



# **Gusau Journal of Accounting and Finance (GUJAF)**

**Vol. 5 Issue 1, April, 2024 ISSN: 2756-665X**

A Publication of  
Department of Accounting and Finance,  
Faculty of Management and Social Sciences,  
Federal University Gusau, Zamfara State -Nigeria

© Department of Accounting and Finance

**Vol. 5 Issue 1**  
**April, 2024**  
**ISSN: 2756-665X**

A Publication of  
Department of Accounting and Finance,  
Faculty of Management and Social Sciences,  
Federal University Gusau, Zamfara State -Nigeria

**All Rights reserved**

*Except for academic purposes no part or whole of this publication is allowed to be reproduced, stored in a retrieval system or transmitted in any form or by any means be it mechanical, electrical, photocopying, recording or otherwise, without prior permission of the Copyright owner.*

*Published and Printed by*  
Ahmadu Bello University Press Limited, Zaria,  
Kaduna State, Nigeria.  
Tel: 08065949711  
e-mail: abupress@abu.edu.ng  
info@abupress.com.ng  
[abupress2013@gmail.com](mailto:abupress2013@gmail.com)  
Website: [www.abupress.com.ng](http://www.abupress.com.ng)

**EDITORIAL BOARD**

*Editor-in-Chief:*

**Prof. Shehu Usman Hassan**

Department of Accounting, Federal University of Kashere, Gombe State.

*Associate Editor:*

**Dr. Muhammad Mustapha Bagudo**

Department of Accounting, Ahmadu Bello University Zaria, Kaduna State.

*Managing Editor:*

**Umar Farouk Abdulkarim**

Department of Accounting and Finance, Federal University Gusau, Zamfara State.

*Editorial Board*

**Prof. Ahmad Modu Kumshe**

Department of Accounting, University of Maiduguri, Borno State.

**Prof Ugochukwu C. Nzewi**

Department of Accounting, Paul University Awka, Anambra State.

**Prof Kabir Tahir Hamid**

Department of Accounting, Bayero University, Kano, Kano State.

**Prof. Ekoja B. Ekoja**

Department of Accounting, University of Jos.

**Prof. Clifford Ofurum**

Department of Accounting, University of PortHarcourt, Rivers State.

**Prof. Ahmad Bello Dogarawa**

Department of Accounting, Ahmadu Bello University Zaria.

**Prof. Yusuf. B. Rahman**

Department of Accounting, Lagos State University, Lagos State.

**Prof. Suleiman A. S. Aruwa**

Department of Accounting, Nasarawa State University, Keffi, Nasarawa State.

**Prof. Muhammad Junaidu Kurawa**

Department of Accounting, Bayero University Kano, Kano State.

**Prof. Muhammad Habibu Sabari**

Department of Accounting, Ahmadu Bello University, Zaria.

**Prof. Okpanachi Joshua**

Department of Accounting and Management, Nigerian Defence Academy, Kaduna.

**Prof. Hassan Ibrahim**

Department of Accounting, IBB University, Lapai, Niger State.

**Prof. Ifeoma Mary Okwo**

Department of Accounting, Enugu State University of Science and Technology, Enugu State.

**Prof. Aminu Isah**

Department of Accounting, Bayero University, Kano, Kano State.

**Prof. Ahmadu Bello**

Department of Accounting, Ahmadu Bello University, Zaria.

**Prof. Musa Yelwa Abubakar**

Department of Accounting, Usmanu Danfodiyo University, Sokoto State.

**Prof. Salisu Abubakar**

Department of Accounting, Ahmadu Bello University Zaria, Kaduna State.

**Prof. Sunusi Sa'ad Ahmad**

Department of Accounting, Federal University Dutse, Jigawa State.

**Prof. Isaq Alhaji Samaila**

Department of Accounting, Bayero University, Kano State.

**Dr. Fatima Alfa**

Department of Accounting, University of Maiduguri, Borno State.

**Dr. Nasiru A. Ka'oje**

Department of Accounting, Usmanu Danfodiyo University Sokoto State.

**Dr. Aminu Abdullahi**

Department of Accounting, Usmanu Danfodiyo University Sokoto, State.

**Dr. OnipeAdebenege Yahaya**

Department of Accounting, Nigerian Defence Academy, Kaduna State.

**Dr. Saidu Adamu**

Department of Accounting, Federal University of Kashere, Gombe State.

**Dr. Nasiru Yunusa**

Department of Accounting, Ahmadu Bello University Zaria.

**Dr. Aisha Nuhu Muhammad**

Department of Accounting, Ahmadu Bello University Zaria.

**Dr. Lawal Muhammad**

Department of Accounting, Ahmadu Bello University Zaria.

**Dr. Farouk Adeza**

School of Business and Entrepreneurship, American University of Nigeria, Yola.

**Dr. Bashir Umar Farouk**

Department of Economics, Federal University Gusau, Zamfara State.

**Dr Emmanuel Omokhuale**

Department of Mathematics, Federal University Gusau, Zamfara. State

**ADVISORY BOARD MEMBERS**

**Prof. Kabiru Isah Dandago**, Bayero University Kano, Kano State.

**Prof A M Bashir**, Usmanu Danfodiyo University Sokoto, Sokoto State.

**Prof. Muhammad Tanko**, Kaduna State University, Kaduna.

**Prof. Bayero A M Sabir**, Usmanu Danfodiyo University Sokoto, Sokoto State.

**Prof. Aliyu Sulaiman Kantudu**, Bayero University Kano, Kano State.

**Editorial Secretary**

**Yazid Kabir Ibrahim**

Department of Accounting and Finance, Federal University Gusau, Zamfara State.

## **CALL FOR PAPERS**

The editorial board of Gusau Journal of Accounting and Finance (GUJAF) is hereby inviting authors to submit their unpublished manuscript for publication. The journal is published in two issues of April and October annually. GUJAF is a double-blind peer reviewed journal published by the Department of Accounting and Finance, Faculty of Management and Social Sciences, Federal University Gusau, Zamfara State Nigeria. The Journal accepts papers in all areas of Accounting and Finance for publication which include: Accounting Standards, Accounting Information System, Financial Reporting, Earnings Management, , Auditing and Investigation, Auditing and Standards, Public Sector Accounting and Auditing, Taxation and Revenue Administration, Corporate Governance Issues, Corporate Social Responsibility, Sustainability and Environmental Reporting Issue, Information and Communication Technology Issues, Bankruptcy Prediction, Corporate Finance, Personal Finance, Merger and Acquisitions, Capital Structure, Working Capital Management, Enterprises Risk Management, Entrepreneurship, International Business Accounting and Finance, Banking Crises, Bank's Profitability, Risk and Insurance Issue, Islamic Finance, Conventional and Islamic Banks and so forth.

### **GUIDELINES FOR SUBMISSION AND MANUSCRIPT FORMAT**

The submission language is English and must be a well-researched original manuscript that has not previously been submitted elsewhere for publication. The paper should not exceed more than 15 pages on A4 type paper in MS-word format, 1.5-line spacing, 12 Font size in Times new roman. Manuscript should be tested for plagiarism before submission, as the maximum similarity index acceptable by GUJAF is 25 percent. Furthermore, the length of a complete article should not exceed 5000 words including an abstract of not more than 250 words with a minimum of four key words immediately after the abstract. All references including in text citation and reference list, tables and figures should be in line with APA 7<sup>th</sup> Edition publication manual. Finally, manuscript should be send to our email address [elfarouk105@gmail.com](mailto:elfarouk105@gmail.com) and a copy to our website on [journals.gujaf.com.ng](http://journals.gujaf.com.ng)

### **PUBLICATION PROCEDURE**

After receiving a manuscript that is within the similarity index threshold, a confirmation email will be send together with a request to pay a review proceeding fee. At this point, the editorial board will take a decision on accepting, rejecting or making a resubmission of the manuscript based on the outcome of the double-blind peer review. Those authors whose manuscript were accepted for publication will be asked to pay a publication fee, after effecting all suggested corrections and changes made on the manuscript. All corrected papers returned within the specified time frame will be published in that issue.

### **PAYMENT DETAILS**

Bank: FCMB

Account Number: 7278465011

Account Name: Gusau Journal of Accounting and Finance

### **FOR INQUIRY**

The Head,

Department of Accounting and Finance,  
Federal University Gusau, Zamfara State.

elfarouk105@gmail.com

+2348069393824

### **FOR MORE INFORMATION, CONTACT**

**The Editor-in-Chief on** +2348067766435

**The Associate Editor on** +2348036057525

OR visit our website on [www.gujaf.com.ng](http://www.gujaf.com.ng) or [journals.gujaf.com.ng](http://journals.gujaf.com.ng)



## **CONTENTS**

Impact of Audit Quality on Earnings Management of Consumer Goods Firms in Nigeria

***Sirajo Bappah, Auwal Saad, Shehu Usman Hassan PhD, Saidu Adamu PhD***

Board Characteristics and Corporate Social Responsibility of Listed Oil and Gas Companies in Nigerian.

***Aliyu Abubakar, Yunusa Nasiru PhD, Dr. Umar Abubakar***

Board Characteristics and Audit Quality of Listed Consumer Goods Firms in Nigeria

***Aliyu Shehu Usman, Danson Andrew, Abdullahi Bala Ado PhD,***

CEO Characteristics and Financial Reporting Quality in Listed Consumer Goods Companies in Nigeria

***Okika Nkiru Philomena, Oyeneye Temitope Esther, Adedeji Daniel Gbadebo***

Liquidity Risk and Financial Performance of Listed Deposit Money Banks in Nigeria

***Bashir Abdulrauf Mohammed, Aliyu Ahmed Abdullah PhD, Prof. Salisu Mamman Ibrahim Yusuf PhD, Suleiman Salami PhD***

Information Asymmetry and Cost of Capital: A Review of Empirical Evidence

***Sunusi Ridwan Ayagi PhD, ACA, Rashida Lawal, PhD***

Ownership Structure and Female Inclusion of Listed Financial Firms in Nigeria

***Gbemigun Catherine Omoleye, Alade Muyiwa Ezekiel Phd***

CSR Initiatives and Sustainability Resilience in Nigeria's Oil and Gas Industry: A PLS-SEM Approach from Local Communities' Perspective

***Tajudeen Alaburo, Rofiat Bolanle, Abdussalam, Abdulrahman Abubakar, Tajudeen, Akeem Olamilekan Babatunde***

Capital Structure and the Financial Performance of Listed Information and Communications Technology Firms in Nigeria

***Nasiru Adamu Kanoma, Nurudeen Usman Miko, Augustine Ayuba, Idris Mohammed, Mark G, Tagwai***

Profitability and Turnover Appraisal of Listed Deposit Money Banks in Nigeria  
*Odogu, Terry Keme Zuode (PhD) and Koroye, Amapamo Stephen*

Board Attributes and Timeliness of Financial Reports of Listed Non-Financial Firms in Nigeria  
*Rashida Lawal PhD and Prof. Kabir Hamid Tahir*

Board Independence and Financial Reporting Quality of Listed Oil and Gas Companies in Nigeria: Moderated by Firm Size  
*Adamu Lawal Bello, Prof. J. Okpanachi, Prof. T. Nyor and Lateef Olumude Mustapha (Ph.D)*

Does ESG Investment Impact the Financial Sustainability of Nigerian Energy Companies: A Panel Regression Approach?  
*Tajudeen Alaburo, Abdulsalam and Adedeji Daniel Gbadebo*

Board Attributes and Sustainability Reporting of Listed Firms in Nigeria  
*Idris Mohammed, Benjamin K, Gugong PhD, Rofiat Adedokun, Abdulrahman A, Olorunloga and Mark, G, Tagwai*

Mediating Effect of Internal Auditors' Ethical Conduct on The Relationship Between Usage of Information Technology, Management Support for Internal Audit Department, and Internal Audit Effectiveness: A Conceptual Framework  
*Nura Badamasi, Adura Binti Ahmad*

**BOARD INDEPENDENCE AND FINANCIAL REPORTING QUALITY  
OF LISTED OIL AND GAS COMPANIES IN NIGERIA MODERATED BY  
FIRM SIZE**

**Adamu Lawal Bello**

National Board for Technical Education (NBTE)  
Kaduna, Nigeria.  
adamulbello@gmail.com

**Prof. J. Okpanachi**

Department of Accounting,  
Faculty of Management Sciences,  
Nigerian Defence Academy, Kaduna, Nigeria.  
Okpasmg82@gmail.com

**Prof. T. Nyor**

Department of Accounting,  
Faculty of Management Sciences,  
Nigerian Defence Academy, Kaduna, Nigeria.  
[tnyor@nda.edu.ng](mailto:tnyor@nda.edu.ng)

**Lateef Olumude Mustapha (Ph.D)**

Department of Accounting,  
Faculty of Management Sciences,  
Nigerian Defence Academy, Kaduna, Nigeria.  
[lomustapha@nda.edu.ng](mailto:lomustapha@nda.edu.ng)

---

**Abstract**

In the dynamic landscape of corporate governance, the interplay between board characteristics and financial reporting quality stands as a focal point for scholarly investigation. This study investigates the moderating effect of firm size on the relationship between board independence and financial reporting quality of listed oil and gas companies in Nigeria. The study employs a quantitative research design and the populations of the study were all the oil and gas companies listed on the floor of Nigerian Exchange Group from 2012 to 2021. The study used ten (10) oil and gas companies as the population and sample size. The study further used panel regression technique as method for data analysis. The result of the direct relationship revealed that board independence and board size negatively and significantly influence the financial reporting quality of listed oil and gas companies in Nigeria. In the case of moderated effect, the results indicate that firm size does not significantly moderate the influence of board independence on the financial reporting quality of listed oil and gas

companies in Nigeria. Based on the results obtained, it can be concluded that the interaction between firm size and board independence does not have a significant impact on the financial reporting quality of listed oil and gas companies in Nigeria. Based on the findings, the study recommended that policymakers such as financial reporting council and Securities and Exchange Commission should enforce the code of corporate governance that will provide for mandatory independent directors with financial expertise. Secondly, the firm size should be properly put into consideration in constituting the number of non-executive directors on the board of directors of listed oil and gas companies in Nigeria.

**Keywords:** Board independence, firm size, financial reporting quality and board Size

---

## **1. Introduction**

The Nigerian oil and gas industry plays a significant role in the country's economy by making substantial contributions to its gross domestic product and serving as a major source of government revenue. Therefore, ensuring high-quality financial reporting is crucial in this sector to maintain investor confidence, attract foreign investments, and promote transparency and accountability. Recent academic research and professional attention have focused on understanding the importance of financial reporting quality (Al-Dmour et al., 2018; Pourabdollahian & Kordlouie, 2019). Engaging in research to understand the factors influencing financial reporting quality is a valuable pursuit, as it contributes to the provision of high-quality financial information. This, in turn, has a positive impact on capital providers and other stakeholders, influencing their decisions related to investment, credit, and resource allocation, ultimately enhancing market efficiency.

The global economic crisis and the failures of prominent firms like Enron, World.Com, and Pamalat in the early 2000s, along with their external auditors, have raised concerns about the integrity of the accounting profession. Researchers worldwide have attributed the failure of these firms to non-adherence to ethical standards and poor corporate governance mechanisms (Aifuwa & Embele, 2019; Aifuwa et al., 2018; Akeju & Babatunde, 2017). The board of directors plays a critical role in business operations, including management monitoring, corporate policy formulation, strategic planning approval, management recruitment and removal, succession planning, resource provision, board size determination, and nomination of new members (Oyedokun, 2019). The ability of the board to effectively monitor the top management and to investigate the agency problems is greatly dependent in the board independence as the outside directors have absolutely to stake in the firm (Altuwajiri & kalyanaraman, 2016).

Though previous studies have explored the relationship between board independence and financial reporting quality, highlighting its positive impact on reducing earnings management, financial fraud, and improving the reliability and transparency of financial statements. However, limited research has investigated the moderating effect of firm size on this relationship, particularly in Nigeria's oil and gas sector.

Firm size is a significant characteristic that can influence corporate governance practices and financial reporting quality. Li and Chen (2018). Large firms often have more resources, higher visibility, and greater public scrutiny, which can affect their governance structures and reporting practices. On the other hand, smaller firms may face unique challenges and constraints in implementing effective corporate governance mechanisms and maintaining high-quality financial reporting Almajali et al (2012).

However, a gap exists in understanding how firm size moderates the relationship between board independence and financial reporting quality, particularly within Nigeria's oil and gas sector. Firm size is a crucial factor that can significantly influence corporate governance practices and reporting standards. Larger firms typically possess more resources and face greater public scrutiny, affecting their governance structures and reporting practices. Conversely, smaller firms may encounter unique challenges in implementing effective governance mechanisms and maintaining high-quality reporting standards.

Understanding the moderating role of firm size is crucial for gaining insights into how the relationship between board independence and financial reporting quality may vary across different company sizes within Nigeria's oil and gas sector. This understanding can provide valuable implications for policymakers, regulators, and practitioners in developing appropriate governance frameworks and strategies to improve financial reporting practices in both large and small oil and gas companies. Therefore, this study fills the existing research gap by examining the moderating role of firm size on the relationship between board independence and financial reporting quality among listed oil and gas companies in Nigeria.

### **Statement of Hypotheses**

Ramdani and Witteloostuijn (2010) assert that an independent board effectively monitors top management, discouraging self-interest, while Nesrine and Abdelwahid (2011) find a strong relationship between "board independence" and

the "quality of financial statement reporting." D'onza & Lamboglia (2014) suggest that an independent board ensures proper financial statement reporting, presenting high-quality reports without material misstatements. Conversely, Park and Shin (2004) found no significant link between board independence and financial statement quality in Canadian corporations. Thus, this study proposes the null hypothesis:

**H<sub>01</sub>:** Board independence has no significant effect on the financial reporting quality of listed oil and gas companies in Nigeria.

Firm size influences the timely reporting of financial statements, with larger firms attracting more external interest (Chekili, 2012). Mohammed et al. (2019) indicate that larger board size can enhance organizational performance and moderate agency problems between shareholders and managers, reducing agency costs. Sinebe (2020b) suggests that larger boards can commit more time and effort to managerial functions. Therefore, the study hypothesizes a null:

**H<sub>02</sub>:** Firm size has no significant effect in moderating the relationship between board independence and financial reporting quality of listed oil and gas companies in Nigeria.

## **2. Literature Review**

The review of the literature was based on the concept, theories and review of empirical studies.

Board independence means the number of independent non-executive directors on the board in relation to the total number of directors (Uwugbe, 2011). It plays a significant role in firm performance as an independent board can effectively reduce agency problems by monitoring managers and mitigating their opportunistic behavior (Oyedokun, 2019; Uadiale, 2010). Anderson et al. (2004) argue that a board consisting mostly of employees may be inclined to hide negative information to gain personal benefits, concealing it from stakeholders. An independent board is committed to serving both management and stakeholders by actively monitoring and disclosing financial and non-financial information.

Board independence refers to the degree to which a company's board consists of outside directors who are not affiliated with the company. It also signifies the

freedom of board members. Board independence represents the degree to which the board consists of outside directors who are not affiliated with the company. Board independence, also known as the freedom of board members to express objective opinions in managing firms without interference from the chairman, management, or block owners, is a measure of the percentage of independent non-executive directors on the board.

Company size has been defined differently in the literature to refer to, among other things, total assets, the scope of operations, and the number of employees. A company's size cannot be overridden when determining the company's value (Diriya & Korolo, 2023). Larger companies tend to have maximized value than smaller companies. This is reflected in their operational level, which is expected to be larger than smaller companies. When the value of the company is measured by performance, this large volume of operations translates into better performance than smaller companies. Most companies intend to increase the size of their operations, either to increase sales, the number of employees, or the size of facilities (Pervan & Visic, 2012). Ousama and Fatima (2010) explain the relationship between firm size and the extent of disclosure.

Financial reporting quality refers to the accuracy and precision with which financial reporting presents information about a firm's operations (Biddle et al., 2009). It is crucial for efficient allocation of resources as information disclosure influences decision making (Bekiri & Doukakis, 2011). Verdi (2006) defines financial reporting quality as the accurate representation of a business's activities and anticipated cash flows, aiming to inform shareholders about the company's operations. It also pertains to the provision of fair and authentic information about the financial position and performance of an enterprise. High-quality financial statements should provide genuine information to keep shareholders and stakeholders informed about the entity's current situation.

Board size and board independence have garnered attention in corporate governance regulations globally. Board size refers to the total number of directors, indicating a large or small board (Tajuddin et al., 2023). A large board comprises diverse experts with extensive expertise, beneficial for problem identification. Studies on board size present varying findings. For instance, Potharla and Amirishetty (2021) find a nonlinear relationship between board size, board independence and firm performance in India. The effects of board size, composition and independence on CSR disclosure are also examined (Rouf and Hossan, 2021),

along with the relationship between board independence and firm value in state-owned enterprises (Sasidharan, 2020).

In this study, board size serves as a control variable to examine the moderating effect of firm size on the relationship between board independence and financial reporting quality in the Nigerian oil and gas sector. By incorporating board size as a control, we aim to isolate the specific impact of firm size on the interaction between board independence and financial reporting quality. This approach allows for a more nuanced understanding of how the dynamics among these variables may vary.

## **2.2 Review of Empirical Studies**

This section examines the relationship between the independent variable, board independence, and the dependent variable, financial reporting quality.

Abdallah et al. (2022) explore the influence of board of directors' characteristics on integrated reporting quality in Malaysia. The board's characteristics considered is independence, as hypothesized by the agency theory. A total of 64 companies were analyzed from 2017 to 2020, for a total number of 173 integrated reports. The findings highlight that IRQ is positively related to the board size, gender diversity and activity of the board. This study's finding adds to the current literature in numerous ways, and it contributes to the intensive scientific debate on integrated reporting. Furthermore, it is the first study that investigates such a relationship in Malaysia.

Ajibulu et al. (2021) examine six characteristics representing the board of directors independence of board of directors and their impact on quality of financial reports. A correlational research design was used to examine influence of board quality of financial reports using 12 listed deposit money banks. Finding suggests board shows that the study do not find evidence that board independence improve quality of financial report.

Ogbonnaya (2020) examine the impact of Board Independence on Financial Reporting quality of Pharmaceutical companies in Nigeria. A total of 10 Pharmaceutical Companies were selected for the study. Time series data were obtained from annual report of Pharmaceutical companies from 2006 -2019. Accrual model was used to compute the proxy for financial reporting quality; while Board Independence is calculated as the ratio of Non-Executive to Executive



directors on the Board. Regression analysis was used to analyze the data. The study indicated that Board Independence has significant impact on financial reporting quality of Pharmaceutical companies in Nigeria.

Obaje et al. (2021) explored the moderating effect of firm size on the relationship between board structure (board size, board independence) and financial performance (return on assets) of quoted deposit money banks. The study analyzed secondary data spanning from 2012 to 2019, after the implementation of International Financial Reporting Standards. The findings indicated that board size moderated by firm size had a non-significant effect on return on assets, while board independence moderated by firm size had a significant negative effect. Firm size, had a significant negative effect at a 1% level of significance.

Ogbaisi et al. (2019) examined the relationship between board independence, and financial reporting quality in Nigeria. The study utilized data from forty quoted companies from 2010 to 2015. The results showed a positive significant relationship between board expertise and financial reporting quality. However, the relationship between board independence and financial reporting quality was positive but insignificant, indicating that changes in the number of independent board members did not significantly impact financial reporting quality. The study concluded that board expertise is a crucial determinant of financial reporting quality and recommended increasing the number of board members with expertise to enhance reporting quality.

Bako (2018) investigated the impact of board independence on financial reporting quality in the Nigerian chemical and plant industry. The study utilized data from four selected companies for a period of five years (2009-2013) and analyzed it using correlation and regression. The results indicated that board independence had an insignificant effect on financial reporting quality.

Elshawarby (2018) examined the characteristics of the board of directors and their impact on the delay of external auditors' reports in companies listed on the Egyptian stock exchange. The study utilized data from sixteen listed companies between 2013 and 2016. Multiple regression analysis was used to test the hypotheses. The findings revealed that board independence had an impact on the delay of external reports. The study recommended legislation at the local and global level to enhance the characteristics of the board of directors, ensuring timely issuance of independent reports and improving the credibility and reliability of financial

statements. Although the study focused on the delay of external auditors' reports, it did not explore other measures of financial performance or governance.

Mu'azu (2016) studied the moderating effect of firm size on the relationship between board structure and financial performance of Deposit Money Banks in Nigeria. The study analyzed the role of bank size as a moderator between board size, board independence, and financial performance. Data from the financial statements of Nigerian Deposit Money Banks from 2005 to 2015 were analyzed using regression models. The results indicated that the relationship between board structure and financial performance is moderated by firm size. Therefore, the study recommends considering firm size when evaluating the financial performance of DMBs, as it moderates the relationship between board independence, board size, and firm financial performance.

The theory that underpins this study is the stewardship theory. The concept of stewardship theory was introduced by Donaldson and Davis (1989) as an alternative to agency theory. Unlike agency theory, stewardship theory takes a positive view of human (managerial) behavior. It argues that agents are not primarily driven by individual goals and that they are inherently trustworthy, unlikely to misuse corporate resources, and motivated to work in the best interest of their principals (Barney, 1990; Davis, 1991; Nicholson & Kiel, 2007).

As a result, stewardship theorists propose consolidating power among insiders. They suggest that the board should hold ultimate power and authority for the optimal exercise of the stewardship role (Donaldson & Davis, 1991). Additionally, stewardship theory suggests the need for outside independent directors because agents sometimes fail to act as proper stewards for their corporations and may not be motivated by overall goals (Luan & Tang, 2007).

This study is grounded in stewardship theory, which asserts that directors often have interests aligned with those of shareholders. According to this perspective, there is no significant agency cost because managers are inherently trustworthy (Donaldson, 2003). Donaldson and Davis (1991) propose an alternative view of individuals in organizations, where role holders are motivated by a desire to achieve and derive intrinsic satisfaction from performing challenging work, exercising responsibility and authority, and receiving recognition from their superiors. They argue that over time, individual egos become integrated with the corporation. Cullen et al. (2000) suggest that stewardship theory rejects the notion of a general

problem with executive motivation. Therefore, extrinsic incentive contracts are less critical, as managers derive intrinsic satisfaction from fulfilling their duties.

Grounded in stewardship theory, recent studies have delved into the examination of corporate governance dynamics and their influence on financial reporting quality. Ogbonnaya (2020) explored the impact of Board Independence on Financial Reporting quality within the context of pharmaceutical companies in Nigeria. Bako (2018) conducted an analysis on the impact of corporate governance on the quality of financial reporting specifically in Nigeria's chemical and plant industry. Elshawarby (2018) focused on investigating the characteristics of the board of directors and their influence on the delay of external auditors' reports, applying this inquiry to companies listed on the Egyptian stock exchange. In a study by Yohan An (2016), the effects of outside directors' quality on firm value and earnings quality in Korean listed firms were examined, utilizing panel data spanning the period 2000-2012. These studies collectively contribute to a deeper understanding of stewardship theory's application in assessing the relationship between governance structures and financial reporting quality in various industries and geographical contexts.

### **3. Methodology**

The study employs a quantitative research design, and the population of the study were all the oil and gas companies listed on the floor of Nigerian Exchange Group (NGX). The study used ten (10) oil and gas companies as the population size and the sample size comprised of all the 10 listed oil and gas companies in Nigeria and covered a period of 10 years (2012-2021). The sample was based on (i) the company must have the financial reports on their website or on NGX website of office throughout the study period (ii) the company must have been listed on the NGX and remain listed throughout the study period and (iii) must be oil and gas companies in Nigeria and must be classified as oil and gas companies in Nigeria. The study utilizes panel regression technique for data analysis.

To address the research objectives, two models were adapted from Matta and Beamish (2008); Peng and Yang (2014). Model 1 shows the direct effect of board independence on financial reporting quality of listed oil and companies in Nigeria. The study specified the model as:

The Equation 1 is a linear regression model, where the dependent variable and independent variables were incorporated and it was adapted from the work of

(Ogbaisi et al., 2019). The  $\beta_0$ ,  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$  are the coefficients associated with each independent variable, representing the effects they have on the dependent variable. The  $\mu_{it}$  term represents the error term or the unexplained variation in the dependent variable that is not accounted for by the independent variables.

$$FRQ_{it} = \beta_0 + \beta_1 BIN_{it} + \beta_2 BSIZE_{it} + \beta_3 FSIZE_{it} + \mu_{it} \text{-----}(1)$$

The model 2 in Equation 2 shows the moderating effect of firm size on the effect of board independence on financial reporting quality of the oil and gas companies listed on the NGX. Model 2 is used to test the second study hypotheses and is represented as follows:

$$FRQ = f(BIN, BSIZE, BIN*FSIZE) \text{-----}(2)$$

The Equation 3 is still a linear regression model, but now it includes an interaction term between the independent variables and the moderating variable. The relationship between the independent variables and the dependent variable depends on the level of the moderating variable. While the coefficient  $\beta_4$  quantifies the magnitude and direction of this interaction effect. The model is adapted from the study of Faozi et al. (2022).

$$FRQ_{it} = \beta_0 + \beta_1 BIN_{it} + \beta_2 BSIZE_{it} + \beta_4 BIN_{it}*FSIZE + \mu_{it} \text{-----}(3)$$

Where:

FRQ = Financial Reporting Quality. To measure financial reporting quality, this study adopted the modified Jones (1995) Model where discretionary accrual was used to proxy financial reporting quality.

$$TACC_{it}/A_{it-1} = \alpha_1(1/A_{it-1}) + \beta_1[(\Delta REV - \Delta REC)/A_{it-1}] + \beta_2[(PPE_{it})/A_{it-1}] + \epsilon_{it}$$

Where:

TACC = Total Accruals (NI – OCF)

$\Delta REV$  = Change in Revenue

$\Delta REC$  = Change in Receivable

PPE = Property, Plant and Equipment

$A_{it-1}$  = Year-end assets for company I in year t-1

$\varepsilon_{it}$  = error term/residual

Consistent with previous research, all variables have been scaled by lagged total assets to reduce Heteroskedasticity.  $\varepsilon_{it}$  is included as an error term. The error term,  $\varepsilon_{it}$ , is the estimate of the discretionary accruals.

BIN= Board Independence

BSIZE= Board Size

FSIZE = Firm Size

FSIZE\*BIN = a predictor for firm size-moderated board independence

$\beta_0$  = Intercept term (a constant)

$\beta_1$ - $\beta_3$  = Coefficients of the independent variable

**Table 1: Variables Measurement and Sources**

<b>Variables</b>	<b>Definitions</b>	<b>Measurement</b>	<b>Source</b>
<u>Dependent</u> FRQ	Financial reporting quality: This is defined as the faithfulness of information conveyed in the financial reporting process.	Measured by use of modified Jones Model	Modified Jones (1995)
<u>Independent</u> BIN	Board Independence Means the number of independent non-executive directors on the board in relation to the total number of directors.	Proportion of non-executive members to total number of Board members	Madrigal et al (2015), Uwuigbe et al., (2018), Akintayo and Salman(2018)
<u>Control</u> BSIZE	Board Size: Board size refers to the number of members on the board of a firm.	Total number of directors on the board of directors of the company	Ozcan & Riza (2016), Gurmeen (2015), Dabor and Dabor(2015), Abata and Migiro (2016)
<u>Moderating</u> FSIZE	Firm Size: Refer to the total assets, scale of operations and number of employees among others in an organization	Natural log of total assets	Nwanna and Ivie(2017), Babalola(2013), Badara(2016), Ilaboya & Ohiokha(2014), Dioha et al.(2018), Usman&Amran(2015)

**Source:** Author, 2024

The study utilized data from secondary sources, specifically the annual reports of the selected oil and gas companies listed on the floor of NGX. An advantage of relying on secondary data is that it is not subject to manipulation. The data analysis involved the use of descriptive statistics and multiple linear regression. Descriptive

statistics were employed to determine measures of central tendency and dispersion, such as means, minimum and maximum values, and standard deviation. Multiple regression was used to examine the impact of independent and moderating variables on the dependent variable. As a result, multiple regression analysis was employed to test the formulated hypotheses by examining both cause and effect relationships in the study.

To enhance the validity and reliability of the inferential statistical results based on panel regressions, several robustness tests were conducted. These tests were performed as pre-estimation assumptions to ensure the validity of the multiple regression results. The Shapiro-Wilk test was used to assess normality of the error term, with a significant result indicating a lack of normality. Pearson correlation and Variance Inflation (VIF) were employed to verify that the independent variables were not highly correlated. These pre-estimation tests aimed to identify the absence of multicollinearity issues among the study's variables. Pearson correlation coefficients above  $\pm 0.7$  indicated potential multicollinearity, while VIF values below 10.0 indicated no significant multicollinearity problem. Another regression assumption examined in this study was heteroskedasticity, which was assessed as a post-estimation assumption. The White test was used for this purpose, with a significant result indicating the presence of heteroskedasticity. To address this issue, a robust standard error option was employed during the regression analysis.

The dataset used in this study encompassed both cross-sectional and time-series dimensions. To test the panel effect, a Hausman specification test was conducted. The Hausman test helped determine whether to use a fixed effects model or a random effects model. If the Hausman test yielded a significant result, a fixed effects model would be favored. Conversely, if the Hausman specification test produced an insignificant result, the random effects model would be considered the most appropriate for the data. Lastly, the Lagrangian Multiplier test VIF was conducted to choose between the pooled ordinary least squares and random effects models.

#### **4. Results and Discussions**

This section discusses the results from analysis of descriptive statistics and multiple regression analysis. The discussion begins with descriptive statistics where measures of centrality and dispersion were discussed. Next, regression assumptions were checked and reported, and finally, regression analysis results were presented.

Table 2 presents the descriptive statistics for the three measures of the financial reporting quality, firm size and board independence, and other relevant control variables. The sample is made up of 10 from the population of size of 10 listed oil and gas companies in Nigeria. The 10 samples of listed oil and gas companies from 2012 to 2021 gave rise to a combined observation of 100.

**Table 2: Descriptive Statistics**

Variable	Obs	Mean	Std.Dev.	Max	Min
FRQ	100	0.157092	0.090274	0.319790	-0.07521
BIN	100	0.189916	0.080454	0.375000	0.058824
BSIZE	100	10.25000	1.565893	14.00000	8.000000
FSIZE	100	8.569875	2.057497	14.87830	2.831810
BINFSIZE	100	1.605122	0.736283	3.704568	0.314645

*Source:* STATA Output, 2024

Table 2 presents the descriptive statistics for financial reporting quality in the study. On average, the participating companies had a financial reporting quality of 0.157092. This numeric representation provides a baseline for assessing the accuracy, transparency, and reliability of financial information reported by these companies. A positive FRQ value indicates a generally favorable quality, while the magnitude of this value gives an indication of the extent to which financial reporting meets or deviates from established standards and expectations.. The range of financial reporting quality values spans from -0.075206 to 0.319790, The range provides insight into the diversity of reporting practices, indicating that some companies have FRQ values below the average, while others exceed it. Moreover, the substantial difference between the mean and standard deviation of financial reporting quality suggests the presence of outliers among the listed oil and gas companies in Nigeria. Examining board independence (M= 0.189916; SD= 0.080454), it was found that 18% of board members on average are independent non-executives, with minimal variation observed across the sampled companies. This finding aligns with the NCCG code, indicating that companies generally comply with the code's requirement for appointing independent non-executive directors to the board.

Regarding the control variable, the board size statistics reveal a mean of 10.25000, a maximum of 14.00000, a minimum of 8.000000, and a standard deviation of 1.565893. These values collectively indicate that, on average, boards consist of ten



members, suggesting that most companies have larger boards. Finally, the firm's size demonstrates a mean of 8.569875 and a standard deviation of 2.057497. The minimum size among the listed oil and gas companies in Nigeria is 2.831810, while the maximum size is 8.590045. The mean size signifies that the oil and gas companies listed in Nigeria have an approximate worth of 8.569875 (N20,704,083,106).

To assess multicollinearity, a Pearson correlation coefficient was computed to examine the relationship between the predictors. Table 3 displays the Pearson correlation coefficient, which indicates a strong positive correlation between board independence and firm size. This implies that larger companies, based on their total assets, tend to have higher levels of board independence compared to smaller firms.

**Table 3: Matrix of Correlations**

Probability	FRQ	BIN	BSIZE	FSIZE
BIN	-0.0425 0.6749			
BSIZE	-0.1728 0.0856	-0.0496 0.6241		
FSIZE	0.3445 0.0004	-0.1369 0.1744	0.2156 0.032	
BINFSIZE	0.1169 0.2464	0.8705 0.0000	0.0727 0.4721	0.3310 0.0008

*Source:* STATA Output, 2024

Based on the correlation coefficients in table 3 above, the p-value is used to assess the statistical significance of the correlation coefficient. A low p-value (typically below 0.05) suggests that the observed correlation is statistically significant. The result revealed that there is a very weak negative correlation between Financial Reporting Quality (FRQ) and Board Independence (BIN), and this correlation is not statistically significant. Also, the result shows that there is a weak negative correlation between FRQ and Board Size (BSIZE), but it is not statistically significant at the conventional significance level of 0.05.

At the conventional significance level of 0.05, there exists a statistically significant moderate positive correlation between Financial Reporting Quality (FRQ) and Firm Size (FSIZE). Conversely, there is a statistically non-significant very weak negative

correlation between Board Independence (BIN) and Board Size (BSIZE). Additionally, the weak negative correlation observed between BIN and Firm Size (FSIZE) is not statistically significant. On the other hand, a statistically significant moderate positive correlation is found between Board Size (BSIZE) and Firm Size (FSIZE). The weak positive correlation identified between the interaction of Board Independence and Firm Size (BINFSIZE) and Financial Reporting Quality (FRQ) is not statistically significant. Furthermore, a highly statistically significant strong positive correlation is present between the interaction of Board Independence and Firm Size (BINFSIZE) and Board Size (BSIZE). Lastly, a statistically significant moderate positive correlation is evident between the interaction of Board Independence and Firm Size (BINFSIZE) and Firm Size (FSIZE).

The regression results are presented and discussed accordingly in this study. Since panel data was utilized, a Hausman test was employed to determine the appropriate model estimator method between fixed and random effects models. The results of the Hausman test indicated insignificance (chi-square = 0.335390, p = 0.8456) for model 1, suggesting that the fixed Effects Model (FEM) is the more efficient estimator. The results obtained from the OLS analysis are presented in table 4.

**Table 4: Regression Model 1**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Con	0.294763	0.043292	6.80872	0.0000
BIN	-0.11886	0.056388	-2.1078	0.0379
BSIZE	-0.01123	0.004069	-2.7597	0.0070
R-squared		0.798298	Number of Obs. 100	
F-test		31.66241	Prob> F	0.0000

**Source:** STATA Output, 2024

Results from Table 4 above reveal an overall coefficient of determination (Overall R-sq) of 0.798298 which means that the variables (BIN and BSIZE) of the independent variable without the moderator used in this study have an approximately 80% combined effect on the systematic changes in the dependent variable (FRQ) during the period under review. The F-Statistic of 31.66241 and the corresponding Prob> F of 0.000000 indicate that the model is fit and reliable for decision making. This serves as a piece of considerable evidence to conclude that

the explanatory powers of board independence and the control variable (BIN and BSIZE,) without the moderator used for the study are suitable for the study.

The results of ordinary least square and fixed effects regression on the relationship between board independence, board size financial reporting quality. As shown in Table 4, board independence and board size negatively and significantly influence the financial reporting quality in fixed effect methods, which indicated that there is a significant relationship between these variables and financial reporting quality. According to the agency theory which predicts that where a board of director is more independent of management; financial reporting quality would be positively influenced. The result of this study is consistent with the agency theory and inconsistent with the findings of number of research such as; Ogbaisi, et al., (2019) The results showed a positive but insignificant, indicating that changes in the number of independent board members did not significantly impact financial reporting quality.

Table 5 presents the results obtained from the OLS analysis. Model 2 was found to be insignificant based on the Hausman test (chi-square = 1.343227, p = 0.8540), indicating that the fixed Effects Model (FEM) is a more efficient estimator. Based on these results, the Hausman test suggests that there is no evidence of correlated random effects in the equation, as the p-value is 0.8540, which is higher than the typical significance level of 0.05.

**Table 5: Regression Model 2**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	0.197225	0.048033	4.106061	0.0001
BIN	-0.46401	0.214048	-2.1678	0.0329
BINFSIZE	0.042992	0.024322	1.767626	0.0807
BSIZE	-0.0172	0.003074	-5.59406	0.0000
FSIZE	0.018114	0.004474	4.048509	0.0001
R-squared		0.893123	Number of Obs.100	
F-test		55.28174	Prob> F	0.0000

*Source:* STATA Output, 2024

According to the findings presented in Table 5, the R2 value is 0.893123, indicating that the variables included in Model 2 explain approximately 89.31% of the

variations in financial reporting quality. The primary variable of interest in Model 2 is the interaction between board independence and firm size. The results indicate that firm size does not significantly moderate the influence of board independence on the financial reporting quality of listed oil and gas companies in Nigeria. While board independence has a significant effect on financial reporting quality without moderation, this significance diminishes when the effect is moderated by firm size ( $\beta = 0.042992$ ,  $t = 1.767626$ ,  $p = 0.0807$ ). Based on this outcome, Hypothesis 2 is accepted, concluding that firm size does not significantly moderate the impact of board independence on the financial reporting quality of listed oil and gas companies in Nigeria. This finding contradicts the results of previous studies such as (Ibrahim, 2016). It is worth noting that the negative relationship between board independence and financial reporting quality turns positive after the moderation by firm size.

## **5. Conclusion and Recommendations**

This empirical study examines the moderating effect of firm size on the relationship between board independence and financial reporting quality in listed oil and gas companies in Nigeria. From a direct relationship perspective, it is concluded that firm size has a significantly negative impact on the financial reporting quality of these companies. Based on the results obtained, it can be concluded that the interaction between firm size and board independence does not have a significant impact on the financial reporting quality of listed oil and gas companies in Nigeria. Firm size does not appear to moderate the influence of board independence on financial reporting quality in this context.

Based on these findings, the study offers the following recommendations:

1. Based on these robust findings, it is recommended for companies to continue emphasizing and strengthening board independence as a critical element in corporate governance. Recognizing the substantial influence it has on financial reporting quality, companies should strive to maintain and enhance independent board structures.
2. Given the lack of significant moderation by firm size, it is recommended that policymakers such as the Financial Reporting Council (FRC), the Securities and Exchange Commission and other stakeholders in the oil and gas sector should consider alternative factors such as continuous monitoring, periodic assessments, and adaptability in governance frameworks will be crucial to

ensuring transparency and accountability within the listed oil and gas companies in Nigeria. While board independence remains crucial, the findings suggest that the impact of this governance characteristic on financial reporting quality is not contingent upon the size of the firm.

This study contributes to existing literature by expanding the understanding of the relationship between board independence and financial reporting quality through the inclusion of firm size as a moderating factor. This contribution is significant as it sheds light on how firm size enhances the financial reporting quality of listed oil and gas companies in Nigeria.

### **References**

- Aifuwa, H. O., & Embele, K. (2019). Board characteristics and financial reporting quality. *Journal of Accounting and Financial Management*, 5(1), 30-49.
- Aifuwa, H. O., Embele, K., & Saidu, M. (2018). Ethical accounting practices and financial reporting quality. *EPRA International Journal of Multidisciplinary Research*, 4(12), 31- 44.
- Akeju, J. B & Babatunde, A. A. (2017). Corporate governance and financial reporting quality in Nigeria. *International Journal of Information Research and Review*, 4(2), 3749-3753.
- Al-Dmour, A. H., Abbod, M., & Al-Qadi, N. S. (2018). The impact of the quality of financial reporting on non-financial business performance and the role of organizations demographic' attributes (type, size and experience). *Academy of Accounting and Financial Studies Journal*, 22(1), 11-31.
- Anderson, R. C., Mansi, S. A. & Reeb, D. M. (2004). Board characteristics, accounting report integrity and the cost of debt. *Journal of Accounting and Economics*, 37(3).
- Bako. M. A. (2018) The impact of corporate governance on quality of financial reporting in Nigeria chemical and plant industry. *Research Journal of Financial and Accounting*, 9(7).
- Bekiris, D.F. & Doukakis, L.C. (2011) Corporate governance and accrual earnings management. *Managerial and Decision Economics* 32(7) 439-456.
- Biddle, G.C., Hilary, G. & Verdi, R.S. (2009). How financial reporting quality does relates to investment efficiency? *Journal of Accounting and Economises* 48.2(3) 112-131.
- Cullen, M., Kirwan, C., & Brenman, N. (2006) *Comparative analysis of corporate governance theory: The Agency-Steward continuum*. Paper presented at the 20<sup>th</sup>.

- Donaldson, W.(2003) Congressional testimony concerning th implementation Of the SarbanesOxley Act of 2002. [www.seegor/news/testmony/090903tswnd](http://www.seegor/news/testmony/090903tswnd).
- Elshawarby, M.A. (2018). The Characteristics of board of directors and their Impact on the Delay of external Auditor’s Report by Applying to companies listed on the Egyptian stock Exchange. *Journal of Accounting and Marketing*.
- Ibrahim, I. (2016). Ownership structure and dividend policy of listed deposit money banks in Nigeria: A Tobit Regression Analysis. *International Journal of Accounting and Financial Reporting*, 6(1), 1- 18.
- Ilaboya, J. O., & Ohiokha, F. I. (2014). Audit firm characteristics and audit quality in Nigeria. *International Journal of Business and Economics Research*, 3(5), 187-195.
- Johl, S. K., Kaur, S., & Cooper, B. J. (2013). Board characteristics and firm performance: evidence from Malaysian public listed firms. *Journal of Economics, Business, and Management*, 3(2).
- Dechow, P.M., Sloan, R. G., & Sweeny, A. P. (1995). Detecting earnings management, *The Accounting Review*, 70(2), 193-225.
- Mu’azu, S. B. (2016). The moderating effect of firm size on the relationship between board structure and financial performance of deposit money banks in Nigeria. *Sahel Analyst: ISSN 1117-4668*. 101-115.
- Nodeh, F. M., Anuar, M. A., Ramakrishnan, S., Rafatnia, A. A., & Nodeh, A. M. (2015). Mediating risk taking on relationship between board structure determinants and banks financial performance. *Asian Social Science*, 11(23), 96.
- Nodeh, F. M., Anuar, M. A., Ramakrishnan, S., & Raftnia, A. A. (2016). The Effect of board structure on banks financial performance by moderating firm Size. *Mediterranean Journal of Social Sciences*, 7(1), 258 -263.
- Ntim, C. G., Lindop, S., & Thomas, D. A. (2013). Corporate governance and risk reporting in South Africa: A study of corporate risk disclosures in the pre- and post-2007/2008 global financial crisis periods. *International Review of Financial Analysis*, 30(0), 363- 383.
- Obaje, S. O., Ogiugo, H. O., & Adesuy, I. O. (2021) Corporate governance mechanisms and financial reporting quality of listed commercial banks in Nigeria. *Insights Into Regional Development*, 3(1), 136-146.
- Ogbaisi, S. A., Areo, A. B., & Omotayo, V. A. (2019). Board attributes and quality of financial reporting in Nigerian companies: an empirical evidence. *Malaysian E Commerce Journal (MECJ)*3(2), 01-05.

- PourabdollahianTehrani, R., & Kordlouie, H. (2019). The importance of financial reporting quality in dividend considering the company's growth. *Betriebswirtschaftliche Forschung Und Praxis*, 10(1). <https://doi.org/10.29252/bfup.10.1.10>
- Sanda, A., Garba, T., & Mikailu, A. S. (2011). Board independence and firm financial performance: evidence from Nigeria: *African Economic Research Consortium*.
- Serrasqueiro, Z. S., & Nunes, P. M. (2008). Performance and size: empirical evidence from Portuguese SMEs. *Small Business Economics*, 31(2), 195-217.
- Shukeri, S. N., Shin, O. W., & Shaari, M. S. (2012). Does board of director's characteristics affect firm performance? Evidence from Malaysian public listed companies. *International Business Research*, 5(9), 120.
- Verdi, R. S. (2006). Financial reporting quality and investment efficiency. The Wharton School University of Pennsylvania.