), 44-60.

Yusuf, B. R., &Tijani, J. O. (2019). An Evaluation of Financial Health of Nigerian Deposit Money Banks using CAMELS Rating Model. *Annals of Dunarea de Jos University of Galati fascicle. Economic and applied informatics*,, *25*(1), 48-61.

Zulfikar, R., Lukviarman, N., Suhardjanto, D., Ismail, T., DwiAstuti, K., & Meutia, M. (2020). Corporate governance compliance in banking industry: The role of the board. *Journal of Open Innovation: Technology, Market and Complexity*, *6*(4), 137.

APPENDIX 1: CORPORATE GOVERNANCE COMPLIANCE PRINCIPLES/RATE DETERMINATION

(1) Assurance

This covers 4 items. The company is scored 1 if it records any of the items otherwise score 0. These items include: (i)Accounting and Risk management issues (ii) Effective internal audit function (iii) Appointment of an independent external auditor (iv) Effective whistle-blowing framework for reporting any illegal behaviour.

(2) Shareholder's Relationship (SHR)

This covers 1 item. If the bank discloses annual general meeting with shareholders; it is denoted as 1 otherwise scored 0.

(3) Sustainability (SUS)

This covers 1 item. If the bank discloses adequate attention to sustainability issues relating to Environment, social, occupational and community health and safety; it is denoted as 1 otherwise score 0.

(4) Disclosure (DIS)

This covers 1 item. If the bank discloses comprehensive and full disclosure of all matters material to investors and stakeholders, and of matters set out in this Code, ensures proper monitoring of its implementation which engenders good corporate governance practice; it is denoted as 1 otherwise score 0.