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EDITORIAL NOTE

It is with great pleasure and a profound sense of purpose that I welcome you to the maiden edition of the ***FRC Journal of Financial Reporting and Corporate Governance,*** a platform envisioned to deepen scholarship, stimulate policy dialogue, and enhance professional practice in the fields of financial reporting, auditing, assurance, valuation and corporate governance in Nigeria and beyond.

This inaugural issue marks a significant milestone in the knowledge development mandate of the Financial Reporting Council (FRC) of Nigeria. The journal is not only a scholarly repository but also a strategic initiative aimed at promoting transparency, accountability, ethical leadership, and institutional integrity through the power of evidence-based research and thought leadership.

In an era of rapid economic transformation and increasing complexity in financial markets, the need for high-quality financial reporting and strong corporate governance frameworks cannot be overstated. This journal seeks to bridge the gap between theory and practice, providing a platform for academics, practitioners, regulators, and policy-makers to interrogate emerging issues, share innovations, and propose reforms that align with global best practices.

In this maiden issue, you will find scholarly inquiries into the earnings quality of agricultural firms**,** ESG disclosure influences on investment decisions**,** and the effect of fair value hierarchy on accounting quality in commercial banks. Other contributions explore board attributes and human capital disclosure**,** the economic dimension of corporate social responsibility (CSR) in shaping financial outcomes, and enterprise risk management across Nigeria, Ghana, and South Africa. We also spotlight the increasingly vital theme of green accounting within the context of Nigeria's oil and gas sector.

I express deep appreciation to the Executive Secretary of the FRC of Nigeria, Editorial Board members, reviewers, contributors, and the FRC leadership whose commitment and intellectual rigor made this publication possible. Your support has laid the foundation for what we believe will become a respected academic and professional journal in the years ahead.

As we launch this journey, we invite researchers, regulators, practitioners, and stakeholders to engage with the ideas presented herein and to contribute actively to future editions. Together, we can shape a more resilient, transparent, and accountable financial ecosystem for Nigeria and the global community.

EDITORIAL DISCLAIMER: The authors bear full responsibility for the articles published in this Journal, and the opinions expressed do not necessarily represent those of the Financial Reporting Council of Nigeria.

Prof. Suleiman A. S. Aruwa
Editor-In-Chief
FRC Journal of Financial Reporting and Corporate Governance

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CORPORATE GOVERNANCE AND EARNINGS QUALITY OF LISTED AGRICULTURAL FIRMS IN NIGERIA

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Abstract
Corporate governance is a process and system by which firms' activities are controlled and this includes the reported earnings' quality of the organizations. This study sets out to explore the impact of corporate governance on earnings quality of listed agricultural companies in Nigeria from 2012 to 2021. Secondary data were collected from financial statements of five selected agricultural firms and corporate governance indicators covered included; board size, independence, gender diversity and audit committee size. The ordinary least square panel regression was applied for the analysis of data after some preliminary tests undertaken to determine the adequacy of the technique. Findings indicate that board size and audit committee of agricultural firms in Nigeria have significant and positive effect on their earnings quality. Also, board independence and female gender diversity was found to have no significant effect on the earnings quality. It was therefore, recommended that board female gender diversity of agricultural firms should be improved on. The study also suggested that board size optimization should not be viewed from the perspective of numbers alone but also from the spread of knowledge and expertise of various members who will come together to manage the affairs of the company and consequently its financial reporting.

Keywords: Corporate governance, Earnings quality, Board size, Board independence, Agricultural sector

Introduction
The implementation of the Sarbanes-Oxley (SOX) Act of 2002 in the United States led other countries to realize the significance of quality corporate governance mechanisms implementation in lowering agency costs and maximizing shareholders' wealth. This realization ignited several studies in emerging economies to investigate the impact of corporate governance (Agyemang, 2015). To fully achieve the stated objectives of corporate enterprises, there is need for separation of controls through corporate governance mechanism functions as strategic decision-makers (Jensen, 1986). The corporate governance structure has the responsibility of setting policies for every aspect of an organization of which earnings management is not an exception. A firm with an effective corporate governance system can enhance its value by reducing the conflict of interest between minority shareholders and empowered managers of firms as well as by reducing information asymmetry, increasing managerial efficiency, and enhancing firm value.

Corporate governance simply entails the system of directing, controlling and guiding the affairs of company with a view to forestall the possibility or incidence of mismanagement, fraud and undue concentration of decision-making powers in the hands of few persons that may not represent the interests of all stakeholders adequately. Corporate governance though not a modern concept gained much popularity and attention during the high corporate failure era, which saw the collapse of firms like Enron and WorldCom. Researchers and educators have responded with advanced research into various issues regarding how corporations should be owned and managed. Asogwa, Ofoegbu et.al. (2019) iterated that the past twenty-five years have witnessed ongoing flooding of researches into the issue of corporate governance. It is thus believed that the term only became very popular quite recently although it had been coined several years earlier.

Corporate governance is a process and system by which firms are controlled. Boards of directors are responsible for the governance of their companies or firms. Board sets the company's strategic aims, supervises the management of the business, reports to shareholders on their stewardship and provides the leadership to put them into effect. Shareholders appoint the managers, directors and the auditors to satisfy themselves that an appropriate governance structure is in place. Earning quality on the other hand, refers to the predictive ability of reported earnings to future earnings. In other words, earnings can be categorized as having higher quality if previous earnings can be used to predict future earnings. This is one of the reasons why accounting standards are constantly been updated to improve the quality of reported earnings that are free from manipulation (Dechow, et.al. 2010). The use of earnings quality by investors rather than the traditional reported earnings shown in the financial reports of firms, according to Bernstein and Siegel (2019) is because contemporary investors are now aware that reported earnings values are most likely to be products of deliberate choices between various accounting treatments and business options. The authors, therefore, opined that investors now look out for quality of reported earnings in the determination of a given firm's performance.

Despite the significant importance of corporate governance on accounting information quality, it has received less attention in the literature, particularly for emerging economies like Nigeria. This, coupled with the use of a single measurement in already existing studies which is likely to present unreliable results since it is inadequate to measure corporate governance with a single measure, creating a policy gap such that policymakers and firm owners do not have adequate information in decisions regarding the significance or otherwise of corporate governance in influencing earnings quality and the necessary measures needed.

Thus, in response to this paradigm shift, businesses attempt to improve the quality of their earnings through consistency and many other conceivable patterns to attract and retain the interests of their potential investors through earnings management. So, the reported earnings of an enterprise make more meaning when its earnings quality is high. In consideration of the critical nature of earnings management and quality of earnings reported to the external users of financial information, it naturally falls within the role of the strategic leadership of any listed company to manage and ensure that the quality of its earnings is always guaranteed. However, the achievement of earnings quality through the earnings management activities of the board which will highlight the achievement of the core objectives of corporate governance in the first place; remains a subject of research exercise as various scholars in recent times have views towards the possibility of corporate governance interacting with earnings quality of companies as a means of justifying or criticizing the imposition of corporate governance measures on listed firms in Nigeria.

Furthermore, academic research thrusts in the area of corporate governance and earnings quality are normally based on the manufacturing firms and commercial banks thus little research attempts have been made to explore the justification of corporate governance in the sustenance of quality of reported earnings within the agricultural sector of Nigeria. According to Chait (2020), agricultural firms are firms that produce, market, and distribute agricultural products and supports. It relates to industries that are engaged in farming or that produce farm inputs. Also, Echobu, et.al.(2017) opined that studies of this nature which are critical to the survival and growth of corporate bodies should be intensified in the agricultural sector and among agricultural firms in consonance with the recent plan of the nation to diversify its economy by promoting agricultural based ventures of which listed agricultural companies occupies a pivotal position.

Thus, this study focuses on the board of director independence and performance (board size, board independence, board gender diversity and audit committee size) as a means of exploring the role of corporate governance in achieving earnings quality of listed agricultural companies in Nigeria.

Review of related literature

Concept of Corporate Governance

The concept of corporate governance constantly remains an important issue as far as businesses are concerned. It is a topical issue in modern management and other related disciplines that gained more prominence since the well celebrated Enron and WorldCom scandals in United States. Various scholars have different definitions of corporate governance from deferent perspectives that reflect their varied interests and backgrounds (Oghojafor, et.al., 2010). It is an area that has enjoyed robust attention and thus several definitions of the concept exist in extant literature. Corporate governance is concerned with holding the balance between economic and social goals, and between individual and communal goals.

According to David (2004), corporate governance is a set of mechanism that influences the decisions made by managers when there is a separation of ownership and controls with some of the monitoring mechanisms as the board of directors, institutional shareholders and the operation of the market for corporate control. According to Akinsulire (2005), corporate governance is a system by which companies are directed and managed in the best interest of the investors. It refers to the role of the board of directors, executive and non-executive, shareholders' right and to other actions taken by shareholders to influence corporate decision.

Corporate governance is a process and structure used to direct and manage the business and affairs of corporation with the objective of enhancing shareholders' value, which includes ensuring the financial viability of the business. It also noted that the process and structure describe the division of power and establish mechanisms for achieving accountability among shareholders, the board and management. Lang, et al. (2006) added that corporate governance is about the manner in which the corporations are directed, controlled and held to account for resource used. The obligation of trust for the companies to act in a manner that protect the public interest and make full and fair public disclosure of corporate information including financial results since they raise funds from the public and serve as the basis for corporate governance (Inyang, 2009).

Corporate governance was defined by LaPorta, et.al. (2000), as a set of mechanisms through which outside investors protect themselves against expropriation by the insiders, and aims at efficient use of companies' assets in the interests of the stakeholders and protects investors from opportunistic behavior (Gillan, 2006). Corporate governance surrounds all the provisions, instruments, and mechanisms intended to monitor the activities of management and align the management incentives with all capital lenders (Garcia-Osma, 2008). It generally involves the mechanism by which corporate managers are held accountable for corporate conduct and performance. For example, Ahmadi, et al. (2018) viewed corporate governance as an internal mechanism to improve shareholder's interest and manager's accountability. This is also the position of Ozili (2020) who places importance on management control as a vital function of corporate governance and the ultimate aim to ensure the longevity of the enterprise. Ibadin and Dabor (2015) took a wider view of the concept noting that corporate governance covers institutional rules, norms, and laws. However, this study focuses on internal corporate governance mechanisms with particular attention to board characteristics. Lemo (2010) stated that corporate governance is the body of rules of the game by which companies are managed and supervised by the board of directors in order to protect the interest and financial stakes of shareholders that are far removed from the management of the firm. It is a system by which corporations are governed and controlled with a view to increasing shareholders value and meeting expectations of other stakeholders.

Okene et al (2010) citing Farar (2005) maintained that corporate governance was used as a term forty years ago. The root of the term "governance" was from the Latin words "gubarnare" and "gubernator" which refer to "steering a ship" and to the "steerer or captain of the ship" respectively. Mensah (2003), stated that corporate governance is an institutional arrangement which provides discipline and checks over the excesses of controlling managers. Knowledge of quality governance plays vital roles in achieving quality corporate governance. Good governance is characterized by eight factors which includes accountability, transparency, responsiveness, consensus oriented, participatory, inclusiveness, rule of law and efficiency.
According to Onalo, et al. (2013), corporate governance becomes an important issue after the 1997 – 1998 monetary crises that hit several countries in Southeast Asia, including Indonesia.

They noted that several earnings management related international frauds and accounting scandals such as Enron, Worldcom and Parmalat in the United States and Kimia Farma and Bank Lippo in Indonesia to mention but a few, has fueled public and government concern about the potency of corporate governance. It ensured that corporate reports communicate economic measurements of and information about the resources and performance of the reporting entity useful to those having reasonable rights to such information.

Corporate governance framework is therefore to encourage the efficient use of resources. Similarly, John and Sembet (1998) stated that board of directors play central roles in any corporate governance system and are viewed as primary means for shareholders to exercise control over management. Also, the separation of ownership from control generates the agency problem, which means that the management often makes decisions that are not often in line with the firm's main objective of maximization of shareholders' wealth (Ekundayo & Atu, 2010). Separation of ownership and control is inherent in the corporate firm. This separation gives rise to the potential conflicts of interest, thus the need for governance structures to control these potential conflicts of interests. To mitigate this conflict of interest between management and shareholders brings up the need for proper corporate governance.

Elements of Corporate Governance
Corporate governance is effective when the essential elements are efficiently deployed and implemented to achieve the set goals of the organization. The study has outlined the following elements of corporate governance:

a) Board size**:** It is always good to maintain adequate board size but there is no set number of members for a board. Most board ranges from 3-31 members while Board of directors recommended size is seven. Fama and Jensen (1983) stated that the most important function of a board of directors is to control agency. There is a general consensus that large board size makes it difficult for members to have efficient communication and to achieve a consensus. The Iranian Code of Corporate Governance Goodstein, Gautam, and Boeker (1994) stated that the optimum number of board members should be appropriately determined by the whole board to ensure that there are enough members to discharge responsibilities and perform various functions. They also argued that smaller boards of 4-6 members might be more effective, since they can make timely strategic decisions, while larger boards are capable of monitoring the actions of top management and increase the earnings quality (Xie *et al*., 2003). Board size refers to the number of individuals on the board. There are several arguments as to whether a large board or a small board size is more effective and the discourse has largely not moved towards a consensus. On the empirical side, studies have also examined the relationship between board size and several organizational outcomes but with earnings quality, Kukah, *et al.* (2016) study revealed that board size has a positive effect on earnings quality.

b) Board independence: Independence occurs when a board member has not been and is not currently employed by the company or its auditor and the board members' employer does not have a significant amount of business with the company. An independent board director is someone who does not have a material or pecuniary relationship with the company either directly or through one of the companies' partners, shareholders, or management members except for the fees it gets from being a board member (Vieira, 2018). Board Independence is the proportion of independent non-executive directors on corporate boards, calculated from the number of independent members divided by the number of members on the board. The level of independence of the board can be looked at from the perspective of the number of non-executive directors or outside directors that are on the board. In a case where the board has a reasonable proportion of non-executive directors, that board can be seen as more independent when compared to the case where the board is dominated by inside directors.

c) Board gender diversity: Board gender diversity is a significant aspect of corporate governance; it is defined as the presence of female directors on the board of directors of corporations (Carter *et al.,* 2003). Board gender diversity for this study deals with the female to male ratio of the board. There is the argument that the female presence on the board introduces some dynamics in board interactions and this can ultimately affect the outcomes at the board level decisions regarding earnings quality (Agyeman, 2020). This point is also dominant in the position of Wu *et al.* (2020) which also argues that boards that are diverse in terms of gender composition experience some board dynamics resulting from cognitive differences and this also has a way of influencing the firm-level outcomes.

Earnings Quality

Earnings typically represent the net income resulting from operations of a corporation and it is the basis for computing the tax liability of the entity. Thus earnings are indicators for assessing the financial performance of a company (Francis, et.al. 2004). With an emphasis on the concept of earnings quality, Chen, et al. (2019) noted that earnings quality can be defined as the predictive ability of reported earnings to future earnings. In other words, earnings can be categorized as having higher quality if previous earnings can be used to predict future earnings. This is one of the reasons accounting standards are constantly being updated to improve the quality of reported earnings that is free from manipulation (Dechow, et.al., 2010).

However, the concept of earnings quality is multidimensional and can be understood from several perspectives. First, there is earnings management which is the act of intentionally influencing the process of financial reporting to obtain some private gain. Second is earnings persistence which focuses largely on the continuity and durability of the current earnings. The third earnings quality dimension is the earnings predictability which looks at the predictive characteristics of earnings. All three dimensions are important and present unique perspectives on earnings quality. Chen et al., (2019) viewed earnings quality based on the level of stability of current earnings in future periods. Hence the focal point of their conceptualization of earnings quality is that earnings that show high quality is more stable and less volatile. This view of earnings quality is also shared by Agyeman (2020) who pointed out that earnings have good quality if earnings in the current period can be used to forecast the possible earnings in the future period. However, it is noted in the literature that there is no one way to look at earnings quality as several characteristics of earnings have varying levels of importance to stakeholders.

An indicator of the earnings quality used in this study is the smoothness approach. According to Perotti and Wagenhofer (2014), smoothness approach in the measurement of earnings quality presupposes that cash flows from operating activities cannot be easily manipulated and so, earnings quality is viewed in terms of volatility of the earnings in relation to the volatility of the operating cash flow. Thus, earnings quality can be measured as the extent to which reported earnings can be explained by the level of business operations evidenced in operating cash flows. It tries to measure the quality of earnings reported by firms by estimating the ratio of cash flow from operating activities to the reported earnings.

It is important to note that one of the views of earnings quality opines that smoothness is highly correlated with low earnings quality (Nanda, et al., 2003). This is attributable to the fact that earnings management activities of the reporting firm are capable of smoothing out the true picture of the earnings resulting to poor quality of reported earnings; a situation that is highlighted by low earnings quality ratio, that is, an earnings quality ratio of less than 1.

Corporate Governance and Earnings Quality Issues in the Agricultural Sector of Nigeria

The quest for diversification of the Nigerian economy has begun since after the oil boom period as the country through its various government administrations realized the dangers of depending heavily on petroleum for the sustenance of national spending. It is even more worrisome when the prospects of agricultural business in Nigeria are brought into consideration. According to Yusuff (2017), Nigeria can only boast of a performing agricultural sector before the discovery of petroleum but have tended towards food insecurity since after oil discovery despite having a great potential for agribusiness. The author pointed out that one of the major contributors to decline in agribusiness in Nigeria is high wastage level in production and subsequent scarcity of supply to agricultural products processing firms, leading to heavy importation of food products into the country.

It is important to understand that the national governmental thrusts to expand and diversify into agricultural sector through various programmes such as Operation Feed the Nation in 1975, Green Revolution Plan Scheme in 1980, Structural Adjustment Programme in 1986, Agricultural Policy for Nigeria in 1988 and also the Agricultural Promotion Policy of 2016 - 2020; will yield greater benefits when the private sector willingly becomes a part in the various agribusiness ventures in the nation. This is because it is not sufficient for the government to throw in funds into subsistence farming alone as that cannot guarantee national food security; however, there is need for the average Nigerian investor to realize that agriculture offers a competitive business income opportunity and is worth being invested into. Thus the financing and management of agribusiness companies in Nigeria becomes part of the major determinants of successful realization of the national economic diversification through agriculture. Nwafor (2022) opined that agricultural firms, similarly to companies in other economic sectors thrive under effective corporate governance through adequate board size, board gender diversity and board duality. The study suggests that agricultural companies in Nigeria will improve their productivity levels through efficient governance thereby highlighting the possibility of agricultural firms competing favourably with their counterparts in other sectors in terms profitability. This implies that agribusiness can become an attractive investment opportunity in Nigerian capital market if its corporate governance issues are equally given serious attention. There are myriads of contributions in literature in respect of corporate governance and its influence on various measures of corporate goals. Some authors have matched corporate governance with different measures of firm performance whereas others have tried to study its influence on earnings management or earnings quality (Zalata, et al., 2022; Madhusha & Kehelwalatenna, 2021). The important aspect of this analogy is the fact that there abound many indicators of corporate governance and also for earnings quality. And many studies on corporate governance tend to favour board size and independence more than the other corporate governance indicators.

Theoretical Framework and Development of Hypotheses

This research is built on resource-based theory as developed by the work of Penrose (2009), however according to Utami and Alamanos (2023), the idea of utilizing firm-based resource for competitive advantage as a thought in strategic management started in the 1980s and one of the major works on the subject in the form of resource-based view was done by Barney (1991) prior to the theoretical formalization by Penrose (2009). The theory posits that firms have differing resources which are persistently different or immobile overtime, thus creating a different competitive advantage and results for each. The concept of corporate governance, though mandatory for listed agricultural firms in Nigeria, have different application due to available resources or control, and its practice overtime creates different results or advantage for firms in terms of the quality of its earnings. Using this framework, corporate governance practices through its various elements impacts on the quality of reported earnings as a measure of firm performance thus the study hypothesizes as follows;

H01 Board size has no significant effect on earnings quality of listed agricultural firms in Nigeria

H02 Board independence has no significant effect on the earnings quality of listed agricultural firms in Nigeria

H03 Board gender diversity has no significant effect on the earnings quality of listed agricultural firms in Nigeria

H04 Audit committee size has no significant effect on the earnings quality of listed agricultural firms in Nigeria

Methodology

As a correlational research on broad level, *ex-post facto* research design was adopted. The study area is Nigeria as the study focused on the total five firms listed on the Exchange Group under the agricultural sector as at February 2023. Since the population is not large, the study covered all the five listed agricultural companies. The companies include; Okomu Oil Palm Plc, Ellah Lakes Plc, FTN Cocoa Processors Plc, Livestock Feeds Plc, and Presco Plc. Data was collected from the financial reports of the firms from 2012 – 2021. Since the study sets out to understand the relationship that may exist between corporate governance indicators and earnings quality of listed agricultural firms in Nigerian, the ordinary least square panel regression was used for the analysis of data after some preliminary tests was used to ascertain its adequacy as analytical technique. These tests include the descriptive analyses, cross-sectional dependency tests and unit root tests. The study adapted model of Olaoye and Adewumi (2020) which was stated as

EQ = a + b1BS + b2BIND + b3BGD + e

Where

BS = board size

BIND = board independence

BGD = board gender diversity

Hence the study adapted and specified its model as follows;

Mathematic model:

Earnings Quality Ratio = f (Board size + board independence + Board gender diversity + Audit Committee Size)

Econometric model:

$$EQR_{it} = \alpha + \beta_1 BSZ_{it} + \beta_2 BID_{it} + \beta_3 BGD_{it} + \beta_4 ACS + U_{it}$$

EQR = Earnings quality (Is explained in this study as the degree of the smoothness of the reported earnings in relative to the volume of operations. It is measured as Earnings divided by Cash flow from operating activities multiplied by 100%)

Thus, EQR = (profit before tax/cash flow from operating activities) X (100/1)

BGD = Board gender diversity (the number of female board members divided by the total number of members on the board)

BSZ= board size (Total number of members represented on the board).

BID = Board independence (Number of non-executive members on the board divided by the total number of board members)

ACS = Audit committee size (Is the total members in the audit committee team)

U= error term

it = $_I$ cross-section & $_t$ time

β = Beta coefficient of the model.

Results and Discussion

Table 1: Descriptive analyses of corporate governance variable and earnings quality

	ACS	BGD	BID	BSZ	EQR
Mean	5.122449	8.985306	69.42816	8.510204	0.530284
Median	6.000000	10.00000	71.43000	9.000000	0.741100
Maximum	7.000000	33.33000	87.50000	12.00000	5.417120
Minimum	3.000000	0.000000	42.86000	3.000000	-8.310555
Std. Dev.	1.166059	9.418782	12.08025	2.151767	1.725778
Observations	50	50	50	50	50

Source: Analytical Output

The descriptive analyses of all the variables on table 1 that are used in the regression analysis with the purpose of understanding the spread and normality of the series. The descriptive analyses were deemed important essentially because this thesis dealt with panel data and there is need to understand the flow of the series from each of the agricultural companies that formed the model. The descriptive analyses presented in table 1 suggests that the agricultural firms possess similar characteristics because the variability in the series are not on the extreme side though it was noted that some firms at some point in the time series possess board female gender diversity of 0% whereas some other firm at some point showed board female gender diversity of 33.33%. This observation suggests that the recommendation made by Nwafor (2022) which proposed that the expansion of agribusiness in Nigeria will become a reality only when firms in the sector learn to take corporate governance issues as seriously as companies in other sectors of Nigerian economy.

Agribusiness is only receiving attention from business investors in the recent times due to the fact that it has become obvious that oil exploration can no longer sustain the Nigerian economy alone any longer (Yusuff, 2017) thus it is possible for firms in this sector to not view competitive adoption of important policies as essential for their survival. But it is evident from this study that governance is very strategic to issues that borders on company image, integrity and long-term survival which the concept of earnings quality represents.

Cross-section dependence and panel unit root tests of variables

As part of the pre-estimation tests, the cross-section dependence test correctly specifies the unit root procedure that will be applicable in ascertaining the stationarity or otherwise of the individual series.

The results summarized on table 2 indicate that audit committee size, female board gender diversity, board size and earnings quality all possess probability values of more 5% for at least one of the criteria variables possess probability values of above 5% for all the test criteria hence the decision to adopt 1st generation unit root method which is Levin, Lin, and Chu t. However, for board independence, the results of the probability values for all the test criteria all yield values of less than 5% suggesting the rejection of null hypothesis which proposes that there is no cross-dependence for board independence as a variable. Thus, this outcome informed the decision to apply a method from the second generation unit root methods in subsequent stationarity estimation of the variable which is the Im, Pesaran and Shin W estimation.

Table 2: Cross-section dependence test results

Test Criteria	ACS	BGD	BID	BSZ	EQR
Breusch-Pagan LM	0.0728	0.8907	0.0003	0.0196	0.6512
Pesaran scaled LM	0.1139	0.2642	0.0000	0.0121	0.6181
Bias-corrected scaled LM	0.1925	0.1633	0.0000	0.256	0.4376
Pesaran CD	0.0302	0.8876	0.0000	0.2234	0.6715
Decision on unit root generation	1st Generation	1st Generation	2nd Generation	1st Generation	1st Generation
Method of Unit root	LLC	LLC	Im,Pesaran & Shin W	LLC	LLC

Source: Research Analyses Extracts

Furthermore, the panel unit root test was taken to test the adequacy of ordinary least square estimation method for estimating the relationship between the variables. The results of the panel unit root estimation are summarized on table 3.

The results obtained showed that all the variables failed to align with their respective null hypotheses which proposed in each case that the series possess unit root and therefore is not stationary. Thus, the study concludes on the bases of the unit root results that audit committee size, board female gender diversity, board independence, board size and earnings quality are stationary at level since all the probability values for each the series are below 5% indicating that they are all stationary at level.

Table 3: Panel Unit Root Results for each Variable

Series	Unit Root Method	Order	t-statistics	P-value
ACS	Levin, Lin, and Chu t	Level	-3.57705	0.0002
BGD	Levin, Lin, and Chu t	Level	-2.02329	0.0215
BID	Im, Pesaran and Shin W	Level	-4.18407	0.0000
BSZ	Levin, Lin, and Chu t	Level	-3.15411	0.0008
EQR	Levin, Lin, and Chu t	Level	-6.02183	0.0000

Source: Research Analyses Extracts

Hausman test for fixed/random effects ordinary least square regression

The Hausman test serves as a guide in the decision of which panel ordinary least square regression is more appropriate for the estimation of the effect of corporate governance structure on earnings quality. This is achieved through the proposition of a pair of hypothesis;

Ho: Random effect regression model is more appropriate
HA: Fixed effect regression model is more appropriate

Table 4: Hausman Test for Fixed and Random Effects Models

Test Summary	Chi-square statistics	P-value
Results	6.7286	0.1509

Source: Research Analyses Extracts

The Hausman test result on table 4 has a probability value of 0.15 approximately and which is greater than 5% threshold of rejection. So the random effects ordinary least square regression is adopted for analysing the effect of corporate governance structure on earnings quality of listed agricultural firms in Nigeria. The random effects ordinary least square regression adopted for analysing the hypotheses of the study is shown on table 5.

The r-squared of the random effect ordinary least square regression model is 32% approximately and shows that the model is fairly specified, indicating that the explanatory variable can explain to a fair extent the variation or the causes of change in the dependent variable which is earnings quality of the listed firms in the agricultural sector of Nigeria. The f-statistics also yielded a value of 3.393 which is significant at 5% suggesting that the corporate governance structure indicators in this thesis are capable of explaining the changes that occur in the earnings quality of the selected firms.

Considering the Durbin-Watson statistics which returned a value of 2.0557, it can be deduced that the regression result is not affected by serial correlation and therefore, can relied on in making decisions as it pertains to the individual hypotheses acceptance or otherwise.

Table 5: Panel random effects regression of corporate governance structures on earnings quality of agricultural firms in Nigeria

Test Statistics	Results	T-statistics	P-values
Constant	-1.7443	-2.6452	0.0130
Coefficients:			
ACS	0.2292	2.2331	0.0334
BGD	-0.0080	-0.6812	0.5012
BID	-0.0065	-0.7243	0.4747
BSZ	0.1000	2.3624	0.0236
R-squared	0.3188		
Adjusted R-square	0.2249		
F-statistics	3.3932		0.0215
Durbin-Watson	2.0557		

Source: Research Analyses Output Extracts

Board size and Earnings quality

The analysis of the first hypothesis reflects a significant influence flowing from board size of the firms within agricultural sector to their earnings quality. The result for board size interaction with earnings quality depicts approximately 10% effect on the earnings quality of the selected firms at statistical significance level of 5% affirms acceptance of the alternative proposition to the null hypothesis. This outcome has been similarly established by previous studies within the Nigerian economy (Olaoye & Adewumi, 2020) who specifically used thirty-seven companies selected from the manufacturing sector of the economy. Badu and Appiah (2017) also had similar results from a study that sampled 137 quoted firms from Ghanaian and Nigeria; they concluded based on their findings that board size has significant effect on the firm performance of those selected firms. Egbunike and Odum (2018) also found that board size of selected forty-five non-financial companies has significant and positive effect on their earnings quality. However, Siyanbola, et.al (2019) who domiciled their sampling within the banking sector of Nigeria reported that board size has a positive effect on earnings quality but the interaction is not statistically significant to warrant conclusion. This outcome negates the findings made in this thesis and those of studies though an important consideration to it is that the companies were selected from the banking sector of the economy from 2008 to 2017.

Ibadin and Dabor (2015) and Kumar and Singh (2013) on the other hand, found that board size has significant effect on earnings quality though the direction of the observed effect is negative. It is important to add that both studies analysed the effect of board size as an indicator of corporate governance in isolation of other corporate governance structures and this is possibly a deviation from the models applied by other similar studies including the present study. It is also evident from the discussion of board size in relation to earnings quality that many research thrusts in this direction have identified that board size has significant effect on earnings quality of firms they covered though the agricultural firms has not been exclusively sampled as this study did.

Board Independence and Earnings Quality

The study accepts the null hypothesis because both the t-statistics and probability value of board independence, -0.72 and 47% approximately are less than 1.96 and greater than 5% respectively, thus it concludes that board independence has no significant effect on the earnings quality of listed agricultural firms in Nigeria. The implication of these findings is that the board independence practiced in the sector does not influence their earnings reporting quality to an extent that it is statistically not significant. A look at other similar studies reveals that there are mixed results for board independence and earnings quality. Frankelet.al (2011) found that board independence has significant and positive effect on earnings quality of companies in United States of America. This also applies to the study conducted in the United Kingdom by Peasnell, et al. (2015). But Mohammed, et.al. (2015) found a significant but negative influence from board independence to earnings quality of two hundred and seventy-two companies excluding finance and banking institutions between 2010 and 2014. Olaoye and Adewumi (2020) also found significant interplay between board independence and earnings quality of manufacturing companies in Nigeria between 2011 and 2017. However, Abels and Martelli (2012) who selected firms in the United States of America and Ghazali (2010) after sampling companies from Malaysia had similar outcomes to this study in terms of significance and direction of influence.

In Nigeria Siyanbola, et al., (2019) found that board independence of selected commercial banks has negative and non-significant effect on earnings quality in a study that covered 2008 to 2017. A study that sampled Chinese firms reported no significant relationship between board independence and earnings management (Yifan, 2020). So it can be deduced from the discussion that board independence as an indicator of corporate governance has been dicey as there remains no overwhelming conclusion of its significance or otherwise on earnings quality based on the various studies consulted during this study.

Board Female Gender Diversity and Earnings Quality

Table 5 presents a beta coefficient of -0.01 approximately for board female gender diversity and a probability value of 50% favouring the acceptance of the null hypothesis.

Considering the descriptive statistics presented on table 4.1, the study notes that some of the listed agricultural firms at some point have no female board members at all, hence the minimum value of the board female gender diversity as a variable is 0.00% whereas the maximum value is on 33.33% which is not up to half of the total board size composition. The relevance of this observation rests on the fact that board female gender diversity may not be expected to wield sufficient effect on the earnings quality of the firms in this study when the variable itself is not upheld significantly by the firms in practical terms. So even if the regression result as obtained for board female gender diversity is not in line with initial expectation for it, it aligns with its practical reality since the average percentage of board female gender diversity for agricultural sector remains as low as 9% approximately. However, Olaoye and Adewumi (2020) reported that board gender diversity of listed manufacturing firms in Nigeria has significant influence on earnings quality. This is also the case for the study done by Zalata, et.al (2022) which covered a time frame of 2017 to 2013 using listed firms from the Jordanian economy. The study established that board female gender diversity in consideration of female directors with financial background has significant and positive effect on earnings quality of the sampled companies. Gao (2018) found that board gender diversity contributes positively to earnings quality of sampled firms in China. The conclusion of this study runs contrary to consulted empirical studies but an important factor to note is that this study covered the agricultural sector of the Nigerian economy which is not the case for any of the above researches. Also, the low turnout of board female gender diversity observed for agricultural firms in this thesis is already a pointer that is likely to contribute towards the differences recorded especially for studies domiciled in Nigeria.

Audit Committee Size and Earnings Quality

From the summarized results in table 4.5, audit committee size has a beta coefficient of 0.23 approximately and a probability value of 3.3% which favours the rejection of the null hypothesis. The probability value implies that the result is statistically sufficient to be relied on in explaining the influence of audit committee size on the earnings quality of listed agricultural firms. Similarly, Ahmed and Hasnah (2015) though they sampled Malaysian companies, submitted that audit committee independence influences earnings quality significantly. Peasnell, et.al. (2015) also found that audit committee size as an indicator of board monitoring oversight significantly decrease earnings management by managers who wish to avoid reporting losses. But Omoye, and Eriki (2014¸ while studying quoted companies in Nigeria reported that audit committee size has significant but negative effect on earnings quality of the companies thereby aligning with the present study in terms of statistical significance but running contrary in terms of the direction of influence. Raya (2021) has a different submission concerning audit committee expertise which it reported as not having significant influence on earnings quality.

Conclusion and Recommendation

The study concluded that only the board and audit committee size has significant and positive effect on the earnings quality of listed agricultural firms in Nigeria. Summarily and in consideration of the residual statistics of the regression, the study therefore concludes that corporate governance structure of listed agricultural firms in Nigeria has significant influence on their earnings quality. The study therefore recommended that board size optimization should not be viewed from the perspective of numbers alone but also from the spread of knowledge and expertise, board female gender diversity of agricultural firms should be improved to harness the benefits empirically proved by studies from other climes. The study also suggested for optimality in audit committee size with emphasizing on expertise and dedication to tasks as effective results to not rely only on number of person in the committee but also their input towards the firms’ governance.

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ENVIRONMENT, SOCIAL AND GOVERNANCE (ESG) DISCLOSURES AND INVESTMENT DECISIONS OF PROFESSIONAL ACCOUNTANTS IN NIGERIA

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Abstract
Global investors are increasingly placing emphasis on Environmental, Social, and Governance (ESG) reports, driven by a rising interest in socially responsible investments. Hence, this study examines the influence of environmental, social and governance information disclosure on the investment decisions making of professional accountants in Nigeria. The research employed a descriptive survey research design. The population of the study comprises 279 registered chartered accountants in Osun state, based on the Institute of Chartered Accountant of Nigeria Osogbo district membership register as at 30 November, 2022. Random sampling was adopted to select 150 professional accountants. Data were obtained through the use of a structured questionnaire. The findings using logistic regression, indicate that governance and social disclosures significantly influence investment decision among professional accountants in Nigeria. Nevertheless, environmental disclosure does not significantly influence investment decisions. The study concludes that social and governance disclosures exert a positive influence on investment decision-making among professional accountants in Nigeria. It is therefore recommended that organisations should prioritize social disclosures to attract investments and governance disclosure to address investor perceptions of risk, respectively.

Keywords: Environmental, Governance, Investment decisions, Social, Disclosure.

Introduction
Investors are increasingly prioritizing environmental, social, and governance (ESG) issues, drawn towards socially responsible investments (SRI) and recognizing the inherent value of these criteria (Sætra, 2023). Over the past decade, ESG considerations have gained prominence in business decision-making. Modern businesses consistently strive to enhance their reporting practices. Investors now insist on reliable and understandable ESG data from businesses. According to PricewaterhouseCoopers (2016), ESG encompasses a set of criteria used by socially responsible investors to assess company activities. The precursor to ESG was the United Nations Principles of Responsible Investment (PRI), adopted in 2006, solidifying the acknowledgment and integration of ESG factors into investment decisions. However, ESG gained resonance in 2008 with the release of an ESG guide by the Chartered Financial Analyst (CFA) Institute, though it would be misleading to assert that ESG emerged that year, given certain elements of ESG had earlier foundations (Fuller, 2012).

The significance of ESG consideration in the investment choices of professional accountants has had a profound impact on the sustainability of the country's stock market, as well as the global economy and society (Sultana et al., 2018). Companies engaging in irresponsible behaviour may incur substantial costs for post-incident clean up, sustainability efforts, resource consumption, loss of customers' trust, potential harm to employees' well-being, obligations to local governments, and stakeholder investments (Jun & Conroy, 2013). Moreover, businesses adhering to ESG principles stand to benefit from enhanced client retention, heightened brand recognition, improved access to financing, cost efficiencies, increased innovation capacity, superior human resource management, and enhanced risk management (Ferrero-Ferrero et al, 2016). In addition, ESG concerns furnish crucial data on financial performance which have and will continue to influence the evaluation of organizations in the future (Atz et al., 2023).

Examples such as the Exxon Valdez oil spill (1989), Nike's sweatshop allegations (2005), Coca-Cola's environmental and labour infractions (2006), the BP oil spill (2010), the Rana Plaza collapse (2013), the BHS corporate governance scandal (2016), and other incidents serve as poignant illustrations of the adverse consequences of ESG transgressions and their impact on the environment, society, and financial markets. Adebimpe et al. (2015) additionally stress the necessity of advancing ESG practices by integrating financial and ESG components to produce a unified integrated report, enabling both the company and its stakeholders to make more informed decisions. Due to inconclusive data and varying research perspectives, the ongoing discourse regarding the relationship between ESG and investors' decision-making remains open. this study is therefore set to find out the influence of ESG on investment decision making among professional accountants in Nigeria.

Literature Review

Investment Decision

The pivotal stage of investment decision-making involves selecting a stock from a wide array of options across diverse stock exchanges. Conventional economic theory posits that individuals, assumed to be rational actors, leverage their knowledge, experience, and expectations to seize opportunities. Yet, the behavioural framework of financial decision-making, encompassing emotional inclinations, entrenched cognitive patterns, and psychological biases, illuminates how investors perceive their surroundings and make investment choices (Jagongo & Mutswenje, 2014; Bhanu, 2023). Traditionally, a basic triangle comprising risk, liquidity, and return served as the compass for investment choices. However, an escalating number of investors have now embraced the comprehensive square, which encompasses liquidity, risk, return, and sustainability (VonWallis & Klein, 2015). Henceforth, the decision-making processes of investors in regard to investments exhibit heterogeneity, differing among various investors rather than adhering universally. In the realm of selecting stocks or bonds, diverse tactics are employed by different investors. Some may base their decisions solely on the financial outcomes of the investment, whereas others may factor in both the financial results and ESG considerations.

Environmental, Social, and Governance Disclosures

ESG considerations have gained increasing prominence within discussions of corporate social responsibility (CSR). Understanding the historical underpinnings and core concepts of ESG is paramount to grasping its role. The inception of ESG can be traced back to the Quakers' divestment from enterprises linked to slavery in North America (Kölbel et al., 2020). Socially responsible investing (SRI) initially entailed avoiding "sin stocks" such as alcohol and cigarettes. However, it has evolved to encompass purposeful inclusion of businesses that excel in sustainability investments, champion human rights, and safeguard the environment, while still excluding "sin"-related investments (Liang & Renneboog, 2020). Employing the technique of "positive screening," the top ESG performers in their respective asset classes can be identified (Liang & Renneboog, 2020).

According to Wagner (2010), corporate financial statements fall short in conveying critical aspects like reputation, quality, brand equity, safety, workplace culture, strategies, expertise, and various other assets, which hold heightened significance in today's knowledge-driven global economy. ESG metrics aim to capture additional facets of corporate performance that remain concealed in accounting data. Consequently, ESG indicators serve not only to gauge a company's managerial proficiency but also to bolster risk management, as they encompass a broader spectrum of non-financial data encompassing environmental, social, and corporate governance factors (Sierdovski et al., 2022). Particularly for managerial objectives, ESG data assumes paramount importance. Managers necessitate comprehensive and up-to-date information regarding their global operations. Baron (2014) characterized ESG as a voluntary facet of corporate sustainability reporting or CSR. Lydenberg (2016) underscored the growing need for more systematic ESG practices, leading to the establishment of various international initiatives like the Global Reporting Initiative and the United Nations Global Compact. These endeavours unmistakably respond to how investors evaluate investments and emphasize a set of operational guidelines for integrating ESG considerations into investment research.

Paredes-Gazquez et al. (2014) asserted that the UN Principle of Responsible Investing Initiatives can foster ESG communication among diverse stakeholders and heighten ESG awareness among consumers. This is evident in the escalating number of investors endorsing the UN Principles of Responsible Investing, signifying their increasing value of ESG disclosures in investment decisions. Consequently, management gains enhanced capacity to adapt its business planning and promptly notify analysts of significant shifts in estimates. This targeted approach heightens the precision and applicability of analysts' forecasts, providing management with more specific insights to consistently meet or surpass market expectations. Additionally, managers of organizations exhibiting robust ESG performance demonstrate adeptness in steering long-term objectives and possess acute awareness of enduring strategic concerns within their industry. Such enterprises, committed to sustaining their operations, make the requisite long-term decisions to secure the enduring success of their business (Habib & Mourad, 2023).

Environmental Disclosures

Taking environmental considerations into account is a crucial aspect of investment decision-making. These concerns encompass a wide range of factors related to the state and functionality of the environment and natural systems, including issues such as air, water, and resource pollution, greenhouse gas (GHG) emissions, climate change, alterations in the nitrogen and phosphorus cycles, ocean acidification, shifts in land use, waste management, biodiversity loss, stratospheric ozone depletion, as well as renewable energy and energy efficiency (Principles of Responsible Investments, 2015). Given the interdependent repercussions of social transformation, economic progress, the scarcity of natural resources, and population growth, both the economy and society must factor in considerations of the environment and climate change (Stevens, 2018).

The impact of corporations on the environment has gained increasing significance due to the evident, widespread effects on biodiversity, harm to natural resources, and accelerated global warming resulting from corporate activities. Consequently, companies adhering to sound environmental practices not only promote the development of equitable and sustainable financial returns but also fulfil their environmental responsibilities. The connection between environmental factors and the investment decision-making process has been examined in various regions, including the USA, Japan, India, France, and Australia. American investors have expressed that assessing environmental concerns plays a pivotal role in evaluating a company's socially responsible conduct (Berry & Junkus, 2013). French companies disclosing their ESG practices witnessed a 30.8% reduction in private equity investors' likelihood of making investments, particularly if they exhibited environmentally harmful practices or policies (Crifo et al., 2015). In India, environmental concerns exert the most significant influence on investors' endeavours to align with their non-economic investment objectives (Sreekumar & Ladha, 2014). Conversely, the Brazilian stock market does not demonstrate a notable inclusion of environmental considerations in investment decisions (Miralles-Quirós et al., 2018). Nigeria experiences environmental pollution stemming from negligent industrial practices (Belal et al., 2015).

Social Disclosures

Social issues encompass the well-being, rights, and interests of both individuals and groups. These issues primarily involve workplace health and safety, human rights, slavery, child labour, labour standards within the supply chain, diversity, freedom of expression, access to healthcare, employee relations, human capital management, interactions with local communities, contentious weapons, consumer protection, and involvement in organized crime. Australian superannuation fund investors frequently factor in social issues when making their investment choices (de Zwaan et al., 2015). Additionally, they weigh the connection between the community and employees, as well as human rights considerations (Rakotomavo, 2011). Notably, Australian investors assign greater importance to social issues compared to other factors like environmental and governance concerns (Pérez-Gladish et al., 2012). However, social disclosures are not considered by investors in the Nigerian stock market (Miralles-Quirós et al., 2018). There is an increasing trend among investors to take into account the social challenges faced by the companies they invest in on a global scale.

Governance Disclosures

The governance practices of companies exhibit a significant correlation with the rational economic decisions made by investors. The sustainability of business, resource allocation, and the economic system all hinge on profitability (Busch et al., 2016). Businesses with effective governance procedures are more inclined to adopt responsible social and environmental practices. Examples of governance-related issues encompass executive compensation, disclosure of information, ethical conduct in business, rights of shareholders, engagement with stakeholders, the dynamics between a company's management team and other stakeholders, as well as matters related to bribery, among others. Governance concerns extend to corrupt practices within firms and other entities that attract investors (Principles of Responsible Investments, 2015). Investors express a clear preference for considering the governance practices of a company, attaching substantial importance to social issues, as long as they align with the prospect of a profitable return on investment (Rakotomavo, 2011; Pérez-Gladish et al., 2012). In Australia, when making investment decisions, 64% of respondents favoured corporate governance (de Zwaan et al., 2015), whereas investors in the Brazilian stock market did not give due consideration to governance issues (Miralles-Quirós et al., 2018). The Global Financial Crisis (GFC) has heightened the demands of stakeholder groups for improved governance. In a nation where investors have recently faced a stock market crash and corporate governance scandals, it remains uncertain whether stock market investors are factoring in corporate governance issues.

Empirical Review

Ahmad et al. (2024) reviewed the impact of environmental, social and governance disclosures on sustainability investment decision making from a global perspective. The study examined the ESG indices by 3 major global information providers, Bloomberg, Thomson Reuters and MSCI. Meta-analysis was employed to analyse articles to determine the ESG factors that impact business investment. The findings of the study revealed that ESG policies are not integrated into organisational culture of most organisations examined by various studies. However, the adoption of ESG policies do improve organisation’s performance and wealth creation. The study therefore concludes that ESG disclosures are crucial for investment performance. Nevertheless, the study noted that there are serious challenges to the implementation of ESG, including different perspective of various stakeholders that often conflicts.

Nwaigwe et al. (2022) examined the effect of the extent and quality of sustainability disclosure on the market value of firms. To achieve the study’s objectives, 31 relevant sustainability performance indicator aspects were analysed for the 39 companies drawn from 9 sectors for the period 2010–2019. Un-weighted sustainability extent and quality indices are calculated using

12,090 data points from 390 firm-year observations. Regression research results point to a favourable, non-significant relationship between the degree of sustainability disclosure and business market value. Market value was found to be inversely correlated with the quality of sustainability disclosure. The value impact of the quantity and quality of sustainability disclosure across the economic, social, and environmental components of sustainability also showed variations. The study combines two distinct lines of inquiry—the extent and quality of sustainability disclosure and provides fresh, informative data on the importance of the pair in a growing environment

Gao et al. (2022) conducted a comprehensive analysis of the relationship between ESG operations and financial indices in publicly traded firms in China. They employed both dynamic and static panel data analysis techniques to investigate this link. Initially, financial data was collected and pre-processed using z-score normalization. The study also examined the impact of ESG factors on companies' financial performance during the pandemic, employing statistical analytic approaches such as Fisher's exact test, logistic regression model, and Pearson correlation test. The dynamic and static statistics revealed that a robust ESG framework significantly influenced corporate value and profitability per share. This research underscores the potential positive effect of ESG performance on financial outcomes, with implications for investors, decision-makers, executives, and industry regulations.

Pulino et al. (2022) explored the influence of environmental, social, and governance (ESG) disclosure on firm performance, particularly in light of stakeholders' increasing focus on a company's ESG policies. The study was centred on the Italian context, where the European Directive was enforced through Legislative Decree 254/2016, mandating larger companies (those with over 500 employees) to provide comprehensive information about their social and environmental activities starting from 2017. The research demonstrated a positive correlation between environmental, social, and governance disclosure and business success, assessed by EBIT, following a panel regression analysis conducted on a sample of the top Italian listed companies over a decade (from 2011 to 2020). The findings imply that managers should be encouraged to invest in CSR practices, as there is evidence of a beneficial association between ESG disclosure and corporate performance.

Park and Jae (2021) developed a unique ESG framework tailored to the context of South Korea, incorporating both international and national perspectives in each of the three categories. The study utilized the Analytic Hierarchy Process (AHP) model to assess how institutional investors would prioritize the materiality of these categories and how country-specific factors compared to global ones. The findings revealed that institutional investors assigned greater importance to environmental and governance factors over social factors. Investment decisions were found to be particularly influenced by factors such as shareholder rights, pollution and waste management, greenhouse gas emissions, and risk and opportunity management. Furthermore, the study identified two South Korea-specific factors, partnership with a subcontractor and

CEO reputation—that significantly impacted investment choices. This methodology, focusing on a country-specific model, provides a valuable framework for research in other emerging markets with their unique countries.

Theoretical Review

Signalling Theory

In 1973, American Economist Michael Spence introduced the theory of signalling in the job market, emphasizing the pivotal role of information in business transactions (Spence, 1973). According to this theory, managers can mitigate information asymmetry by proactively sharing relevant information with external stakeholders (Hahn & Kühnen, 2013). Specifically, companies are willing to invest financial resources in disclosing favourable information about their sustainability commitments, providing stakeholders with unique insights (Maas et al., 2016). The signalling theory revolves around four key elements: signal, signaller, receiver, and feedback (Taj, 2016). The signal comprises of the flow of information from the signaller (internal management) to the receiver (external stakeholders) as well as the feedback and interactions between signallers and receivers (Bae et al., 2018). Managers are often inclined to disclose information about their long-term sustainability initiatives as a signal of their dedication to society, the environment, and stakeholders. This practice serves to diminish the information asymmetry between companies and external stakeholders. ESG reporting is not merely a social or political imperative but holds significance from a signalling perspective. Environmental and social challenges can potentially affect an organization's operations and profitability. Therefore, high-quality ESG disclosures indicate that potentially crucial business risks are being effectively managed, ultimately reducing the cost of equity and eliminating information asymmetry (De Klerk et al., 2015).

Methodology

The research employed a descriptive survey research design, focusing specifically on chartered accountants in Osun State. The population of the study comprises 279 chartered accountants in Osun State, based on the data obtained from the ICAN Osogbo district membership register as at 30th November, 2022. The random sampling was employed to select 150 professional accountants. Data was collected through the use of a structured questionnaire. In examining the influence of ESG on investment decision, the model of Adebimpe et al., (2015) was adopted.

$IVD = f\ (ESGD)$

Where: $ESGD = (ED, SD, GD)$ …………………….(i)

Therefore; $IVD = f\ (ED, SD, GD)$ ……………….(ii)

$IVD_i = \beta_0 + \beta_1 ED_i + \beta_2 SD_i + \beta_3 GD_i + \mu_i$ ……. (iii)

Where: IVD = Investment Decision;

ED = Environmental Disclosure;

SD = Social Disclosure;

GD = Governance Disclosure;

β_0 - β_3 = coefficients of variable
Apriori Expectation $\beta_1, \beta_2, \beta_3 > 0$

Results and Discussion
Table 1 Variables in the Equation

	B	Wald	Df	Sig.	Exp(B)
ED	-0.515	0.854	1	0.355	.598
SG	1.183	3.774	1	0.032	3.263
GD	0.168	5.120	1	0.000	.845
Constant	-1.842	0.538	1	0.463	.159

a. Variable(s) entered on step 1: Environmental disclosure, social disclosure, Governance disclosure.

Source: Author's Computation (2023)

Table 1 shows the logistic regression findings which indicates that social and governance disclosure has significant influence of t-value of 1.183 and 0.168 at $p<0.005$ respectively on investment decision making of sampled respondents. These findings are consistent with the notion of signalling theory that investors may view high social responsibility as an indicator of performance. Similarly, lack or low level of governance disclosure signals risk and uncertainty, as well as lack of transparency or accountability. This result is consistent with the empirical findings of Carnini et al. (2022), Garcia *et a*l (2017); Nor et al., (2016); and Dhaliwal et al (2011). Nevertheless, the findings show that environmental disclosure does not significantly influence decision making of sampled respondents. It should be noted that although the environmental disclosure is not significant, it reflects a negative influence at coefficient of -0.515 at $p>0.005$. This implies that sampled respondents do not consider environmental information as a particular positive information when making investment decisions although they deem it less significant. This is in line with the study of Meng and Zhang (2022) but inconsistent with the signalling theory. These findings therefore indicate that investors do not consider the environmental disclosure as a relevant information when making investment decisions as much as social and governance information. This assertion could be attributed to the level of development of Nigeria as a developing economy and might not be in such a level to see environmental factors as a very paramount or relevant issue.

Table 2 shows the step number, chi-square value, degrees of freedom, and p-value. The chi-square value measures the difference between the observed and expected data, while the degrees of freedom are based on the number of predictor variables in the model. The p-value indicates the probability of obtaining a test statistic as extreme as the observed one, assuming that the null hypothesis is true. The results of the test showed that the model is fits the data, with a significant chi-square value of 14.652, 3 degrees of freedom, and a p-value of less than .05. This means that the predictor variables included in the model are significantly associated with the outcome variable. Furthermore, Table 3 shows the model summary for the binary logistic regression model that was employed. The summary reflects that measure of model fit and goodness of fit. The -2 Log likelihood value represents the overall goodness-of-fit of the model, where lower values indicate a better fit. In this case, the value is 109.433, indicating that the model has a reasonable fit. The "Cox & Snell R Square" and "Nagelkerke R Square" are measures of how well the model predicts the outcome variable, ranging from 0 to 1. Higher values indicate better prediction. In this model, the Cox & Snell R Square is 0.355 and the Nagelkerke R Square is 0.273, suggesting that the model may be a moderate predictor of the investment decision outcome. It's worth noting that the model's estimation was terminated at iteration number 4 because parameter estimates changed by less than 0.001. This indicates that the model converged quickly and that the parameter estimates are stable.

Diagnostic Tests

Table 2 Omnibus Tests of Model Coefficients

		Chi-square	Df.	Sig.
Step 1	Step	14.652	3	.000
	Block	14.652	3	.000
	Model	14.652	3	.000

Source: Author’s Computations (2023)

Table 3 Model Summary

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
109.433[a]	.355	.273

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Source: Author’s Computation (2023)

Conclusion and Recommendations

Based on the findings of this study, it could be concluded that social disclosures and governance disclosure have a significant influence on investment decision making. Nevertheless, environmental disclosure has no significant influence on investment decision making. These implies that professional accountants in Nigeria consider social and governance disclosures as the most important ESG disclosure when making investment decision but have little or no regard to environmental disclosure. Based on the results obtained and the conclusions made, the following recommendations are given;

i. Companies in Nigeria should prioritize social disclosure practices to attract more investments from professional accountants and other investors.

ii. Organizations in Nigeria should consider more governance disclosure because investors may view higher levels of governance disclosure as an indicator of increased risk or uncertainty.

iii. Organizations in Nigeria should take note that environmental disclosure is not considered by investors as relevant and therefore they should consider other forms of disclosure.

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BOARD ATTRIBUTES AND HUMAN CAPITAL DISCLOSURE OF QUOTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract
This study examines the effect of board attributes on human capital disclosure (HCD) among listed deposit money banks in Nigeria for ten years (2015–2024). Anchored on positivist philosophy and guided by Agency Theory, Resource-Based Theory, and Stakeholder Theory, the study adopts an ex-post facto research design to explore how board independence, board gender diversity, and board diligence influence the extent and transparency of human capital information disclosed in annual and sustainability reports except and board size. Utilising a census sampling technique, the study covers all 15 deposit money banks listed on the Nigerian Exchange Group (NGX), ensuring full sectoral representation. The panel data analysis uses a fixed-effects regression model, with appropriate diagnostics such as the Breusch–Pagan/Cook–Weisberg test, variance inflation factor (VIF), and Hausman specification test confirming model robustness and statistical validity. The findings revealed that board independence and diligence are significant predictors of enhanced human capital disclosure. Board size shows a marginally positive influence, suggesting resource advantages of larger boards. In contrast, board gender diversity does not exhibit a statistically significant effect. These results highlight the importance of structural and functional board attributes in driving disclosure quality, particularly within Nigeria's banking sector. In conclusion, the study affirms that well-composed and actively engaged boards foster voluntary human capital disclosure among banks. It recommends that regulatory bodies strengthen board independence requirements, enforce minimum board meeting frequencies, and promote institutional empowerment of female directors to enhance disclosure effectiveness. These governance reforms, if implemented, will help align Nigerian banks with international standards and support more transparent, accountable, and sustainable corporate practices.

Keywords: Human Capital Disclosure, Board Attributes, Board Size, Board Independence, Board gender Diversity, Board Diligence

Introduction
Human capital disclosure (HCD) has emerged as a vital component of corporate transparency, reflecting the value firms place on their employees' skills, knowledge, and experience. In an era where intellectual capital underpins competitive advantage, banking institutions are increasingly expected to report on workforce development, retention strategies, and diversity initiatives. However, human capital disclosure practices remain uneven across Nigerian banks, partly due to the voluntary nature of such reporting and the heterogeneity of governance structures. Prior studies in developed markets demonstrate that boards with a higher proportion

of independent directors, greater gender and ethnic diversity, and relevant human resource expertise tend to champion more extensive non-financial disclosures (Chau & Gray, 2010; Ben-Amar et al., 2017; Guthrie, et al., 2006). However, empirical evidence from Nigerian banks is sparse, and the mechanisms through which board characteristics translate into richer HCD remain underexplored.

The problem is compounded by Nigeria's regulatory framework, which, despite emphasising good governance, stops short of mandating human capital disclosures. Consequently, stakeholders, investors, regulators, and employees- face information asymmetries when evaluating a bank's commitment to workforce development. Existing Nigerian studies have largely concentrated on financial disclosures or general governance metrics, neglecting the nuances of human capital transparency (Ujunwa, 2012; Ofoegbu & Ezeagba, 2021). This gap underscores the need to examine how specific board attributes independence, gender diversity, diligence, and size influence the decision to disclose human capital information, and to what extent these characteristics can mitigate the absence of mandatory reporting requirements.

Guided by four research questions on board independence, gender diversity, diligence, and size the study sets out to (1) determine the effect of independent directors on HCD, (2) assess how gender diversity shapes human capital disclosure breadth, (3) investigate the role of board diligence in information quality, and (4) analyse the impact of board size on overall disclosure levels. Correspondingly, four null hypotheses posit no significant relationships between each board attribute and human capital disclosure. By constructing a multidimensional disclosure index and applying panel regression analysis to annual report data from 2012–2023 for all deposit money banks listed on the Nigerian Exchange Group, the research offers robust methodological advances over prior cross-sectional and univariate approaches.

The significance of this study lies in its potential to inform both theory and practice. Theoretically, it extends agency, resource dependence, and stakeholder perspectives to the context of voluntary non-financial reporting in an emerging market. Practically, the findings will equip policymakers with evidence-based insights to strengthen corporate governance codes, guide regulators in crafting incentives for transparent HCD, and assist bank boards and managers in understanding which governance structures most effectively foster comprehensive human capital reporting. Ultimately, enhancing disclosure practices and improving stakeholder trust, support investor decision-making, and promote sustainable human capital management in Nigeria's banking sector.

Literature Review

Board Attributes

The conceptual framework for this study posits that board attributes comprising independence, gender diversity, diligence, and size serve as key governance mechanisms that shape a bank's human capital disclosure practices. Human capital disclosure (HCD) refers to the depth and quality of information an organisation provides about its workforce's skills, training, experience, and contributions to value creation. As intangible assets, these workforce elements drive competitive advantage and performance (Becker, 1964), making transparent HCD essential for attracting investors, retaining talent, and fostering stakeholder trust. In the Nigerian banking sector, robust HCD aligns with broader Corporate Social Responsibility efforts and regulatory expectations under the Financial Reporting Council's Corporate Governance Code and international frameworks such as the IIRC's Integrated Reporting principles and the GRI Standards.

Human capital disclosures

Human capital disclosures typically span quantitative metrics such as employees' headcount, turnover rates, training expenditures, diversity statistics, and qualitative narratives on engagement initiatives, career development programs, and inclusion efforts. Quantitative data allow stakeholders to benchmark performance over time and across peers (Vasilieva et al., 2018), while qualitative disclosures provide context about the company's culture, strategy, and social commitments (Dumay & Garanina, 2013). By combining these dimensions into a composite HCD index, this study captures the multifaceted nature of workforce reporting and its strategic importance for long-term sustainability and reputation management.

Board Attributes

Board attributes are the structural and behavioral characteristics of a firm's board of directors that influence governance effectiveness and disclosure quality. Board independence, the proportion of non-executive, external directors enhances objective oversight, mitigates agency conflicts, and is empirically linked to richer non-financial reporting (Fama & Jensen, 1983; Lin et al., 2020). Board gender diversity, measured by the share of female directors, brings varied perspectives that can enrich decision-making and broaden a board's sensitivity to stakeholder interests, although its impact on HCD may depend on the depth of women's engagement rather than mere numerical representation (Milliken & Martins, 1996; Adams & Ferreira, 2009). Board diligence, proxied by meeting frequency and committee activity, reflects the board's commitment to active monitoring; greater diligence has been shown to improve transparency across many governance domains, including workforce disclosures (Jensen, 1993; Appuhami & Bhuiyan, 2020). Finally, board size balances the benefits of diverse expertise against coordination challenges: moderately larger boards can access a wider array of resources to support comprehensive HCD, while excessively large boards risk inefficiency and diluted accountability (Dalton et al., 1999; Yermack, 1996).

Empirical Literature Review

Board Independence and Human Capital Disclosure

Several studies across diverse contexts have documented that a higher proportion of independent directors on corporate boards is associated with more comprehensive human capital disclosures. Reddy, Suri, and Sreenivasulu (2018) showed that Indian manufacturing firms with greater board independence tended to provide richer narrative and quantitative information on employees' training, development programs, and diversity policies. Similarly, Zhang, et al. (2021) found that independent oversight encouraged firms to elaborate more fully on workforce initiatives, particularly in research-and-development training and talent diversity in China's technology sector. In Nigeria, Osazevbaru and Izedonmi (2021) observed that listed firms with more external directors were notably more transparent about employees' health, safety, and retention strategies in their annual reports. Collectively, these findings underscore the role of independent directors as champions of non-financial transparency and accountability in human capital management.

Board Gender Diversity and Human Capital Disclosure

Board gender diversity has likewise been linked to enhanced reporting on human capital practices. In a foundational U.S. study of financial institutions, Adams and Ferreira (2009) demonstrated that firms with greater female representation on their boards went beyond minimal compliance to disclose detailed information on employee retention, development pathways, and work–life balance initiatives. Campbell and Mínguez-Vera (2008) extended this evidence to European corporations, showing that the mere presence of female directors doubled the likelihood of companies reporting extensively on training investments and workforce diversity policies. Within Nigeria's telecommunications sector, Olatunji, et al. (2022) confirmed that firms with more women on their boards offered fuller accounts of their human capital strategies, particularly around professional development and gender-equity measures. These studies highlight how gender diversity brings broader perspectives that foster more inclusive and transparent human capital disclosure.

Board Diligence and Human Capital Disclosure

The extent to which board members actively engage with firm oversight, often termed board diligence, has also influenced the depth of human capital reporting. Appuhami and Bhuiyan (2020) found that boards characterised by high meeting attendance and active committee involvement among Bangladeshi firms were more likely to report on employee training, safety protocols, and retention efforts. Agyemang, Osei, and Ansong (2020) further demonstrated in Ghana that diligent boards, identified through qualitative interviews and content analysis, encouraged management to provide detailed disclosures on workforce policies. In Nigeria's oil and gas sector, Olawale and Olayinka (2023) observed that firms whose boards demonstrated sustained engagement in reviewing HR practices tended to include richer narrative descriptions of training programs, safety measures, and welfare initiatives. These findings suggest that the greater the board's commitment to oversight, the more transparent and comprehensive its human capital disclosures.

Board Size and Human Capital Disclosure

Empirical evidence on board size presents a more nuanced picture. However, a prevailing view is that boards of an optimal size, large enough to encompass diverse expertise but small enough for effective coordination, foster better human capital reporting. Early work by Yermack (1996) argued that overly large boards might dilute accountability. In contrast, subsequent studies such as Zeng, Xu, and Zhou (2023) in China found that broader boards brought a wider array of skills that supported more extensive reporting on workforce development and retention. In Nigerian banking, Olowu, Idowu, and Adeoye (2023) reported that banks with moderately larger boards tended to disclose more detailed information on employee training, diversity initiatives, and talent management strategies. These mixed findings highlight that, while board size alone does not guarantee superior disclosure, an appropriately constituted board balancing diversity of expertise with decision-making efficiency can enhance the quality of human capital disclosures.

Theoretical Review

Theoretically, three governance perspectives -agency, stakeholder, and resource dependency theories frame our understanding of why board attributes matter.

Agency theory highlights independent directors' role in aligning management actions with shareholder interests through enhanced oversight and disclosure advocacy (Jensen & Meckling, 1976; Fama & Jensen, 1983). Stakeholder theory argues that diverse and engaged boards are better attuned to the information needs of employees, regulators, and investors, thus promoting more comprehensive HCD (Freeman, 1984; Post et al., 2011). Resource dependency theory (RDT) posits that boards serve as conduits to external resources expertise, legitimacy, and stakeholder networks and that larger, more diverse boards can leverage these resources to improve transparency and reporting practices (Pfeffer & Salancik, 1978; Hillman & Dalziel, 2003). In the context of Nigerian deposit money banks, RDT offers the most encompassing lens, as it captures how board composition enhances both internal governance capacity and external stakeholder engagement, driving richer human capital disclosures.

Methodology

This study employs a quantitative, correlational research design underpinned by a positivist philosophy. By focusing on observable and measurable variables, the approach facilitates rigorous examination of how board attributes influence human capital disclosure among Nigeria's listed deposit money banks. The correlational design enables the researcher to quantify the strength and direction of relationships between board characteristics such as independence, gender diversity, diligence, and size and the extent and quality of human capital information disclosed in banks' annual and sustainability reports.

The study population comprises all the fifteen deposit money banks listed on the Nigerian Exchange Group as of December 31, 2024. A census sampling technique was used, incorporating every bank for the ten-year period spanning 2014–2023. This comprehensive coverage ensures the elimination of sampling bias and enhances the generalizability of findings to the entire sector. By tracking each bank over multiple years, the panel framework captures both cross-sectional differences and longitudinal trends in governance and disclosure practices.

Human capital disclosure serves as the dependent variable and is operationalized via a composite index derived from content analysis of annual and sustainability reports, capturing dimensions such as training investments, retention strategies, and workforce diversity. Independent variables include board independence (proportion of non-executive directors), board gender diversity (percentage of female directors), board diligence (frequency of board meetings), and board size (total number of directors). Each measure draws upon established empirical benchmarks to ensure validity and comparability with prior research.

Secondary data were collected from published annual reports from quoted deposit money banks on sustainability disclosures and the Securities and Exchange Commission. These documents provide detailed information on both human capital practices and board composition. The ten-year timeframe allows for robust trend analysis, while reliance on audited, publicly available reports guarantees data reliability and minimises collection costs.

Data analysis is conducted using Stata 17. Descriptive statistics first assess data quality and distributional properties. Thereafter, panel multiple regression models estimate the effect of board attributes on human capital disclosure, with both fixed-effects and random-effects specifications tested via the Hausman procedure to select the most appropriate estimator. Robustness checks, including variance inflation factors to detect multicollinearity and heteroskedasticity tests, ensure the validity of statistical inferences. The core regression model is specified as:

$$HCD_{it}=\beta 0+\beta_1 BIND_{it}+\beta_2 BGEND_{it}+\beta_3 BDIL_{it}+\beta_4 BSIZEit+\varepsilon_{it},$$

Where HCD is the human capital disclosure index, and the β-coefficients represent the estimated effects of board independence, gender diversity, diligence, and size, respectively.
The chosen methodology, comprehensive census sampling, secondary data sources, and panel regression analysis, aligns closely with the research objectives. It provides objective, generalisable insights into how corporate governance structures shape non-financial disclosure practices in Nigeria's banking sector, offering a rigorous foundation for policy recommendations and future empirical work.

Results and Discussions

The dataset comprises annual observations (2015–2024) for all fifteen deposit money banks listed on the Nigerian Exchange Group, yielding 150 bank-year records. Key variables include: Human Capital Disclosure (HCD): Composite index from annual and sustainability reports covering training, retention, health & safety, diversity, and development programs., Board Independence (BIND): Proportion of non-executive directors., Board Gender Diversity

(BGEND): Share of female directors., Board Diligence (BDIL): Annual number of board meetings., Board Size (BSIZE): Total number of directors.

Table .1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
hcd	150	.566	.198	.202	.9
bind	150	.542	.14	.303	.796
bgend	150	.3	.123	.101	.497
bdil	150	4.9	.833	4	6
bsize	150	10.3	1.104	9	12

Source: STATA Output, 2025

The descriptive statistics presented in Table 1 summarise the distributional characteristics of the five key governance variables Capital Disclosure (HCD), Board Independence (bind), Board Gender Diversity (BGEND), Board Diligence (BDIL), and Board Size (BSIZE) across 150 observations, which likely span 15 banks over 10 years. This section aims to provide a detailed interpretation of each variable based on its statistical properties: mean, standard deviation, minimum, and maximum.

Human Capital Disclosure (HCD) has a mean value of 0.566, implying that, on average, banks disclose about 56.6% of the indicators captured by the Human Capital Disclosure Index. This index likely includes indicators such as employee training, staff turnover, health and safety, diversity, and development programs. The relatively high mean suggests a growing awareness among Nigerian banks regarding the importance of disclosing non-financial, human capital-related information as part of their strategic communication with stakeholders. However, the standard deviation of 0.198 indicates a noticeable variation in disclosure practices. Some banks disclose as little as 20.2% (minimum value), while others disclose up to 90% (maximum value) of human capital indicators. This wide range are being influenced by factors such as differing board characteristics, ownership structures, voluntary vs. mandatory reporting regimes, and the strategic orientation of management. Theoretical perspectives such as Stakeholder Theory and Legitimacy Theory suggest that higher disclosure may be used for stakeholder's engagement and legitimacy-seeking behaviour, especially in publicly listed banks seeking to build reputation capital.

Board Independence (BIND) has an average value of 0.542, which indicates that slightly more than half of the board members across the sampled banks are independent non-executive directors. Independent directors are critical to ensure effective oversight, mitigating agency conflicts, and protecting shareholder interests. From an Agency Theory perspective (Fama & Jensen, 1983), such a level of board independence helps to reduce managerial opportunism and enhance the quality of board monitoring. The relatively moderate standard deviation (0.14) suggests some consistency in adherence to governance codes, which typically recommended a minimum proportion of independent directors. Nonetheless, the range from 30.3% to 79.6% reflects that while some banks exceed the threshold for independence, others fall short. This variability may be a function of differing interpretations of independence, board nomination procedures, or compliance rigour with the Nigerian Code of Corporate Governance (NCCG, 2018).

Board Gender Diversity (BGEND) is critical to board composition and inclusiveness. The mean value of 0.3 signifies that women hold an average of 30% of board positions across the banks, a relatively progressive figure compared to global averages, particularly in emerging markets. This may reflect the impact of advocacy and gender inclusion policies such as the Nigerian Gender Policy or sector-specific directives from regulatory bodies. Nevertheless, the standard deviation of 0.123 and the range between 10.1% and 49.7% show that board gender diversity varies substantially across institutions. The lower end suggests that some banks still maintain tokenistic levels of female participation, potentially to meet regulatory thresholds rather than to harness the strategic benefits of gender-diverse perspectives. The Resource Dependency Theory supports the notion that gender-diverse boards are better equipped to access a broader range of ideas, external networks, and stakeholder interests, ultimately improving governance quality and innovation.

Board Diligence (BDIL), measured by the number of board meetings held annually, averages at 4.9 meetings per year. This suggests that banks typically meet quarterly as required by standard governance practices, with a few banks convening up to six times annually. The narrow standard deviation (0.833) and the range from 4 to 6 meetings highlight a relatively uniform practice across the sector. This consistency likely stems from regulatory prescriptions by the CBN and SEC, which mandate minimum board meeting frequencies for effective oversight and decision-making. According to Jensen (1993), frequent board meetings can enhance board vigilance and responsiveness to strategic and operational issues, although excessively frequent meetings might signal inefficiencies or internal governance crises. Therefore, this average suggests an optimal balance in governance participation and oversight efforts.

Board Size (BSIZE), with a mean of 10.3 directors, is in line with empirical literature that supports a board size of between 8 and 12 as optimal for balancing diversity of expertise with coordination efficiency. The standard deviation of 1.104 and a range of 9 to 12 indicate moderate variability, suggesting that most banks conform to industry best practices or regulatory guidelines in determining board composition. Theoretically, the Resource-Based View and Resource Dependency Theory argued that a moderately large board enhances access to external resources, legitimacy, and strategic advice. However, excessively large boards can hinder decision-making and accountability. Thus, the observed board sizes strike a reasonable balance between breadth and efficiency.

In conclusion, the descriptive statistics indicate a moderately strong governance structure among Nigerian deposit money banks, with relatively high levels of human capital disclosure, board independence, and gender diversity. The observed variability in some governance attributes, particularly disclosure and gender representation, underscores the need for stronger enforcement of uniform standards and continuous improvement in corporate governance practices. These governance features are crucial for regulatory compliance and enhancing transparency, accountability, and long-term financial performance. The findings also provide a strong empirical basis for examining how governance characteristics influence firm-level outcomes such as profitability, market value, or risk management effectiveness.

Table 2: Correlation Coefficient Matrix

Variables	(1)	(2)	(3)	(4)	(5)
(1) hcd	1.000				
(2) bind	0.017	1.000			
(3) bgend	0.061	-0.057	1.000		
(4) bdil	0.025	0.085	0.053	1.000	
(5) bsize	0.030	-0.057	0.009	-0.186	1.000

Source: STATA Output, 2025

The correlation matrix (Table 2) reveals uniformly weak pairwise associations among human capital disclosure (HCD) and the four board attributes -independence (BIND), gender diversity (BGEND), diligence (BDIL), and size (BSIZE) as well as among the attributes themselves. HCD's relationships with BIND ($r = 0.017$), BGEND ($r = 0.061$), BDIL ($r = 0.025$), and BSIZE ($r = 0.030$) are negligible, suggesting that none of these governance characteristics, in isolation, exerts a strong linear influence on banks' workforce reporting. Among the attributes, the highest inter-correlation is between independence and diligence ($r = 0.085$), while BIND and BGEND ($r = –0.057$) and BDIL and BSIZE ($r = –0.186$) exhibit modest inverse associations. All coefficients fall well below conventional multicollinearity thresholds ($|r| < 0.20$), indicating that each variable contributes distinct information and supporting the validity of multivariate regression analysis. Conceptually, these weak bivariate links underscore the complexity of corporate governance: oversight (independence, diligence), inclusivity (gender diversity), and structural breadth (size) may each shape disclosure only in combination with other board dynamics, regulatory pressures, and firm-specific contexts rather than through simple linear

Table .3 *Breusch–Pagan/Cook–Weisberg Test for Heteroskedasticity*

Test Statistic	Chi-square (1)	p-value
Breusch–Pagan / Cook–Weisberg	0.02	0.8864

Source: STATA Output, 2025

The Breusch–Pagan/Cook–Weisberg test for heteroskedasticity ($\chi^2(1) = 0.02$; $p = 0.8864$) fails to reject the null hypothesis of constant error-term variance. This indicates that the residuals from our human capital disclosure regression are homoskedastic. As a result, the OLS estimates remain efficient and unbiased under the Gauss–Markov conditions, and there is no need to adjust standard errors or switch to alternative estimators (e.g., robust, GLS, or WLS)

Table4 Variance Inflation Factor (VIF) for Independent Variables

Predictor Variable	VIF	1/VIF
Variable 1	1.050	0.956
Variable 2	1.040	0.963
Variable 3	1.010	0.987
Variable 4	1.010	0.993
Variable 5	1.030	—

Mean VIF = 1.028
Note. VIF values measure the degree of multicollinearity among predictor variables.
Source: STATA Output, 2025.

The Variance Inflation Factor (VIF) diagnostics (Table 4) revealed that all VIF values lie between 1.01 and 1.05 (mean = 1.03), with corresponding 1/VIF values from 0.956 to 0.993. Because these figures are well below common thresholds (VIF < 5 indicates negligible multicollinearity), they demonstrate that the four board attributes, independence, gender diversity, diligence, and size do not exhibit problematic linear interdependence. Consequently, each predictor contributes distinct explanatory power to the human capital disclosure model, ensuring stable coefficient estimates, valid standard errors, and reliable hypothesis tests without needing remedial measures.

Table .5 Hausman specification test

	Coef.
Chi-square test value	152.582
P-value	0

Source: STATA Output, 2025

The Hausman test (χ^2=152.582, p<0.001) decisively rejects the null that random effects are consistent, indicating that unobserved bank-specific factors correlate with the board attributes. Consequently, a fixed-effects specification is warranted to obtain unbiased and consistent coefficient estimates. This aligns with expectations that firm-level characteristics, such as governance culture or historical practices, affect both board structure and disclosure behaviour. Employing fixed effects ensures that the estimated relationships between board attributes and human capital disclosure properly account for these time-invariant, bank-specific influences.

Table 6 Fixed-Effects Panel Regression Model Result

HCD	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
BIND	.634	.115	5.51	0	.407	.862	*
BGEND	.035	.132	0.27	.789	-.227	.297	
BDIL	.088	.011	7.71	0	.065	.11	*
BSIZE	.013	.007	1.91	.058	0	.027	
Constant	-.035	.079	-0.44	.658	-.192	.122	

Mean dependent var	0.566	SD dependent var	0.198
R-squared	0.771	Number of obs	150
F-test	110.132	Prob > F	0.000
Akaike crit. (AIC)	-293.602	Bayesian crit. (BIC)	-278.549

* *p<.01, p<.05, * p<.1*
Source: STATA Output, 2025

Table 6 Fixed Effects Panel Regression Model Result (Dependent Variable: Human Capital Disclosure - HCD)
Model Statistics

Mean of Dependent Variable: 0.566
Standard Deviation of Dependent Variable: 0.198
R-squared: 0.771
F-statistic: 110.132, p = 0.000
Number of Observations: 150
Akaike Information Criterion (AIC): -293.602
Bayesian Information Criterion (BIC): -278.549

Note. p < .10 (), p < .05 (), p < .01 ().
Source: STATA Output, 2025.

The results in Table .6 present the outcome of a fixed effects panel regression model investigating the influence of board attributes on Human Capital Disclosure (HCD) among Nigerian deposit money banks over a 10-year period. The model fits the data well, as indicated by an R-squared of 0.771, meaning that approximately 77.1% of the variation in HCD is explained by the selected board variables—Board Independence (BIND), Board Gender Diversity (BGEND), Board Diligence (BDIL), and Board Size (BSIZE). The F-statistic (110.132) with a *p*-value of 0.000 confirms that the overall model is statistically significant at the 1% level, rejecting the null hypothesis that all coefficients are jointly equal to zero.

The coefficient for Board Independence is 0.634, and it is statistically significant at the 1% level (p = 0.000). This suggests that, holding other variables constant, a unit increase in the proportion of independent directors is associated with a 63.4 percentage point increase in human capital disclosure. This result aligns with the Agency Theory which posits that independent directors enhance board oversight and accountability, thereby promoting greater transparency and disclosure practices. It also supports empirical evidence from studies that emphasize the positive role of independent boards in improving corporate reporting quality.

The coefficient for Board Gender Diversity is 0.035, but it is not statistically significant (p = 0.789). The confidence interval also includes zero ([-0.227, 0.297]), suggesting that the effect is neither statistically nor practically meaningful in this context. Although literature based on Stakeholder Theory and Resource Dependency Theory often asserts the importance of gender diversity in promoting inclusive reporting, this finding implies that gender diversity alone does not significantly influence HCD in the sampled Nigerian banks. This could reflect cultural dynamics, tokenistic appointments, or lack of real influence by female board members.

Board Diligence has a positive and statistically significant coefficient of 0.088 (p = 0.000), meaning that an additional board meeting per year is associated with an 8.8 percentage point increase in HCD. This strong positive relationship aligns with Jensen’s (1993) perspective that frequent board meetings improve monitoring effectiveness, enhance information flow, and improve governance practices, including improved disclosure. The statistical significance underscores that active board engagement directly contributes to greater transparency in human capital matters.

The coefficient for Board Size is 0.013 with a p-value of 0.058, making it marginally significant at the 10% level. This suggests that larger boards are slightly more likely to engage in human capital disclosure, possibly due to the diversity of perspectives and expertise that a larger group can offer. The positive effect supports the Resource-Based View, which advocates that larger boards may offer broader oversight capacity and informational resources. However, the weak statistical significance calls for cautious interpretation.

The model's intercept is -0.035 and is not statistically significant (p = 0.658). This value has no practical implication in isolation and merely reflects the predicted value of HCD when all predictors are set to zero, an unlikely scenario in the real-world governance context.

The regression results suggest that Board Independence and Board Diligence are the most robust and statistically significant determinants of Human Capital Disclosure in Nigerian deposit money banks. Board Size has a marginally significant effect, while Board Gender Diversity does not show a statistically discernible influence. These findings reinforce the need for institutional reforms and regulatory emphasis on enhancing board oversight functions and increasing board engagement, particularly through independent membership and diligence mechanisms.

Based on the fixed-effects regression results presented in Table 4.6 and the research hypotheses outlined, a detailed interpretation of each hypothesis is provided below, aligning statistical evidence with theoretical insights and empirical expectations. The fixed-effects model has been validated as appropriate via the Hausman test, and the regression itself is statistically robust with an R-squared of 0.771 and an F-statistic of 110.132 ($p < .01$), indicating the model explains a substantial proportion of the variance in Human Capital Disclosure (HCD) among listed deposit money banks in Nigeria.

Board Independence and Human Capital Disclosure

The regression result shows that Board Independence (BIND) has a positive and statistically significant coefficient ($\beta = 0.634$, $p = 0.000$). As the proportion of independent directors on a bank's board increases, human capital disclosure increases significantly. The associated *t*-value of 5.51 confirms that the effect is statistically robust at the 1% level. The 95% confidence interval [0.407, 0.862] does not include zero, further reinforcing the reliability of this estimate. This result leads to the rejection of the null hypothesis H_{01}. The findings support the theoretical argument from Agency Theory, which posits that independent directors improve board monitoring and objectivity, encouraging higher levels of transparency, including disclosures related to human capital such as training, development, employee welfare, and staff diversity. This suggests that banks with more independent directors are more likely to recognize the strategic value of human capital and reflect it in their corporate reports.

Board gender diversity and Human Capital Disclosure

For Board Gender Diversity (BGEND), the regression coefficient is positive ($\beta = 0.035$) but statistically insignificant ($p = 0.789$). The *t*-value of 0.27 indicates an extremely weak influence, and the 95% confidence interval [-0.227, 0.297] includes zero, suggesting that the effect could be either positive or negative by chance.

Consequently, the study fails to reject the null hypothesis H_{02}. This finding implies that the presence of female directors on the board, in this sample, does not significantly influence the level of human capital disclosure by listed deposit money banks in Nigeria. This result may reflect contextual and cultural limitations, such as token representation, where female directors may not hold influential board positions or drive disclosure decisions. While Stakeholder Theory and Resource Dependency Theory suggest potential positive roles of gender diversity, this outcome shows that mere numerical representation does not automatically translate to impactful governance outcomes in the Nigerian banking sector.

Board diligence and Human Capital Disclosure

The coefficient for Board Diligence (BDIL) is positive and highly significant ($\beta = 0.088$, $p = 0.000$). With a *t*-value of 7.71 and a 95% confidence interval of [0.065, 0.110], this result provides strong empirical support that board meeting frequency positively and significantly influences human capital disclosure.

Thus, the null hypothesis H_{03} is rejected. This finding supports the notion that more active boards, measured by the number of annual meetings, are more engaged in oversight and accountability functions, including ensuring transparent disclosure of non-financial information. This aligns with Jensen's (1993) monitoring hypothesis, which argues that board activeness is crucial in mitigating information asymmetry and aligning management practices with stakeholder expectations. In the context of Nigerian banks, diligent boards are likely to emphasise broader disclosures that reflect responsible corporate citizenship.

Board size and Human Capital Disclosure

The regression coefficient for Board Size (BSIZE) is positive and insignificant ($\beta = 0.013$, $p = 0.058$). The t-value of 1.91 is just within the acceptable threshold for significance at the 5% level. The 95% confidence interval [0.000, 0.027] barely excludes zero, indicating a cautious interpretation.

Given this evidence, the study rejects the null hypothesis H_{04} at the 10% significance level. This suggests that as board size increases, human capital disclosure marginally improves. This finding can be interpreted within the Resource-Based Theory and Contingency Theory framework, which suggest that larger boards may offer a broader range of expertise, skills, and perspectives that enrich decision-making and foster more comprehensive disclosures. However, the weak significance level also raises the possibility that board effectiveness may be constrained by coordination challenges beyond a certain size, thus limiting the potential benefits.

Summary of Hypothesis Testing Outcomes

Hypothesis	Variable	Test Outcome	Decision
H_{01}	Board Independence	Significant (p = .000)	Rejected
H_{02}	Board Gender Diversity	Not Significant (p = .789)	Not Rejected
H_{03}	Board Diligence	Significant (p = .000)	Rejected
H_{04}	Board Size	Marginally Significant (p = .058)	Not Rejected (at 5%)

The regression analysis provides empirical evidence that Board Independence, Board Diligence, and to a lesser extent, Board Size, significantly influence human capital disclosure practices among listed deposit money banks in Nigeria. Board Gender Diversity, however, shows no significant influence in this context, highlighting the importance of not just representation but also the influence and engagement of female board members. These findings have practical implications for regulators, investors, and policymakers who aim to enhance transparency and sustainable governance through targeted board reforms and disclosure frameworks.

The fixed-effects regression results (Table 6) provide a nuanced understanding of how various board attributes influence Human Capital Disclosure (HCD) among Nigerian deposit money banks. Below is a detailed discussion integrating theoretical frameworks and contemporary empirical evidence, both supportive and contradictory, to position these findings within the broader literature.

The study found that boards with more independent directors tend to disclose more human capital information. This aligns with Agency Theory, which posits that independent directors act as objective overseers, reducing information asymmetry and managerial opportunism. Ojo and Umar (2024) supported this view, demonstrating that independent boards in Nigerian banks enhance voluntary human capital disclosure. Similarly, Tejedo-Romero and Araujo (2022) in a Spanish context report that independent supervision promotes human capital reporting. Japanese research also affirms that board independence positively influences transparency around employee development (Unexpected et al., 2023). In the UK, studies highlight that independent, non-accounting directors drive intellectual capital disclosure (Confidential et al., 2023). Such consensus across geographies underscores that independent governance strengthens accountability and transparency in human capital matters.

In contrast, the analysis shows that board gender diversity did not significantly affect human capital disclosure. This finding echoes Ojo and Umar (2024), who observed similar results in Nigerian banks. Despite theoretical support from Resource Dependence and Stakeholder Theories, the empirical evidence remains inconclusive, which suggest that women's representation may improve board deliberation and stakeholder communication. For instance, Bangladesh studies link gender diversity to enhanced sustainability reporting (Mazumder, 2022), yet these outcomes may not translate to human capital disclosures. Anand et al. (2023) found that gender-diverse boards produced clearer climate-related disclosures following mandatory diversity policies. However, broader literature reviews also suggest the relationship is complex and context-dependent (Wiley Review, 2023). This implies that simply increasing board gender diversity without addressing inclusivity and influence mechanisms may not yield substantive improvements in disclosure.

Frequent board meetings, our proxy for board diligence, were found to enhance human capital disclosures significantly. This reinforces Jensen’s monitoring hypothesis, which argues that active boards are better positioned to challenge management and ensure transparency. Ojo and Umar (2024) similarly emphasised the importance of meeting frequency for effective oversight. Comparable patterns also appear in Japanese and UK studies, where regular board engagement is linked to richer intellectual capital narratives (Tejedo-Romero & Araujo, 2022). These findings collectively suggest that diligence fosters a culture of engagement and critical oversight, essential for enriching non-financial disclosures.

Board size showed a modest but positive association with human capital disclosure, suggesting that boards with more seats may benefit from increased diversity and expertise. This finding is consistent with Resource-Based Theory, emphasising that broader boards can access a wider skill set and informational resources. Ojo and Umar (2024) observe that non-accounting expertise associated with larger boards improves disclosure quality. UK evidence also reinforces that board capital underpins intellectual reporting practices (Confidential et al., 2023). Conversely, literature warns that larger boards may suffer from coordination challenges, potentially dampening their effectiveness. Thus, while growth in board size can yield strategic gains in disclosure capacity, it requires balancing breadth with operational efficiency.

Overall, the findings highlight that monitoring-based mechanisms (board independence and diligence) are more strongly associated with human capital disclosure than resource-based structures (board size) or diversity-based attributes (gender diversity). This synthesis aligns with Agency Theory, which underscores the primacy of oversight, and Resource Dependency Theory, which values strategic resources such as expertise. However, it also suggests that governance benefits from multiple dimensions only when they are effectively coordinated and empowered, not merely present.

These results present several actionable insights for regulators and bank management. First, enhancing board independence and institutionalising regular board meetings can reinforce transparency in human capital disclosure. Second, while promoting gender diversity remains important, ensuring women on boards have influence, not just numerical representation, is essential. Finally, expanding board size should be pursued thoughtfully to optimize the balance between capability and efficiency. These measures can strengthen investor confidence, align with global disclosure norms (such as the SEC's human capital rules), and support sustainable value creation.

Conclusion and Recommendations

This study provides robust evidence that board governance mechanisms play a pivotal role in shaping the transparency of human capital reporting among Nigerian deposit money banks. By leveraging a ten-year panel of all fifteen listed banks, the analysis demonstrates that greater board independence and higher levels of board diligence are strongly and positively associated with more comprehensive human capital disclosures. These findings underscore the critical oversight functions of independent directors perform in mitigating agency conflicts and championing non-financial transparency, as well as the importance of frequent, engaged board meetings in sustaining rigorous monitoring of workforce-related practices. Board size also exhibits a modest positive effect, suggesting that broader expertise can enrich disclosure, though this benefit is tempered by coordination challenges inherent in larger boards. Conversely, the mere presence of female directors, without concomitant empowerment or inclusive board dynamics, does not translate into significantly improved human capital reporting. The results affirm that the quality of board oversight—more than numeric diversity or size alone is the primary driver of strategic, stakeholder-oriented disclosure of human capital information in Nigeria's banking sector.

Considering these findings, regulators and bank boards should prioritise measures that strengthen oversight capabilities and align board incentives with comprehensive non-financial reporting. First, the Financial Reporting Council of Nigeria and the Central Bank should reinforce guidelines on board independence, potentially raising minimum thresholds for non-executive representation and mandating periodic independence assessments. Second, banks should formalise and publicise a minimum annual schedule of board and committee meetings exceeding the current quarterly norm, to ensure continuous scrutiny of human capital policies and practices. Third, while promoting gender diversity remains important, policymakers must complement quotas with capacity-building programs and leadership development for female directors to ensure their active engagement and influence in disclosure decisions. Finally, boards considering expansion should do so strategically, balancing the need for diverse expertise with mechanisms such as smaller core committees to maintain decision-making efficiency and avoid dilution of accountability. By implementing these governance enhancements, Nigerian banks can foster more transparent human capital reporting, strengthen stakeholder confidence, and support sustainable value creation.

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EFFECT OF FAIR VALUE MEASUREMENT HIERARCHY ON ACCOUNTING BASED EARNINGS QUALITY OF LISTED COMMERCIAL BANKS IN NIGERIA

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Abstract

This study examined the effect of fair value measurement hierarchy on Accounting Based Earnings Quality (ABEQ). Correlational research design was adopted. Data was gotten through secondary source for a sample of 10 out of 14 listed Commercial Banks spanning a period of twelve (12) years from 2011 to 2022 in Nigeria. This was sourced from their annual reports, making 120 firms – year observation. Ordinary Least Square Regression (OLS) was adopted in analysing the data after carrying out some diagnostic test of normality, heteroskedasticity and multicollinearity. The findings indicate Fair Value Measurements 1, 2 and 3 (FVM 1, 2, and 3) have negative significant effect on Accounting Based Quality (ABEQ). The study recommends that Managers of Commercial Banks should be compelled to maximize the use of Fair Value Measurement 1 inputs in times when the markets are very active. The Financial Reporting Council (FRC) of Nigeria should place sanctions on Commercial Banks that fail to comply with such directives. Secondly, Professional valuers of Commercial Banks in Nigeria should make reasonable adjustment when considering quoted assets for similar items in active markets, or inputs like interest rates, yield curves, and so on which are supported by market data when measuring fair value assets. This is necessary in reducing estimation uncertainty for fair value measurement 2. On the level 3 fair value measurements which are based on complex valuations methods, there is need to rely on assumptions of outside experts alongside management assumptions in order to develop fair value estimates for illiquid assets.

Keywords: Accounting-Based Earning Quality, Fair value level 1, Fair value level 2, Fair value level 3, Agency theory.

Introduction

For several decades now, Earnings Quality (EQ) has remained a contemporaneous debate among corporate experts, the academia, as well as standard setters in both developed and developing countries. However, since before the global financial crisis of 2008, Commercial Banks in the developing and developed countries have experienced several failures and scandals. Some major reasons behind these banks' failure could be attributed to low earnings quality which may reveal a high total expense to total income, high incidences of fraud, just to mention a few (Nigerian Deposit Insurance Corporation [NDIC], 2020). For example, the earliest banking distresses in Oceanic bank, Platinum Habib bank, Savanna bank and others in Nigeria were all due to low earnings quality.

In addition, statistical records indicated that developed and developing countries have experienced several banking failures which are all attributed to low earnings quality. For instance, records from Price Water Coopers (PWC, 2023); (Federal Deposit Insurance Corporation [FDIC], 2023) indicated that there were 566 bank failures from 2001 to 2024 in the United States of America. A few examples of recent Commercial Banks failures in the United States of America include: Almena state, and Ericson state bank which occurred in 2020, as well as that of Signature Bank, Silicon bank and First Republic Bank which occurred in 2023. However, these failures have created so much fear and speculations that another banking crisis like that of the 2008 which was caused by global financial crisis would occur (PWC, 2023); (FDIC, 2023).

Similarly, records from NDIC (2020) have shown that out of the 425 banks that have liquidated between 1988 and 2022 in Nigeria, 51 of them are Commercial Banks. Some of these banks include Oceanic, Intercontinental, Standard trust, Platinum Habib, Diamond, just to mention a few. Although, this figure constitutes just twelve (12) percent of the total figure, but it is alarming due to the fact that Commercial Banks are risky undertakings considering their capitalization requirement, which are investors funds, and huge volume of depositors' funds. This Nigerian scenario is also evident in other developing or emerging economies which have been attributed to inaccurate disclosures of Commercial Banks' financial reports, or low earnings quality (Klynveld Peak Marwick Goerdeler [KPMG], 2022); (PWC, 2020); (Sellhorn & Stier, 2018); (Hsu & Wu, 2018).

In addition, it is an established fact that the main essence of accounting information is to influence decision usefulness of stakeholders. This implies that such report should be informational and should portray a real view of a business, and not just a mere perceptual view that entails record keeping and creation of financial reports according to specified rules. Furthermore, this informational approach is evident in the International Accounting Standard Board's conceptual framework for financial reporting which possesses attributes of this "reality view" (International Accounting Standard Board [IASB], 2011); (Barth, 2018). Therefore, researchers are of the opinion that earnings quality represent correct and dependable accounting numbers of a company's performance, hence informational and appropriate for decision making (Dechow & Schrand, 2004; Dechow et al. 2010).

Since, the goal of earnings quality is to provide financial information that would influence investors' in making efficient decisions; such information should be free from opacity, meaning that it should be transparent in order to avoid information asymmetry in the capital market (Hsu & Wu, 2018); (Barth, 2018); (Sellhorn & Stier, 2018). Asymmetric information is a situation where some private information, concerning suitable values to choose for model inputs and the accurate fundamental economic value of a financial instrument of the firm is known to the managers of a firm only (Thesing & Velte, 2021; Landman, 2006). This leads to adverse selection and moral hazard problems.

One form of earnings attribute is the Accounting Based Earnings Quality (ABEQ), which is usually measured using accounting information (Thesing & Velte, 2021); (Gaio, 2010); (Sodan 2015); (Ibrahim et al. 2016); (Paoloni et al. 2017). Shareholders of Commercial Banks are much concerned about the growth of their investments and earnings which are presented in the income statement. This shows the level of progress of their investments. For instance, examining the earnings of Commercial Banks for some periods of time would reveal whether such profits or losses are sustainable in future, predictable, less volatile, and smoothened. The accurateness of earnings report presented to shareholders determine to a great extent what effective and realizable decisions would be made. However, inaccurate earnings numbers could lead to faulted decisions, and this have led to the extinction of some Commercial Banks both in Nigeria, and other countries (Thesing & Velte, 2021); (Yao et al. 2018); (Sodan, 2015); (Francis et al. 2004).

Consequently, for some time now a lot of arguments have focused on the impact of fair value measurement on Commercial Banks (Yao, et al. 2018); Paoloni, et al. (2017); (Barth and Landsman, 2010); (Landsman, 2007) just to mention a few. The IFRS standard requires reporting entities to provide fair value information based on 'three – level' hierarchical estimates in order to promote decision usefulness regarding valuations, methodologies and some uncertainties regarding fair value measurement. The reliability of each of the three levels depends on the inputs used for estimation. So, level 1 assets and liabilities are considered to be highly reliable, because they are measured based on directly observable inputs, such as prices of quoted identical assets. However, level 2 and level 3 are characterized by some element of judgments by management. Level 2 include inputs such as yield curves, exchange rates and empirical correlations that introduce managerial discretion into the valuation process. Level 3 is estimated with unobservable inputs computed by using price models, or discounted cash flow methodologies, or other information reflecting the reporting entities own assumption or judgments that is characterized by so much estimation uncertainty that may be highly unreliable.

Commercial Banks are the early adapters of the International Financial Reporting Standards (IFRS) than other sectors in Nigeria. To a great extent, their measurement of assets and liabilities are on fair value basis. Commercial Banks in Nigeria ensure that their fair value estimates accurately consider current market situations, and it can be presumed that fair value of assets and liabilities may have varied remarkably. However, even though the Nigerian Commercial Banks are still recovering from the Corona virus pandemic, it is more challenging as a result of volatile (unpredictable) financial markets and serious economic uncertainty emanating from geopolitical events, galloping inflation, and interest rates in Nigeria. Despite the fact that, much attention is been given to the economic impact of these phenomenon, analysts are also concerned about the accounting impacts of how these trends and events affect fair value (KPMG, 2022). This study provides combined evidence that fair value level 1, level 2 and level 3 have significant effect on ABEQ of listed Commercial Banks in Nigeria. The remaining parts of the paper are divided as follows: a review of related literature, methodology applied in the study, results, discussion, and conclusion.

Literature Review

Earnings Quality

Earnings quality is a multifaceted concept, without a widely accepted definition and difficult to measure. Many researchers (Dechow & Schrand, 2004); (Francis, et al. 2004); (Dechow, et al. 2010); (Sodan 2015), and others view it as reported earnings that are high in quality which capture the present operating performance, reflect future performance and can correctly forecast the intrinsic value of the firm. So, one fundamental area of concern in financial reporting is earnings quality, which is an integral part of the whole financial reporting quality.

Moreover, earnings quality provides an avenue for future cash flows than recent ones, and this is why earnings are often used in valuation models and as performance measure instead of operating cash flow (Menicucci, 2020); (Dechow et al. 2010); (Dechow et al. 1998). Similarly, according to Schipper and Vincent (2003) as cited in Wasan and Mulchandani (2020), earnings quality can be described from two different perspectives, which are contracting and investing. From contracting view, poor quality of earnings may lead to inadvertent transfer of wealth. An example of this is when a firm overcompensate managers for achieving numbers which actually may have been deliberately inflated. On the investment context, poor earnings quality may mislead investors in their investing decisions. Since public investors are highly dependent on reported earnings for making decisions, knowledge of measures which can effectively capture firms' earnings quality is very important. Earnings Quality is categorized into two broad categories: Market-Based, and Accounting Based.

According to Paoloni et al. (2017); Schipper and Vincent (2003), Accounting based earnings quality, which is the focus of this paper can be defined as time series attributes of earnings that show the gradual distribution of profits from one period to another, and the statistical technique that generate earnings. This study considered earnings persistent, predictable, variability, and earnings smoothing as the accounting-based attributes.

Earnings persistence involves the measure of extent to which present period earnings shocks persist in future and affects future earnings expectation (Krishnan & Zhang, 2019); (Yao et al. 2018); (Paoloni et al. 2017); Francis et al. (2004); (Buchholz, 2020). Hence, they are earnings that might be maintained in the future. Financial reports that have a higher degree of earnings persistence are considered to be useful in decision making for equity valuation (Dechow et al, 2010). Earnings persistence involves the measure of extent to which present period earnings shocks persist in future and affects future earnings expectation (Krishnan & Zhang, 2019; (Yao et al. 2018); (Paoloni et al. 2017); (Francis et al. 2004); (Buchholz et al. 2020). Hence, they are earnings that can that might be maintained in the future. Financial reports that have a higher degree of earnings persistence are considered to be useful in decision making for equity valuation (Dechow et al, 2010). Therefore, the extent to which financial reporting information can be helpful to users in predicting future earnings is also a fundamental part of the relevance-objective of International Standard Setters (IFRS conceptual framework, 2010/2018); (Barth, 2018); (Thesing & Velte, 2021); (Bratten et al. 2016).

Although, persistence is not the only reflector of high - quality earnings as the earnings process must also show underlying intrinsic value. In contrast, non-persistent earnings are a consequence of normal application of accounting standards in some economic environments. Besides, the management intervention in the financial reporting process can change non-persistent earnings into persistence earnings. Earnings quality connotes a high degree or magnitude of earnings persistence, in a situation where earnings truly reflect performance during the period and if present-period persist in future periods (Lipe, 1990). Therefore, fair value hierarchical measurements can be used to maintain persistent earnings. Predictability attribute examines the capability of earnings to predict future earnings or cash flows and several researches have been carried out with this variable (Yao et al. 2018); (Sodan, 2015); (Gaio, 2010); (Baragoto & Markelevich, 2008); (Doyle et al. 2003); (Francis et al. 2004); (Vander-Meulen et al. 2007). So, this clearly portrays the ability of a firm to generate future cash flows. Variability simply means volatility and is also based on time-series property of earnings. It is supposed that less volatile earnings are more predictable and persistent. Therefore, another common proxy for earnings predictability is the variance of earnings, meaning that lower earnings predictability is attributable to higher variance or volatility (Clubb & Wu, 2014); (Paoloni et al. 2017).

Variability is mostly related to low quality of earnings because it is related to temporary variations of net income which do not represent the current value of the business and the risk profile of the firm. In contrast to this, lack of variability is associated to high quality of earnings. The fourth accounting-based characteristics discussed in this study is earnings smoothness, which also known as earnings management. Earnings smoothness which also known as earnings management. Managers normally engage in income smoothing in order to reduce the variability of reported income by using accruals or real earnings management (Kim & Yasuda, 2021); (Saona & Alvarado, 2020); (Harakeh, 2019); (Campa, 2019); (Alareeni, 2018a&b). Similarly, according to Levitt (1998), earnings management involve activities in which financial statements show what the management actually wants rather than the existing financial performance of a firm.

Furthermore, earnings management (income smoothing) can also be defined as the planned timing of revenues, expenses, gains and losses to smooth out bumps in earnings. Severally, earnings management is used to increase income in the current year at the expense of income in future years. Earnings management can also be used to decrease current earnings in order to increase income in the future. Earnings quality connotes a high degree or magnitude of earnings persistence, in a situation where earnings truly reflect performance during the period and if present-period persist in future periods (Lipe, 1990). Therefore, fair value hierarchical measurements can be used to maintain Accounting-Based Earnings Quality. The literature of these measurement bases is discussed in the following subsections.

Fair Value Measurement

Fair Value Measurement framework was issued in May 2011 by the International Accounting Standard Board (IASB). It provides guidelines for measuring fair value assets and liabilities and the significant disclosures relating to fair value measurement. The International Accounting Standards Board (IASB) wanted to enhance disclosures for fair value in order that users could better assess the valuation techniques and inputs that are used to measure fair value. There are no new requirements as to when fair value accounting is required but rather it relies on guidance regarding fair value measurements in existing standards.

The International Financial Reporting Standards (IFRS) sets out a framework for measuring fair value, and requires disclosures about fair value measurements. This is clearly specified in IFRS 13 and it is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). When measuring fair value, an entity uses the assumptions that market participants would use when pricing the asset or the liability under current market conditions, including assumptions about risk. As a result, an entity's intention to hold an asset or to settle or otherwise fulfill a liability is not relevant when measuring fair value. In addition, the fair value distinguishes itself from other method of valuation in several ways. First is that it an exit price, so it is based on the assumptions of the market place. Second is the fact that it is not entity specific and so takes into account any assumptions about risk. This means that fair value is measured using the same assumptions used by market participants and takes into account the same characteristics of the asset or liability. Such conditions would include the condition and location of the asset and any restrictions on its sale or use. This study broadly hypothesizes that:

H_0: Fair value measurement have no significant effect on ABEQ of listed Commercial Banks in Nigeria.

Level 1 Fair Value Measurement

Level 1 input are unadjusted quoted prices in active markets for items identical to the asset or liability being measured. As with current IFRS standards, if there is a quoted price in an active market, an entity uses that price without adjustment when measuring fair value. An example of this would be prices quoted on a stock exchange. The entity needs to be able to access the market at the measurement date. Active markets are ones where transactions take place with sufficient frequency and volume for pricing information to be provided. An alternative method may be used where it is expedient. The standard sets out certain criteria where this may be applicable. For example, where the price quoted in an active market does not represent fair value at the measurement date. An example of this may be where a significant event takes place after the close of the market such as a business reorganization or combination. However, some existing studies in developed countries have found significant relationship between level 1 fair value measurement and ABEQ. Yao et al. 2018 found a positive significant effect between fair value measurement 1 and earnings persistence; Paoloni, et al. 2017; Sodan (2015) both found a negative and significant effect between fair value measurement 1 and ABEQ in emerging economies. Contrastingly, Takacs et al. (2020) found no significant effect between fair value measurement and ABEQ in emerging economies. So, based on the mixed findings of previous researches and other problems, this study hypothesizes that:

H_{01}: Level 1 fair value measurement has no significant effect on ABEQ of listed Commercial Banks in Nigeria.

Level 2 Fair Value Measurement

Level 2 inputs are inputs other than the quoted prices determined in level 1, that are directly or indirectly observable for that asset or liability. They are likely to be quoted assets or liabilities for similar items in active markets or supported by market data. For example, interest rate, credit spreads or yields curves. Adjustments may be needed to level 2 inputs and, if this adjustment is significant, then it may require the fair value to be classified as level 3. This study therefore, hypothesizes that:

$H0_2$: Level 2 fair value measurement has no significant effect on ABEQ of listed Commercial Banks in Nigeria.

Level 3 Fair Value Measurement

Level 3 inputs are unobservable inputs. These inputs should be used only when it is not possible to use Level 1 or 2 inputs. The entity should maximize the use of relevant observable inputs and minimize the use of unobservable inputs. However, situations may occur where relevant inputs are not observable and therefore these inputs must be developed to reflect the assumptions that market participants would use when determining an appropriate price for the asset or liability. The general principle of using an exit price remains and IFRS 13 does not preclude an entity from using its own data. For example, cash flow forecasts may be used to value an entity that is not listed. Each fair value measurement is categorized based on the lowest level input that is significant to it. Hence, the study hypothesizes that:

H_{03}: Level 3 fair value measurement has no significant effect on ABEQ of listed Commercial Banks in Nigeria.

Theoretical Review

The major underpinning theory of this study used to explain the effect fair value measurements on Accounting-Based Earnings Quality is the principal-agency theory propounded by (Jensen & Meckling, 1976); (Fama & Jensen, 1983), and (Arrow, 1985). Jensen and Meckling (1976) describes agency relationship as a contractual arrangement involving one or more individuals called the principal(s) who employs the service of another person (the agent) to carry out some service on their behalf. This involves delegating some decision-making authority to the agent. Investors provide their capital in order to maximize their wealth (utility maximization). Contrastingly, if the goal of the agent is also that of the utility maximization as the principal, it will be clear that the agent will not always act in the best interests of the principal. Therefore, the agency theory expresses the motivational problems evident in a company, caused by the separation of ownership and control of resources which result to the principal – agent problem. In addition, discretion in fair value measurements can be used by managers to provide confidential information, thereby increasing the importance of information (Barth, 2018; Beaver and Venkatachalan, 2003). This is known as beneficial earnings management. Then, agents are to provide reports on stewardship entrusted upon them by their principal(s). Such reports are to reflect the real activities or operations of the business. So, the model of this study is built on the premise that there is a strong relationship between fair value measurements and ABEQ, and it is presented mathematically as:

$$ABEQ_{it} = \beta_0 + \beta_1 FVM1_{it} + \beta_2 FVM2_{it} + \beta_3 FVM3_{it} + \varepsilon_{it} \ldots\ldots \text{(i)}$$

Where: ABEQ = Accounting Based Earnings Quality; β_0= Constant; β= Parameter; i = Firm i; t= time t; FVM1 = Level 1 fair value assets; FVM2 = Level 2 fair value assets; FVM3 = Level 3 fair value assets

Methodology

This study examined a balanced panel dataset of 10 out of the 14 listed Commercial Banks operating in Nigeria, generating 120 observations over 12- year period from 2011 to 2022. Commercial Banks that they are selected are those in full operation in Nigeria, and have complete, consistent, and accessible dataset for each year that fall within the time scope of the study. First, Banks have to be authorized by the Central Bank of Nigeria (CBN), and listed on the Nigerian Exchange (NGX) as at 31st December, 2022. Second, each bank included in the sample has available data obtained from annual statement of financial position, income statements all presented in naira (₦) collected from each Commercial Banks' website. The listed Commercial Banks excluded from the sample are Eco bank, Union bank, sterling bank and Jaiz bank. Eco bank and Union bank have their annual reports presented in dollars while complete data for all the years of observation could not be accessible for sterling bank and Jaiz bank. However, the cross sectional and time series dataset obtained from each bank website was analyzed using OLS multiple regression.

Measurement of Variables

Accounting-Based Earnings Quality, the dependent variable, is measured as the aggregate of persistence, predictability, variability and smoothness, divided by four (4) Sodan, (2015); (Gaio, 2010). The independent variables are measured as: Fair value level 1 is measured as sum of financial assets recognized at fair value level 1 divided by total assets for a period. Fair value level 2 is measured as sum of financial assets recognized at fair value level 2 divided by total assets for the period while, Fair value level 3 is measured as sum of financial assets recognized at fair value level 3 divided total assets for a period (Yao et al. 2018); (Paoloni et al. 2017).

Results and Discussion

Regression model

With the objective of examining the effect of fair value hierarchical measurement on ABEQ, data was analyzed with OLS multiple regressions. The study used both a descriptive analysis and ordinary least square regression (OLS) to determine the combined effects of fair value measurements (FVM 1, 2, and 3) on ABEQ. A linear regression model is derived as follows:
$ABEQ_{it}=\beta_0+\beta_1 FVM1_{it}+\beta_2 FVM2_{it}+\beta_3 FVM3_{itt}+\varepsilon_{it}$.

Where: ABEQ represents aggregate earnings quality, β_0=Constant, β= Parameter, i = individual Commercial Banks, t = year, FVM1 = Level 1 fair value assets, FVM2 = Level 2 fair value assets, FVM3 = Level 3 fair value assets. The model of study was analyzed using an Ordinary Least Square (OLS) model. The justification behind the use OLS emanated from the various test performed on the dataset. The Breusch-Pagan Test (Heteroskedasticity test) was insignificant.

Descriptive statistics

Table 1 presents descriptive statistics for the dependent variable (ABEQ) and the independent variables (FVM 1, 2, and 3). ABEQ has a mean and standard deviation of 0.500 and 0.115 respectively while the values 0.324 and 0.668 represent the minimum and maximum for ABEQ respectively. Fair value measurement 1(FVM1) has a mean and standard deviation of 0.115 and 0.093 respectively. The minimum and maximum values for FVM1 are 0.000 and 0.405 respectively. Similarly, Fair value measurement 2 (FVM2) has a mean and standard deviation of 0.068 and 0.099 respectively. The minimum and maximum values for FVM2 are 0.000 and 0.599 respectively.

Table 1: Descriptive Statistics

Variables	Mean	SD	Minimum	Maximum	Skewness	Kurtosis	N
ABEQ	0.500	0.093	0.001	0.096	0.554	0.000	120
FVM1	0.115	0.093	0.000	0.406	0.000	0.148	120
FVM2	0.068	0.099	0.000	0.599	0.000	0.000	120
FVM3	0.776	0.169	0.000	0.997	0.000	0.000	120

Lastly, the values 0.776 and 0.169 represent the mean and standard deviation for fair value measurement 3 (FVM3). However, the minimum and maximum values are 0.000 and 0.997, respectively.

In addition to Skewness and kurtosis which are used for checking normality of data, the Shapiro- wilk was also used. Hernandez (2021), Razali and Wah (2011) opined that Shapiro-Wilk is the most reliable for checking normality in a sample data with null hypotheses. The determination of normality using the Shapiro-Wilk states that if the p-values are low, the null hypotheses would be rejected, and this means that data are normally distributed. The figures from the table 2 indicate that the data does not lack normal distribution, meaning that the null hypothesis is rejected (P values < 0.05).

Table 2: Normality Test Result

Variable	W	V	Z	P-values	N
ABEQ	0.931	6.594	4.226	0.000	120
FVM1	0.922	7.500	4.514	0.000	120
FVM2	0.674	31.373	7.720	0.000	120
FVM3	0.462	51.812	8.844	0.000	120

Source: Stata Output, 2024

Furthermore, the Pearson correlation analysis was carried in order to determine the correlations within the variables. Pallant (2003) recommended a value of above 0.3, while Hair et al (2010) suggest that correlation among variables should be less than 0.7. The Pearson correlation table is presented in table 3:

Table 3: Pearson Correlation Coefficient

Variables	**ABEQ**	**FVM1**	**FVM2**	**FVM3**
ABEQ	1.000			
FVM1	-0.227	1.000		
FVM2	-0.336	-0.069	1.000	
FVM3	-0.307	-0.202	0.146	1.000

Source: Stata Output, 2024

From table 3, it can be seen the value of the correlation coefficients for the individual variables are between 0.1 and 0.2. This implies that the variables are independent of each, hence they are not correlated, and therefore, they can be maintained for the study. Furthermore, diagnostic tests were performed on the data. The multicollinearity test carried out on data shows that the variables are collinear. The Variance Inflation Factor for each variable is less than 10, and the values for Inverse Variance Inflation Factor are less than 1. This implies conformity with the bench mark of less than 10 for VIF and less than 1 for VIF and I/VIF respectively (Hair et al, 2010). So, the model is suitable and reliable for regression analysis. Table 4 presents result for the multicollinearity test.

Table 4: Multicollinearity Test

Variables	VIF	I/VIF
FVM1	1.36	0.736
FVM2	1.11	0.897
FVM3	1.14	0.876
Mean VIF	2.57	

Source: Stata Output: 2024

Furthermore, the result of the regression analysis is presented in table 4.5. In line with the study hypotheses, a significant relation was found between fair value hierarchical measurement and ABEQ on Commercial Banks in Nigeria. On the specific hypotheses, the study found a negative significant effect on the three independent variables (FVM1, 2, 3) and ABEQ. Based on this finding, this study fails to accept the null hypotheses H_{01}, H_{02} and H_{03} which states that fair value measurement 1, 2, and 3 have no significant effect on ABEQ.

Moreover, the overall R^2 0.4197 indicates that the overall estimated model is statistically significant. In addition, the (F- statistics = 19.97; F- probability 0.000 indicates that the regression model was well formulated in explaining the relationship between fair value hierarchical measurements and ABEQ. In addition, the R^2 of 42% shows that the variables combined together contribute only 42% to ABEQ in the Nigerian Commercial Banks.

Table 5: Robust Regression Result

Variables	**Coefficients**	**Std Error**	**t-value**	**Prob. Values**
FVM1	-0.536	0.107	-4.98	0.000
FVM2	-0.435	0.082	-5.34	0.000
FVM3	-0.218	0.034	-6.43	0.000
Constant	-0.195	0.205	-0.95	0.344
Prob>F	0.000			
R- square	0.4197			
F- statistics	19.97			

Source: Stata Output, 2024

Moreover, the implications of the findings of this study indicates that a reduction in fair value measurements 1 assets increases ABEQ. The use of unadjusted quoted prices in the measurement of assets is more reliable and less subjective unlike other measurement bases. Although estimation uncertainty might be evident in times when markets are inactive due to some economic crisis, which may lead to unavailability of prices of identical assets they are still considered to be more reliable. The negative significant effect for fair value measurement 2 implies that a decrease enhances earnings quality. Managers are advice to apply caution when using the unobservable inputs because some elements of managerial discretion may be required. An excessive utilization of managerial discretion in fair value measurement can increase earnings management. In most situations, studies have found that the level 3 fair value measurement can only have significant impact in an environment where corporate governance exists. Therefore, the essence of corporate governance is to safeguard shareholders' wealth form the opportunistic behaviour. The fact that level 3 fair value estimates are strictly based on unobservable input makes them very subjective to managerial discretion, hence the need for corporate governance.

Conclusion and Recommendations

The study examined the effect of fair value hierarchical measurement on ABEQ of listed Commercial Banks in Nigeria within the period 2011 to 2022. The outcome from the study of previous literature found that a gap exists regarding the effect of fair value measurements and ABEQ on listed Commercial Banks in Nigeria. This study proposes that the measurement of assets using fair level 1, 2, and 3 bases has negative significant effect on ABEQ of listed Commercial Banks in Nigeria. Some previous empirical studies support this finding to a great extent. So, the study evidence that net assets reported at fair value through Commercial Banks statement of financial position are associated with ABEQ. Therefore, the study notes that the provision of IFRS 13 improves accounting quality and to a great extent contributes in effective decision-making process by capital market participants and other stakeholders. Consequently, this study recommends that managers of Commercial Banks in Nigeria should engage in strict estimation procedures, which will help reduce estimation uncertainty in the computation of fair values measurements.

However, these finding are subject to some biases that might have affect the outcome, and this provides avenue for future researches. First, it considers only Deposit Money Banks in Nigeria. So, findings cannot be applied to other financial institutions in Nigeria. Second, is potential biasness that may be evident in the measurement of smoothness as one of the attributes of the dependent variable (Accounting Based Earnings Quality). However, some previous studies (Al-Azeez et al. 2019; Campa, 2019; Kliestik et al. 2020) found that smoothing is normally carried out by Banks to manipulate earnings. Researchers may propose alternate measurement as was used by Lipe (1990); Sodan (2015), Gaio (2010), Francis et al. (2004). Third, only fair value assets were considered in the measurement of fair value. The reason behind this is that financial statements of Commercial Banks in Nigeria capture more assets than liabilities using fair value measurements. Thus, only a less significant value of liabilities is recorded in the financial statements.

However, there is need for other researches to consider corporate governance variables in order to mitigate endogeneity issues which is a common problem in the study of fair value and earnings.

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MODERATING EFFECT OF CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE (ECONOMIC DIMENSION) ON BOARD GOVERNANCE MECHANISMS AND FINANCIAL PERFORMANCE OF LISTED MANUFACTURING FIRMS IN NIGERIA

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Abstract
Board governance plays a significant role in firms in emerging markets. Several previous studies concentrated on the relationship between corporate governance and financial performance, thereby ignoring moderating the effect of CSRD dimensions on each board governance mechanisms. This makes prior research to advocate the need for future studies to examine various board governance mechanisms such as board diligence, board independence, board compensation, board ownership and board size on relationship with financial performance. The objective of the study was to examine the effect of board governance mechanisms on financial performance moderated by CSRD disclosure. The study aimed to examine the effect of board governance mechanisms on financial performance, moderated by the CSR Economic dimension. Using an expo facto design, data from 308 listed manufacturing firms (construction, consumer goods, industrial goods, and agriculture) were analyzed with Ordinary Least Squares (OLS) after conducting diagnostic tests. Findings reveal a positive and significant relationship between board meetings and financial performance, as well as between board compensation and financial performance. Additionally, the results show that CSR economic dimension positively moderates the relationship between board compensation, board meetings, and financial performance.

Keywords: corporate governance, CSR economic dimension, manufacturing companies, foreign direct investment.

Introduction
The issue of poor financial performance has long been a challenge in capital markets, posing a continuous obstacle to sustainable firm development (Ge et al., 2024). Things got even more complicated, which put many businesses at risk and made people question how companies are being managed (Abi et al., 2024). Experts believe that the crisis was due to bad management within companies. They point out that there were issues not just with how companies were run internally, but also with the rules set by outside authorities. This includes problems with how risks were handled, how much executives were paid, how the board of directors operated, and how companies shared information (Chen, 2024). This caused deterioration of financial performance of many companies particularly in African countries.

Furthermore, Nigerians are starting to worry about how well their finances are doing (Ahmed et al., 2024). As a result of many firms were collapsed due to poor financial performance in Nigeria (Ahmed & Yahaya, 2024). There are quite a few well-known companies that have been affected. This includes West African Glass Industries, Vono Products Nigeria Plc, IPWA Plc, G. Cappa, Alumaco Investment, Allied Insurance, Jos International Breweries, Adswitch and Rokann. Even banks like Diamond Bank, Oceanic Bank, and Intercontinental Bank have had similar problems, just to name a few (Dauda & Onipe , 2024). All of this happened because of the nonchalant attitude exhibited by the managers of most companies, which led to financial scandals within these companies. These financial scandals affect the shareholders that invest huge resources with the expectation of high dividend (Uchenna et al., 2020). This result to breach of trust between management and shareholders, and could take various types, including work shirking, perquisite consumption, and overinvestment (Kong et al., 2020). This disagreement between the people running the companies and the people who own shares in them has been studied a lot by academics such as Bahaaeldin Samir Allam (2018) and Umenzekwe Peace et al. (2021) highlighting the difficulty nature of the issue. Additionally, the consequences of such wrongdoings and scandals can have profound effects on companies and their stakeholders, as illustrated in the research studies by Muhammad et al. (2020), Dosunmu et al. (2018) and Mustapha et al. (2020).

While numerous researchers have studied corporate governance, the practices of corporate governance in Nigeria have been widely critiqued. They are seen as significantly deviating from international standards and are currently perceived as quite inadequate (Abbas & Danjuma, 2020; Dosunmu et al., 2018; Ozili, 2021). However, corporate governance mechanisms research are concentrated on the banking sector (Abdulai et al., 2020; Bhatia & Gulati, 2021; Dosunmu et al., 2018; Manukaji , 2018; Omer , 2021; Rihab et al., 2020).

In Nigeria, the manufacturing sector has become crucial for economic growth and environmental impact due to its potential and this has drawn considerable attention (Shabbir et al., 2020). National Bureau of Statistics reported decline in the manufacturing sector's contribution to Nigeria's GDP over the years, with 11.77% in 1982 to 6% in 1998, which signifies that only increase of single digit was witness (National Bureau of Statistics, 2022). This trend has been further worsened which has led to a reduction in Nigeria's GDP growth rate and reduced the manufacturing sector's role to nominal GDP to 12.97% in the second quarter of 2022 (National Bureau of Statistics, 2022).

As several countries around the globe struggle to expand their manufacturing sectors either by financing on other investments or drawing attention of Foreign Direct Investors, which is expected to brought about new technologies, innovations and create more jobs (Chukwuebuka, 2020). Furthermore, United Nations Sustainable Development Goals (UNSDG) for Africa suggested the need for African economies to attract a significant amount of foreign direct investment (FDI) to enhanced growth through investment in important development infrastructure (Appiah-Kubi et al., 2020). African countries are performing very poorly in terms of FDI (Appiah-Kubi et al., 2020). This brought about the importance of corporate governance in recent years, not only in Nigeria but also globally, with many countries adopting codes and principles to promote best practices and improve FDI (Aljughaiman et al., 2024; Almarayeh, 2021; Appiah-Kubi et al., 2020). Nigeria's FDI performance has been low (Oyego & Aras, 2021). Nigeria FDI for 2023 was $1.87B, decline of 1102.46% from 2022 (World Bank, 2024). Nigeria FDI for 2022 was $-0.19B, decline of 105.64% from 2021(World Bank, 2024). Similarly, Nigeria is endowed with availability of raw materials and necessary resources which are very much important to attract the FDI (Haudi et al., 2020). Therefore, CSR economic dimension makes companies to produce high-quality products and services at minimal costs, while employing reusable packaging to minimize environmental pollution (Oláh et al., 2018). Such initiatives could be enhanced through foreign direct investors through production of customize products for developing countries with lower price (Haudi et al., 2020).

Moreover, food and beverage manufacturing companies operating in Nigeria have faced a series of formidable challenges, which have impeded their financial performance and operational activities. Evidently, the sector has been dealing with a variety of issues such as deteriorating cash flows, stagnant turnover, and poor liquidity management. This predicament has consequently led to a decline in profitability indicators, particularly shareholders' returns on equity (ROE) and returns on assets (ROA), as perceptively emphasized by authoritative studies by Hassan et al. (2020) and Umenzekwe et al. (2021). Other companies in the industry have faced similar issues. For example, Ellak Manufacturing has been dealing with potential disruptions in their operations as result of insufficient cash flow caused by poor sales. This shortage of funds has even led to the postponement of important meetings, such as those related to the company's corporate governance (Ellak, 2021).

Considering the crucial significance of corporate governance in fostering economic development, there is a need for more research. This research aim to establish a reliable and complete understanding of the most effective corporate governance mechanisms in Nigeria, extending the focus beyond just the banking sector.

Literature Review

Conceptual Framework

The study aims to explore the connection between board governance mechanisms and firm performance. To achieve this, the researchers design a model that considers both board governance mechanisms and corporate social responsibility (CSR) Economic dimensions.

This present model of this study is an extension of work of Adedeji et al. (2020) investigate different proxies for corporate governance mechanisms, including Board Composition, Board Size, and the presence of a board audit committee. The authors used sustainability initiatives as mediators, considering both social and environmental dimensions.

Lu et al. (2021) examined internal corporate governance mechanisms such as chief executive officer (CEO) power, the board size, independence, ownership concentration, managerial ownership, and audit quality on the connection between firm performance moderated by CSR, which only social dimension of CSR was examined. This present study have examined this model below in listed manufacturing firms in Nigeria in order to fill the gaps identified by previous studies.

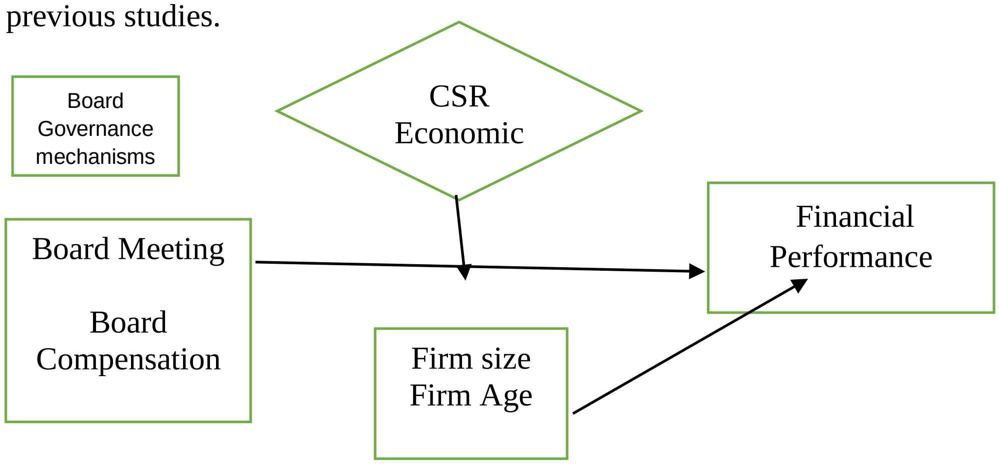

Figure 2.1: Conceptual Model of the study

The conceptual model presented directly above addresses the research needs identified by respected academic scholars. Its importance lies in its potential impact on advancing scholarly inquiry in this field. This contribution aligns with perspective Patrick (2022) emphasizes the necessity for future research efforts to focus on developing and validating innovative theories, frameworks, and models that explain the intricate and dynamic relationships between Corporate Social Responsibility (CSR), corporate governance, and firms' financial performance. However, the link between corporate governance mechanisms and financial performance may not always yield conclusive results. Scholars have proposed exploring the use of moderators or mediators in future studies to better understand these relationships (Puni & Anlesinya, 2020). This present study aims to fill several gaps and make significant contributions. Firstly, it expands upon the limited research regarding our understanding of board governance mechanisms and their impact on the financial performance of manufacturing companies.

Additionally, this study is one of the first to explore the influence between board governance mechanisms and financial performance, with the moderation effect of corporate social responsibility (CSR), specifically including the economic dimension. CSR Economic Dimension means socio-economic aspects of the business such as economic recession (Ghaderi et al., 2019). This will help manufacturing companies become more sustainable, navigate challenges effectively, and position themselves as competitive leaders in today's market (Yasamin et al., 2019). For manufacturing companies to have competition over rival companies, this was usually determined by total cost involved in manufacturing a particular product (Gao et al., 2020). This is another CSR (Economic dimension) measures known as product price (Orji, 2021). This entails product availability, as well as consumer choice options regarding delivery service, abilities to produce in smaller batches, mass customization processes (Esper et al., 2021). Scholars have also found a lack of sufficient literature specifically addressing the economic dimension of Corporate Social Responsibility (Bastas & Liyanage, 2018; Maignan, 2001, 2003; Martínez-Ferrero & García-Meca, 2020; Marwa Elnahass et al., 2020; Muhmad & Muhamad, 2020). Chen Jun et al. (2023) includes several control variables to consider factors that might influence financial performance.

Conceptual Review

Financial performance

Financial performance is crucial for an organization's ability to generate revenue by efficiently utilizing the available capital in the market (Akinyemi et al., 2021). In addition, financial performance serves as a critical instrument of an organization's effectiveness and efficiency in achieving its objectives. It reflects to what extent the company uses available assets to produce revenue within the market (Karamoy & Tulung, 2020). This brings about effectiveness of an organization hinges on management's ability to define clear goals and select the appropriate strategies to achieve them. This was done all in order aligned purpose with action (Karamoy & Tulung, 2020). In today's business environment, assessing financial performance extends beyond being a mere concern for company administrators and investors. It has become a vital facet with significant implications across the entire sector. Emphasis on financial performance is essential for decision making and ensuring sustainable growth (Abdel-Basset et al., 2020). In today's severely competitive business environment, companies strive to secure top positions within their sectors, thereby enhancing their competitive edge in the global market. Similarly, these rankings are often established based on thorough evaluations of firms' financial performance. Understanding and optimizing financial performance becomes a vital role in achieving sustainable success (Abdel-Basset et al., 2020).

Board Meeting

Board meetings are a clear sign of how engaged and active a board is in overseeing company management. The frequency of these meetings signifies involvement in the monitoring process (Kapil, 2023). Board meeting involves bringing together the board's directors to deliberate on matters pertinent to the Company (Kakanda et al., 2016). For the board to effectively discuss company issues, a platform known as Board Diligence must be utilized. This platform allows directors to access firm-specific information crucial for making strategic business decisions and monitoring management activities. It could be primary source of information for the organization (Arafat Hossain & Elaine Yen Nee Oon, 2021). Not only did it act as a principal source of information, but it also functioned as a mechanism to enhance corporate governance quality. This, in turn, paved the way for optimizing tax issues, thereby improving the firms' performance and value (Barros & Sarmento, 2019). To enhance firm performance, the Board of Directors must serve as an integral part of the internal control system, responsible for supervising and guiding management. This oversight is conducted primarily through regular board meetings (Gafoor et al., 2018). Furthermore, board diligence is a tool where good corporate guiding principles, are implemented in the organization and provide reports on the number of meetings carried out by the board of directors and the attendance of each member of the board present at the meeting (Afriyie et al., 2020).

Board Compensation

Board compensation includes salaries, bonuses, incentives, or allowances provided to board members (Nadia Khairani & Harahap, 2017). Researchers globally are interested in this topic due to its significant influence on board functions Compensation is crucial for researchers, policymakers, and regulators, but there's a risk of directors expropriating funds (Khatib et al., 2023). Effective corporate governance is needed to minimize this risk (Nadolny et al., 2020). Managerial power during negotiations can increase compensation if the company performs well (Chen et al., 2020; Dah & Frye, 2017) Frequent board meetings can also raise compensation, motivating thorough examination of operations and aligning interests, leading to higher stock market valuations (Elnahass et al., 2020).

Empirical Review

Board meeting and financial performance

Shahrina liza salisi et al. (2024) employed hierarchical regression analysis to observe the interdependence between corporate governance, capital structure, and firm performance. The study applied both agency theory and resource-based view theory (RBVT) to explain the relationships. The frequency of board meetings was positively and significantly related to firm performance. Companies listed on the main board of Bursa Malaysia were chosen using a stratified random sampling method. Relevant data were extracted from the annual reports of selected companies for two periods: 2015-2016 (before) and 2018-2019 (after) the revised code. Mechanisms of Corporate Governance used in the study were Independence of Audit Committee, Board Meeting Frequency, Director's Remuneration, Board Independence and Risk Management Committee.

Fater et al. (2024) examined the importance of corporate governance mechanisms on the cost of debt for consumer goods companies listed in Nigeria, the study specifically observes the influence of board size, board gender diversity, board independence, board meetings, and audit committee size on the cost of debt. The research employs an ex-post facto design, using data extracted from published audited annual financial reports of 16 sampled consumer goods companies listed on the Nigerian Exchange Group over a ten-year period (2012-2021). Rigorous testing for validity and reliability includes correlational tests, variance inflation factor analysis, and normality tests. Regression post-estimation involves heteroskedasticity testing. Panel data analysis is utilized, and multiple regression analysis using the Ordinary Least Square (OLS) model is most appropriate for testing the formulated hypotheses. The findings show that Board Meeting Attendance (BM) also significantly reduces the cost of debt.

Board Compensation and financial performance

Elnahass et al. (2022) examined the impact of compensation of directors' schemes on valuation of stock market in dual banking system, this made Islamic and conventional banks inclusive. Data from 2010 to 2015 was collected from sources like Thomson One Reuters DataStream, Bankscope, bank annual reports, and the World Bank database. Using Pearson Pair-Wise correlation matrix analysis and regression models with panel data estimation, the study addressed endogeneity issues. Findings showed a significant correlation between net income and board compensation for Islamic banks (0.216) and conventional banks (0.309) at the 5% significance level, highlighting a positive result on stock market valuations.

Mun et al. (2019) examined the influence of board of director compensation on the operational and financial outcome of U.S. restaurant firms using data from the COMPUSTAT database over 24 years. Analyzing 797 unbalanced panel observations, Tobin's Q was used to estimate expected board compensation. Results showed a significant correlation between board compensation and Tobin's Q. Interestingly; overcompensation did not negatively affect the operational and financial performance of these firms. The methodology was supported by previous research and justified accordingly.

Board Meeting and Financial Performance

Studies have shown that board meetings improve control within the institution and consequently promote the performance of the establishment of the hospital. Board Meeting serves as a tool for implementing good corporate guiding principles within the organization (Afriyie et al., 2020). Shahrina liza salisi et al. (2024) authors used a view of agency theory and resource-based view theory (RBVT) to clarify the relationship between corporate governance mechanisms and firm financial performance. The findings show board of directors' meeting frequency was positive and significant relation to firm performance. Fater Atagher and Iorlaha (2024) found board Meeting Attendance (BM) also significantly reduces the cost of debt, this could enhance financial performance. Based on the previous studies findings there is a positive relationship between board meeting and financial performance.

Board Compensation and Financial Performance

Resource theory suggests that larger boards can leverage their networking capabilities to enhance a firm's performance. Consequently, this improvement may lead to higher compensation offerings (Nadolny et al., 2020). In addition, the board of directors' compensation also seems to be influenced by firm performance and risk. Specifically, equity compensation is positively associated with Return on Assets (ROA (Dah & Frye, 2017). Ebimobowei Appah and Tebepah Sekeme Felix (2023) Researchers discovered that board compensation correlates positively and significantly with the return on equity of consumer goods manufacturing firms listed in Nigeria. This finding suggests financial rewards and benefits received by executives are linked to enhanced financial performance for these companies.

Based on the previous studies findings this study hypothesized a positive relationship between board compensation and financial performance.

Moderating effect of CSRD (Economic Dimension)
Corporate social responsibility (CSR) standards can promote a company's reputation and brand value by reducing the likelihood of noncompliance and avoiding reputational damage (He et al., 2024). It was confirmed that the CSRD economic dimension has a greater influence on utilitarian value than the social and environmental dimensions, which implies that companies tend to be more productive, with better economic performance in the longer period, and provide avenue for good products at competitive prices that will bring about sensations of utilitarian value for consumers (Currás-Pérez et al., 2018).

Abreu et al. (2021) found that CSR (economic dimension) increased customer value, this could enhance firm performance. Bae and Masud (2018) Researchers found that having more independent directors on company's board is associated with an increased emphasis on Corporate Social Responsibility (CSR), leading to greater Total Sustainability Disclosure and improved firm performance. In a separate study, it was found that companies with high ESG (Environmental, Social, and Governance) ratings generate abnormal returns. These positive returns ultimately contribute to higher profitability, which in turn leads to increased dividend payouts (Lagasio & Cucari, 2019). Based on the previous studies findings there is positive moderating relationship between CSRD economic dimension and financial performance.

Utilitarian Theory
Utility approach is the expression of utilitarian philosophy as mainly advocated by Jeremy Bentham (1748-1832) among others. The theory further states that social rules and arrangements are imperative to happiness and good of every individual while satisfying the desires of the whole society (Richard, 2019). The theory further classified into various aspects. These are economic perspectives, social cost, functionality view and Neo-functionalist. This present study used economic perspective as corporation is regarded as a part of the economic system, primarily concentrate on profit maximization (Secchi, 2007).

Methodology
This research employs ex-post factor design which deals with repeated observations on the same entities (e.g., individuals, firms) across multiple time points. These data structures allow for the examination of both individual-specific and time-varying effects (Dimitrios Asteriou & Hall, 2021). Data was collected from listed manufacturing companies in Nigeria. These companies consist of four sectors. These are Agriculture, Industrial goods, Consumer goods and construction. The target population for the study is listed manufacturing companies on the Nigerian stock exchange from 2012 to 2021 was purposively selected as they are the companies with publicly published financial reports, in order to get the required data. About 308

observations were used in the study. Furthermore, Companies with missing key variables such as corporate governance and CSR were excluded (Borchers, 2022).

Data was analysed using Ordinary Least Squares (OLS) estimation procedure. The regression model is specified below.

Y = f (BG, CSR)
Where Y represent firm performance, BG is the Board Governance and CSR is the Economic dimension, of Corporate Social Responsibility. Y is provided by Return on Asset.
BG = f (BM, BCOM).
Therefore, $ROA_{it} = \beta_0 + \beta_1 BM_{it} + \beta_2 BCOM_{it} + \varepsilon_0$-------------------Equation 1
Therefore, it $ROA = \beta_3 BM_{it} \times CSR + \beta_4 BCOM_{it} \times CSR$-------------------Equation 2

Variables Measurement.

Table 5: Variable Measurement

S/N	Variables	Variable Name	Measurement	Source
1	***Dependent Variable*** Return on Asset	ROA	Net earnings/total assets	(Ciftci et al., 2019)
2	***Independent Variable***		Salaries, bonus, in kind benefits and directors' attendance fees.	(Marwa Elnahass et al., 2020)
	Board Compensation	BCOM		
	Board Meeting	BM	Number of meetings held during the year.	(kanakriyah, 2021)
	Moderating Variable			
	CSR Economic	CSRD	GRI index	(Pucheta-Martínez, 2018)
3	**Control Variables**			
	Firm size	FS	Natural Log of Total assets of a firm.	(Rita Wijayanti & Setiawan, 2023)
	Firm Age	FA	the aggregate number of years elapsed since its establishment	(Mine Aksoy et al., 2020)

Results and Discussion

1.3.1 Descriptive Statistics

Table 1

Variables	Mean	SD	Min	Max	N
ROA	0.1449	0.270996	-0.4043	0.8136	308
BSC	4.43290	1.009051	2.5172	7.9956	308
BM	0.728831	0.382238	0.22	0.52	308

Table 1 shows mean of ROA is approximately 14.49%. This indicates the average return on assets across the sample of companies. The positive mean shows that, on average, companies generate a return on their assets. The standard deviation of 27% indicates the variability or dispersion of ROA values around the mean. A higher standard deviation suggests greater variability in how companies perform in terms of ROA. Companies with ROA values farther from the mean may have more volatile financial performance.

Table 1 shows mean value which indicates that, on average, board members receive approximately ₦4.43 million. The minimum compensation is approximately ₦2.52 million, while the maximum is around ₦7.99 million. This findings is similar to that of Mun et al. (2019) found mean value of total board compensation was about $7.78 million with a mean number of directors of 5.87. Authors found board compensation has a positive effect on firm growth and capital investment in USA restaurant companies.

Table 1 shows this mean value indicates that, on average, board members attend approximately 72.88% of scheduled board meetings. Standard Deviation 38.22%. Some board members may attend significantly more or fewer meetings than the average. The minimum attendance percentage is approximately 22%, indicating that some board members attend relatively few meetings.

Correctional Analysis

Table 2 Correlational analysis

	Correlational Matrix		
Variables	ROA	BSC	BM
ROA	1		
BSC	0.1827	1	
BM	0.087	-0.0898	1

Table 2 shows results of Pearson correlation matrix, which indicate the absence of multicollinearity problem. Because maximum values do not exceed the threshold value (0.90) of correlation and (10) of the VIF (Dimitrios & Hall, 2021). This signifies that existence of perfect multicollinearity indicate that OLS method cannot provide estimates for population parameters (Dimitrios & Hall, 2021).

Table 3: Test of Hetroscedasticity

Fitted values of ROA (Return on Assets)		
chi^2 value	**df**	**P**
32.84	1	0.0000

Table 3: shows very low p-value (less than 0.05) indicate that null hypothesis of constant variance is rejected. This indicates that there is significant evidence of heteroskedasticity in the model concerning the fitted values of ROA (Dimitrios & Stephen, 2007).

Table 4: Multicollinearity

VARIABLES	**VIF**	**1/VIF**
BSC	1.32	0.756387
BM	1.17	0.856682
AGE	1.26	0.795734
LOGFS	1.69	0.593346
MEAN VIF	4.17	

Table 4: shows the Mean VIF is 4.17 fall within acceptable range. This indicate there is no multicollinearity between the variables (Dimitrios Asteriou & Hall, 2021).

Regression Result

relationship between board compensation and board diligence with financial performance with statistical significance of $p < 0.05$. The findings are in consistence with Secchi (2007), which supports utilitarian theory through emphasizing actions that maximize happiness. Furthermore, Mishra & Vishvas (2019) affirmed that the CSRD economic dimension fosters economic performance, while Cuesta-Valiño et al. (2019) highlighted its role in enhancing customer loyalty and satisfaction. The coefficient for board compensation (BSC) is estimated at 0.0583037, indicating a significant positive relationship with Return on Assets (ROA) $p < 0.05$. The findings is consistence with Mun et al. (2019) and Elnahass et al. (2022), who confirmed a positive influence of board compensation on stock market valuations and financial performance across various sectors. The coefficient for board diligence (BM) is 0.0905654, indicating that an increase in board meeting diligence corresponds to a 0.0905 unit rise in ROA $p = 0.028$. This results is in line with Fater et al. (2024) and Salisi et al. (2024), who found board meetings positively influence firm performance and cost of debts.

Table 4.6: Ordinary Least Squares

Ordinary Least Squares				
Dependent Variable: ROA				
	Coef	Standard error	Robust standard error	P Value
BSC	.0583037	.0151683	.0159114	0.000
BM	.0905654	.0409404	.0440092	0.028
AGE	.0000637	0008869	.0440092	0.727
FS	-.0456737	.0168801	.0176523	0.039
Bsc-csreco	.0115449	.0009635	.0007785	0.00
Bd-csreco	.019655	.0008745	.0009754	0.025
Number of obs	308			
F(4, 303)	5.56			
Prob > F	0.0002			
R-squared	0.1683			
Adj R-squared	0.0560			
Root MSE	.26329			

ROA=Return On Asset, BSC= Board Compensation, BD= Board Diligence, FAGE=Firm Age, FS= Firm size.

Source: STATA

The Corporate Social Responsibility Disclosure (CSRD) economic dimension strengthens the monitoring bodies such as Central Bank of Nigeria (CBN), benefit from this results as flow of FDI into a country transforms into uninterrupted flow of foreign exchange. This aid Central Bank maintain a contented reserve of foreign exchange (Haudi et al., 2020). Practitioners in manufacturing industries made a serious concern regarding shortage of funds has even led to the postponement of important meetings, such as those related to the company's corporate governance (Ellak, 2021).

The study contributes to corporate governance literature by demonstrating how CSRD economic dimension interacts with board governance mechanisms, reinforcing utilitarian theory in financial performance relationships with board governance mechanisms.

Conclusion and Recommendations

In conclusion, this article contributes to knowledge of how board governance can moderate financial issues in manufacturing companies. By emphasizing the significance of CSR economic dimension, the research provides practical implications for policymakers and regulators. Strengthening CSR economic dimension enhances financial performance and promote foreign direct investment through product innovation which bring about high quality product, these strategies attract foreign investors.

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ENTERPRISE RISK MANAGEMENT AND CREDIT RISK EXPOSURE OF BANKS IN NIGERIA, GHANA AND SOUTH AFRICA

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Abstract
This research investigated a comparative analysis of enterprise risk management and credit exposure of banks between Nigeria, Ghana, and South Africa on the effect of enterprise risk management (ERM) on credit risk exposure (CRE) of banks. This research covered a period of ten (10) years spanning from 2014 to 2023 and data were collected from the published financial statements of a sample size of fifteen (15) banks, five (5) banks from each of the countries, Nigeria, Ghana and South Africa. The data were analyzed using ordinary least square regression and results were interpreted based on F-Statistics, P-Value (PV) and R-Square (R^2). The finding revealed that ERM has negative and significant effect on CRE of banks in Nigeria and South Africa, but ERM has positive and significant effect on CRE of banks in Ghana. The finding further revealed that there is greater significant different on the effect of ERM on CRE of banks in South Africa (R^2 = 49%) than Nigeria (R^2 = 40%) and Ghana (R^2 = 32%). This implies that banks in South Africa has greater significant effect of CRE as a result of increase in ERM implementation, followed by Nigeria and Ghana. Hence, this research recommended that, the banking regulatory bodies in Nigeria, Ghana and South Africa should strictly enforce that banks totally implement the adoption of RMC in line with the corporate governance codes on the number of RMC because this will significantly reduce CRE of the banks. This could be done by setting-up monitory committee to help monitor the ERM implementation by banks.

Keywords: Comparative Approach**;** Credit Risk Exposure; Enterprise Risk Management; Legitimacy Theory; Nigerian, Ghanaian and South Africa Banks.

Introduction
Credit risk exposure (CRE) has attracted immerse academic research efforts due to its pivotal role in enhancing financial performance of business organisations in particular, the banking sector. The banking sector plays a pivotal role in driving economic growth and development in every nation. The banks for instance receive deposits and provide loans and advances to customers. However, these banks are typically susceptible to various risks in their day-to-day operations including liquidity risk, credit risk, market risk, operational risks, regulatory risks, foreign exchange risks and also interest rate risks to mention but a few. However, credit risk exposure is the most notable risk among these various risks because it is associated with the risk of failure of repayment of both interest and principal amount of cash advanced to borrowers (Majani, 2022).

Credit risk exposure (CRE) is the risk of total or partial loss of loans due to the inability of the customer to repay the loan as when due (Olabamiji & Michael, 2023). Basically, CRE is used to explain how value of the bank's assets is being affected by the adverse price of shares in the stock exchange market. Credit risk is generally determined by capital adequacy ratio (the amount of bank's core capital expressed as a percentage of its risk weighted assets), loan to deposit ratio (the amount that the bank must hold out of the customers' deposits), loan loss provision (specified amount provided from the interest income and kept in the reserve account to meet loan losses), liquid ratio, nonperforming loans and interest expenses to interest income ratio (Bencharles & Nwankwo, 2021). An increase in these ratios signals poor CRE by the bank which in turn can reduce the value of the bank. Therefore, when bank customers fail to make good on their promised remittances from loans and advances taken, this greatly undermines the bank's earnings, and capital reserves and exposes it to the risk of bankruptcy.

There are a lot of factors that determined CRE, and these factors include enterprise risk management (Frank & Ukpong, 2024). Enterprise risk management (ERM) is an aggregate approach to treat all the organization's risk which is developed as a result of the failure of the conventional traditional risk methods, which treats risk in a piecemeal or the departmental based approach (Odubuasi, *et al.*, 2022). The ERM requires a company-wide perspective to be taken in identifying, assessing, and managing risk of the organization.

Furthermore, ERM is a vital strategic management tool for risk reduction because it is a top-down approach for the enterprise wide-based risk detection, mitigation, determination, assessment, evaluation and policy formulation, and setting the risk appetite of the enterprise. Basically, Nigeria, Ghana and South Africa are some of the emerging markets in Africa that should establish a solid and efficient financial system for faster and robust regional economic growth and is expected to of them to device an effective approach to handle all the prospective risks that may confront its banking sector.

Importantly, the banking industry was faced with risk of unrecoverable loan or non-performing loan which was caused by ineffective risk management traditional leading to holistic approach called ERM (Odubuasi, *et al.*, 2022). Another factor that contributed to high level of CRE of banks is the increase in diversification of asset portfolios by banks and increase in operational activities of banks (Uford, *et al.*, 2023). Furthermore, unfavourable credit exposures, interest rate position taken or derivate exposures that were supposed to reduce CRE also failed and led the banking industry to suffered huge financial losses (Frank & Ukpong, 2024). These crises exposed the vulnerabilities of banks worldwide, including those in Africa, underscoring the need for effective credit risk management frameworks to mitigate potential losses and ensure financial stability (Okoughenu, *et al.*, 2022). Consequently, this pandemic catastrophe has brought to light how inadequately banks particularly in Africa countries handle risks and the efficacy of shift from traditional risk approach to holistic risk approach (implementation of ERM) in reducing CRE.

Against this backdrop this research raised the question on: (i) what effect does ERM has on CRE of banks in Nigeria, Ghana and South Africa? (ii) what is the different between banks in Nigeria, Ghana and South Africa on the effect of RMC on CRE? Hence, this research broadly investigated the effect of ERM on CRE of banks in Nigeria, Ghana and South Africa. Specifically, this research examined the effect ERM has on CRE of banks in Nigeria, Ghana and South Africa, and analysed the different between Nigeria, Ghana and South Africa on the effect of ERM on CRE of banks.

The research tested the following null hypotheses:
$H0_1$: Enterprise risk management has no significant effect on credit risk exposure of African banks, Nigeria, Ghana and South Africa.
$H0_2$: There is no significant different between Nigeria, Ghana and South Africa on the effect of enterprise risk management on credit risk exposure of banks.

Credit Risk Exposure

The concept of CRE according to Majani (2022) is essentially in two different perspectives, the expected and unexpected CRE. The expected CRE is the likelihood that the exposure on a bank's credit portfolios will result in the loss of a certain amount of money over a given time horizon under a given probability distribution function. The unexpected CRE represents the difference between the total future losses and the expected losses given a certain confidence interval. Since these unexpected losses constrain capital reserves, they can only be covered by provisions through the use of economic capital, the cost of which is the interest rate in the market.

Hence, effective management of CRE is a fundamental aspect of financial services which aimed at mitigating the potential losses that arise when borrowers or counterparties fail to meet their obligations (Nyebar, *et al.,* 2023). CRE is a multi-faceted process that involves identifying, measuring, monitoring, and controlling credit risk to ensure that it remains within acceptable limits (Kaur & Molla, 2023). Furthermore, Natufe, *et al* (2023), Adeusi, *et al* (2023) highlighted the key importance of effective CRE management in maintaining the stability, profitability, and resilience of financial institutions. The main focus of CRE in the banking industry is the assessment of borrowers' credit worthiness and the ability of the bank to easily recover loans. The bank may employ credit scoring models, such as the Z-score model and other financial indicators such as capital adequacy ratio, loan loss provision ratio, loan to deposit ratio, loan to assets ratio, liquidity ratio to predict the default based as well as CRE.

Enterprise Risk Management

According to Anugerah, *et al* (2023), ERM is new strategic management approach to risk that replaced the silos (traditional risk management). ERM is a collection of cultural practices, procedures, and endeavors that are intended to facilitate the accomplishment of organizational goals through efficient handling of events or possible occurrences that may impact goal achievement (Husaini *et al.*, 2020). ERM is a holistic approach to treat the enterprise's risk by replacing the conventional traditional risk approach which treats risk in a piecemeal or unit or sessional bases. ERM allows different organizational units to handle risks separately. The root of ERM can be traced on the Committee of Sponsoring Organizations of the Treadway Commission (COSO) Internal Control Framework and framework was first created in 1992 and widely adopted by many large organizations across the globe to manage their internal control systems.

ERM implementation measurement can be seen from four aspects of risk management, and they are strategy (referring a plan of action designed to accomplish goals following the organization's mission), operations (referring to the successful and effective utilization of sources), reporting or the accuracy of relevant reports, and compliance or the observance of appropriate rules and regulations (COSO, 2004). Hence, the successful implementation of ERM by corporations such as banks will enhance ERE.

Empirical Review

The influence of ERM on companies' financial and market performance was examined by Anugerah, *et al* (2023) and the study covered the population of all the companies registered on the Indonesia Stock Exchange in 2019. Purposive sampling method was used by the study to select 664 listed companies to obtain a total sample of 242 companies. Quantitative approach and was adopted by the study and data was analysed using Partial Least Square (PLS). The study showed that ERM positively and significantly affects company financial performance. This study was limited to Indonesia and did not extend data analysis to include a cross-border data analysis approach in African Countries.

The study of Odubuasi, *et al* (2022), investigated the collective effect of risk management committee and ERM on the performance of banks in Nigeria. The study adopted ex-post facto research design and nine (9) banks were selected by the study using discretionary sampling technique. In addition, the study employed secondary data extracted from the annual reports of the banks from 2010 to 2019. The data were analysed in the study using descriptive statistics, correlation analysis and panel data regression. The study found that risk committee account expertise has positive effect; Risk committee gender diversity has inverse effect and finally, ERM and risk committee attributes jointly had significant and positive effect on performance of Nigerian banks. This study was limited to Nigeria and did not extend data analysis to include a cross-border approach.

The impact of ERM on the institutional performance of Jordanian public shareholding companies was x-rayed by Altanashat, *et al* (2019) and the study used 313 questionnaires. In the study, data were analysed using Structural Equation Modeling Tool (Smart-PLS) and the result revealed that ERM implementations proxies by internal environment, event identification, risk assessment, risk response, control activities, information and communication, and monitoring significantly improved institutional performance. This study was limited to Nigeria and did not extend data analysis to include a cross-border approach.

The effect of ERM on firm value was investigated by Zungu, *et al* (2018) in context of South African mining firms. The study covered the mining firms listed on the Johannesburg Stock Exchange from 2004 to 2015. The study applied pooled data design. The study employed Generalised Method of Moments (GMM), Pooled Mean Group (PMG), the Mean Group (MG), and Dynamic Fixed Effect (DFE) estimations in data analysis and the result revealed that ERM mitigates the level of risks faced by companies and consequently reduces firm value. This study was limited to South African mining firms and did not extend data analysis from banks to include a cross-border data analysis approach.

ERM practices and firm performance was investigated by Yang, *et al* (2018) and the study used survey research design. Furthermore, the study employed primary data source and extracted information from the respondents of the 69 SME sampled, who have 101 to 250 employees. In addition, the study viewed above 336 out of the 900 structured questionnaires administered which were returned, while total of 304 were filled/completed correctly. The study revealed that ERM practices significantly influenced SMEs' competitive advantage.

The effect of ERM on firm value was investigated by Nasir (2018) and the study covered 83 non-financial firms in Pakistan between 1999 and 2015. The study measured ERM with dummy variable and employed binary logistic regression for the analysis. The study revealed that ERM significantly enhances the shareholders' value. This study was limited to Pakistan non-financial firms and did not extend data analysis to include a cross-border data analysis approach from African countries.

The joint impact of ERM and corporate governance on the value of firms operating within Gulf Cooperation Council (GCC) was investigated by Rao (2018) and the study utilized panel data approach. The study measured ERM with dummy variable, and proxy corporate governance using board size and existence of audit committee. Furthermore, the study covered sample size of 160 financial institutions operates in Bahrain, Kingdom of Saudi Arabia, Kuwait, Oman, United Arab Emirate and Qatar for the period between 2004 and 2011. The data was analyzed with ordinary least square regression technique and the finding showed that ERM and corporate governance jointly impacted significantly on value of firms. This study was limited to Bahrain, Kingdom of Saudi Arabia, Kuwait, Oman, United Arab Emirate and Qatar and did not extend data analysis to include a cross-border data analysis approach.

Udoka and Orok (2017) carried out an assessment of ERM practice by deposit money banks in Nigeria. The dependent variables in the study were challenges of ERM, government policy and impact of enterprise risk management on the adoption of ERM by deposit money banks in Nigeria. The study adopted ex-post factor research design and collected data from twenty (20) commercial banks and analyzed three hundred and seventy-four (374) questionnaires collected from the correspondent. The study employed ordinary least square regression analysis and the result revealed that the problems of the banks have significant effect on their adoption of ERM and the various government inactions policy has significant effect on the adoption of ERM. This study was limited to Nigeria and did not extend data analysis to include a cross-border data analysis approach.

ERM and firm performance was investigated by Soliman and Adam (2017) in the Nigerian banking sector. The study used ERM, index, return on average equity, share price return, and firm value were proxy with three different models, ten (10) sample of the total population of the commercial banks listed on the Nigerian stock exchange. The study employed ordinary least square regression estimation for data analysis and result revealed that a positive relationship between ERM implementation and performance of banks in Nigeria. This study was limited to Nigeria and did not extend data analysis to include a cross-border data analysis approach.

The effect of ERM and corporate governance on firm value of companies listed on Indonesian Stock Market was examined by Husaini and Saiful (2017) and the study used sample of 110 businesses for the period 2010 to 2013. The study applied single-stage cluster sampling technique, employed generated panel data and descriptive statistics, correlation analysis and panel regression analysis on the data gathered. The study revealed that implementation of ERM is positively affected the value of organizations. This study was limited to Indonesian firms and did not extend data analysis to include a cross-border data analysis approach.

Theoretical Review

Several theories such as agency theory, risk management theory, stewardship theory and resource based view theory were reviewed to examine the relationship that exists between CRE and corporations' operational variables. However, this research anchored on the legitimacy theory.

Legitimacy Theory

Legitimacy theory was popularly introduced by Dowling and Pfeffer in 1975. According to Noah (2017) cited in Olateju, *et al* (2021), legitimacy theory states that for an organization to gain legitimate status, which is the approval and support of the society and elimination of threat to survival, such an organization should maintain integration of its value system with that of the social system within which it operates. The basic assumption of legitimacy theory is that the activity of an organization is appropriate, right and good in line with the socially built system of norms, values and beliefs of the society. Legitimacy theory's target is to manage the relationships among the shareholders that are of critical importance to the existence and continuity of the enterprise (Ugwu, *et al.*, 2021). For a business corporation to be successful, legitimacy theory suggests that the corporation must operate within the boundaries of socially acceptable behavior.

Odubuasi, *et al* (2022) indicated that legitimacy theory best describes the relationship between the enterprise and the society generally. Hence, legitimacy theory is based on a condition in which a business corporate's value system is congruent with the value system of the larger society. The implementation of ERM may not be convenient to the business corporation but due to the need and or attempt to influence the stakeholders about the legitimacy of the business operations, ERM implementation became important. Furthermore, in order to align with the expectation of society now, business corporations ought to adopt the ERM to boast their legitimacy position. Similarly, according to Martens and Bui (2023), the legitimacy theory implies that organizations attempt to align their actions with societal standards. The implementation of ERM by an organization is to meet the societal expectation not necessary to enhance CRE. ERM is relatively viewed by society as a system that checks the entity's risk holistically as it will affect the society significantly. Hence, legitimacy theory generally predicts positive relationship between ERM and CRE because when banks enhance their CRE by effective management will in turn increase earnings capacity of the stakeholders including the general society.

Methodology

This research adopted ex-post facto research design since the data were existing data which made it difficult for the researcher to have direct inference over it outcome. Furthermore, this research employed panel data methodology so as to have a balanced approach on the construct. This research selected three countries: Nigeria, Ghana, and South Africa. These countries are selected because they are among the leading emerging economies in the whole of Africa in terms of GDP rate (Odubuasi, et al., 2022). At total, the listed banks as at 31st December, 2023 in Nigeria is twenty-four (24), Ghana is twenty-three (23) and South is thirty (30). Furthermore, fifteen (15) banks, five (5) banks for each country, Nigeria, Ghana, and South Africa were selected for analysis by this research, employing filtering sample technique which allowed us to sieve out the banks that did not meet our requirement. For instance, some of them that did not disclose their ERM report were eliminated. In addition, all the banks that have not consistently been in operation for ten years, between 2014 and 2023 were eliminated.

This research sourced data from the annual reports and accounts from the study area between 2014 and 2023. Furthermore, this research employed descriptive statistics and ordinary least square regression to analyse data. Since this research involved a comparative analysis, F-Statistics, P-Value (PV) and R-Square (R^2) was used to select between the countries that have higher or lowest significant effect of ERM on CRE.

The variables are measured as: CRE is dependent variable and measured as total equity capital divide total assets; ERM is independent variable and is measured as Strategy + Operation + Reporting + Compliance STRATEGY = (Salesi − μSales)i/σ Sales, where Salesi = Sales of firm i in year 1; μSales = Average industry sales in year 1 and σ Sales = standard deviation of sales of all firms in the same industry, OPERATION = Sales/Total assets, REPORTING =

Material weakness + Qualified Auditor Opinion + Restatement, Material Weakness : if the firm disclosed any material weakness in its annual report 1, otherwise 0, Qualified Opinion: Firms with unqualified, auditor's opinion is set 0, otherwise 1, Restatement: if the financial statement, is restated 1, otherwise 0, and COMPLIANCE = Auditor fees divide Total assets. In addition, the audit size and bank size are control variables. The control variables are audit size measured as dummy variable, "1" for the bank that engaged the services of the big-4 audit firm (KPMG, PWC, Deloitee, and Ernst & Young), otherwise "0", and Financial leverage measured as total debt divide total equity of the bank.

The model used for this research is therefore stated below:

CRE = f(ERM[i.e. strategy, operation, reporting, compliance], financial leverage, audit size)……………………….………………………………………………………………….…….
(3.1)

Equation 3.1 is presented in econometric form as;

$CRE= \beta_0 +\beta_1 ERM_{it} [STR+ OPE +REP + COM]+\beta_2 FLV_{it} + \beta_3 AS_{it} + \mu_{it}$...............................
(3.2)

Where; CRE is credit risk exposure; ERM is enterprise risk management; STR is strategy; OPE is operating; REP is reporting; COM is compliance; AS is Audit Size; FLV is Financial Leverage; β_0 is the intercept; μ_{it} is the disturbance terms that absorbs effect from other variables that are ignored; and β_1…..β_3 are the coefficients.

Results and Discussion

In this section, descriptive statistics of all the study variables are presented and followed by test of hypotheses using the panel results from each of the selected countries as well as a summary of the comparative analysis of all the countries' results. In addition, the section indicated discussion of findings.

Table 1 presents the results for the three countries (Nigeria, Ghana, and South Africa) on the description of the variables. The mean value of CRE in Nigeria is 32.4%, which was the highest among the three countries, indicating stronger CRE in Nigerian banks. In contrast, Ghana has a lower mean value of CRE at 15.52%, while South Africa has the lowest mean value of CRE at 13.74%. The higher standard deviation is banks in Nigeria (34.65) suggest greater variability in CRE across banks compared to Ghana (12.19) and South Africa (4.26). Nigeria's CRE ranges from a minimum of 8% to a maximum of 98%, while Ghana's range is from 5% to 96%, and South Africa's, ranging from 5% to 18%.

For ERM, Nigeria banks stand out with the highest mean value of ERM in terms strategy, operation, reporting, compliance scores at 44.92, followed by South Africa at 33.988 and Ghana has the lowest mean value of ERM at 29.03, suggesting that Nigerian banks emphasize on ERM more significantly than banks in South Africa and Ghana. The standard deviation is higher in Nigeria 34.65, indicating a large dispersion of ERM focus across Nigerian banks, followed by

South Africa at 26.25 and Ghana at 21.56. Notably, Nigeria records the widest range for ERM, with a maximum of 79 and a minimum of -63, signifying a broad diversity in ERM approaches in their business activities, followed by South Africa with a maximum of 68 and a minimum of -16, and Ghana with a maximum of 63 and a minimum of -2.3.

Table 1 Descriptive Statistics

Table 1 Descriptive Statistics

		CRE	ERM	AS	LEV
	Mean	32.4	44.915	1	0.306
Nigeria	Std. Dev	34.65	29.129	0	0.251
	Maximum	98	79	1	0.301
	Minimum	8	-63	1	0.211
	Mean	15.52	29.03	1	0.263
Ghana	Std. Dev	12.19	21.56	0	0.212
	Maximum	96	63	1	0.229
	Minimum	5	-2.3	1	0.109
	Mean	13.74	33.988	1	0.256
South Africa	Std. Dev	4.26	26.25	0	0.206
	Maximum	18	68	1	0.229
	Minimum	5	-16	1	0.155

Source: Researchers' Computation, 2025.

For the control variables, all the three countries reported identical mean audit sizes (AS) of 1, showing no variation in this variable. This implies that the audit size across banks in Nigeria, Ghana, and South Africa is standardized, with no fluctuation in this parameter. Also, Nigeria has the largest average of financial leverage (FLV) with a mean of 0.306, suggesting that Nigerian banks are significantly debt to equity finance than their counterparts in Ghana and South Africa. Ghana and South Africa have nearly identical means of 0.263 and 0.256, respectively. The variability in bank financial leverage is highest in Nigeria, with a standard deviation of 0.251, compared to Ghana of 0.212 and South Africa of 0.206 indicating a broader range of debt to equity finance in banks in Nigeria.

Table 2 presents the effect of ERM on CRE of banks in Nigeria, Ghana, and South Africa. In Nigeria, the result shows that ERM has a negative and significant effect on CRE, meaning that a 1% increase in the ERM leads to a 0.255% decrease in CRE. This suggests that when Nigerian banks implement stronger ERM, their CRE significantly reduces. Furthermore, the control variables audit size and financial leverage both has a negative and insignificant effect on CRE, meaning that a 1% increase in the engagement of the big-4 audit firms and ratio of debt to equity leads to a 0.388% and 5.732% decrease in CRE respectively.

In Ghana, the result shows that ERM has a positive and significant effect on CRE, meaning that a 1% increase in the ERM leads to a 4.522% increase in CRE. This suggests that when banks in Ghana implement stronger ERM, their CRE significantly increases. Furthermore, the control variables audit size and financial leverage both has a negative and insignificant effect on CRE, meaning that a 1% increase in the engagement of the big-4 audit firms and ratio of debt to equity leads to a 0.388% and 5.732% decrease in CRE respectively.

Enterprise risk management and credit risk exposure of African banks, Nigeria, Ghana and South Africa.

Table 2: ERM and CRE

	Nigeria		Ghana		South Africa	
	Coeff	Prob	Coeff	Prob	Coeff	Prob
C	2.042	0.004	1.109	0.021	-2.114	0.002
ERM	-0.255	0.001**	4.522	0.051*	-70.611	0.000**
AS	-4.597	0.200	-0.388	0.714	0.419	0.156
FLV	-0.921	0.591	-5.732	0.129	5.321	0.000**
R^2	0.40		0.32		0.49	
F-STAT	4.835		2.945		7.899	
PROB	0.001		0.017		0.000	

Note: ** and * denotes significance at 1% and 5% respectively.
Source: Researchers' Computation, 2025.

In South Africa, the result shows that ERM has a negative and significant effect on CRE, meaning that a 1% increase in the ERM leads to a 70.611% decrease in CRE. This suggests that when banks in South Africa implements stronger ERM, their CRE significantly decreases. Furthermore, the control variables, audit size has a positive and insignificant effect on CRE, meaning that a 1% increase in the engagement of the big-4 audit firms lead to a 0.419% increase in CRE but the increase is not significant. However, financial leverage has a positive and significant effect on CRE, meaning that a 1% increase in the ratio of debt to equity leads to a 5.321% significant increase in CRE.

Table 3 presents the country summary of result on comparative assessment between Nigeria, Ghana and South Africa. In Nigeria, the F-statistic is 4.835, a p-value of 0.001 and R^2 of 40%, meaning the model is statistically significant, and combination of the variables jointly affects CRE. Similarly, for Ghana, the F-statistic is 2.945, a p-value of 0.017 and R^2 of 32%. This indicates that although the explanatory power is weaker compared to Nigeria, the model is still statistically significant at the 5% level. This shows that ERM factors do significantly affects CRE of banks in Ghana, but the model fit is weaker. For South Africa, it has the strongest model with an F-statistic of 7.899, a p-value of 0.000 and R^2 of 49% suggesting a highly significant relationship between the independent variable and CRE. This implies that in South Africa, the ERM factors more significantly and reliably explain variations in CRE compared to banks in Nigeria and Ghana.

Test of *significant difference between Nigeria, Ghana and South Africa on the effect of enterprise risk management on credit risk exposure of banks.*

Table 3: Country Summary of Result

Country	F-Statistics	Probability (p-value)	R^2
Nigeria	4.835**	0.001	0.40
Ghana	2.945*	0.017	0.32
South Africa	7.899**	0.000	0.49

Note: **** and * denotes significance at 1% and 5% respectively.**
Source: Researchers' Computation, 2025.

Having assessed how the explanatory variables fit to explain the CRE of banks across Nigeria, Ghana and South Africa, it can be concluded that the null hypothesis ($H0_2$) which stated that the effect of RMC on CRE of banks in Africa (Nigeria, Ghana and South Africa) is not significantly different is rejected. ERM have greatest effect on banks' CRE in South Africa (R^2 = 49%). Furthermore, our model has shown that Nigeria has a closer chase to South Africa, in affecting CRE with ERM (R^2 = 40%). Finally, Ghana has the least effect of ERM on CRE of banks with explanatory power (R^2 = 32%).

This research specifically examined first, the effect ERM has on CRE of banks in Nigeria, Ghana and South Africa. The finding indicated ERM implementation by banks in Nigeria and South Africa country has a negative and significant effect on CRE, meaning that the more banks in Nigeria and South Africa implement ERM it would exhibits to significant decrease in CRE. However, the finding indicated ERM implementation by banks in Ghana country has a positive and significant effect on CRE. Significant reduction in CRE of banks in Nigeria and South

Africa by ERM implementation means that there is reduction in the total amount of the banks could lose if the borrowers default.

Also, this research specifically analyzed the different between Nigeria, Ghana and South Africa on the effect of ERM on CRE of banks. The findings showed that ERM has greater significant effect on banks' CRE in South Africa than Nigeria and Ghana. This implies that the implementation of ERM in South Africa has significantly enhances CRE of banks. This finding corroborated with the legitimacy theory that argued an organizational practice such as ERM implementation enhances the societal expectation such as reduction in CRE. Furthermore, this finding corroborated with the finding revealed by Anugerah, *et al* (2023), Odubuasi, *et al* (2022) and Husaini and Saiful (2017) who showed that ERM positively and significantly affects company financial performance.

Conclusion and Recommendations

This research carried out a comparative analysis on the effect of ERM on CRE of banks in Nigeria, Ghana and South Africa. This research collected data from annual reports and accounts of banks in Nigeria, Ghana and South Africa) for a period of ten (10) years spanning from 2014 to 2023. The research found that, first the implementation of ERM has negative and significant effect on CRE of banks in Nigeria and South Africa, but ERM has positive and significant effect on CRE of banks in Ghana. Second, ERM has greater significant effect on banks' CRE in South Africa than Nigeria and Ghana. Hence, this research concludes that the implementation of ERM is a vital strategic management tool to manage CRE of African banks.

On the basis of this conclusion, this research recommends that, the banking regulators in African countries should strictly enforce the compliance of ERM policies and be implemented across banks in Nigeria, Ghana and South Africa. This could be done by setting-up monitory committee to assist in monitoring the ERM implementation by banks.

The researchers would not fail to acknowledge the major limitation encountered in this research. This research was limited to Africa banks and sample size was based on those banks with complete information disclosure on the variables. Consequently, the sample size is relatively low size. Hence, this research suggests to future researchers to employ pooled data approach on banks as well as include other sectors that may have implement ERM to know their effect on CRE.

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GREEN ACCOUNTING AND VALUE OF QUOTED OIL AND GAS FIRMS IN NIGERIA

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Abstract

This study investigated the relationship between green accounting practices and value of seven (7) quoted oil and gas companies in Nigeria over a 6-year timespan from 2018 to 2023. The study made use of secondary data for its analysis using an ex-post facto research design. It looked at green accounting by checking the environmental, social, and governance reports from the companies' annual and sustainability reports, and it assessed firm market value by using the price-earnings ratio calculated from their annual reports and information from the Nigerian Exchange Group (NGX). The Stata 19 software used a panel data regression to analyze the collected data. The result of the study showed that there is a positive but statistically insignificant relationship between green accounting and the value of quoted oil and gas firms in Nigeria. Descriptive analysis of the data also showed that while all firms made required social and governance reports, not all firms made relevant environmental reports in their published statements and reports. This study therefore recommends that oil and gas firms should consider making more investments in environmental, social and governance reporting boost their shareholder perception.

Keyword: *Environmental, Social, Governance, corporate social responsibility,* price-earnings ratio*, Nigeria*

Introduction

Corporate organizations strive to maximize profits; their operational environment has a significant impact on their capacity to succeed in a variety of business activities. It is important to remember that no company can thrive without its internal and external environments. A number of corporate social responsibility (CSR) initiatives have been developed to actively consider an organization's relationship with its environment and manage the effects that it has on it. These initiatives have ultimately resulted in sustainable development. As time went on, the idea of sustainable development arose to address resource consumption and environmental pollution issues and start the development of economic, social, and environmental aspects, all of which were influenced by numerous corporate organizations (Yan, 2024). Green accounting, also known as sustainability accounting and reporting, has become a popular tool for reporting and documenting the accomplishments and efforts of different organizations in the direction of sustainable development.

Green accounting, according to Yeasin (2021), is a practice that integrates ecological costs, effects, and significance; it blends environmental and financial information about a company, and it will undoubtedly have a long-term impact on the organization's ecological and financial policies. According to Benson, et al. (2021), green accounting is a kind of accounting that aims to include environmental costs in the financial outcomes of operations. Information regarding the business's operational performance in relation to environmental protection is the aim (Etim, et al., 2024). Damieibi (2023) claimed that "green accounting" primarily focusses on how an organization operates in relation to the environment. In the end, an organization's environmental impact will match its overall economic impact.

With an average daily production of 1.22 million barrels and approximately 92% of all national exports, Nigeria's petroleum industry is estimated to contribute 5.5% of the country's GDP (Sasu, 2024). Numerous upstream, midstream, and downstream operations carried out by the Nigerian oil and gas industry significantly contaminate the environment. As of 2020, Nigeria was the tenth-largest oil producer in the world according to the Environmental Performance Index, with the highest emissions-to-production ratio. International oil companies such as Shell and ExxonMobil are responsible for the highest emissions from petrol flares and oil spills. According to the Index, Nigeria's oil and gas sector has a poor record when compared to global averages, with higher rates of gas flaring and oil spills (Stakeholder Democracy Network, 2020).

Therefore, it is impossible to discuss green accounting without mentioning this sector of the economy. Etim et al. (2024) asserted that market-driven environmental regulations have supplanted the traditional "command and control" approach, substituting pollution prevention strategies for pollution cleaning. They also believed that management might need to make some additional decisions after deciding on the best pollution prevention strategy. These choices could include green management accounting and appropriate environmental costing to lessen the environmental effect of the company's operations. However, a study by Edeh, et el. (2020) found that Nigerian oil companies are not required by law to report on their environmental practices. As a result, according to Etim et al. (2024), the majority of oil and gas companies gives green or environmental reporting little to no thought, which has disastrous effects on the environment and host community. In addition to harming the environment, this corporate disregard and avoidance of sustainability reporting practices prevents shareholders and other potential investors from viewing financial accounting data accurately or fairly. This study examined the potential effects on market share value of Nigerian oil and gas companies' investments in green accounting practices.

Sadly, the high-level business these companies do in different parts of the country hasn't been able to make the lives of the people living there much better or have a positive effect on the growth of infrastructure. Companies that significantly impact this tragedy have published well-written sustainability reports discussing their effects on the environment and society. It is evident that these large corporations generate significant profits through their direct or indirect business activities in key regions of the country, where their goods and services are frequently traded. However, that money doesn't seem to be enough to clean up those areas for future generations. Air pollution is a big part of the information on environmental sustainability in the sustainable development goals (SDGs). Because of this, visionary organizations can't ignore it, and they can't let their sustainability and corporate social responsibility (CSR) activities be just words on these issues anymore. This doesn't mean that Nigerian companies' efforts to adopt integrated reporting are any less important.

The main focus should be on actions and activities that affect sustainability, similar to how financial reports are prioritized, in order to make green accounting more appealing and useful. According to a KPMG survey of Nigeria's top 100 companies by revenue, Nigeria's sustainability accounting practices were not very similar to those of South Africa and the UK, which had 55%, 95%, and 93%, respectively (KPMG, 2023). The survey said that these percentages showed the percentage of businesses in these countries that put ESG or sustainability information in their annual reports. The lack of clarity around sustainability reporting in Nigeria is mostly due to the fact that regulatory bodies like the Financial Reporting Council of Nigeria (FRCN) and the Corporate Affairs Commission (CAC) don't require companies to make sustainability reports. It's very important for companies to give detailed green accounting reports, especially those in the oil and gas industry, which do a lot of work that harms the environment and other social and environmental problems. The broad objective of this study was to determine the extent to which green accounting practices affect the firm market share value of quoted firms in the oil and gas sector.

Literature Review

Green Accounting

Accounting for the Environment Greenham (2010) said that green accounting is a way to look at the effects of human activity on the earth's ecosystems and resources, not just the financial effects. The traditional financial accounting system only looks at transactions that involve money or can be valued in money terms. This is what makes it different from green accounting. Green accounting is a way of keeping track of money that tries to include environmental costs in the financial results of operations (Benson et al., 2021). It goes beyond the usual accounting system, which only looks at costs like labour, materials, and other expenses that directly affect the organization’s activities. It also gives more room to look at social, environmental, and economic costs that are outside of the organization. Green accounting's goals are to promote sustainable development, keep a good relationship with the community, and carry out environmental conservation activities that are both effective and efficient (Etim et al., 2024). Akpan and Nkanta (2023) defined green accounting as all the things that a company's management does to keep the environment "clean" and "green" by using new and long-lasting methods that make the company look "eco-friendly" and responsible.

Environmental Reporting

According to Lloyd (2017), environmental reporting is a type of accounting that focuses on keeping track of the environment and its health. Radzi, et al. (2023) talked about the "environmental pillar" of ESG reporting and green accounting as a way to judge how well a company is doing at protecting the environment. This includes trying to stop climate change, lower carbon emissions, control pollution and waste that comes from making things, and use energy and water wisely while also focusing on biodiversity and deforestation. Shil and Iqbal (2005) said that the goal of environmental reporting is to give an organization's management better information about the real private environmental costs that the organization is already paying. He said that it was the use of environmental costs and information in different accounting methods.

Social Reporting

Radzi et al. (2023) went on to explain that the "social reporting" is the part of a business that shows how it treats people and relationships and the steps it takes to keep customers happy, protect their privacy and security, consider gender and diversity, involve employees, build community relations, and uphold human rights and labour standards. Jose and Leire (2021) averred that social reporting can help us expand traditional accounting in two ways: first, it can include the non-financial value that organizations create or lose in their interactions with society, such as emotional value; and second, it can shift the focus from just investors and financiers to all the different groups that are affected by the organization. It is a methodical look at the worth that a business creates or destroys in relation to its stakeholders or the community where it is located (Richmond, Mook & Jack, 2003).

Governance Reporting

The "governance reporting" emphasis at the rules for running a business, including how to make a board, an audit committee, and programs for whistleblowers (Radzi et al., 2023). It also looks at how to stop bribery and corruption, how to pay executives, how to lobby, and how to give money to political campaigns. According to Donohue (2023), a corporate governance report should include a description of the company's governance procedures and compliance, information about the board's composition, statements about the company's performance, and information about how the company follows the best practices for good corporate governance.

Value of the firm

The market value of a company is a set of financial and non-financial measures that show how well it is meeting its goals and what the results are. Investors' opinions of a company's managers' ability to predict and deal with changes in the company's economic environment can have an effect on the company's market value (Emeka-Nwokeji, 2019).

Ratio of price to earnings (P/E)

The price-to-earnings ratio (PER) illustrates the difference between a company's share price and its earnings per share. It tells potential investors whether a company's stock is worth more or less than it is. This ratio helps figure out how much a business is worth on the market.

Empirical review

Appah, et al. (2025) the goal of this study is to evaluate the carbon accounting practices and financial performance of publicly traded manufacturing companies in Nigeria. The study used a quantitative research design and got its data from both primary and secondary sources. The main data came from a structured questionnaire sent to 312 accountants who worked for listed manufacturing companies in Nigeria. We used SmartPLS version 4 to do structural equation modelling on the data we got from the different respondents. The results of the data analysis showed that there is a positive but not significant relationship between the amount of carbon emissions, the sources of emissions, the categories of emissions, and the factors that affect emissions. These factors have a positive but not significant effect on the return on assets of listed manufacturing companies in Nigeria. Also, reporting boundaries have a small and negative effect on return on assets. We came to the conclusion that carbon emission accounting has an effect on the financial performance of publicly traded manufacturing companies in Nigeria based on the results. So, we suggested that regulatory bodies should come up with the right carbon emission policies that would help listed companies do better financially. This would help keep the economy stable by giving people more reasons to invest in technologies that don't release a lot of carbon.

Appah, et al. (2025) examined the carbon accounting and financial performance of publicly traded manufacturing companies in Nigeria. The study used a quantitative research design and got its data from both primary and secondary sources. The main data came from structured questionnaires filled out by 312 accountants who worked for listed manufacturing companies in Nigeria. We used SmartPLS version 4 to analyse the data we got from each respondent using structural equation modelling. The analysis of the data showed that there was a positive but not significant link between the amount of carbon emissions, the sources of emissions, the types of emissions, and the factors that cause emissions that had a positive but not significant effect on the return on assets of publicly traded manufacturing companies in Nigeria. Also, reporting boundaries and the size of a business have a small and negative effect on return on assets. The study found that carbon emission accounting affects the financial performance of publicly traded manufacturing companies in Nigeria. So, among other things, the study suggested that managers of publicly traded manufacturing companies should take carbon reduction strategies seriously because carbon emissions lower the value of shareholders. This means that managers can increase the value of shareholders by putting in place policies to cut down on emissions that will improve their financial and market performance.

Etim et al. (2024) did some exploratory research to find out how green accounting affects the financial performance of oil and gas companies in Nigeria between 2013-2022. This study was based on the idea that green accounting could improve the quality of corporate goods and services by making operations more efficient and cutting down on waste. The study's results showed that green accounting had a big effect on the financial performance of publicly traded oil and gas companies in Nigeria during the time studied. The study suggested that oil and gas companies' management should pay more attention to the environmental costs of doing business and the effects they have on the social and environmental ecosystem.

Doobee, et al. (2024) examined how green accounting affects the performance of Nigerian oil and gas companies that are publicly traded. They used data from 2010 to 2023 that they got from the Nigerian Exchange Group (NGX), the companies' annual reports. The study data were analyzed using the multiple regression analysis, panel cointegration tests, Hausman tests, panel unit roots. The study found that green accounting practices have a big effect on Tobin's Q. These findings led to the conclusion that green accounting practices could have a big effect on performance metrics. The study also suggested that oil and gas companies should create sustainability strategies that are in line with their goals to prioritise green accounting investments with high Tobin's Q, involve different groups of stakeholders in the decision-making process, and measure their impact on society.

Etty, et al. (2024) looked into how green accounting and firm value work together to affect financial performance. The study said that good green accounting can make a company look better to investors and customers, which can lead to an increase in the value of the company. The study looked at manufacturing companies and data from their annual reports from 2021 to 2023. The study used the EViews 10 program to do path analysis. The results showed that green accounting doesn't affect how well companies do, but firm value does have a positive effect on how well they do financially. The study came to the conclusion that manufacturing companies can better understand their environmental impact, how investors see them, and their overall financial health by combining green accounting and corporate value in their financial performance analysis.

Erly and Nurhastuty (2024) started a study on how green accounting and disclosing carbon emissions can help businesses become more valuable. The study observed 20 companies over a four-year period, from 2020 to 2023. We used multiple linear regression analysis to find out how green accounting and carbon emission disclosure affect the value of a company. The study's results showed that green accounting has a statistically significant effect on the value of a company. Foreign ownership, which was used as a moderating variable, made the positive and significant effect of green accounting on firm value even stronger.

Dewi, et al. (2024) examined how green accounting, financial performance, and CSR affect a company's value, using the size of the company as a variable. The study gathered data from nine (9) mining companies that met the requirements for the research. Data analysis was done with SPSS version 26. The study's findings showed that green accounting, financial performance, and CSR do not have a big effect on the size of a company. On the other hand, when firm value was looked at, it was found that green accounting, firm size, and CSR do not have a big effect on firm value, but financial performance does have a big effect on firm value. Firm size, on the other hand, was found to be a mediating variable that affected the effect of green accounting on firm value but not the effect of financial performance or CSR on firm value.

Astari, et al. (2023) examined how green accounting and sustainability reports affect the value of companies in Indonesia. They found that using green accounting and sharing sustainability reports is a beneficial way to deal with environmental problems caused by the manufacturing industry. The study looked at manufacturing companies and gathered information about how they talked about the environment over a three-year period, from 2019 to 2021. The data used were regressed using the multiple linear regression analysis. The study found that while using green accounting methods increases a company's value, releasing sustainability reports decreases it because, despite the company continually improving its reports, the increase in perceived value does not align with the actual increase in firm value.

From 2012 to 2021, Akpan and Nkanta (2023) evaluated the link between green accounting practices and the value of shareholders in Nigerian listed consumer goods companies. The study used an ex post facto research design and secondary data, and it used least square dummy variable regression to ascertain the data that had been collected. The study's independent variable, green accounting, was measured by how much biodiversity, emissions, waste, water, and effluents were disclosed, as well as how well the company followed environmental rules. On the other hand, the dependent variable, the shareholder's value, was shown by the shareholder's value added (SHVA). The study's results showed that all measures of green accounting had a positive and statistically significant effect on the value added to shareholders of listed consumer goods companies in Nigeria during the observation period. The study ended with the suggestion that all businesses should have to follow green accounting rules. This shows to different groups of stakeholders that the businesses are "green and eco-friendly", which is good for shareholders' value.

Obiora, et al. (2022) investigated environmental reporting affects the profits of publicly traded companies in Nigeria from 2017 to 2021. The study used the environmental disclosure index as the independent variable and financial performance, such as return on equity (ROE), return on assets (ROA), and return on capital employed (ROCE), as the dependent variable. The study used Freeman's stakeholder theory and an ex post facto research design. The study looked at five companies from different parts of the economy. It got information about these companies from their annual reports and statements of accounts. It then used descriptive analysis, ordinary least squares regression, and correlation analysis to examine the data. The analysis showed that environmental reporting disclosure has a big effect on the return on assets and return on equity of publicly traded companies in Nigeria. It does, however, have a small effect on the return on capital employed by the chosen companies. The study found that environmental reporting disclosure has a big effect on financial performance. It also said that companies should work hard to adopt consistent standards for reporting and disclosing environmental practices.

Obiora, et al. (2022) looked into how environmental reporting practices and social responsibility disclosures affect the values of publicly traded oil and gas companies in Nigeria. To find the right connection between the study's variables, we used the Global Reporting Index (GRI) G4 to measure environmental reporting and social responsibility disclosure. Net assets per share were used to measure firm value, which was the dependent variable. The study analysed data from 2016 to 2020 using an ordinary least squares regression model. The study's results showed that environmental reporting and social responsibility disclosures have a positive and statistically significant effect on the value of Nigerian oil and gas companies that are listed. The study also suggested that companies should have to include environmental information in their annual reports.

Nkwoji (2021) used an explanatory, historical, and correlational research design to look at the link between environmental reporting and the profits of publicly traded companies in Nigeria. They used data from 2012 to 2017 from annual financial statements, annual sustainability reports, and annual reports of global tax payments to nations by the quoted oil firms, among other sources. The study's findings showed that there is no strong link between the oil and gas companies' environmental spending and their net profit. The study ended with a suggestion that the management of the companies involved should focus on making enough environmental spending and making it public in order to build trust with stakeholders.

Iliemena (2020) evaluated environmental reporting practices affected the performance of publicly traded oil and gas companies in Nigeria. The study used information from the annual reports of the listed companies, the Nigerian Exchange Group fact books, and the corporate sustainability reports of the listed companies. This information was then analysed using simple linear regression. The study's results showed that environmental reporting practices have a statistically significant and positive effect on both turnover and ROCE, but a positive but not statistically significant effect on net profit.

Dian, et al. (2019) investigated at how environmental management accounting affects green innovation and how that affects the value of a company. The study showed that businesses that can make green innovations will have an edge over their competitors and will also see a rise in the value of the company. Dian et al. said that "using green innovation measures will help with the implementation of environmental management accounting (EMA) and help lessen the overall damage to the environment caused by the company's operations." The study used 277 companies as samples, and the results showed that green innovation (GI) has a big impact on both firm value (FV) and environmental management accounting.

Whetman (2017) looked at how sustainability reporting affected the profits of 95 companies from different sectors in 2015–2016. They used sustainability reporting disclosures as their independent variable and profitability measurements like returns on equity (ROE), returns on assets (ROA), and profit margin as their dependent variable. They also looked at the level of institutional ownership of the companies as a control or moderating variable. The study's results showed that there is a positive link between corporate social responsibility and all measures of profitability for companies with low institutional ownership. The opposite is true for companies with a higher percentage of institutional ownership.

Che-Ahmad, et al. (2015) did a real-world study in Nigeria to look into environmental reporting and company profitability, with a focus on whether or not firm-specific effects matter. The study used environmental disclosure information from the audited annual reports of the chosen companies. The data were then analysed using regression analysis with the ordinary least squares method. The stakeholder theory was also used in the study. This theory says that management should focus on serving the interests of all stakeholders in the best way possible. The researchers say that the study's results have some problems, such as only looking at companies listed on the first-tier market and not all companies listed on the Nigerian Exchange Group (NGX), only looking at data from one year (2012), and only getting data from one source. The study's results showed that there is a statistically significant link between a company's financial performance and its environmental reporting disclosure when firm size, industry type, and auditor firm type are taken into account as firm-specific variables. The study also suggested that businesses should stop focussing only on making money and instead make sure they are aware of how their actions affect people and the environment.

Bassey, et al. (2013) did a study on how environmental reporting and reporting affect the performance of certain oil and gas companies. The study was limited to the Niger Delta region of Nigeria. The study used data from both primary and secondary sources and looked at it using Pearson's product moment correlational analysis. The study was based on theories like the stakeholders' theory, the legitimacy theory, and the positive accounting theory. The study's results showed that environmental reporting has a big effect on how much money a company makes. The results also showed that the size of a company is positively related to its willingness to share environmental information in its annual reports. This is because companies that are seen more by the public are more likely to share information they need to improve their reputation.

A lot of different academics and researchers have done a lot of holistic research on how green accounting practices affect the financial performance, profitability, and market value of businesses in different sectors and countries, including Nigeria. The study evaluated at a wide range of literature, including companies in the manufacturing sector (Astari et al. 2023), the mining sector (Dewi et al. 2024), the production of consumer goods (Akpan et al. 2023), the non-financial sector (Olagunju et al. 2022), and, of course, a number of literatures that focused on the oil and gas sector (Etim et al. 2024; Doobee et al. 2024; Obiora et al. 2021; Iliemena, 2020 The literature we looked at showed that most researchers only looked at how environmental reporting disclosures affect a company's profits and financial performance. They did not look at social reporting or governance reporting (Nkwoji, 2021; Iliemena, 2020; Che-Ahmad et al., 2015; Bassey et al., 2013). A few studies looked at how all three parts of green accounting (Etty et al. 2024; Whetman, 2017) affect the market value of oil and gas companies in Nigeria (Dewi, 2024; Astari et al. 2023; Akpan et al. 2023; Erly et al. 2024; Obiora et al. 2022).

Most of the research that focused on how green accounting affects firm value was done in the Niger Delta region of Nigeria, which is only the south-south part of the country (Bassey, 2013). Most of the literature that was reviewed only used the stakeholders' theory, which Freeman (1984) came up with (Dewi, 2024; Obiora et al., 2022; Che-Ahmad et al., 2015), and in a few other cases, the legitimacy theory to explain the link between green accounting and firm performance, profitability, and value. The gaps found in the literature show that more work needs to be done. To fill in these gaps, this study examined green accounting affects the market value of quoted oil and gas companies in Nigeria over a six-year period from 2018 to 2023, using environmental, social, and governance reporting disclosures that were moderated with firm size.

Theoretical Review

This study focused on a few important theories to explain how green accounting practices affect the market value of publicly traded oil and gas companies. After reviewing various literatures on environmental, social, and governance reporting.

Stakeholders' theory

Freeman (1984) introduced the stakeholders' theory. The main assumption of the theory is that the effectiveness of an organization is measured by its ability to satisfy not only its shareholders but also all other agents who have a stake in it. This theory explains that organizations ought to consider and protect the interests of different individuals or groups affected by their actions. By this, as advocated by Freeman (1984), this theory maintains that all stakeholders have the right to be treated reasonably by the organization. Stakeholders, as used, implies that the organization should be concerned not just for its shareholders but also for other groups like employees, local communities, suppliers, investors and potential investors, banks, competitors, customers, governments and other non-governmental organizations. More so, according to Akpan and Nkanta (2023), this theory proposes an increased level of environmental awareness which goes on to create the need for companies to extend corporate planning to include the non-traditional stakeholders to adjust to changing social demands. As stakeholder influence becomes crucial for corporate image (or firm market value and investor perception) and comparative advantage, companies manage their stakeholder relationships by providing information, often in the form of voluntary disclosures in the annual reports or on their websites (Akpan & Nkanta, 2023).

Relating this theory to the oil and gas sector of the Nigerian economy, there is a need for firms within this sector to take into consideration not just the financial implications of their operations and how they may benefit their shareholders but also to take cognizance of how their operations affect other groups of stakeholders – the community wherein they operate, employees, the general public and several others. Oil and gas firms can do this by taking into account the impact of their operations on the environment around them and seeking ways to implement countermeasures for negative impacts of their operations, as well as ways to positively benefit or give back to the society within which they operate.

Agency theory

The agency theory, as put forth by Jensen and Meckling in 1976, provided a universal explanation for organizational behaviour by placing emphasis on the relationship between the manager as the "agent" of the company and the shareholder as the "principal" (Zogning, 2017). Jensen and Meckling (1976) defined the agency relationship to be a contract under which one or more persons, known as the principals, engage another person, known as the agent, to perform some services on their behalf. This engagement will typically involve delegating a degree of authority for decision-making to the agent. Akpan and Nkanta (2023) highlighted that an agency problem arises due to a conflict of interests in the subsisting relationship between the company's management and the investors/shareholders. They explained that seeing that investors invested their funds into a company without any intention to actively participate in its management, it creates an incentive for the managers to "misuse" the investors' funds by making self-centered decisions.

As stated by Zogning (2017), this theory is based on two assumptions, the first being that individuals seek to maximize their utility and the second being that they are likely to benefit from the incompleteness of contracts. Relating this theory to this study, there exists an agency relationship between the firms in question and not only the shareholders but also all groups of individuals who have a stake in such firms. Where these stakeholders do not receive sufficient information from the management (agent), such that the management "have the competitive benefit of information within the company over that of the stakeholders", a situation of information asymmetry is created, according to Arnold and Lange (2004), as cited in Akpan and Nkanta (2023). This theory is important for this study because it aims to stop information gaps between both sides of the agency relationship and to make sure that all relevant stakeholders receive the necessary information about a company's green accounting disclosures and the resources it uses for different sustainable activities.

Legitimacy theory

The legitimacy theory was developed in 1975 by Dowling and Pfeffer, who maintained that organizations seek social legitimacy by aligning their actions, decisions, and communications with stakeholder expectations. Suchman (1995) described the legitimacy in question to be the perceived right of an organization to exist within a societal context. He considered it to be a generalized perception that the actions of an entity are desirable, proper or appropriate within a socially constructed system of norms, values, beliefs and decisions. Schiopoiu et al. (2013) expanded on this description by presenting the legitimacy theory to be a mechanism which supports organizations in implementing and developing voluntary social and environmental disclosures to achieve their social contract. This social contract, as highlighted, will enable an organization to survive in changing environments and attain recognition of its objectives. In matters of green accounting disclosures, a failure to consistently and effectively make necessary disclosures regarding an organization’s commitment to achieving various sustainability goals and objectives may lead to a loss of legitimacy and potential destruction of an organization’s image, which will ultimately bring about a decrease in its market value. Hence, this also stands as a key theory for this study.

Methodology

This research adopted an ex-post-facto research design, which was historical and correlational in nature. The historical part of the design used data that has already been published over time, specifically the spending of oil and gas companies in Nigeria related to different aspects of green accounting during the chosen period, while the correlational part showed how green accounting affects a company's market share value.

The study considered seven (7) oil and gas companies quoted on the Nigerian Exchange Group (NGX) carrying out operations in Nigeria as at 2023 and which have consistently submitted their audited financial statements from 2018 to 2023. This process ensured equal representation and minimized selection bias. These quoted companies included Seplat Energy Plc, Conoil Plc, Eterna Plc, TotalEnergies SE, MRS Oil and Gas Plc, Japaul Gold &Ventures Plc, and Oando Plc.

The research made use of a panel data regression analysis method, , method to determine the relationship between green accounting and firm market share value. The panel data regression analysis was suitable for analyzing the changes in the variables over the time period covered by the study. This method of data analysis also provides control for the confounding variable, which, in this case, is firm size. The study also made use of descriptive analysis to investigate the characteristics of the selected sample. The analysis was carried out using statistical software such as Stata 19 and Microsoft Excel.

Operational Measurement of Variables

Variable Name	Definition/Measurement of Variable
Firm market value	This variable was measured using the price earnings ratio of the quoted oil and gas firms.
Green accounting practices (environmental, social and governance (ESG) disclosures)	Measured using dummy variables of 1 and 0; where 1 signifies the presence of ESG disclosures and 0 signifies its absence.
Firm size	Measured as total assets (TA) of the quoted oil and gas firms.

Model Specification

This study made use of the model specified below:

$$FMV_{it} = \alpha_0 + \beta_1 ENVR_{it} + \beta_2 SOCR_{it} + \beta_3 GOVR_{it} + \beta_4 FSIZ_{it} + \varepsilon_{it}$$

Where:

Dependent variable:

FMV = Firm market value

Independent variables:

ENVR = Environmental reporting
SOCR = Social reporting
GOVR = Governance reporting

Control Variable:

FSIZ = Firm size
β_{1-4} = variable coefficients
ε = stochastic error term

Results and Discussion

The table shows the firm market value of each firm over the time period which was represented by their price earnings ratios, the size of each firm, as represented by their total assets, and “1”s and “0”s which indicted a presence or an absence, respectively, of environmental, social and governance reporting.

Table 1 shows the descriptive statistics of this study, while Table 2 shows the frequencies of environmental, social and governance reporting of the firms selected for the purpose of this study. From Table 2, it can be seen that most firms have greater regard for environmental accounting reporting, in line with the requirements of global sustainability accounting standards like Global Reporting Initiatives (GRI), as thirty-four (34) out of a total of forty-two (42) observances made environmental disclosures in their audited annual reports or published sustainability reports, which represents a compliance of about 81%, and only 8 showed an absence of environmental reporting. The table also shows that all firms, within the 6-year period under observation made the required social and governance reports in their audited annual reports or published sustainability reports.

Table 1: Summary of descriptive statistics of firm market value (dependent variable) and firm size (moderating variable)

Variable	Obs.	Mean	Std. dev.	Min	Max
FMV	42	1.306429	7.191926	-32.54	11.24
FSIZ	42	477,000,000,000	738,000,000,000	13,100,000,000	3,050,000,000,000

Source: *SPSS Output*

Table 2: Summary of frequencies of environmental, social and governance reporting of specified companies

	YES	NO
ENVR	34	8
SOCR	42	0
GOVR	42	0

Source: researcher's computation, 2025

From Table 1, it has been observed that the dependent variable (firm market value, FMV) has a mean of 1.31 with a standard deviation of 7.19, which shows a wide disparity in the market values of the quoted oil and gas firms. The maximum value of firm market value was 11.24, while the minimum was -32.54. As for the moderating variable (firm size, FSIZ), the computed mean was 477 billion naira, while the standard deviation was 738 billion naira. The maximum firm size attained by the firms throughout the period of the study was 3.05 trillion naira and the minimum was 13.1 billion naira.

Table 3: Panel data regression analysis of the relationships between green accounting and firm market value

VARIABLES	Fixed effect FMV	Random effect FMV
ENVR	1.012(0.87)	1.59(0.66)
SOCR	0	0
GOVR	0	0
FSIZ	5.01 (0.87)	-3.03 (0.87)
CONSTANT	0.249 (0.96)	0.163 (0.96)
R sq	0.0017	0.0092
Rho	0.18	0.125

(Note: *Values in bracket represent p values of the coefficients)*
Source: SPSS Output

Table 3 represents the results obtained from the linear regression analysis for the study. From the table, it can be observed that there is a positive but non-significant relationship between environmental reporting (ENVR) and firm market value which is shown by the p-value of 0.87 obtained from the fixed effect regression and the p-value of 0.66 obtained from the random effect regression. The same applies for the social reporting and governance reporting variables under green accounting; the results of the analysis showed a non-significant relationship between the social reporting and governance reporting variables and firm market value. From the table, it is also observed that firm size, as a moderating variable, had a positive but non-significant effect on green accounting and firm market value, as inferred from its p-value of 0.87 from the fixed effect regression and a negative and non-significant effect as shown in the random effect regression p-value of 0.87.

Test of hypotheses

Each of the four null hypothetical tests were based on same decision rule; we reject null hypothesis if p-value is less than 5% (or 0.05) conventional level, otherwise we fail to reject. The following hypotheses were tested:

Environmental reporting and value of quoted oil and gas firms in Nigeria.

The data analysis revealed a coefficient of 1.012 with a p-value of 0.87 for the fixed effect regression and a coefficient of 1.59 and a p-value of 0.66 for the random effect regression. Given that the p-value is non-significant (p is greater than 0.05), we fail to reject the null hypothesis. This therefore suggests that environmental reporting does not have a statistically significant effect on the firm market value of quoted oil and gas firms in Nigeria.

Social reporting and value of quoted oil and gas firms in Nigeria

From the data collected, all firms made social accounting reports for the relevant years. Therefore, the social reporting dummy variable was omitted from the linear regression analysis. As a result, the data analysis revealed a coefficient of 0 and no available p-value. Given this result, it can be concluded that social reporting has no significant effect on firm market value of quoted oil and gas firms in Nigeria.

Governance reporting and value of quoted oil and gas firms in Nigeria

From the data collected, all firms made governance accounting reports for the relevant years. Therefore, the governance reporting dummy variable was omitted from the linear regression analysis. As a result, the data analysis revealed a coefficient of 0 and no available p-value. Given this result, it can be concluded that governance reporting has no significant effect on firm market value of quoted oil and gas firms in Nigeria.

Moderating effect of Firm size on green accounting and value of quoted oil and gas firms in Nigeria.

The data analysis revealed a coefficient of 5.01 with a p-value of 0.87. Given that the p-value is non-significant (p is greater than 0.05), we cannot reject null hypothesis. This therefore suggests that firm size, as a moderating variable does not have a statistically significant effect on green accounting and the firm market value of quoted oil and gas firms in Nigeria.

The findings from the data analysis are discussed below:

Environmental Reporting and Firm Market Value of quoted oil and gas firms in Nigeria

Environmental reporting, as the first component of green accounting, was indicated using data and statements disclosed by the quoted firms in their audited annual reports and sustainability reports regarding issues like biodiversity, greenhouse gas emission, gas flaring, oil spillage, investment in renewable energy production. The results from the data analysis showed that there is a positive but statistically non-significant effect of environmental reporting on firm market value of quoted oil and gas firms in Nigeria. This result contradicted the findings of Etim et al. (2024) who conducted a study to assess the effects of green accounting on financial performance of quoted oil and gas firms in Nigeria between 2013 and 2022, working with independent variables which included environmental accounting disclosures. The findings of the study showed that there is a positive and significant effect of carbon emission disclosure of the market value of the relevant companies.

It equally contradicted the findings of Obiora et al. (2022) who carried out a study on the impact of environmental accounting practices and social responsibility disclosures on firm value of listed oil and gas firms in Nigeria. The study carried out showed that environmental accounting disclosures (EAD) had a positive and statistically significant effect on the value of listed oil and gas firms. The same was obtainable in relation with a study by Iliemena (2020) on environmental accounting practices and corporate performance of listed oil and gas companies in Nigeria whose findings revealed environmental accounting practices to have a positive and significant effect on the corporate performance of listed oil and gas firms in Nigeria, as well as the study of Adebayo et al. (2022) on environmental accounting disclosure and market value of listed non-financial firms in Nigeria which concluded that environmental accounting has a positive and statistically significant relationship with market value.

Astari et al. (2023), on the other hand, whose study is more consistent with the findings of this research, looked into the effect of green accounting, working with economic, social and environmental components, and disclosure of sustainability reports on firm value and concluded from his research that green accounting and related disclosures have a positive and statistically significant effect on firm value. The findings of this study, however, were in line with the analysis results of Adebanjo et al. (2024) in his study on environmental accounting practices and value of listed firms in Nigeria, which concluded waste management disclosure to have a positive and statistically insignificant relationship with price earnings ratio.

Social reporting and firm market value of quoted oil and gas firms in Nigeria
Social reporting, the second component of green accounting, was indicated using data and statements disclosed by the quoted firms in their audited annual reports and sustainability reports regarding issues like employee welfare, gender diversity, charitable donations, community engagement, health and safety, human rights, etc. The results from the data analysis showed that social reporting has no effect on firm market value of quoted oil and gas firms in Nigeria.

The findings of this study contradicted the findings of Obiora et al. (2022) who carried out a study on the impact of environmental accounting practices and social responsibility disclosures on firm value of listed oil and gas firms in Nigeria. The study carried out showed that social responsibility disclosures (SRD) had a positive and statistically significant effect on the value of listed oil and gas firms. A study by Dewi et al. (2024) involving an assessment of the effect of Corporate Social Responsibility disclosures on firm value obtained results indicating that there is a positive and statistically insignificant relationship between CSR and firm value, thus contradicting the results of this study.

The result from this study was also contradicted by a study by Astari (2023) on green accounting and disclosure of sustainability report on firm values where sustainability reporting disclosures including social impacts had a negative but significant effect on the value of listed firms.

The findings of this study align more with the findings of a study by Babalola (2012) on the effect of corporate social responsibility (CSR) on firm profitability in Nigeria, where CSR was found to have a negative and statistically insignificant effect on firm profitability, as well as a study on corporate social responsibility (CSR) and firms' financial performance by Emamoke and Omodero (2021), whose findings established a positive but insignificant effect of CSR on financial performance of firms.

Governance reporting and firm market value of quoted oil and gas firms in Nigeria
Governance reporting, the third and final component of green accounting, was indicated using data and statements disclosed by the quoted firms in their audited annual reports and sustainability reports regarding issues like board composition, size and committees, board compensation, risk management, board appointments, etc. The results from the data analysis showed that social reporting has no effect on firm market value of quoted oil and gas firms in Nigeria.

The findings of this study contradict the findings of a study on the impact of corporate governance practices and profitability of commercial banks in Nigeria by Tubotamuno-Ojas and Agbonma (2025) which established a positive and statistically significant effect of corporate governance practices on firm profitability. It equally contradicted the study of Ubi, et al. (2017) on the effect of corporate governance practices on profitability and efficiency of deposit money banks in Nigeria which established a positive and significant relationship between corporate governance practices and profitability.

The findings of this study also contradicted the findings of Bogamuwa and Kaht (2021) on the effect of corporate governance practices on firm's profitability which showed that corporate governance factors like audit committee independence, board independence, board size, etc have a positive and significant effect on firm profitability.

The findings of this study go along with the findings of Nandal and Kumari (2014) on the impact of corporate governance practices on firm profitability. The study found that board size as the independent variable had a statistically non-significant effect on firm profitability.

Conclusion and Recommendations

Green accounting extends beyond the financial affairs of a company and accounts for the impact of its activities on the environment and the community around it, providing clear information for the benefit of all stakeholders. It advocates not only for financial investors but for groups with reasonable non-financial interests in the company. Environmental, social and governance reporting serves a tools through which an organization can step up and take responsibility for its activities and how they affect the environment around it, guiding it towards more sustainable strategies and policies. The data analyzed for the purpose of this research showed a positive but statistically non-significant effect of green accounting on firm market value of quoted oil and gas firms in Nigeria. While the achieved result may have been statistically non-significant, there remains a positive impact that green accounting and reporting is able to exert on the market value of the relevant firms. This means that there is still a degree of influence, though not strong enough, which green accounting and reporting is able to place on shareholders' and other stakeholders' interests in the relevant firms.

This study advocates for heightened compliance of quoted oil and gas firms in Nigeria to global sustainability reporting standards as these serve as valuable information for all users and stakeholders of accounting information. In view of this, this study recommends that:

1. The management of quoted oil and gas firms in Nigeria should commit more to making green accounting disclosures, not only regarding corporate social responsibility and governance but also as it regards the impact of their activities on the environment within which they operate.
2. Adherence to Sustainability reporting standards and initiatives should be made compulsory for companies carrying out business operations within Nigeria, and various

regulatory authorities should take better measures to strengthen the enforcement of these reporting standards.

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BOARD ATTRIBUTES AND ADOPTION OF INTEGRATED REPORTING OF LISTED INDUSTRIAL GOODS FIRMS IN NIGERIA

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Abstract
This paper's objective is to empirically examine how board attributes affect the integrated reporting of Nigerian listed industrial goods companies. There are eight (8) industrial goods companies in the sample. The data from the yearly report for the years 2019–2023 was analyzed using multiple regression. The study discovered that while board financial expertise and board gender diversity had no effect on the adoption of integrated reporting of listed industrial products firms in Nigeria, board independence and board age diversity have a statistically significant impact. Based on the results, it recommended that management of industrial goods firms in Nigeria should maintain non-executive directors on the board. This will enable them to ensure any changes that would create value to the firms and provide confidence in stakeholders will be adopted. Furthermore, the management should appoint more young directors, this will enable them to modernise the entire system of the companies by bringing new innovations to meet the global changes.

Keywords: *Integrated Reporting, Board Expertise, Board Independence, Board Diversity*

Introduction
Information regarding the corporate environment and decision-making process plays a very important role. Financial reporting has a huge impact on how the corporate community makes decisions and how investors choose to invest (Dey, 2020). In spite of the fact that, the financial reporting has given information on monetary operation as it were based on conventional framework. It ignored other important angles of information that are exceptionally imperative on the eye of stakeholders such as investors, policy makers, employees, government agencies and creditors. This, in turn, has necessitated the need for a company report that includes the use of a modern system that reveals company information allied to all aspects of operations. This modern system is recognized as Integrated Reporting (IR) and has kept on attracting attention globally. The system comes as a result of failure of conventional reporting to give comprehensive information about companies' environmental, social and governance (ESG) activities.

Integrated reporting involves the presentation of all relevant information with respect to a corporate execution in a single report, to develop good understanding of the stakeholders (Cooray, et al., 2020). Integrated reporting would make organization more responsible to shareholders about its execution in accomplishing long term goals. In spite of, the various benefits such as, upgrade corporate reputation, better decision-making, and drawing investors' attention, to companies in unveiling comprehensive information, but the practice of integrated reporting in many countries is still voluntary (India, Malaysia and US), including Nigeria. Very few listed firms prepare and publish their annual report in integrated report model. Integrated reporting in this case has not gotten adequate recognition and acceptance (Adelowotan & Udofia, 2021). Hence, integrated reporting in Nigeria is still in its early stages, with few studies carried out on different angles, especially the ability of corporate board to influence the execution of integrated reporting (Udofia, et al., 2020; Yahaya & Onyabe, 2022). Prior literature, especially those conducted in Nigeria has not investigate to see whether board attributes can influence the management of the corporation to report based on the framework of IIRC. One of the factors that may well be utilized to influence the management to execute integrated reporting is board attributes, because the board of directors are the one responsible of preparing annual report of the companies.

Board attributes are a vital device in governance structure (Chouaibi, et al., 2022), specifically in ensuring the operation is in line with shareholders' interests of maximizing benefit. Companies regard board of directors as a control component and serve as a means of taking steps to disclose relevant information (Fayad, et al., 2022). Therefore, directors are anticipated to influence on the preparation of annual information in form of integrated reporting. Based on the significance relevant to board in the company's activities, this paper considered three aspects of board attributes, such as; financial expertise, independence and diversity (gender and average age). Hence, prior empirical research, including Kamwana and Ombati (2018) and Selven, et al. (2022) discover board financial expertise moves forward corporate reporting, whereas Agyemang, et al. (2019); Anatami, et al. (2019) get a constructive commitment of board independence on firms' disclosure performance. Too, Study like that of Naseem, et al. (2017) and Jahid, et al. (2020) inspected the board diversity on integrated reporting. Hence, the purpose of this article is to investigate how board characteristics affect integrated reporting in Nigeria.

Furthermore, most studies were carried out outside of Nigeria on integrated reporting (Ahmed, et al., 2017; Albetairi, et al., 2018). In view of that, those studies conduct in Nigeria concentrated on other segment of the Nigerian market like banking sector (Adegbite, et al., 2019), insurance sector (Mirzael, 2019). Even though, these studies was conducted in Nigeria, considered financial sector and the very few conducted on non-financial sector are mainly concentrated on oil and gas firms, therefore this firms can easily adopted integrated reporting system because of the nature of operations, i.e exploration, economy and social (Alade & Odugbemi, 2022; Abdulwasi'u, et al., 2023; Olagunji, et al., 2023). Other sectors that are mainly operating with the country (Nigeria), find it difficult to comply, not this only but due to the nature of operations. Thus, the need for further study is imperative on the other sectors to testify the influence of application. Therefore, This study looks at how board characteristics affect integrated reporting for Nigerian listed industrial goods companies.

Literature Review

The degree to which integrated reporting was used in the annual reports of the companies listed on the Nigerian Exchange Group (NGX) between 2019 and 2023 was investigated in this research using legitimacy theory. The most often used theoretical justification for voluntary reporting, including integrated reporting, is legitimacy theory (Raimo, et al., 2020; Vitolla, et al., 2020). The legitimacy theory improves comprehension of how businesses construct, implement, and convey social responsibility agreements (Fiori, et al., 2016; Songini, et al., 2022; Tumwebaze, et al., 2021).

According to this theory, in order to satisfy societal demands and lessen information asymmetry, businesses should include more financial and other relevant information on report. Information of all kind of operations should be combined on one reporting system. It is hoped that this integrated report will provide the needed information. Therefore, legitimacy theory is used to underpin all variables of the study.

Board Financial Expertise and Integrated Reporting

Members of board typically come from a variety of educational and professional backgrounds. The efficiency with which the board of directors and their oversight responsibilities should be enhanced by the participation of members with professional, financial, and accounting backgrounds (Fayad, et al., 2022). To encourage corporations to implement integrated reporting, board expertise specifically describes their knowledge and abilities (Mawardani & Harymawan, 2021).

Empirically, Songini, et al. (2022) discovered a favourable connection between board members' educational attainment and the quality of integrated reporting. Alfiero, et al. (2018) confirmed similar findings and emphasized the value of these boards' proficiency in integrated reporting and information dissemination. Unsupported by economic or socio-political theories, Erin and Adegboye (2020) discovered a negligible correlation between board financial expertise and integrated reporting practices. Furthermore, research by Hichri (2022) found that directors with experience in finance and accounting did not significantly contribute to integrated reporting transparency. These divergent findings could be explained by differences in the factors that affect economic, social environments and legal, which lead to variations in board expertise and, eventually, in the disclosure practice. In conclusion, board members with experience in finance and accounting are more likely to have an influence on the disclosure of pertinent, higher-quality information. For that reason, we suggest the first hypothesis:

H1: Board financial expertise has significant influence on integrated reporting.

Board Independence and Integrated Reporting

Furthermore, directors with accounting and finance backgrounds did not significantly help to integrated reporting transparency, according to research by Hichri (2022). Other disparities in results were seen by Omran, et al. (2021), who found an insignificant correlation between boards' expertise and integrated reporting in Australian firms. These conflicting results may be explained by variances in the social, legal, and economic contexts, which in turn influence board expertise and, eventually, disclosure practices. In nutshell, directors with accounting, finance and auditing backgrounds are most likely to influence the release of relevant, superior information.

According to Bueno, et al. (2018), independent directors essentially have a say in a constituted board and encourage management to release an integrated report of forward-looking information. In order to demonstrate their presence on the board, board independence would be more interested in the forward-looking disclosures. Need to make sure that strong corporate governance is promoted by the incorporation of both monetary and non-monetary information (integrated reporting) disclosures in order to further promote transparency and responsibility to the stakeholders (Erin & Adegboye, 2020).

Previous studies that examined the association between board independence and IR disclosure in other region have produced contradictory conclusions. More board independence, for instance, improved integrated reporting information, as demonstrated by Omran, et al. (2021). Likewise, Hichri (2022) discovered a correlation between a higher degree of integrated reporting transparency and a larger proportion of independent directors on board. Their autonomy as non-executive directors and the amount of qualitative integrated reporting, however, have not been linked in numerous other empirical investigations (Cooray, et al., 2020; Songini, et al., 2022). On the other hand, independent directors served as an efficient monitoring system to safeguard the interests of all parties involved (Girella, et al., 2021; Vitolla, et al., 2020). To resolve these contradictory statistical results, the study makes the prediction that businesses with a larger percentage of independent directors will be more likely to enhance integrated reporting disclosure. In light of this, the following hypothesis is put forth:

H2: Board independence has significant influence on integrated reporting.

Board diversity and Integrated Reporting

According to Vitolla, et al. (2020), a diverse board may bring a wealth of knowledge, ideas, and strategies that help the company better manage the requirements of various stakeholder groups. This diversity can be attributable to differences in gender, age, color, education, technical abilities, and expertise. Studies that include this aspect typically concentrate on the gender of directors (Pidani, et al., 2020).

Adding women to the board, according to Khatib, et al. (2019), brought a variety of viewpoints and ideas that improve decision-making. More contact among board members is often encouraged by women directors to enhance understand the desires of the stakeholders. Using a sample of fifty non-financial businesses with reports accessible in the 2014 Integrated Reporting Examples Database, Kilic and Kuzey (2018) examined how corporate governance traits affect integrated reports' forward-looking disclosures. It was discovered that having a diverse mix of genders on boards had a major and beneficial effect. Likewise, Musa, et al. (2020) and Fernández-Temprano and Tejerina-Gaite (2020) found that the gender diversity of the board had a substantial impact on the adoption of integrated reporting.

H3: Board gender diversity has significant influence on integrated reporting.

As previously said, age is a significant diversity constructs that affects corporate information and is not solely dependent on gender when it comes to board diversity. Board age diversity was also the subject of relatively few studies (Giannarakis, 2014; Allini, et al., 2016). Board members' youthfulness can lead to fresh ideas that enhance company operations (Alfiero, et al., 2018). Although there is empirical evidence to be contrary, Allini, et al. (2016) report that younger directors do better than older ones.

According to Alfiero, et al. (2018), one rationale could be that youthful directors are more receptive to change and novel concepts. In terms of governance control, they are also more creative and effective, and they are more likely to take chances (Grimm & Smith, 1991). According to Giannarakis (2014), the amount of CSR disclosure is independent of the board's average age. Information asymmetry is reduced, transparency is enhanced, and older directors are more inclined to provide information concerning risk-related issues (Allini, et al., 2016). Thus, the paper proposes two hypotheses:

H4: Board age diversity has significant influence on integrated reporting.

Methodology

The present study employed historical and correlational research design. Panel least square regression analysis was utilized to investigate the impact of board features on integrated reporting utilizing a five-year balanced panel data set spanning 2019–2023. The paper's population as of December 31, 2023, consisted of all 13 industrial products companies listed on the Nigerian Exchange Group (NGX).

Filtering sampling techniques were adopted to select companies based on the following criteria: i) any company has not required information is excluded. ii) any company that is delisted within the period of the paper is excluded. iii) any company listed within the time frame of the paper is also not included. Based on the criteria, the sample size of the paper is eight (8) industrial goods firms.

Three categories: background (7 items), assurance and reliability (3 items), and form (3 items), are used to measure integrated reporting (Qaderi, et al., 2022). A binary variable was used to evaluate the data, with a value of "1" indicating that the item was disclosed in the company's

annual report and "0" otherwise. Therefore, a maximum score of 13 might be assigned to these areas (Appendix 1). See table 1 below:
IR = Actual number of all category's items disclosed in corporate reporting/Total items of the score index

Table 1. Measurement of Independent Variables

Acronyms	Variables	Measurement	Source
		Dependent Variable	
IR	Integrated Reporting	Measured by scoreboard index	Qaderi, et al. (2022)
		Independent Variables	
BDEX	Board Financial Expertise	Number of financial experts to total size of board	
BDIN	Board Independence	Number of independence directors to total size of board	Alfero, et al. (2018)
BDGD	Board Gender Diversity	Proportion of women on the board to total board members	Udofia, et al. (2021)
BDAD	Board Age Diversity	Proportion of young age members on board.	Alfero, et al. (2018)
		Control Variables	
FSZ	Firms' Size	It measures by natural log of firm's total assets	Erin and Adegboye (2020)

Source: Author

Longitudinal panel data is used to form a multiple panel regression model, which utilised to encapsulate the hypotheses of this paper.

$IRit = \alpha + \beta 1BDEXit + \beta 2BDINit + \beta 3BDGDit + \beta 4BDADit + \beta 5FSZit + e$

Whereas, IR is integrated reporting, BDEX represents board financial expertise, BDIN is board independence, BDGD is board gender diversity, BDAD is board age diversity, and FSZ shows firms' size.

Results and Discussion

Table 2. Descriptive statistics

	Obs.	Min	Max	Mean	Std. Deviation
IR	39	.23	.84	.4641	.1965
BDEX	39	.20	.64	.4297	.1437
BDIN	39	.17	.50	.3178	.0981
BDGD	39	0	.38	.2587	.1134
BDAD	39	0	.50	.2705	.1199
FSZ	39	19.71	28.59	21.512	1.5165

Source: STATA Output 13

The data obtainable in Table 2 above shows the means of integrated reporting of listed industrial goods firms is 0.4641. The minimum integrated reporting is 0.23 and the maximum is 0.84. This indicates that there are companies that disclosure very few items in the annual report of the sampled firms, but about 46% companies voluntarily disclosed integrated reporting. Averagely 43% of the sampled companies' board members are accounting and finance experts. It is observed that averagely 32% of board members were independent directors who are not executives. The mean value board gender diversity is 26%, the lowest figure and greatest are 0 and 0.38 respectively. This indicates there some companies that have no woman director on the board at all. Some of the sampled firms have about 27% young age members below 50 years on board. Even though, there are firms that do not have young directors, some firms have maximum of 50% young directors in their board settings. The minimum and maximum of firm's size is 19.71 and 28.59 billion respectively.

Table 3 OLS Panel Regression results of models

Variables	Model 2
Constant	-0.8387* (-2.46)
BDEX	0.2130 (1.37)
BDIN	1.0527** (4.35)
BDGD	-0.1190 (-0.56)
BDAD	0.4600* (2.15)
FSZ	0.0369* (3.16)
Adjusted R2	0.5129
P value	0.0000
F`value	9.00

*Source: STATA Output 13.0 NOTE: ** and * indicate 1% and 5% significant levels respectively; the figures attached with asterisk represent the coefficient, while the t-value is presented in bracket in parenthesis.*

Table 3 above shows the panel least square regression analysis using the ordinary least square (OLS) technique applied to analysis the formulated hypotheses. The justification of selecting OLS is as a result of the heteroskedasticity probability is not significance (Prob = 0.9546). The analysis reported an adjusted R^2 value of 0.5129 (51%), which statistically indicates the overall contribution of the board attributes variables (financial expertise; independence; gender diversity and age diversity) used in in connection with Integrated Reporting. The model employed is well-fitted to the variables in the article, as evidenced by the F-statistics of 9.00 and the corresponding P value of 0.0000. When all variables' VIFs fall between 1.01 and 1.35, the VIF test indicates that the model is free of multicollinearity issues.

As regards with variables of interest, the result indicates that, hypothesis (H1), board financial expertise has a positive ($\beta 1= 0.2130$) and statistically insignificant relationship ($t = 1.37$) with integrated reporting. The result rejects the first hypothesis implying that financial experts the board cannot influence on integrated reporting. It is surprising indeed, because it is contrary with the reality that directors with accounting and finance knowledge are expected to influence and encourage management to unveil more relevant information on the reports.

Pursuant to the regression analysis, independence on the board and integrated reporting have a strong, significant positive relationship ($\beta 2 = 1.0527$, $t = 4.35$). The findings support hypothesis two (H2), which claimed that board independence significantly affects integrated reporting. According to this, independent directors help to disclose further details that would meet stakeholders' needs.

In this case, board diversity has measured in two ways: first, the percentage of female directors is a metric of board diversity. Statistically, board gender diversity has negative insignificant relationship ($\beta 3 = -0.1190$, $t = -0.56$) with the integrated reporting. This implies that women director do not influence on integrated reporting. The result is statistically rejecting hypothesis three (H3). Secondly, board diversity is measured by average age. Board age diversity offered a positive significance allied with integrated reporting ($\beta 4=0.4600$, $t = 2.15$) meaning that directors with younger age on a board are influencing management to adhere with current trend of accounting changes, thus encourage disclosing non-financial information. The model explains excitedly 5% significance level, suggesting that gender diversity is a relevant factor to sensitize companies’ disclosure. However, the finding suggests that young age on boards has impacted on integrated reporting, so hypothesis four (H4) is therefore accepted.

Conclusion and Recommendations

This empirical paper assesses the influence of board attributes on integrated reporting framework in the listed industrial goods firms in Nigeria. The paper concludes that BDEX is positive insignificant relationship with integrated reporting. But both BIND and BDAD are statistically positive significant relation with integrated reporting. While BDGD is negatively insignificant related with integrated reporting.

The paper's conclusion suggested that more directors that are independent from the business be retained on the board of Nigerian industrial goods companies. This will enable them to ensure any changes that would create value for the firms and provide confidence in stakeholders will be adopted. Furthermore, the management should appoint more young directors, this will enable them to modernize the entire system of the companies by bringing new innovations to meet the global changes.

The limitations of this paper centered on only four board attributes. Then, the period is too short to reasonably show the effect of board attributes on integrated reporting. Finally, the paper limits industrial goods firms.

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Appendix 1

CATEGORIES	ITEMS
Background: - Whether the reports presented an introduction that outlined the following information:	- Objectives - Motivations behind the adoption - Manager responsible for the process - Key consumers - Title - Compliance with disclosure standards - Level of CEO commitment.
Assurance and Reliability: - Whether the company conducted the following:	- An internal audit report - Third party verification - Whether the organization received awards and acknowledgments for integrated reporting practice.
Form: - By reviewing the report summary:	- Accessibility - Number of pages - Readability and clarity.

Source: Pistoni et al. (2018)

AUDIT COMMITTEE CHARACTERISTICS AND EARNINGS MANAGEMENT OF LISTED DEPOSIT MONEY BANKS IN NIGERIA: MODERATING EFFECT OF INSTITUTIONAL OWNERSHIP

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Abstract
The collapses of financial institutions around the globe as a result of the financial scandals has put a doubt in the mind of investors about the integrity of the financial reporting process. Audit committee which is responsible for the monitoring financial reporting process are found to be weak in discharging its responsibilities because of the alarming rate of increasing earnings manipulation by corporate entities which calls for strict monitoring instruments as a result of conflict of interest between the principals and the management in which, management embark on activities that are inefficient in the attainment of the interests of shareholders. The study employed correlational research design, secondary source of data collection was adopted for the research. Furthermore, the study covered ten (10) period years From 2012 to 2023 as at 31st, December, 2024. The population of the study consisted of Seventeen (17) listed DMBs on Nigerian Exchange, with a sample of fourteen (14) deposit money banks using purposive sampling techniques. Panel multiple regression was employed to analyze the data. The findings revealed that Audit Committee Independence (ACI) and Audit Committee Gender (ACG) have statistical positive and significant impact on earnings management of listed DMBs in Nigeria. However, it was found that Audit Committee Financial Expertise (ACFE) and institutional ownership (INSO) are negatively and insignificantly related with earnings management of listed DMBs in Nigeria. The study concluded that audit committee characteristics have significant impact in restraining earnings manipulation among listed DMBs in Nigeria. Therefore, it is recommended that the board of directors of the listed DMBs in Nigeria should be appropriately constituted with an independent audit committee while incorporating the spirit of gender-equality in the inauguration of the audit committee as they are empirically found to play a crucial role in curbing the menace of managerial opportunistic tendencies among the listed DMBs in Nigeria.

Keyword: Earnings management, Audit committee characteristic, Institutional Ownership, Earnings Management.

Introduction
Financial Statements are means through which companies communicate to their users the financial performance of an organization for economic decision making and resource

allocation. The Financial Reporting Council, states that the objective of any financial statements is to provide information about the reporting entity's financial performance and position that are useful for assessing the stewardship of the entity's management and making economic decision. To achieve the quality of these financial reporting, a monitoring committee is often put in place to serve as a watchdog in ensuring that companies present relevant and reliable information which will eventually protect the interest of both existing and prospective investors. The most important of these monitoring committees is the Audit Committee, which is responsible for the review of audited financial statements of organizations thereby improving the quality of such information and reducing the possibilities of unethical abuse of accounting practices and earnings management when preparing financial statements (Bala & Gugong 2015; Alvez 2012).

Despite the existence of these monitoring committee, there were a lot of corporate failures for instance, the accounting scandals by Cadbury plc, Skye Bank Plc, and Oceanic Bank Plc, Diamond bank among others. This has brought doubt in the minds of shareholders on the credibility and reliability of financial reports (Kaoje *et al 2023*). It was as a result of the foregoing statements that study consider it as a paramount importance to examine audit committee characteristic and earnings management: Moderating effect of institutional ownership. Therefore, it is expected that the presence of ownership in the management of listed deposit money banks reduces earnings manipulation. Therefore, the absence of ownership in the management gave an opportunity to managers to create earning manipulation (Miko & Ajuma, 2018). Therefore, the study seeks to examine audit committee characteristics on earnings management of listed deposit money banks in Nigeria: Moderating effect of Institutional Ownership.

Literature Review

Concept of Earnings Management

Earnings management refers to the extent to which the financial reports provides true and fair information about the underlying performance and financial position. Kwanbo and Tanko (2018) perceived earnings management as the financial information created without taking advantage of accounting rules and principles to present them as reliable information. Earnings management is also considered to be constituted by four dimensions which are relevance, timeliness, neutrality and representational faithfulness (Bimo *et al.*, 2019). The authors stated that this consideration has its focal emphasis on the basic measures of earnings management.

Earnings management means intentional manipulation of reported financial statements by managers to deceive information users to attain the managers' own gains or pre-set objectives Healy & Wahlen (1999). Categories earnings management based on Accruals Earnings Management (AEM) and Real Earnings Management (REM). AEM involves deliberate attempts by management to change the accounting procedures when treating a given transaction in the financial statement (Dechow & Schrand, 2010).

Audit committee independence and Earnings Management

Audit committee independence is a term which describes the level of autonomy vested on the audit committee of a particular corporate entity. It is the proportion of external directors to the total number of members in the audit committee (Anas, 2021). It has been argued that an AC that is independent of the management does not have a private or financial dependence on the managers. Hence, within the context of the agency theory, Carcello and Neal (2003) contended that an independent AC may be more ready to disagree with managers on different issues. Throughout the assessment of the audit programmed and outcomes thereof, an independent AC may demand an extended audit scope in order to dodge being linked to a financial misstatement and reserve its reputational capital. Prior studies argued that companies with an effective AC with the majority of whom are independent directors pay high audit fees in order to protect the company's reputation and promote the interests of the investors (Abbott *et al.*, 2000, Carcello *et al.*, 2002). It has been contended that independent directors on the AC perform more of a monitoring role since they are independent of the management. This makes them require a high quality audit and be more willing to decrease the propensity for financial fraud and EM Beasley, (1996).

It is commonly assumed that non-executive directors exhibit the courage and capability to scrutinize the actions of executive directors, preventing potential unethical behaviors and ensuring decisions are made in the best interest of the owners (Weir & Laing, 2001). Upholding the integrity and credibility of financial reports by the audit committee contributes to the overall effectiveness of corporate entities (Joseph et al., 2011). Helen and Arnold (2011) further asserted that the quality of the audit committee has a direct impact on the efficiency of the audit process and internal control systems. In a Nigerian context, Kaoje et al, (2023) conducted an empirical investigation into the influence of audit committee characteristics on earnings management within listed firms. The results unveiled a significant positive correlation between audit committee independence and earnings management. In Egypt, a study by Galal et al, (2022) delved into the statistical relationship between the characteristics of audit committees and earnings management. The results brought to light a noteworthy and positive correlation between audit committee independence and earnings management.

In this study, we examine board independence from non-executive director and independent directors as this study opines that an independent director is more independent than a non-executive director. The findings of the studies of Aryal *et al.* (2022); Chi *et al*. (2020); Musa *et al.* (2023) adduce evidence to support the fact that non-executive directors reduce earnings manipulation which improves earnings quality. The finding of the studies implies that the non-executive director is independent, a position that remains a subject of controversy in literature. In same vein, findings by Aleqab and Ighnaim, (2021): Cumming and Awais (2023); Fahlevi *et* al. (2020); Kusnadi et al. (2022); Moradi et al. (2012) Musa et al. (2023); Misbahu and Shittu (2022); Oyebamiji (2020) reveal significant negative relationship between board independence and earnings management which implies a positive association with earnings quality.

On the contrary however, studies by Azeez *et al.* (2019); Bansal (2021); Kapoor and Goel (2021); Ulfah *et al.* (2022) adduce evidence that board independence as a function of non-executive director reduces earnings quality.

Audit committee financial expertise and Earnings Management
According to Olowookere *et al*, (2015), the term audit committee expertise refers to those members on the company's board of directors with technical knowledge in the field of accounting. And acquired professional accountancy certificates or qualifications. They also added that the professional qualifications acquired in the field of accountancy by the board members may enable them to influence managerial decision-making in an appropriate way. Other scholars with similar views regarding the aforementioned assertions includes (Ojeka *et al.*, 2019). According to (Ojeka et al, 2019), a professional accountant is an audit committee member in the board of directors with professional accountancy qualifications and expertise. On the contrary, Mohammed and Ayoib (2016) have unanimously argued that a professional accountant on the company's board of directors can be anybody who possesses requisite skills and experience in the field of accounting, finance and other related specializations. In consideration with the aforementioned definitions, Audit committee expertise can be defined as a member on the company's board of directors with technical knowledge of accounting and belonging to at least one of the accounting institutions in Nigeria such as the Institute of Chartered Accountants of Nigeria (SEC, 2018).

The expertise criteria of an audit committee were included in Nigeria by the 2011 SEC Code and the 2006 Post consolidation CBN code, amongst other codes. Such codes require that an audit committee member must have at least financial management and accounting expertise (Asiriuwa et al., 2018). Juhmani (2017) stated that the presence of financial expertise would improve proficiency and capacity to detect and prevent earnings management. (Kibiya *et al*, 2016) also stressed that the participation of a financially literate or competent member in financial management would improve earnings management. Li et al. (2012) stated that an audit committee with members who possess the required financial expertise is more equipped with the knowledge of necessary capital market consequences of financial statement disclosures that are expected to improve the quality of reporting and reduce the asymmetry of information.

Audit Committee Gender Diversity and Earnings Management
Audit committee gender can be defined as the spread or division of the audit committee members into sexes or male and female genders (Amran *et al.,* 2016). Thus, is the proportion of women relative to the total number of members in the audit committee of a firm? It has been argued that women exhibit more effective communication capabilities and perform better than men in group problem-solving requiring consensus (Ekpe *et al.,* 2014). This has been done with a view to address the issue of gender equality that has been a debatable topic all over the world. The objective of this policy is to consider men and women as partners in development, and more essentially to challenge any structure that creates gender-based inequalities in the country

(Ekpe *et al 2014).* Shehu and Ibrahim (2014) revealed that women directors have a significant positive impact on earnings management. Oba (2014) found that gender diversity has a significant negative impact on earnings management.

A similar study conducted in Nigeria by Omoye and Eriki (2014) reported a significant negative effect of board gender on earnings management. Lakhal *et al*, (2015) found the negative influence of the proportion of women on board standing and on the earnings management of firms. Susanto (2016) result shows that gender has influenced the earnings management. Also, Hussaini and Gugong (2015) found that female director has a significant positive influence on earnings management. Ioualalen *et al*, (2015) found that gender diversity has no significant influence on the earnings management of firms both in Iran and Canada firms investigated.

Institutional Ownership and Earnings Management

Institutional ownership is the ownership of company shares by institutions (pension funds, investment companies, banks and others). The relationship between institutional ownership and the quality of financial reporting is the fact that institutional ownership can improve the supervision of management by minimizing agency conflicts between shareholders and managers Affan *et. Al, (2017*). According to Bhatala *et. al.* (1994), Affan *et. al.* (2017) and Sirat (2012), institutional ownership has an influence on monitoring the behavior of corporate managers and can therefore minimize agency conflicts between shareholders and manager and consequently minimize agency problems.

Institutional investors are investors who typically serve a monitoring role in reducing managerial behavior on information asymmetry Bartov *et al*, (2001). Recent studies have classified institutional investors into two main groups and what effects they have on earnings management. Firstly, long-term institutional investors engage in investment with the intent of holding their ownership stake for a long duration. Hence, they are occupied with strong incentives to monitor those firms they have invested in. This suggests that the monitoring role of long-term institutional holdings can have a significant negative effect on the level of earnings management (Habbash, 2010). Secondly, institutional shareholders with short-term orientation or, as popularly referred to as myopic, or transient institutional investors are the more dominant type and their focus are chiefly on present earnings in determining stock prices rather than earnings gained through long-term investments or long-term earnings. This, according to Habbash (2010), implies that short-term institutional holdings can have a positive effect on earnings management. This is also in line with the study by Isenmila and Afensimi (2012); Farouk and Hassan (2014).

Institutional shareholding according to the agency theory serves as a monitoring mechanism and thus minimizes the chances of opportunistic behavior by managers. The institutional shareholders are also a key component of governance based on their level of participation which would lead to reducing agency costs. Studies such as Ekpulu *et a*l (2018), investigated the relationship between institutional ownership and earnings management. The studies found substantial evidence to support the proposition that companies with large institutional shareholding could help mitigate earnings management. Alternatively, Miko and Ajuma (2018) observed a positive relationship between the proportion of institutional ownership and earnings management. Ekpulu *et al*, (2018) document the insignificant relationship between the proportion of institutional ownership and earnings management.

Empirical Review

Audit committee independence and Earnings management

Yosra and Men (2022) investigated the relationship between ACI and earnings management using African banks as evidence. In their work, earnings management was measured using a loan loss provisions (LLP) model with secondary data obtained from eighty-two (82) African banks over the period of six (6) years ranging (2011 – 2016). The findings show that audit committee independence is significantly associated with lower earnings management among the listed banks in Africa. However, variations in corporate governance practices, regulatory frameworks, political and socio-economic systems could seem ambiguous which will definitely affect the reliability of the study findings.

Bala et al. (2022) examined audit committee attributes and whistle-blowing policy in Nigeria for a period of ten (10) years spanning from 2009 to 2019. The results from the logistic regression technique shows that audit committee independence serves as an effective whistle-blowing policy among the listed banks. However, the measure of whistle-blowing policy is not clear and unrealistic as the criterion or outcome variable of the study. If a more reliable measurement validity will be focused and employed from the Nigerian context, more reliable findings could have been documented.

Hassan et al. (2022) examined the effects of audit committee characteristics on financial reporting quality of listed firms in Nigeria using secondary data from the annual reports and accounts of the listed firms. The regression results show that audit committee independence has a statistical positive and significant impact on the financial reporting quality of listed firms in Nigeria. However, the study has exclusively examined the direct relationship between audit committee independence and financial reporting quality without considering their indirect connections.

Audit committee expertise and Earnings management

Mardessi (2022) examined the association between audit committee expertise and financial reporting quality using audit quality as the moderating variable of the study. A sample of ninety (90) non-financial firms listed on the Amsterdam Stock Exchange (AEX) was employed for the period of eight (8) years covering 2010 to 2017.The output from the Ordinary Least Square (OLS) regression reveals that audit committee expertise has statistical positive and significant association with financial reporting quality proxied by Real Earnings Management (REMs).

Although, if a similar study was conducted in an emerging market economy like Nigeria with emphasis on the listed deposit money banks (DMBs), different and more reliable result could have been obtained.

Yosra and Men (2022) studied the association between audit committee expertise and earnings management using African banks as evidence. Indeed, a two-step regression model was employed for data analysis of the study. The findings showed that audit committee expertise is significantly associated with lower earnings management among the listed banks in Africa. Although, discrepancies in corporate governance practices, regulatory frameworks, political and socioeconomic systems could seem ambiguous.

Bala et al. (2022) examined audit committee expertise and whistle-blowing policy in Nigeria for a period of ten (10) years spanning from 2009 to 2019. Data for the study were obtained from the secondary sources through the annual reports and accounts of the listed banks. The results from the logistic regression technique shows that audit committee expertise have an effective whistleblowing policy among the listed banks. However, the measure of whistle-blowing policy is not clear and unrealistic as the criterion or outcome variable of the study. If more reliable measurement validity will be focused and employed from the Nigerian context, more reliable findings could have been documented.

Audit committee gender and Earnings Management

Davis and Garcia-Cestona (2023) investigated the influence of The purpose of this study is to examine the effects of chief finance officer (CFO) gender, board gender diversity and the combination of both attributes on financial reporting quality (FRQ) represented by restatements. The findings provide evidence that restatements are less possible if the CFO is a female and if a larger number of females work on the board of directors (BOD). In respect of the interaction roles, the study found proof that females on the BOD are more efficient at minimizing restatement tendency if the CFO is also a female. Nevertheless, the study failed to consider the proportion of female directors in the audit committee of the US quoted companies during the period.

Felix *et al*. (2021) examined the impact of audit committees' cultural diversity, as measured through ancestral cultural diversity of audit committee members, on company’s earnings management. It was discovered that audit committee cultural diversity is connected to a little possibility of financial accounting manipulations. However, the study was not specific as to which proxy of earnings management was used. Hence, indicating the problems of measurement validity in the study.

Oradi and Izadi (2020) examined the link between gender diversity on the audit committees and the prevalence of financial restatements. The study employed a sample of 683 firm-year observations from Iranian quoted firms for the duration of five (5) years spanning from 2013 to 2017. Findings from the study revealed that the presence of at least one female director on audit committees minimizes the possibility of the occurrence of financial manipulation. Even though, the study was carried away by time constraint as the data employed in the study was restricted to 2017.

Institutional Ownership and Earnings Management

Oyedokun *et al;* (2019). The study examined the effect of ownership structure on earnings management of listed industrial goods companies in Nigeria from 2008 to 2017. The study adopted Ex-post facto research design and panel regression model was used to analyze the data. The results revealed that domestic institutional ownership has positive significant effects on earnings management, foreign institutional ownership has positive insignificant effects on earnings management, managerial ownership has insignificant effects on earnings management and number of block holders has negative significant effects on earnings management. The study draws an overall conclusion that ownership structures have positive insignificant effects on earnings management of listed Industrial goods companies in Nigeria. The study therefore, recommended that the management of Industrial goods companies should put in more measures to reduce the domestic ownership in order to have a fair and reliable financial statement. Finally, the number of Block holders has a significant effect on the earnings management as such, the companies should encourage combined ownership in their companies.

Ekpulu and Omoye (2018) investigated the impact of ownership structure on earnings management in Nigeria. The study makes use of data obtained from secondary source and employs a longitudinal panel research as the research design for a sample of 75 quoted firms for the period 2009 to 2014. Also, descriptive statistics and Pearson correlation analysis were conducted. Relevant residual diagnostic tests were also conducted. The result reveals that managerial ownership is negatively and significantly related to earnings management while institutional ownership and foreign ownership exhibit a positive but insignificant. The study, therefore, recommends that firms should consider improving managerial ownership by issuing policy statements requiring managers and executive directors to have more equity shares. In addition, there may be a need for companies to have a high percentage of institutional ownership especially participatory institutional ownership that can influence efficient monitoring and reduce earnings management.

Bawa and Isa (2018) investigated the effect of Ownership Structure on Accounting Earnings of listed Deposit Money Banks in Nigeria. Ownership structure is proxied with Managerial ownership, Institutional ownership, and foreign Ownership, while Accounting Earnings is proxy using Discretionary loan loss provision DLL model. Pooled Regression technique was adopted using Fixed and Random effects in the analysis. The study used a purposive sampling technique to filter out banks that do not satisfy the criteria set out for inclusion thereby arriving at the sample size of ten (10) listed Deposit Money Banks in Nigeria out of Seventeen (17). Secondary data source was used which were extracted from the Annual reports and accounts of the sampled Banks from 2006-2012. The findings revealed that, Managerial Ownership is negatively and significantly related to Earnings management, while foreign Ownership was positively and significantly related to Earnings management of listed Deposit Money Banks in Nigeria. However, Institutional Ownership was found to have no significant positive influence on Accounting Earning. It is recommended amongst others that those who are interested in the reported earnings as a basis for their investment decisions should look up Ownership Concentration in those banks as they empirically guarantee the reliability of the Banks reported Earnings.

Umar and Shehu (2017) examined the impact of audit committee characteristics, institutional shareholding on discretionary accruals of listed conglomerate firms in Nigeria. Secondary data were extracted from the annual reports of 6 most active listed firms on the Nigerian Stock Exchange for the period 2006 to 2015. After running the OLS regression, a robustness test was conducted for validity of statistical inferences. A multiple regression was employed using HACC Model. The study documents that audit committee characteristic and institutional shareholding has significant impact on earnings management of the firms, specifically, audit committee size, audit committee financial expertise and institutional shareholding are inversely related with earnings management, while audit committee independence is positively and significantly related with earnings management, but there is no such impact of audit committee meetings. Furthermore, institutional shareholding and audit committee size are inversely related with earnings management; audit committee independence and institutional shareholding are positively, strongly and significantly constraining earnings management, while audit committee financial expertise with committees' meetings and institutional shareholding reveals no impact on earnings management. In line with the findings, the study recommended that regulatory bodies like CAMA, SEC, and NSE should ensure that listed conglomerate firms in Nigeria strictly adhere with code of best practice so that the interest of various stakeholders would be fully protected.

Agency Theory

This theory was first developed by Jensen and Meckling in 1976, Agency Theory described the relationship that exists between the owners of the business (shareholders) called the principals and the management of the firm (managers) called the agents. In other words, Agency Theory is built on the grounds that there is an agency relationship wherein the principal delegates work to the agent. Consequently, there evolves risk sharing and conflict of interest between the two parties. Consistent with this theory, managers may decide to increase its benefits at the expense of the owners by engaging in opportunistic behavior. This will become more intensified where management compensation is tied to performance. Management also achieves this through income increasing accounting practice.

The theory explains the conflicts that arise as a result of the separation of ownership and control. Jensen and Meckling (1976) stated that in agency theory, agents have more information than principals and this information asymmetry adversely affects the principals' ability to monitor whether or not their interests are being properly served by the agents. To reduce the likelihood of the moral hazard, principals and agents engage in contracting to achieve optimality, including the establishment of monitoring processes such as auditing. Specifically, based on the points highlighted earlier, agency theory was used as the underpinning theory of the study.

Methodology

The study adopted correlation research design. The population of this study comprised all the seventeen (17) listed Deposit Money Banks (DMBs) in the Nigerian Exchange group as at 31st December, 2023 while Fourteen (14) DMBs was used as the sample size using purposive sampling techniques was used in the study. Filtering criteria was used to arrive at the sample size of the listed DMBs that exclusively have readily and available financial data/information throughout the period of the study. The data were sourced using secondary data extracted from annual financial reports of the sample banks as the method of data collection for the study. Multiple regression techniques were used for data analysis because it established the relationship between two or more variables. Discretionary accrual was used to measure earnings management using modified jones by Dechow et al (1995) model.

Model Specification:

$$EM_{it} = \beta_o + \beta_1(ACI)_{it} + \beta_2(ACFE)_{it} + \beta_3(ACG)_{it} + \beta_4(ACI*INO)_{it} + \beta_5(ACFE*INO)_{it} + \beta_6(ACG*INO)_{it} + \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots. \mu_{it}$$

Where,

Em_{it} = Earnings management.
$ACIi_t$ = Audit board independence.
$ACFE_{it}$ = Audit financial expertise.
ACG_{it} = Audit gender diversity. +
OWC_{it}= Ownership concentration
ε_{it} = error term.
β_0 is a constant,
β_1 *to* β_6 are the coefficients.

Table 1: Variables Acronym and Measurement

S/N	Variable Name	Acronym	Variables	Measurement	Source(s)
1.	Earnings Management	EM	Dependent	Measured using discretionary accrual.	Modified jones by Dechow et al (1995) model.
	Audit Committee Characteristics				
2.	Audit Committee Independence	ACI	Independent	Measured as the proportion of independent directors to the total number of directors in the AC.	Mardessi (2022) Hassan *et al.* (2022)
3	Audit committee financial expertise	ACFE	Independent	Measured as a proportion of auditors who have accounting knowledge to the total members of audit committee	Mardesi (2022), Bala *et al;* (2022).
4.	Audit committee gender	ACG	Independent	Proportion of female directors in the audit committee to the total number of the audit committee.	Mangala and Singla (2021), Olowookere *et al* (2021).
5	Institutional Ownership	OC	Moderating	Percentage of ownership to the total number of share in a firms.	Ishaka *et at* (2023), miko & Ajuma (2018)

Source: Author Computation, (2025).

Results and Discussion

Descriptive Statistics

The discussion commences with the descriptive statistics which is a test conducted in order to ascertain the nature, direction and quality of the data used in the study. This is presented in terms of the average, changes in average, lowest and highest values in respect of the data.

Table 2: Descriptive Statistics

Variables	Mean	Std. Dev.	Min.	Max.	Observation
EMG	1.76313	0.7575	0.2312	2.7081	140
ACI	18.2387	12.5132	0.0200	1.0000	140
AFE	0.5933	0.1194	0.3000	0.8000	140
ACG	0.3387	0.0905	0.2000	0.5000	140
INO	0.96	0.1966	0.000	0.1000	140

Source: STATA Output (2025).

From Table 2, it shows the minimum and maximum values for EMG as 0.2312 and 2.7081 respectively. With a Mean and standard deviation values of 1.76313 and 0.7575 respectively. It signifies that the deviation from the average mean value is 0.76 approximately. It implies that there are little changes in earnings management of the listed DMBs in Nigeria during the period of the study.

The table also revealed that Audit Committee Independence (ACI), have an average mean value and standard deviation values of 18.2387 and 12.5132 respectively. With a minimum and maximum values of 0.0200 and 1.0000 respectively. It signifies that the average proportion of audit committee independence during the period was approximately 18% while the changes from the average audit committee independence was approximately 13% during the period. The least proportion of external directors in the audit committee stood at 2% with a corresponding largest proportion of 100% during the period of the study.

The table also revealed that Audit Committee Financial Expertise (ACFE), have an average mean and standard deviation values of 0.5933 and 0.1194 respectively. This implies that the minimum and maximum values of 0.30 and 0.80 respectively. This signifies that the listed DMBs in Nigeria have an average audit committee financial expertise of 60 percent (60%) approximately with a corresponding change in the average value of 12 percent (12%) approximately which is minimal and negligible. It also signifies a minimum value of audit committee expertise of 30 percent (30%) with the maximum value of audit committee expertise of 80 percent (80%) during the period of the study. The statistical results imply that the listed DMBs in Nigeria have a majority of their members in the audit committee, possessing the requisite accounting and financial expertise to discharge the oversight functions vested on them by their respective board of directors.

Also the audit committee gender has an average mean value of 0.3387 and a standard deviation of 0.0905. This is evidenced by the lowest and highest values of 0.20 and 0.50 respectively. Specifically, the average proportion of audit committee gender for the listed DMBs in Nigeria stood at 34 percent (34%) approximately with an average change of 9 percent (9 %)

approximately. Again, the maximum proportion of audit committee gender during the period was 50 percent (50%) with a corresponding minimum proportion of 20 percent (20%). This implies that the listed DMBs in Nigeria have a good and reasonable proportion (female representation) in their audit committees during the period of the study.

Finally, the table also shows that institutional ownership as a moderating variable has a mean value of 0.96 and a standard deviation of 0.1966. The table also revealed that the minimum and maximum value of INO is 0.000 and 0.1000 respectively. This implies that Nigeria deposit money banks DMBS have a minimum and maximum members of ownership of 0% and 1%.

Correlation Matrix

The correlation matrix is a pre estimation test which is conducted in order to examine the relationships between the independent variables and the dependent variable as well as the relationships between the independent variables themselves.

***Table 3**: Correlation Matrix*

Variables	EMG	ACI	ACFE	ACG	INO
EMG	1.0000				
ACI	0.4888	1.0000			
ACFE	0.0045	0.0847	1.0000		
ACG	0.0182	0.0497	0.0090	1.0000	
INO	0.8936	0.5281	00.0004	0.0024	1.0000
Sources: STATA	OUTPUT	(2025).			

From Table 3, reveals the correlation information in respect of the independent variables represented by audit committee characteristics and proxy by (, ACI, ACFE, ACG) and ownership concentration proxy institutional ownership as well as the dependent variable Earnings Management (EMG) proxies by Discretionary Accruals (DA). Based on the correlation coefficient values the result shows that there is a positive correlation between variables. The correlation coefficient value was 0.4880 followed by 0.0182, 0.0182, and 0.0045 for independent variables in that order. This implies that as the variables increase by their corresponding value for listed banks in Nigeria, earnings management also increases. The relationship between the independent variable is low as none of the variable is equal to or greater than 0.5% as stated by Gujarati (2009). Hence, there is absence of high correlation amongst all the variables of the study.

Summary of Regression Analysis

The regression analysis shows the multivariate estimation results in respect of the cause and effect relationships between the independent variables and the dependent variable of the study:

Table 4: Regression Analysis

Variables	Coefficients	T-Values	P-Values
Constant	1.331098	5.39	0.000
ACI	0.0277012	8.87	0.000
ACFE	-0.0670363	-0.21	0.835
ACG	0.6547755	1.75	0.080
INO	-0.088611	-0.55	0.080
Adjusted R2			0.2484
Wald Chi2			79.27
Prob>Chi2			0.0000
			0.0000

Source: STATA Output, (2025).

Table 4, Reveals the R^2 and its adjusted value of 0.2484. It signifies that the cumulative coefficient of determination was 24.84 per cent or (25%) approximately and that audit committee characteristics statistically, strongly and significantly affect the earnings management (EMG) of the listed DMBs in Nigeria. By implication, 25% of the total impact or changes in the earnings management (EMG) of listed DMBs in Nigeria were caused by their audit committee characteristics as proxy by audit independence, gender and expertise. Thus, it also implies that 75% of the total impact or changes in earnings management were determined by parameters other than those captured in the model of the study. The result also reveals that the F-change value of 79.27 signifies that the model is good, adequate and well-fitted for the variables. Hence, the predictor variables of the study are effectively chosen, mixed and used. This is proved by the F-sig value of 0.0000 signifying that it is significant at 5 per cent (5%) level of significance.

Audit committee independence and EMG

From Table 4, it shows the regression results in respect of audit committee independence as 0.027701 with a corresponding t and p values of 8.87 and 0.000 jointly. It signifies that ACI is statistically, positively and significantly affecting the earnings management of listed DMBs in Nigeria at 5% level of significance. By implication, an increase in the proportion of external directors in the audit committee of the listed DMBs assists in restraining earnings manipulation practices by the management of the listed DMBs in Nigeria. Thus, any increase in the proportion of external directors in the audit committee of the listed DMBs by the board of directors may likely serve as a checking instrument or watch-dog on the management of the listed DMBs towards ensuring greater level of financial reporting quality. Hence, for hypothesis 1 of the study, H_{01} is strongly rejected. From the perspective of previous studies, this finding is in line with the work of Mardessi (2022), Yosra and Men (2022), Bala et al. (2022) and the work of Hassan *et al*. (2022) who jointly documented that audit committee independence has significant impact on earnings management of listed DMBs in Nigeria.

Audit committee financial expertise and EMG

Reference to the result in Table 4, it indicates the value in respect of audit committee expertise as -0.067036 with a corresponding t and p values of --0.21 and 0.835 jointly. It signifies that audit committee expertise is statistically, negatively and insignificantly influencing the earnings management of listed DMBs in Nigeria. This implies that, audit committee expertise is not significant in curbing the menace of earnings management among the listed DMBs in Nigeria. This is in line with hypothesis three (3) of the study which states that audit committee expertise has no significant influence on earnings management of listed DMBs in Nigeria. Thus, for hypothesis two (2), H_{02} failed to be rejected. With reference to the prior studies, the finding is contrary to the work of Mardessi (2022), Yosra and Men (2022), Bala et al. (2022) and Mohammed et al. (2022). The aforementioned studies have jointly documented an insignificant relationship between audit committee expertise and earnings management of listed firms.

Audit committee gender and EMG

From the Table 4, it reveals the regression results in respect of audit committee gender is 0.654775 with a corresponding t and p values of 1.75 and 0.080 respectively. It signifies that audit committee gender is positively and significantly affecting the earnings management of listed DMBs in Nigeria. By implication, the presence or membership of a female director in the audit has the tendency of curbing the menace of earnings management. This result is contrary to the hypothesis thee (3) of the study which states that audit committee gender has no significant impact on earnings management of listed DMBs in Nigeria. Hence, hypothesis three (3), H_{03} is strongly rejected. Based on the findings from the previous studies, this finding is consistent with the work of Davis and Garcia-Cestona (2023), Felix et al. (2021) and Oradi and Izadi (2020). All the aforementioned studies have jointly established empirical evidence that audit committee independence have significant impact on earnings management.

Institutional Ownership and EMG

From the Table 4, it reveals that institutional ownership has -0.088611 with corresponding t and p values of -0.55 and 0.582 jointly. This means that ownership concentration is insignificantly affecting earnings management of listed DMBs in Nigeria. This implies that institutional ownership is not a strong determinant of listed DMBs. Institutional ownership may straighten the relationship and the study expects a negative relationship. The study hypothesizes that institutional ownership moderates the relationship between AC and EM, specifically to be stronger (more negative).

Conclusion and Recommendations

Based on the findings of the study, it can be concluded that the presence of more external directors in the audit committee of listed DMBs in Nigeria have the tendency of curbing the occurrence of earnings management challenges. It is also concluded that the financial expertise in the committee also assists in curbing the problems of earnings management among the listed DMBs in Nigeria. From the spectrum of audit committee gender, it is concluded that the presence of more female directors in the audit committee have the tendency of restraining the menace of earnings management amongst the listed DMBs in Nigeria.

Many studies have been conducted on audit committee and earnings management in developed and developing countries using the agency theory. The present study's findings contribute to the extension of the agency theory by examining the role of audit committee mechanisms and moderating effect of ownership concentration on earnings management in mitigating agency conflicts between shareholders and managers. Some of the existing regulations such as corporate governance code for better earnings quality in the country.

Based on the conclusion drawn on findings, the following recommendation were made:

(i) It is recommended that the board of directors should ensure reasonable representation of the external directors in the audit committee of the listed DMBs in Nigeria. This is based on the fact that the presence of external directors in the audit committee will serve as a watch-dog, whistle-blower and even a controlling mechanism towards ensuring the best and hitch-free internal assurance services. Hence, restraining the management from engaging on such unethical practices under the guise of earnings management.

(ii) The board of directors of the listed DMBs in Nigeria should inculcate the spirit of gender-equality in their overall corporate strategic decisions especially when it comes to audit and assurance services. This could serve as part of an effort aimed at complimenting the United Nations Sustainable Development Goals (SDGs) Agenda by 2030. If effectively implemented, it could have the tendency of curbing the menace of earnings management amongst the listed DMBs in Nigeria.

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IMPACT OF DIRECTORS ATTRIBUTES ON RETURN ON ASSETS OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract
The research investigated the impact directors' attributes on return on assets of listed deposit money banks in Nigeria. The population comprises 13 Listed Deposit Money Banks, purposive sampling method was employed of which 8 DMBs banks that published audited financial statements as at December 31, 2024, were selected as sample size. The independent variables are DNS, DLS, DT, DPQ, and DAG while the dependent variable is ROA, as proxy of financial performance. The research is quantitative, it adopted ex-post facto design and grounded in Upper Echelons Theory (UET), the study utilized secondary data from Nigerian Exchange Group (NGX) of listed banks' financial statements (2015-2024). Multiple regression was used, and the data were analyzed using STATA. The regression results revealed that the directors' professional qualification (DPQ) has positive and significant effects on ROA, Leverage (LVG) has a strong, negative, and significant effect, while DNS, DLS, DT, DAG, FSZ, and BAG is not statistically significant. The findings conclude that director qualifications and networking strength have a significant role in improving bank performance, as they are positively correlated with Return on Assets (ROA). However, the results also show that higher leverage and older board demographics are associated with reduced profitability. The study recommends that Banks should prioritize strengthening the professional qualifications and networking capabilities of their directors through regular training for their directors. Banks should consider fostering a more balanced age distribution on their boards; banks also should adopt strategies to reduce excessive leverage.

Keys: Directors Attributes, Deposit Money Banks, Return on Assets.

Introduction
Organizations' performance is about evaluation its effectiveness in achieving its established objectives. While these objectives vary depending on the specific organization, the performance is classified into financial and non-financial. To ensure sustained progress, banks must define their corporate performance targets and establish a structured framework for monitoring, evaluating, and how their targeted goals will be achieved.

Corporate performance is essential for the sustainability, growth and development of corporations, as it incorporates various dimensions such as financial health, operational efficiency, and innovation. Financial performance metrics, including return on assets, return on equity, return on investment, net profit margin provide quantifiable measures to assess a company's success and identify areas for improvement. Operational efficiency further enhances corporate performance by maximizing output while minimizing waste, thus improving productivity and customer satisfaction (Turakpe & Fiiwe, 2017). There is an emergent trend towards appraising performance based on value creation, associated with sustainable development goals, to provide a more comprehensive and compensating measurement for management and employees (Chen et al., 2023). Financial performance is the ability of companies to realize intended outcomes measured against its projected outputs. These contain results correlated to shareholder return, market performance, and overall financial health (Khursheed & Sheikh, 2022). The qualities of directors become an important issue in banking sector management, impacting areas like equity, responsibility, openness, and justice. Banks play a crucial role in emerging economies as intermediaries in the financial sector.

The attributes of board directors have a significant stance in the financial performance of Deposit Money Banks (DMBs), influencing strategic decision-making, risk management, and corporate sustainability. Despite the essential role of directors' attributes in promoting bank stability, based on the existing literature reviewed, most authors have primarily examined broader corporate governance frameworks, often neglecting the attributes of directors that directly impact bank performance. The persistent collapse and financial distress of several Nigerian banks including the revocation of Heritage Bank’s operating license in 2024 and the merger of Access Bank with Diamond Bank in 2019 due to financial mismanagement highlight the urgent need to assess the effectiveness of board directors in stabilizing the banking industry in Nigeria.

Empirically, previous studies reviewed on this study on corporate governance and financial performance in Nigerian banks (Mehmood et al., 2019; Sanusi, 2010) has predominantly focused on governance structures without isolating the specific influence of directors' attributes. While some research has explored board composition, findings are often generalized across industries rather than being tailored to DMBs. Moreover, existing studies reviewed primarily assess financial outcomes using conventional indicators such as Return on Assets (ROA) and Return on Equity (ROE), with limited consideration of how individual director attributes such networking strength, leadership styles, tenure, professional background, financial expertise, age distribution, gender diversity, and independence affect financial performance. This study seeks to bridge this gap by conducting a focused analysis of the impact of these director variables on the financial soundness of Nigerian banks.

A theoretical perspective, existing governance research reviewed are largely underpinned by Agency Theory, Stakeholder Theory, and Resource Dependency Theory, which emphasize principal-agent relationships, stakeholder engagement, and external resource acquisition, respectively. However, these theories do not clearly capture the influence of individual director attributes on strategic decision-making and financial performance. To address this gap, this study adopts the Upper Echelons Theory (UET), which argues that the demographic and cognitive attributes of top executives significantly influence organizational outcomes. UET provides a more comprehensive theoretical foundation for understanding how factors such networking strength, leadership styles, tenure, professional background, financial expertise, age distribution, gender diversity, and independence on bank financial performance affect decision-making processes and financial performance within Nigerian DMBs. Therefore, this study will investigate on the impact of directors' attributes on return on assets of listed deposit money banks in Nigeria.

The main objective of the study, therefore, is to examine the effect of directors' attributes on return on assets of listed deposit money banks in Nigeria. In line with the study objectives, the study formulated and tested the following null hypotheses:

H_{01}: Directors' networking strength has no significant effect on the Return on Assets of listed deposit money banks in Nigeria.
H_{02}: The leadership style of bank directors has no significant influence on the Return on Assets of listed deposit money banks in Nigeria.

H_{03}There is no significant correlation between the tenure of directors and the Return on Assets of Deposit Money Banks in Nigeria.

H_{04}Directors' professional Qualification has no significant role in the Return on Assets of Deposit Money Banks in Nigeria.

H_{05}The age distribution of directors has no significant relationship with the Return on Assets of Deposit Money Banks in Nigeria.

Literature review
This section covers the conceptual reviews of both dependent and independent variables of the study, empirical reviews and theoretical reviews.

Conceptual review
Return on assets can be utilised to measure an organisation's ability to generate income from its resources. The ROA quantifies the effectiveness of management in creating profits from a company's assets and economic resources (Huang et al., 2015). Shareholders, managers, and analysts, ROA reveals how well a company can convert its assets into earnings. Lara et al., (2017), efficient utilisation of an entity's resources is crucial to achieving a high ROA. ROA is commonly used to evaluate financial performance in the oil and gas industry. Due to the substantial financial outlay required by the industry, this indicator is of paramount importance to companies in the sector. ROA is determined by dividing net income by total assets of an entity as shown below:

$$ROA = \frac{NetIncome}{TotalAssets} \text{ X}$$

A director's networking strength is defined as the breadth and depth of their professional and personal connections. The organisation may benefit from stronger leadership, access to critical resources, and more informed strategic decision-making through these connections. Business results are improved by the free flow of information and ideas made possible by these networks. Li and Zhang (2023) note that directors with extensive networks generally serve on many boards, which fosters collaboration, information exchange, and enhanced company performance.

The leadership styles of bank directors are a reflection of the strategic ability of banking industry top executives to foresee new threats, adjust to a volatile financial climate, and inspire their teams to find creative solutions that boost the survival and success of their organisations in the long run (Eswari, 2023). Although few executives actively participate in developing long-term plans, directors must give clear guidance at all levels of operation, from the boardroom to frontline banking, for banks (Burke, 2021).

Zhang et al. (2021) described directors' tenure as "the duration a director serves on a board, which significantly impacts their ability to influence organizational strategy and stability. "Directors' tenure refers to the period during which a board member remains in office, influencing both governance practices and regulatory compliance".
Directors' professional qualification is defined as the level of education, certification, or training that enables them to make informed strategic decisions and contribute to effective corporate governance. To better contribute to board performance and oversight responsibilities, directors should have relevant qualifications, such as accounting professional certifications; ACCA, ICAN, ANAN), a degree in law, an MBA, or membership in a recognized professional organization.

Having a diverse range of ages among board directors is a crucial aspect. When all directors belong to the same age group, there's a risk that the board's leadership and decision-making tendencies could lean towards the preferences and perspectives of that specific age cohort. This tendency arises because directors within the same age group likely share similar life experiences and information. By appointing directors from various age demographics, the board gains access to a broader range of insights, particularly regarding the needs and concerns of stakeholders within different age brackets. It's imperative for the board to mirror the diversity present in society, which encompasses various age groups. Carter et al., (2003) suggests that younger boards are more inclined to include female directors compared to their older counterparts. This implies that younger directors may be more receptive to innovative approaches, whereas older directors might favor maintaining the existing status quo.

Empirical Review

Machado and Sonza (2021) found that there is an inverse relationship between the representation of board members with international academic and professional backgrounds and both accounting and market performance. Their study, which utilized data from 230 companies spanning from 2010 to 2016, employed unbalanced panel data regressions with the Systemic Generalized Method of Moments (GMM-Sys) to analyze the data within an institutional theory framework. However, the use of unbalanced panel data regressions may introduce biases, and the study could benefit from further robustness checks to ensure the reliability of results.

Saula et al. (2022). Analysed the efficiency and effectiveness of Nigerian deposit money banks' networks. The study used a survey design and surveyed 2,413 managers at various levels from five different deposit money banks in Nigeria their results showed that all of the constructs were quite dependable; their Cronbach's alpha values were between 0.783 and 0.842. A total of 86.9% of those who were asked to participate did so. Organizational performance increase when Nigerian deposit money banks implemented networking through ATMs, branches, phones, and the Internet ($\beta = 0.139$, $t = 3.281$, $p < 0.05$). But the research doesn't take into account how things outside of the banks' control, such economic and regulatory shifts, can affect the efficacy of networking methods and, by extension, the banks' organizational success.

Aremu et al. (2023) examined the mediating role of leadership quality on the relationship between corporate governance and organizational performance with the particular reference to selected Nigerian banks. The research showed that good corporate governance has a beneficial effect on leadership quality, and that both factors have direct positive effects on group output. In addition, the research showed that good leadership mediates the connection between CG and OP's performance. Osogbo is the only place that the research looked at; therefore, its results might not be generalizable to other parts of Nigeria or other countries' financial systems.

Janahi et al. (2023) discovered that an increase in age diversity within boards correlates with enhanced monitoring effectiveness. Their study reveals that boards with diversified age groups exhibit reduced earnings management, indicating improved reporting quality. However, the reduction in sample size due to incomplete CEO characteristic data highlights potential limitations in generalizability and warrants further investigation into data completeness and its implications for research validity.

Ndubuisiet al., (2023) conducted a study examining the impact of board age heterogeneity on cash flow performance within Nigerian deposit money banks (DMBs). The findings indicated that while board age heterogeneity did not exhibit a statistically significant influence on operating and financing cash flow performance, it did demonstrate a statistically significant effect on investing cash flow performance. Therefore, the research encounters several constraints. The limited sample size comprising only six banks may impede the broader applicability of findings to Nigerian deposit money banks (DMBs) as a whole. Additionally, utilizing annual reports spanning from 2005 to 2021 may limit applicability because of alterations in reporting standards, regulations, and economic conditions over time.

Kose and Kuru (2023) found that while experienced directors bring important expertise, excessively long tenures can result in a lack of flexibility to accept changes more especially in this era of technology and reduced adaptability to industry changes, which demand further exploration and investigations on tenure of directors and financial performance of deposit money banks as there were no such publications specifically in Nigeria and also have different results by different researchers necessitates further research in area. However, despite the expanding body of literature, there is still research deficiencies in examining the challenges and opportunities linked to tenure diversity within the Nigerian setting, with no studies covering the year 2024.

Martinez et al. (2024) examined the relationship between directors' tenure and financial performance remains complex. The study found mixed results, indicating that while experienced directors can positively influence performance through strategic insight, excessively long tenures might adversely affect performance due to outdated. This highlights the necessity of balancing tenure with periodic board refreshment to maintain optimal performance levels.

Theoretical Review

Hambrick and Mason (1984) first proposed the Upper Echelons Theory (UET), which is also known as Top-Level Theory. This idea, top executives' observable demographic and professional traits, greatly affect the strategic decisions and overall success of an organization. Age, level of education, years of experience in the field, and length of service is some of the characteristics that are thought to have an impact. Top managers' actions and the organization's results are impacted by their personal beliefs, experiences, and cognitive frameworks, according to the idea. There is empirical evidence that UET can be used in the banking industry of Nigeria. Take, for example, Akpokerere and Obonofiemro (2022), who looked at how different board traits affected DMBs' bottom lines from 2012 to 2021. Their research showed that ROE was positively impacted by independent board monitoring, but was unaffected by other variables like board size, gender diversity, or the frequency of board meetings. However, the study is grounded in Upper Echelons Theory (UET), which remains the predominant theoretical underpinning owing to its emphasis on the essential role of the board of directors in corporate governance.

Methodology

Ex post facto design was adopted, and the research population of this study consists of all 13 Deposit Money Banks (DMBs) listed on the Nigerian Exchange Group (NGX) as of the conclusion of the financial year in 31/12/2024. The listed Deposit Money Banks on NGX are outlined as follows:

Table 1: List of Listed Deposit Money Banks in Nigerian Exchange Group (NGX)

S/N	Name of Bank	Date of Listing
	Access Holding Plc	2022
	Ecobank Transnational Incorporated	2006
	FCMB Group Plc	2013
	Fidelity Bank Plc	2005
	First Holdco Plc	2012
	Guaranty Trust Holding Company Plc	2021
	Jaiz Bank Plc	2003
	Stanbic IBTC Holdings Plc	2012
	Sterling Financial Holdings Company Plc	2023
	United Bank For Africa Plc	1970
	Unity Bank Plc	2005
	Wema Bank Plc	1970
	Zenith Bank Plc	2004

Source: NGX, (2025)

A purposive (criterion-based) sampling strategy was utilised and 8 listed deposit money were selected as a sample size of this study due to the fact that the remaining 5 DMBs audited financial statement have not yet been published as 13/04/2025 on NGX. The sample size of the study is as follows:

Table 2: List of Listed Deposit Money Banks selected as Sample Size of the Study

S/N	Name of Bank
	Ecobank Transnational Incorporated
	FCMB Group Plc
	Fidelity Bank Plc
	Guaranty Trust Holding Company Plc
	Stanbic IBTC Holdings Plc
	United Bank For Africa Plc
	Wema Bank Plc
	Zenith Bank Plc

Source: Authors' compilation, (2025)

The research employed secondary source of data, from audited annual reports and accounts of chosen Deposit Money Banks listed on the Nigerian Exchange Group (NGX) over a decade, ranging from 2015 to 2024. Utilizing secondary data is noted to offer superior quality for cross-sectional analysis compared to primary data and The Technique of Data Analysis was Stata Version 13.0 (Saunders 2017).

Table 3: Variables and Measurement

S/N	Variables	Acronym	Measurement	Source
Dependent Variables				
	Return on Assets	ROA	Measured as Profit After Tax divided by total assets (%).	(Aginam and Obi-Nwosu 2024; Anya et al., 2024)
Independent Variables				
	Directors Networking Strength	DNS	Number of external board memberships held by a director divided by total number of directors.	(Ike & Abani 2023)
	Directors Leadership Style	DLS	1 if the CEO is also the Chairman, 0 otherwise	(Dulewicz & Higgs, 2015)
	Directors Tenure	DT	Measured as '1' if a board has at least one member with 10 Years banking experience, and '0' for otherwise.	(Ibrahim et la., 2019).
	Directors Professional Qualification	DPQ	Proportion of directors with ICAN/ANAN divided by total directors.	(Essien & Akpan 2024)
	Directors Age	DAG	Age Diversity Proportion = (No. Directors ≤50 years + No. Directors ≥ 70 years)/Total No. of Board members	(Torres et al., 2021).
Control Variables				
	Leverage	LVG	Measured as the percentage of total liabilities to total assets	(Ado et al., 2023)
	Firm Size	FSZ	Measured as the natural logarithm of the total assets	(Ado et al., 2023,)
	Bank Age	BAG	Measured Logarithm of age from date of Incorporation (Natural Log of bank age)	(Abubakar et al., 2022)

Source: Authors Review, 2025

Model Specification

This research followed Ahmed's (2019) previous work by specifying an econometric model to examine the connection between the directors' attributes on return on assets of listed deposit money banks in Nigeria. The model is stated as follows:

$ROA_t = \alpha + \beta_1 DNS_t + \beta_2 DLS_t + \beta_3 DT_t + \beta_4 DPQ_t + \beta_5 DAG_t + \gamma_1 LVG_t + \gamma_2 FSZ_t + \gamma_3 BAG_t + \epsilon_t$

Where:

ROA = Return on Assets (Dependent variable, proxy for financial performance)
DNS = Directors' Networking Strength (Independent variable)
DLS = Directors' Leadership Style (Independent variable)
DT = Directors' Tenure (Independent variable)
DPQ = Directors' Professional Qualification (Independent variable)
DAG = Directors' Age (Independent variable)
LVG = Leverage (Control variable)
FSZ = Firm Size (Control variable)
α = Constant term
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Coefficients for the independent variables (directors' attributes)
$\gamma_1, \gamma_2, \gamma_3$ = Coefficients for the control variables (leverage, firm size and Bank Age)
ε_t = Error term (captures unobserved factors affecting ROA)

Results and Discussion

Descriptive Statistics

The descriptive statistics of the study data are shown in table 4 as follows:

Table 4: Descriptive Statistics of Return on Assets and Board Attributes Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	80	2.156	1.456	-0.999	6.879
DNS	80	0.382	0.087	0.180	0.580
DLS	80	0.475	0.503	0.000	1.000
DT	80	0.975	0.157	0.000	1.000
DPQ	80	0.550	0.101	0.270	0.750
DAG	80	0.336	0.062	0.190	0.470
LVG	80	0.882	0.035	0.796	0.943
FSZ	80	17.789	3.017	13.751	23.418
BAG	80	3.672	0.372	3.219	4.369

Source: Stata 13.0 Output 2025

The descriptive statistics for the panel dataset comprising 80 observations reveal moderate performance indicators among the sampled DMBs in Nigeria. The average Return on Assets (ROA) is 2.16%, suggesting efficient asset utilization, Directors attributes variables show moderate director networking strength (DNS = 0.38) and a slightly higher representation of professional qualification (DPQ = 0.55), while directors' leadership style (DLS) and tenure (DT) appear binary in nature. The average age of directors (DAG = 0.34) suggests a younger to mid-range board. Control variables such as leverage (LVG = 0.88) and firm size (FSZ = 17.79) appear stable, while Bank Age (BAG = 3.67) shows some diversity. Overall, the dataset reflects heterogeneous governance and performance characteristics.

Correlation Metrics

The correlation is used to determine the level of association between dependent variables and independent variables. It explains the correlation among the independent variables to ascertain if there is multi-collinearity problem.

Table 5: Correlation Statistics of Return on Assets and Board Attributes Variables

Variable	ROA	DNS	DLS	DT	DPQ	DAG	LVG	FSZ	BAG
ROA	1.0000								
DNS	0.6734	1.0000							
DLS	0.0729	0.2612	1.0000						
DT	-0.0690	0.0685	-0.0080	1.0000					
DPQ	0.6935	0.8551	0.2569	0.0947	1.0000				
DAG	0.0804	0.2197	0.0758	0.0407	0.3420	1.0000			
LVG	-0.6604	-0.1834	0.0111	0.0314	-0.3007	0.1083	1.0000		
FSZ	0.1701	0.2185	0.0579	0.1065	0.2210	0.1646	-0.1244	1.0000	
BAG	-0.3989	0.0350	0.0639	0.1180	-0.1839	-0.2514	0.5322	0.1732	1.0000

Source: Stata 13.0 Output 2025

The correlation matrix reveals that ROA is positively associated with Directors' Networking Strength (DNS, r = 0.6734) and Directors' Professional Qualification (DPQ, r = 0.6935), suggesting that strong networks and professional qualifications enhance financial performance. Conversely, ROA is negatively correlated with Leverage (LVG, r = -0.6604) and Board Age Group (BAG, r = -0.3989), indicating that higher debt levels and older boards may reduce profitability. Other variables such as Directors' Leadership Style (DLS), Tenure (DT), Directors' Age Grouping (DAG), and Firm Size (FSZ) show weak or negligible correlations with ROA, suggesting limited direct influence on performance in this context.

Regression Analysis

Regression analysis is a statistical method used to examine the relationship between a dependent variable and one or more independent variables. The regression analysis is employed to assess how directors and control variables influence the financial performance of deposit money banks in Nigeria, the fixed and random regressions were computed as follows:

Table 6: Fixed-Effects Regression Results

Predictor	Coefficient (β)	Standard Error	t-value	p-value	95% Confidence Interval
DNS	1.78	3.24	0.55	0.583	[-4.68, 8.25]
DLS	-0.18	0.16	-1.15	0.256	[-0.49, 0.13]
DT	-0.47	0.66	-0.71	0.480	[-1.80, 0.86]
DPQ	6.13	2.90	2.12	0.038	[0.34, 11.93]
DAG	3.28	3.11	1.06	0.294	[-2.92, 9.49]
LVG	-22.51	5.44	-4.14	0.000	[-33.38, -11.64]
FSZ	0.27	0.31	0.86	0.391	[-0.35, 0.88]
BAG	-1.18	2.15	-0.55	0.584	[-5.47, 3.11]
Constant	17.00	6.64	2.56	0.013	[3.73, 30.28]

Source: Stata 13.0 Output 2025

The fixed-effects regression model explains 39.8% of the within-group variation in return on assets (ROA), with the overall R-squared at 57.6%, indicating a moderate fit. The model is statistically significant ($F(8,64) = 5.28$, $p < 0.01$), suggesting that the independent variables jointly influence ROA. The directors' professional qualification (DPQ) positive and significant effects on ROA ($\beta = 6.13$, $p = 0.038$), implying that better-qualified directors may enhance bank performance. Leverage (LVG) has a strong, negative, and significant effect ($\beta = -22.51$, $p < 0.001$), indicating that higher debt levels reduce ROA. Other variables: DNS, DLS, DT, DAG, FSZ, and BAG are not statistically significant. The high intra-group correlation (rho = 0.73) justifies the use of fixed effects. The significant F-test for unit effects ($p = 0.0296$) confirms that unobserved heterogeneity across panels contributes meaningfully to explaining ROA differences.

The random-effects GLS estimates for ROA across eight listed DMBs over ten years reveal that Directors' Networking Strength (DNS) exerts a strong, positive, and statistically significant influence ($\beta = 8.86$, $z = 4.63$, $p < 0.001$), whereas higher leverage (LVG) markedly reduces profitability ($\beta = –17.02$, $z = –5.38$, $p < 0.001$), and greater Bank age (BAG) also has a modest but significant negative effect ($\beta = –0.73$, $z = –2.36$, $p = 0.018$). The remaining directors' attributes (DLS, DT, DPQ, DAG) and firm size (FSZ) are not statistically significant. Model fit is reasonable: within $R^2 = 0.30$, between $R^2 = 0.98$, overall $R^2 = 0.79$, and the Wald $\chi^2(8) = 268.76$ ($p < 0.001$) *(see appendix vii)*, indicating that roughly 30% of the time-series variation and nearly all cross-sectional variation are explained. Correlation between individual effects and regressors is assumed zero.

Table 7: Random-Effects GLS Regression Results

Predictor	Coefficient (β)	Standard Error	z-value	p-value	95% Confidence Interval
DNS	8.86	1.91	4.63	0.000	[5.11, 12.61]
DLS	-0.23	0.16	-1.40	0.162	[-0.55, 0.09]
DT	-0.78	0.51	-1.52	0.130	[-1.78, 0.23]
DPQ	1.92	1.74	1.10	0.270	[-1.49, 5.33]
DAG	-1.89	1.57	-1.20	0.230	[-4.97, 1.19]
LVG	-17.02	3.16	-5.38	0.000	[-23.22, -10.82]
FSZ	0.02	0.03	0.56	0.578	[-0.04, 0.07]
BAG	-0.73	0.31	-2.36	0.018	[-1.34, -0.12]
Constant	16.63	2.49	6.67	0.000	[11.75, 21.51]

Source: Stata 13.0 Output 2025

The presented Hausman test compares the fixed and random effects estimators for the panel regression model. The test statistic $\chi^2(8) = 17.45$ ($p = 0.0257$) see appendix vii) indicates a rejection of the null hypothesis of no systematic difference in coefficients, thus suggesting that the random effects estimator is inconsistent and that the fixed effects specification is more appropriate. Notably, coefficients for DNS, DPQ, DAG and LVG exhibit substantial disparities between the estimators, highlighting the influence of unobserved heterogeneity correlated with these regressors. Consequently, inferences regarding the impacts of directors' networking strength, professional qualification, age grouping and leverage on ROA should rely on the fixed effects estimates to guard against bias from omitted time-invariant bank-specific effects.

Table 8: Hausman Test Results for Fixed-Effects vs. Random-Effects Models

Predictor	Fixed-Effects Coefficient (b)	Random-Effects Coefficient (B)	Difference (b - B)	Standard Error (S.E.)
DNS	1.7846	8.8589	-7.0743	2.6094
DLS	-0.1799	-0.2298	0.0498	—
DT	-0.4726	-0.7775	0.3049	0.4229
DPQ	6.1339	1.9197	4.2142	2.3188
DAG	3.2848	-1.8882	5.1729	2.6780
LVG	-22.5074	-17.0215	-5.4859	4.4264
FSZ	0.2664	0.0162	0.2502	0.3074
BAG	-1.1825	-0.7308	-0.4517	2.1256

Source: Stata 13.0 Output 2025

However, the fact that (V_b–V_B) is not positive definite warrants caution regarding the reliability of the test.

Multicollinearity Test

The multicollinearity test is used to detect the presence of high intercorrelations among independent variables in a regression model. this test helps assess whether Directors attributes and control variables are excessively correlated, which could distort the reliability of regression estimates.

Table 9: Variance Inflation Factor (VIF) Results for Independent Variables

Variable	**VIF**	**1/VIF**
DPQ	5.00	0.200
DNS	4.41	0.227
BAG	2.13	0.469
LVG	1.95	0.513
DAG	1.52	0.658
FSZ	1.25	0.803
DLS	1.09	0.916
DT	1.04	0.959
Mean VIF	**2.30**	

Source: Stata 13.0 Output 2025

Table presents the Variance Inflation Factor (VIF) results, used to assess multicollinearity among independent variables. All VIF values are below the commonly accepted threshold of 10, with the highest being 5.00 for Directors' Professional Qualification (DPQ). The mean VIF of 2.30 indicates a low overall risk of multicollinearity. This suggests that the independent variables in the model are not highly correlated and can be reliably used for regression analysis without distortion of coefficient estimates due to multicollinearity. Therefore, the model meets the assumption of independence among explanatory variables.

Heteroskedasticity

The heteroskedasticity test is used to determine whether the variance of the error terms in a regression model is constant across observations. This test is applied to examine whether the residuals from the regression analysis of Directors attributes on financial performance are homoscedastic.

Table 10: Cameron and Trivedi's Decomposition of the* Information Matrix *-Test

Source	**χ^2**	**df**	**P**
Heteroskedasticity	35.82	36	.4771
Skewness	5.11	8	.7457
Kurtosis	0.27	1	.6027
Total	41.20	45	.6336

Source: Stata 13.0 Output 2025

The Cameron & Trivedi decomposition of the IM-test results show that the model does not exhibit significant issues with heteroskedasticity (chi2 = 35.82, p = 0.4771), skewness (chi2 = 5.11, p = 0.7457), or kurtosis (chi2 = 0.27, p = 0.6027), as all p-values are greater than the typical significance threshold of 0.05. The overall test statistic (chi2 = 41.20, p = 0.6336 suggests that the model is adequately specified without major violations in terms of heteroskedasticity, skewness, or kurtosis, supporting the validity of the model's assumptions.

Conclusion and Recommendations

The findings highlight that director qualifications and networking strength play a crucial role in improving bank performance, as they are positively correlated with Return on Assets (ROA). However, the results also show that higher leverage and older board demographics are associated with reduced profitability of Deposit Money Banks, while strong board attributes like networking and professional qualifications contribute to financial success, excessive leverage and older boards may hinder performance. Based on the findings, the study recommends that Banks should prioritize strengthening the professional qualifications and networking capabilities of their directors, as these factors positively influence profitability. The bank should consider regular training and retraining of directors to expand their professional networks could enhance performance. Banks should review Board Demographics to mitigate the negative impact of older board members on profitability; banks may consider fostering a more balanced age distribution on their boards, incorporating younger members who bring fresh perspectives and agility to decision-making. DMBs should Manage Leverage by adopting strategies to reduce excessive leverage, this could include focusing on improving capital structure and managing debt levels effectively.

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Appendices

```
. summarize ROA DNS DLS DT DPQ DAG LVG FSZ BAG
```

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	80	2.155971	1.455501	-.9992602	6.879042
DNS	80	.381875	.0866843	.18	.58
DLS	80	.475	.5025253	0	1
DT	80	.975	.15711	0	1
DPQ	80	.549625	.1014258	.27	.75
DAG	80	.335625	.0619073	.19	.47
LVG	80	.882156	.0348423	.7957163	.9427527
FSZ	80	17.78925	3.017345	13.75104	23.4176
BAG	80	3.671686	.3723677	3.218876	4.369448

```
. correlate ROA DNS DLS DT DPQ DAG LVG FSZ BAG
(obs=80)
```

	ROA	DNS	DLS	DT	DPQ	DAG	LVG	FSZ	BAG
ROA	1.0000								
DNS	0.6734	1.0000							
DLS	0.0729	0.2612	1.0000						
DT	-0.0690	0.0685	-0.0080	1.0000					
DPQ	0.6935	0.8551	0.2569	0.0947	1.0000				
DAG	0.0804	0.2197	0.0758	0.0407	0.3420	1.0000			
LVG	-0.6604	-0.1834	0.0111	0.0314	-0.3007	0.1083	1.0000		
FSZ	0.1701	0.2185	0.0579	0.1065	0.2210	0.1646	-0.1244	1.0000	
BAG	-0.3989	0.0350	0.0639	0.1180	-0.1839	-0.2514	0.5322	0.1732	1.0000

```
. xtreg ROA DNS DLS DT DPQ DAG LVG FSZ BAG, fe

Fixed-effects (within) regression               Number of obs      =        80
Group variable: PANEL                           Number of groups   =         8

R-sq:  within  = 0.3977                         Obs per group: min =        10
       between = 0.6689                                        avg =      10.0
       overall = 0.5764                                        max =        10

                                                F(8,64)            =      5.28
corr(u_i, Xb)  = -0.6944                        Prob > F           =    0.0000
```

ROA	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
DNS	1.784646	3.235133	0.55	0.583	-4.678275	8.247568
DLS	-.1799158	.1569802	-1.15	0.256	-.4935198	.1336882
DT	-.4726012	.6649376	-0.71	0.480	-1.800967	.8557644
DPQ	6.133892	2.899791	2.12	0.038	.3408942	11.92689
DAG	3.284763	3.10543	1.06	0.294	-2.919046	9.488571
LVG	-22.50741	5.440202	-4.14	0.000	-33.37546	-11.63935
FSZ	.2664238	.3087949	0.86	0.391	-.3504648	.8833125
BAG	-1.18251	2.148056	-0.55	0.584	-5.473745	3.108725
_cons	17.00428	6.644662	2.56	0.013	3.730044	30.27852
sigma_u	1.0919813					
sigma_e	.6575754					
rho	.73387629	(fraction of variance due to u_i)				

```
F test that all u_i=0:     F(7, 64) =      2.41             Prob > F = 0.0296
```

```
. xtreg ROA DNS DLS DT DPQ DAG LVG FSZ BAG, re

Random-effects GLS regression                   Number of obs      =        80
Group variable: PANEL                           Number of groups   =         8

R-sq:  within  = 0.3007                         Obs per group: min =        10
       between = 0.9777                                        avg =      10.0
       overall = 0.7910                                        max =        10

                                                Wald chi2(8)       =    268.76
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.0000

------------------------------------------------------------------------------
         ROA |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         DNS |   8.858954   1.912329     4.63   0.000     5.110858    12.60705
         DLS |  -.2297647   .1642173    -1.40   0.162    -.5516248    .0920953
          DT |  -.7775449   .5131213    -1.52   0.130    -1.783244    .2281543
         DPQ |   1.919651   1.741212     1.10   0.270    -1.493062    5.332364
         DAG |  -1.888159   1.572279    -1.20   0.230    -4.969769    1.193451
         LVG |  -17.02151   3.162711    -5.38   0.000    -23.22031   -10.82271
         FSZ |   .0162411   .0292094     0.56   0.578    -.0410083    .0734904
         BAG |  -.7308224   .3096558    -2.36   0.018    -1.337737   -.1239081
       _cons |   16.62889   2.491474     6.67   0.000     11.74569    21.51209
-------------+----------------------------------------------------------------
     sigma_u |          0
     sigma_e |   .6575754
         rho |          0   (fraction of variance due to u_i)
. hausman fixed random

                 ---- Coefficients ----
             |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
             |     fixed        random       Difference          S.E.
-------------+----------------------------------------------------------------
         DNS |    1.784646     8.858954       -7.074308        2.609422
         DLS |   -.1799158    -.2297647        .0498489               .
          DT |   -.4726012    -.7775449        .3049438        .4229049
         DPQ |    6.133892     1.919651        4.214241        2.318829
         DAG |    3.284763    -1.888159        5.172922         2.67799
         LVG |   -22.50741    -17.02151       -5.485896        4.426404
         FSZ |    .2664238     .0162411        .2501828        .3074103
         BAG |    -1.18251    -.7308224       -.4516876        2.125619
------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                  chi2(8) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       17.45
                Prob>chi2 =      0.0257
                (V_b-V_B is not positive definite)
```

```
. estat vif
```

Variable	VIF	1/VIF
DPQ	5.00	0.199918
DNS	4.41	0.226907
BAG	2.13	0.468976
LVG	1.95	0.513478
DAG	1.52	0.658127
FSZ	1.25	0.802709
DLS	1.09	0.915586
DT	1.04	0.959413
Mean VIF	2.30	

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	35.82	36	0.4771
Skewness	5.11	8	0.7457
Kurtosis	0.27	1	0.6027
Total	41.20	45	0.6336

JOURNAL OF FINANCIAL REPORTING AND CORPORATE GOVERNANCE EDITORIAL POLICY

1. Introduction

The FRC Journal of Financial Reporting and Corporate Governance aims to publish high-quality research that contributes to the development of financial reporting and corporate governance. This editorial policy document serves as a guideline for authors and reviewers involved with the FRC Journal of Financial Reporting and Corporate Governance, ensuring a transparent and rigorous publication process.

2. Scope of the Journal

The journal welcomes submissions that address a wide range of topics related to financial reporting and corporate governance, including cross cutting and interconnected areas of Financial Reporting and corporate governance, but not limited to corporate and public sector financial reporting, auditing and assurance, valuation and actuarial, corporate governance, and regulatory and legal environments.

3. Submission Guidelines

(i) **Manuscript Submission**: Authors must submit their manuscripts through the journal's online submission system. Detailed instructions for manuscript preparation can be found on the journal's website. Alternatively, submissions can be made through email to frcjournal@frcnigeria.gov.ng

(ii) **Formatting**: Manuscripts should adhere to the following specified formatting guidelines, including:

- **Citation style** –APA 7th Edition
- **Length** –Not more than 20 pages, double spacing, Times New Roman 12”
- **Structure**: **Preliminary**: Title, Author’s Affiliations (With email and Phone No.), Abstract (Maximum 250 words) and key words (maximum 5); **Body**: (1) Introduction, (2) Literature Review, (3) Methodology, 4) Results and Discussion, (5) Conclusion and Recommendations, References, Appendices.
- Authors are encouraged to use clear and concise language.

(iii) **Conflict of Interest**: Authors must disclose any potential conflicts of interest in their cover letter. This includes financial interests, personal relationships, or any other factors that could influence the impartiality of the research.

(iv) **Ethical Considerations**: All submissions must comply with ethical standards in research, including proper citation of sources and avoidance of plagiarism, duplicate publication while being peer reviewed. Authors are responsible for obtaining permissions for any copyrighted material used in their work.

4. Review Process

(i) **Initial Review**: Upon submission, the editorial board will conduct an initial review to assess the manuscript's suitability for the journal. Manuscripts that do not meet the journal's standards will be rejected at this stage.

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(iii) **Peer Review Reports as basis of Editorial Decisions**: Peer review reports should be in English and provide constructive critical evaluations of the authors’ work, particularly in relation to the appropriateness of methods used, whether the results are accurate, and whether the conclusions are supported by the results. Editorial decisions should be based on peer reviewer comments that meet these criteria rather than on recommendations made by short, superficial peer reviewer reports which do not provide a rationale for the recommendations. The editorial board reserves the right to accept or reject peer review reports.

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(iii) **Corrections and Retractions**: The journal will publish corrections for any errors identified post-publication and will retract articles if significant ethical breaches are discovered. The editorial board shall do her utmost best to ensure that error laden articles and those with serious ethical infraction that will necessitate retraction, are not published.

7. Additional Information

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a) made substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data; or the creation of new software used in the work;

b) drafted the work or revised it critically for important intellectual content;

c) approved the version to be published; and

d) agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

(v) **Affiliation:** The primary affiliation for each author should be the institution where the majority of their work was done. If an author has subsequently moved, the current address may additionally be stated. Addresses will not be updated or changed after publication of the article.

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JOURNAL OF FINANCIAL REPORTING AND CORPORATE GOVERNANCE PEER REVIEW GUIDELINES

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The Editorial Board shall conduct a prima facie assessment of any articles before dispatching for peer review process. The Board shall have the duty to assess the following:

- ✓ **Relevance**: Check if the manuscript fits the aims and scope of the journal.
- ✓ **Originality**: Assess whether the work provides novel insights or findings.
- ✓ **Significance**: Consider the importance and potential impact of the research.
- ✓ **Ethical Standards**: Ensure compliance with ethical guidelines (e.g., plagiarism check, Ai detection, etc).

3. Responsibilities of Peer Reviewers

Peer Reviewers shall undertake to assess all articles sent to them for:

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- ✓ **Clarity of Hypothesis/Research Question**: Determine whether the study's goals are clearly stated and justified.
- ✓ **Reproducibility**: Check if enough detail is provided for the study to be replicated.
- ✓ **Data Integrity**: Look for possible data manipulation or insufficient data reporting.

b) **Quality of Presentation:**

- ✓ **Structure and Organization**: Ensure that the manuscript is logically organized (in line with the prescribed format of the Journal.
- ✓ **Language and Style**: Consider clarity, grammar, and fluency of expression.
- ✓ **Figures and Tables**: Assess their quality, relevance, and whether they support the text.
- ✓ **References**: Ensure citations are appropriate, up-to-date, and properly formatted in line with APA 7th Edition.

c) Review Report Guidelines

- ✓ **Constructive Feedback**: Provide clear, respectful, and actionable suggestions for improvement on the prescribed form.

- ✓ **Confidential Comments to Editors**: Include concerns about ethics, originality, or recommendation for accept/reject.
- ✓ **Recommendation**: Usually options include:
  - Accept
  - Minor revisions
  - Major revisions
  - Reject

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- ✓ **Conflict of Interest**: Disclose any potential conflicts (personal, financial, academic).
- ✓ **Confidentiality**: Treat the manuscript and data as confidential.
- ✓ **Objectivity**: Remain impartial; avoid personal criticism.

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- h) agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

(xi) **Affiliation:** The primary affiliation for each author should be the institution where the majority of their work was done. If an author has subsequently moved, the current address may additionally be stated. Addresses will not be updated or changed after publication of the article.