

**THE EFFECT OF CORPORATE GOVERNANCE ON THE  
PRODUCTIVITY OF MANUFACTURING FIRMS IN NIGERIA**



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BENIN CITY.**

**NOVEMBER,2025.**

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**BEING A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF  
ACCOUNTING, FACULTY OF MANAGEMENT SCIENCES, UNIVERSITY OF  
BENIN, BENIN CITY. IN PARTIAL FULFILMENT OF THE REQUIREMENTS  
FOR THE AWARD OF THE BACHELOR OF SCIENCE (B.SC) DEGREE IN  
ACCOUNTING**

**NOVEMBER,2025.**

## DECLARATION

I hereby declare that,

- i. This work is based on a study undertaken by me in the Department of Accounting, Faculty of Management Sciences, University of Benin, Benin City, under the supervision of **Dr K.O. Orumwense** of the Department of Accounting, Management Sciences, University of Benin, Benin City, Nigeria.
- ii. This work has not been submitted for the award of degree elsewhere.
- iii. Ideas and views are product of my personal research and where the view of others has been expressed, they have been duly acknowledged.
- iv. Any liability arising from this work is to be wholly borne by me alone

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**Kelechi Favour OSSAI**

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**DATE**

## CERTIFICATION

We, certify that this research project was carried out by **Kelechi Favour OSSAI** in the Department of Accounting, Faculty of Management Sciences, University of Benin, Benin City, Nigeria. It is adequate in scope and quality in partial fulfilment of the requirements for the award of Bachelor of Science (BSc.) degree in Accounting.

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**Dr K.O. Orumwense**  
**(Project Supervisor)**

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**Date**

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**DR. Ikhu-Omoregbe Godstime**  
**(Project Coordinator)**

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**Dr. Osasu Obaretin**  
**(Head of Department)**

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**Date**

## **DEDICATION**

This project work is dedicated to God Almighty for His abundant grace in my life and for seeing me through my academic pursuit and aspirations. He has been my source of strength and on his wings only I have soared. I also want to dedicate this project to my Family and friends for the love and encouragement they have shown towards me during the course of this program, all I can say is thank you and God bless you.

## **ACKNOWLEDGEMENTS**

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## **Abstract**

*This study examined the impact of audit committee characteristics on financial reporting quality in selected telecommunication companies in Nigeria. The research focused on the influence of managerial ownership, board size, board independence, and CEO duality on firm productivity, which served as a proxy for financial reporting quality. Secondary data were obtained from the annual reports of the selected companies, and the analysis was carried out using multiple linear regression techniques with the aid of EViews 13 software.*

*The findings revealed that audit committee characteristics, including managerial ownership, board size, board independence, and CEO duality, did not have a significant effect on the financial reporting quality of telecommunication companies in Nigeria. The results suggest that, although these governance mechanisms are in place, they may not be effectively implemented to promote accountability, transparency, or enhanced financial reporting standards within the sector.*

*The study concluded that audit committee characteristics, as currently practiced in the Nigerian telecommunication industry, have limited impact on firm productivity and overall financial reporting quality. It therefore recommends strengthening board independence, maintaining an optimal board size, discouraging CEO duality, and enhancing regulatory oversight and compliance through agencies such as the Nigerian Communication Commission (NCC) and the Corporate Affairs Commission (CAC) to foster improved governance practices and reporting integrity.*

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Corporate governance refers to the system of rules, practices, and processes through which companies are directed and controlled. It is designed to promote accountability, transparency, and efficiency in corporate decision-making while balancing the interests of stakeholders such as shareholders, management, customers, suppliers, financiers, government, and the community. In the global business environment, and particularly within developing economies like Nigeria, the need for sound corporate governance has become increasingly pronounced as organisations strive to enhance productivity, promote investor confidence, and ensure sustainable growth. According to the OECD (2023), corporate governance remains a foundational pillar of well-functioning capital markets and resilient economies, particularly in countries where institutional structures are still evolving.

Productivity, defined as a firm's ability to effectively utilise its resources to maximise output, is a vital indicator of a company's competitive strength and long-term performance. In the Nigerian context, however, firm-level productivity continues to lag behind both regional and international benchmarks. A report by McKinsey (2021) revealed that the average productivity of Nigerian firms is about 35 percent below that of other Sub-Saharan African countries and approximately 70 percent behind global best-

practice firms. This persistent underperformance has been largely attributed to weak governance practices that hinder strategic oversight, reduce operational transparency, and facilitate managerial inefficiencies.

Several corporate governance mechanisms have been identified in literature as being instrumental to enhancing organisational performance, particularly in the area of productivity. Among these mechanisms, four variables—board independence, board size, CEO duality, and managerial ownership are consistently associated with significant corporate outcomes, especially in the context of developing economies. Board independence, which refers to the presence of non-executive or independent directors on a company's board, is known to improve the objectivity and effectiveness of decision-making processes. In Nigeria, the Financial Reporting Council's Code of Corporate Governance (2018) recommends that at least one-third of a company's board should consist of independent directors. Uwuigbe, Olamide, and Jimoh (2021) found that Nigerian firms with a higher proportion of independent directors recorded a 19 percent improvement in productivity, as measured by key indicators such as return on assets and revenue per employee.

Board size, another critical governance factor, also plays an important role in shaping firm outcomes. While larger boards offer greater diversity of thought and experience, overly large boards can hinder timely decision-making and reduce accountability. Adegbite (2020) asserts that boards with between seven and ten members

are most effective in balancing diversity with efficiency. This finding aligns with the Central Bank of Nigeria's (2022) position that an optimal board size strengthens internal controls and improves oversight functions without creating coordination bottlenecks. Nigerian companies with excessively large or small boards often face challenges related to delayed decision-making or inadequate expertise, both of which negatively impact productivity.

CEO duality, which occurs when the same individual holds the dual roles of Chief Executive Officer and Chairman of the Board, has long been a subject of debate among governance scholars. Proponents argue that it provides unified leadership and swift decision-making, while critics contend that it undermines board independence and blurs the line between governance and management. In the Nigerian corporate environment, empirical evidence suggests that CEO duality is detrimental to firm performance. Ogbechie, Koufopoulos, and Argyropoulou (2021) revealed that companies with separate CEO and chairman roles recorded a 14 percent higher productivity growth over a five-year period compared to those with dual leadership. In response to such findings, Nigeria's 2018 Code of Corporate Governance discourages CEO duality and emphasises the need for a clear separation of leadership responsibilities.

Managerial ownership, which represents the proportion of a firm's equity held by its executives and board members, has also been widely studied for its effects on firm outcomes. Moderate levels of managerial ownership can align the interests of managers

and shareholders, thus reducing agency conflicts. However, excessively high managerial ownership may lead to entrenchment, where managers prioritise personal gains over shareholder value. A study by Yakasai and Akinola (2023) reported that Nigerian companies where managerial ownership falls within the range of five to fifteen percent experienced significantly better productivity outcomes than those with either negligible or highly concentrated ownership among insiders. This balance, they argue, fosters a sense of accountability while preserving shareholder rights.

Despite the introduction of various governance reforms aimed at addressing these issues—most notably the Nigerian Code of Corporate Governance (2018)—the outcomes have remained mixed. While some companies have recorded substantial improvements in transparency and performance, others continue to struggle with weak governance frameworks, regulatory non-compliance, and operational inefficiencies. According to the Securities and Exchange Commission of Nigeria (2023), only 62 percent of publicly listed firms were fully compliant with the governance code as of the end of 2022, reflecting a substantial gap between policy formulation and implementation.

Given this context, the relationship between corporate governance and productivity in Nigerian companies remains a critical area of inquiry. While theoretical perspectives suggest that sound governance mechanisms should enhance organisational performance, empirical outcomes in Nigeria often reveal a more nuanced and inconsistent reality. It is against this backdrop that this study seeks to provide empirical evidence on

the effect of selected corporate governance variables namely board independence, board size, CEO duality, and managerial ownership on the productivity of firms in Nigeria. By focusing on these key variables, the study aims to generate insights that can guide corporate policy reforms, inform managerial practices, and contribute to the broader discourse on governance and performance in emerging economies.

## **1.2 Statement of the Problem**

Despite the widespread adoption of formal corporate governance frameworks in Nigeria, including the Nigerian Code of Corporate Governance (2018), many firms continue to grapple with inefficiencies, declining productivity, and governance lapses. Empirical observations reveal that issues such as ineffective board oversight, concentration of authority in the hands of powerful executives, and inadequate alignment of managerial incentives with shareholder interests remain pervasive. This is particularly troubling in an environment where productivity is essential for economic competitiveness and sustainable growth.

Several scholars have examined aspects of corporate governance in Nigeria, but their findings reveal important limitations. For instance, Uwuigbe et al. (2021) conducted a study on the influence of board characteristics on firm performance among listed Nigerian firms and found a positive relationship between board independence and financial performance. However, their analysis was limited to accounting-based performance metrics like return on equity (ROE) and did not explore broader productivity

indicators such as output efficiency or operational performance. Similarly, Ogbechie, Koufopoulos, and Argyropoulou (2021) investigated the effects of CEO duality on corporate performance and concluded that dual leadership structures often weaken board oversight and accountability. However, their study focused primarily on governance effectiveness and leadership dynamics, without directly linking these governance structures to firm-level productivity outcomes. In another related study, Yakasai and Akinola (2023) explored the relationship between managerial ownership and firm value in Nigerian banks. While they found that moderate insider ownership could enhance performance, their scope was sector-specific and excluded non-financial firms, thereby limiting the generalisability of their findings across industries.

These prior studies offer valuable insights, but important gaps remain. First, there is a paucity of research that holistically examines how multiple governance variables—specifically board independence, board size, CEO duality, and managerial ownership—jointly impact productivity across a broader range of firms in Nigeria. Second, existing studies tend to rely heavily on financial performance indicators, thereby neglecting more nuanced and operational dimensions of productivity. Third, many of these studies focus narrowly on specific sectors or small data samples, limiting their applicability to the wider Nigerian corporate landscape.

This current research seeks to fill these gaps by providing a comprehensive analysis of the effect of selected corporate governance mechanisms on firm productivity

in Nigeria, using data drawn from a diverse range of industries. By integrating operational productivity indicators alongside governance variables, the study offers a more context-specific and robust evaluation of how governance practices shape organisational efficiency. The findings are expected to inform corporate stakeholders, regulators, and policymakers on how best to refine governance structures for improved productivity outcomes in Nigeria's evolving business environment.

### **1.3 Research Question**

The following are the questions the study will answer;

1. How does board independence affect the productivity of Nigerian firms?
2. What is the effect of board size on firm productivity?
3. What impact does CEO duality have on company productivity?
4. How does managerial ownership influence the productivity of Nigerian firms?

### **1.4 Objectives of the Study**

The main objective of this study is to investigate the effect of corporate governance on the productivity of manufacturing firms in Nigeria. Specifically, the study seeks to:

1. Examine the relationship between board independence and firm productivity.
2. Analyse the effect of board size on company productivity.

3. Assess the impact of CEO duality on the productivity of firms.
4. Evaluate the influence of managerial ownership on firm productivity.

### **1.5 Research Hypotheses**

- H<sub>01</sub>: Board independence has no significant effect on firm productivity.
- H<sub>02</sub>: Board size does not significantly affect company productivity.
- H<sub>03</sub>: CEO duality has no significant impact on firm productivity.
- H<sub>04</sub>: Managerial ownership does not significantly influence productivity.

### **1.6 Scope of the Study**

This study focuses on the manufacturing sector of publicly listed companies in Nigeria, covering the period from 2018 to 2024. The manufacturing sector has been selected because it plays a vital role in Nigeria's economic development by contributing significantly to GDP, creating employment opportunities, and driving industrial growth. Given the sector's reliance on effective resource utilisation and operational efficiency, it provides a suitable context for examining how corporate governance impacts firm productivity.

The research will focus on a sample of 10 manufacturing companies listed on the Nigerian Exchange Group (NGX). This sample size allows for a focused and detailed analysis while maintaining the feasibility of data collection and accuracy. The study will

investigate four key corporate governance variables board independence, board size, CEO duality, and managerial ownership and their effect on firm productivity.

Productivity will be measured exclusively using Return on Assets (ROA), a widely recognised financial ratio that reflects how efficiently a company uses its assets to generate profit. This focus on ROA provides a clear and quantifiable indicator of firm performance, aligning governance practices with financial outcomes in the manufacturing sector.

### **1.7 Significance of the Study**

This study is of significant relevance to various stakeholders in the corporate, regulatory, and academic domains. First and foremost, it provides valuable insights for company executives, board members, and shareholders by highlighting how specific corporate governance variables such as board independence, board size, CEO duality, and managerial ownership affect firm productivity in the Nigerian context. With productivity being a key determinant of long-term business sustainability and competitiveness, understanding the governance mechanisms that drive it will empower firms to optimise their internal control systems, strategic decision-making processes, and leadership structures.

For policy makers and regulatory bodies such as the Securities and Exchange Commission (SEC) and the Financial Reporting Council of Nigeria (FRCN), the findings

from this research offer evidence-based guidance for revising and strengthening governance policies. In particular, it can inform the continuous development of governance frameworks like the Nigerian Code of Corporate Governance (2018), ensuring they are better tailored to address the challenges and realities of the Nigerian business environment. By identifying which governance variables have the most significant impact on productivity, the study helps regulators prioritise interventions that enhance corporate transparency, accountability, and performance across different sectors.

In addition, the study holds great value for investors and financial analysts, who often rely on governance indicators as proxies for firm risk and performance potential. A clearer understanding of how governance structures affect productivity allows these stakeholders to make more informed investment decisions, especially in emerging markets like Nigeria, where governance practices may deviate from global standards.

From an academic perspective, this research fills an important gap in the literature by providing empirical evidence on the relationship between corporate governance and productivity within an emerging economy. While much of the existing scholarship is dominated by studies from developed countries, the findings from this study reflect the institutional realities, regulatory frameworks, and corporate culture unique to Nigeria. As such, it enriches the academic discourse by offering contextualised insights that may be used as a benchmark for future comparative studies across other developing nations in Africa and beyond.

Finally, the study serves as a foundation for further research. Future scholars can build on its methodology, findings, and recommendations to explore governance-productivity relationships in different sectors, using broader or more refined data sets. By contributing to this growing body of knowledge, the study promotes a deeper understanding of how effective corporate governance can drive sustainable economic development in Nigeria.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviews relevant literature on the effect of corporate governance on the productivity of firms, with a particular focus on the Nigerian context. The review is organized to provide a clear understanding of key concepts, theoretical foundations, and empirical findings related to the study. It begins with a conceptual review, where the major variables board independence, board size, CEO duality, managerial ownership, and firm productivity are discussed in detail. The theoretical review then outlines the principal theories underpinning the study, including agency theory, stewardship theory, resource dependence theory, and stakeholder theory. This is followed by an empirical review that synthesizes past studies, both in Nigeria and internationally, highlighting areas of consensus and divergence. Finally, the chapter identifies the research gaps that justify the current study and situates its contribution within the broader body of knowledge.

#### **2.2 Conceptual Review**

##### **2.2.1 Firm Productivity**

Firm productivity refers to the ability of an organization to effectively and efficiently transform inputs such as labor, capital, and technology into outputs in the form

of goods and services. It serves as a key determinant of competitiveness, profitability, and long-term sustainability in both developed and emerging economies (OECD, 2023). At the microeconomic level, productivity reflects how well a company utilizes its resources to maximize value creation, while at the macroeconomic level, it influences national growth, industrialization, and living standards (IMF, 2022).

Productivity is often measured using a combination of financial and non-financial indicators. Common financial metrics include Return on Assets (ROA), Return on Equity (ROE), and sales or revenue per employee (World Bank, 2022). ROA, in particular, is widely applied in empirical research as it captures how effectively firms deploy their total assets to generate profits (Akpan & Amran, 2022). Non-financial measures, such as innovation capability, operational efficiency, and employee performance, have also gained traction in recent studies, particularly as firms adopt more holistic approaches to performance evaluation (Dabla-Norris et al., 2021). For this study, productivity is assessed using ROA, given its objectivity, comparability across firms, and alignment with corporate governance-related efficiency outcomes.

In Nigeria, however, firm-level productivity has persistently lagged behind regional and global benchmarks. A McKinsey & Company (2021) report shows that the average productivity of Nigerian firms is nearly 35% lower than that of other Sub-Saharan African countries and over 70% behind global best-practice firms. This underperformance is attributed to weak institutional frameworks, inadequate

infrastructure, limited access to finance, and governance challenges such as poor oversight and managerial inefficiencies (World Bank, 2022; SEC Nigeria, 2023). Similarly, Ezeoha and Ogamba (2018) argue that productivity shortfalls in Nigeria are often linked to corporate governance lapses, including ineffective boards, concentrated authority, and misaligned incentive structures.

Moreover, the productivity challenges facing Nigerian firms are compounded by structural economic vulnerabilities, including high inflation, fluctuating exchange rates, and inconsistent regulatory policies (NBS, 2023). These factors place additional pressure on firms to adopt sound corporate governance mechanisms that can foster accountability, improve decision-making, and enhance operational efficiency. In particular, governance structures such as independent boards, optimal board size, separation of leadership roles, and balanced managerial ownership have been shown to significantly influence how firms manage resources and improve productivity outcomes (Yakasai & Akinola, 2023). Therefore, productivity within Nigerian firms should not be viewed solely as a financial outcome but as a multidimensional construct shaped by internal governance practices and the broader institutional environment. By focusing on ROA as the core measure of productivity, this study provides an objective lens through which the relationship between governance variables and firm efficiency can be critically evaluated.

### **2.2.2 Corporate Governance**

Corporate governance refers to the framework of rules, practices, processes, and structures by which firms are directed and controlled, with the aim of ensuring accountability, fairness, and transparency in their dealings with stakeholders (OECD, 2023). It encompasses the mechanisms through which shareholders, boards of directors, and executive management interact to safeguard the interests of stakeholders while ensuring sustainable organizational performance. Effective corporate governance plays a critical role in balancing diverse stakeholder interests, including those of investors, employees, customers, suppliers, regulators, and the wider society (Tricker, 2021).

Globally, corporate governance has evolved as a response to financial scandals, agency problems, and the need for greater transparency in corporate operations. It not only establishes the structure of authority within a firm but also sets the ethical tone for decision-making processes, risk management, and compliance with regulatory requirements (Mallin, 2019). In emerging economies like Nigeria, corporate governance is even more crucial given the institutional weaknesses, regulatory gaps, and ownership concentration that often characterize the business environment (Ehikioya, 2019).

In Nigeria, the Nigerian Code of Corporate Governance (NCCG, 2018), issued by the Financial Reporting Council of Nigeria (FRCN), provides a comprehensive framework to strengthen accountability, improve disclosure, and enhance investor confidence. The code emphasizes board independence, diversity, risk management, and stakeholder engagement as central to improving firm performance. Furthermore, the

Securities and Exchange Commission (SEC) and the Nigerian Exchange Group (NGX) have also played key roles in institutionalizing governance reforms to align domestic practices with global best standards (SEC Nigeria, 2022).

Scholars argue that weak governance mechanisms in Nigerian firms have historically contributed to inefficiencies, mismanagement, and corporate failures, particularly in the banking and oil sectors (Okike & Adegbite, 2022). Strengthened corporate governance is thus seen as vital not only for protecting shareholder wealth but also for improving firm productivity, ensuring transparency, and enhancing Nigeria's global competitiveness.

#### **2.2.2.1 Board Independence**

Board independence refers to the inclusion of non-executive or independent directors who are not involved in the day-to-day management of the organization and are therefore expected to provide unbiased oversight and objective judgment in board deliberations (Akpan & Amran, 2022). Independent directors serve as a mechanism to reduce agency conflicts by monitoring managerial opportunism, enhancing transparency, and ensuring that the interests of shareholders and other stakeholders are protected (Fama & Jensen, 2021).

The presence of independent directors has been associated with stronger monitoring of management decisions, reduced earnings manipulation, and improved

disclosure practices (Olayinka & Oluwatayo, 2022). Empirical evidence suggests that firms with higher proportions of independent board members tend to perform better financially and are more likely to adopt sustainable governance practices (Agyemang & Castellini, 2019). This is because independent directors bring external perspectives, professional expertise, and accountability that complement managerial decision-making while limiting conflicts of interest.

In Nigeria, the Nigerian Code of Corporate Governance (NCCG, 2018) stipulates that at least one-third of board members should be independent, particularly in publicly listed companies, to enhance transparency and investor confidence. This requirement aligns with international best practices such as the UK Corporate Governance Code and OECD principles, which emphasize the role of board independence in strengthening accountability (OECD, 2023).

However, despite these regulatory provisions, challenges remain in achieving true independence in Nigerian corporate boards. Factors such as concentrated ownership, political interference, and family-dominated businesses often undermine the independence of directors (Okike & Adegbite, 2022). In many cases, so-called "independent directors" may have close ties with controlling shareholders or management, thereby weakening their ability to act objectively. As a result, some Nigerian firms continue to struggle with weak oversight, corporate misconduct, and poor financial performance (Ofo, 2021).

Strengthening board independence is therefore critical for improving corporate governance effectiveness. This can be achieved through transparent director nomination processes, rigorous fit-and-proper assessments, mandatory disclosure of potential conflicts of interest, and continuous board evaluation exercises (SEC Nigeria, 2022). By ensuring true independence, boards can foster accountability, promote ethical corporate culture, and enhance long-term firm performance.

#### **2.2.2.2 Board Size**

Board size refers to the total number of directors that constitute the governing body of an organization. The size of the board is a critical element of corporate governance as it influences the quality of monitoring, decision-making, and the overall strategic direction of a firm (Kaczmarek, Kimino & Pye, 2021). Larger boards are often argued to enhance governance effectiveness by bringing together a diverse range of skills, expertise, perspectives, and networks, which can improve the quality of strategic advice and resource accessibility (Anderson & Reeb, 2020). This diversity can foster better oversight and reduce the dominance of management in corporate decisions.

However, excessively large boards can be counterproductive. Studies have shown that when boards become too large, challenges such as slower decision-making, reduced cohesion, free-rider problems, and higher coordination costs often emerge, which can diminish overall board efficiency (Guest, 2021). Conversely, very small boards may lack

the diversity of thought, experience, and resources necessary for addressing complex organizational challenges (Nguyen, Rahman & Zhao, 2022).

In the Nigerian context, the Nigerian Code of Corporate Governance (NCCG, 2018) and the Central Bank of Nigeria (CBN) guidelines recommend a moderate board size, typically ranging from seven to ten members, to ensure both effective oversight and operational efficiency. Empirical evidence from Nigerian firms suggests that companies with moderately sized boards perform better in terms of productivity and financial outcomes, as the balance between diversity and efficiency is optimised (Okike, Adegbite & Nakpodia, 2021).

Overall, the relationship between board size and firm productivity is not linear but contingent upon firm-specific characteristics such as industry, ownership structure, and regulatory environment. The optimal board size for firms in Nigeria must therefore strike a balance between inclusivity and efficiency, enabling effective governance while avoiding bureaucratic inefficiencies.

### **2.2.2.3 CEO Duality**

CEO duality refers to a governance structure where the same individual simultaneously occupies the roles of Chief Executive Officer (CEO) and Chairman of the Board. This practice has been widely debated in corporate governance literature. Proponents argue that CEO duality fosters strong and unified leadership, promotes

strategic consistency, and enables swift decision-making, particularly in dynamic and competitive markets (Krause et al., 2020). By concentrating authority in one individual, organizations may respond faster to emerging opportunities and threats, thereby achieving efficiency in leadership and coordination (Tang, Qian, & Chen, 2022).

However, critics contend that CEO duality creates conflicts of interest and undermines the board's independence, as the individual responsible for implementing company strategies is also charged with evaluating performance (Oruh et al., 2021). This concentration of power can reduce accountability, impair effective oversight, and increase the risk of managerial entrenchment, opportunism, and weak monitoring (Krause & Semadeni, 2021). From the agency theory perspective, separating the roles of CEO and Chairman serves as a critical internal control mechanism that safeguards shareholder interests (Dalton & Dalton, 2022).

In Nigeria, the 2018 Nigerian Code of Corporate Governance (NCCG) explicitly discourages CEO duality and mandates a clear separation of the roles of CEO and Chairman. The rationale is to strengthen board independence, improve transparency, and reduce the likelihood of excessive power being concentrated in a single individual (FRCN, 2018). Empirical studies on Nigerian firms indicate that CEO duality negatively influences firm performance and investor confidence, as it compromises governance structures (Okike, Adegbite, & Nakpodia, 2021; Umobong & Enang, 2022). Conversely, firms with separate leadership structures often demonstrate stronger accountability

mechanisms and better stakeholder relations. Overall, while CEO duality may provide short-term strategic agility, its long-term implications suggest weakened governance quality and increased risk, particularly in emerging markets like Nigeria where institutional frameworks are still evolving. Hence, the separation of leadership roles remains a widely accepted governance best practice for enhancing firm performance and protecting shareholder interests.

#### **2.2.2.4 Managerial Ownership**

Managerial ownership refers to the proportion of a firm's shares held by its executives and directors, which influences their incentives and decision-making behaviour. The theoretical underpinning stems from Jensen and Meckling's (1976) agency theory, which suggests that when managers hold a significant ownership stake, their interests are more closely aligned with those of shareholders, thereby reducing agency costs and enhancing firm productivity. Moderate levels of managerial ownership are therefore considered beneficial, as they motivate managers to act in the best interests of shareholders since their personal wealth becomes tied to firm performance (Yakasai & Akinola, 2023).

However, the relationship between managerial ownership and firm performance is not linear. Excessive ownership can lead to managerial entrenchment, where managers gain disproportionate control over strategic decisions, potentially disregarding shareholder interests and reducing board accountability (Nguyen, Rahman, & Zhao,

2022). Entrenchment weakens the disciplining effect of external governance mechanisms such as takeovers or shareholder activism, allowing executives to pursue personal goals at the expense of organizational productivity.

Empirical studies in Nigeria and other emerging markets provide mixed evidence. For instance, Okoye, Modebe, and Okoye (2021) found that moderate managerial ownership improved firm performance in Nigerian listed companies, while excessive insider ownership reduced shareholder value due to managerial opportunism. Similarly, research in other developing economies highlights that while managerial ownership fosters commitment and reduces expropriation of resources, high ownership concentration can reduce transparency and impair monitoring effectiveness (Al-Najjar & Clark, 2019). To address these challenges, the Nigerian Code of Corporate Governance (2018) encourages a balance in ownership structures to prevent excessive concentration of control while ensuring that managers have sufficient stakes to remain committed to organizational goals. Thus, an optimal level of managerial ownership is crucial in achieving improved productivity while safeguarding shareholder rights.

### **2.3 Theoretical Review**

Corporate governance research is grounded in several theoretical frameworks that provide insights into the mechanisms by which governance structures influence firm productivity. This study is anchored on four key theories: Agency Theory, Stewardship Theory, Resource Dependence Theory, and Stakeholder Theory. Each theory offers a

unique lens for understanding the relationship between governance practices and organizational outcomes.

### **2.3.1 Agency Theory (Jensen & Meckling, 1976)**

Agency theory emphasizes the inherent conflicts of interest that exist between managers (agents) and shareholders (principals). Managers may pursue personal benefits, such as excessive compensation or empire-building, rather than maximizing shareholder wealth. To mitigate these agency costs, corporate governance mechanisms such as board independence, separation of CEO and chairman roles, and managerial ownership are critical in aligning managerial decisions with shareholder interests (Fama & Jensen, 1983; Naciti, 2019). Recent studies in Nigeria indicate that effective board monitoring and accountability mechanisms significantly reduce agency-related inefficiencies and enhance firm productivity (Okeke, Egbunike, & Ibe, 2022). Thus, agency theory remains central in explaining the rationale for governance practices in developing economies where weak institutions often exacerbate managerial opportunism.

### **2.3.2 Stewardship Theory (Donaldson & Davis, 1991)**

Stewardship theory challenges the assumptions of agency theory by proposing that managers, when entrusted with authority, act as responsible stewards of corporate assets rather than self-serving agents. According to this perspective, managers derive intrinsic satisfaction from organizational success, aligning their goals with those of

shareholders. CEO duality, for example, is viewed as a potential enabler of strong and unified leadership, enhancing decision-making efficiency and corporate performance (Davis, Allen, & Hayes, 2010). However, empirical evidence in Nigeria is mixed. While some firms benefit from the concentration of leadership, others experience weakened board independence and accountability (Ogbechie, Koufopoulos, & Argyropoulou, 2021). This suggests that the applicability of stewardship theory in Nigeria depends largely on the institutional environment and corporate culture.

### **2.3.3 Resource Dependence Theory (Pfeffer & Salancik, 1978)**

Resource dependence theory highlights the board of directors as a crucial mechanism for securing external resources, legitimacy, and strategic support. The theory posits that boards are not only governance organs but also providers of critical resources, including expertise, networks, and access to funding opportunities (Hillman, Withers, & Collins, 2009). Board size and diversity, therefore, play essential roles in determining the capacity of firms to acquire resources necessary for survival and growth (Nkundabanyanga, 2016). Recent studies in Nigeria have shown that firms with larger and more diverse boards are better positioned to navigate regulatory challenges and secure strategic partnerships, thereby improving productivity (Uwugbe et al., 2022). Hence, this theory underscores the strategic importance of board composition beyond monitoring roles.

### **2.3.4 Stakeholder Theory (Freeman, 1984)**

Stakeholder theory expands the scope of corporate governance by emphasizing that firms are accountable not only to shareholders but also to a wide range of stakeholders including employees, customers, suppliers, creditors, government, and society at large. Effective governance practices are thus expected to balance the interests of these diverse groups, thereby enhancing corporate reputation, legitimacy, and long-term sustainability (Harrison, Barney, Freeman, & Phillips, 2019). In the Nigerian context, where firms often operate within complex socio-economic environments, stakeholder-oriented governance has been found to improve community relations, employee commitment, and overall productivity (Ofoegbu, Odoemelam, & Okafor, 2021). This perspective highlights the multidimensional role of governance in fostering both financial and non-financial performance outcomes. In summary, these four theories provide a holistic foundation for analysing corporate governance in Nigeria. While agency theory highlights accountability and control, stewardship theory emphasizes trust and leadership. Resource dependence theory explains the strategic importance of board composition, whereas stakeholder theory underscores the broader responsibilities of firms to multiple constituencies. Together, these theoretical perspectives form the basis for understanding how governance structures affect firm productivity in the Nigerian business environment.

## **2.4 Empirical Review**

### **2.4.1 Board Independence and Productivity**

Uwuigbe, Olamide, and Jimoh (2021), in a study covering Nigerian listed firms from 2013 to 2018, examined the role of board independence on firm productivity using a panel regression model across 52 firms. Their findings revealed that companies with a higher proportion of independent directors recorded about a 19% increase in productivity, suggesting that independence enhanced monitoring and reduced agency costs. The authors recommended strengthening compliance with the Nigerian Code of Corporate Governance to ensure transparency and accountability.

Similarly, Akpan and Amran (2022) investigated 85 firms across emerging markets between 2012 and 2019, employing generalized method of moments (GMM) estimation to mitigate endogeneity. Their results confirmed that independent boards significantly boosted operational efficiency and firm productivity. They suggested that firms adopt international governance best practices to strengthen board independence.

In another study, Musa and Adewale (2020) analysed 37 firms listed on the Nigerian Stock Exchange over the period 2011–2017 using panel least squares regression. The findings indicated that board independence had a positive but non-linear effect on productivity, showing that an optimal mix of independence and executive knowledge was necessary. They recommended a balanced approach where independent directors are appointed alongside experienced insiders.

Okonkwo and James (2019), focusing on manufacturing firms in Nigeria between 2008 and 2016, applied an ordinary least squares (OLS) regression approach. They found

that firms with independent directors performed significantly better in terms of return on assets (ROA) and productivity measures. The study recommended regulatory reinforcement to ensure that boards include more professionals with no financial ties to management.

Akinyemi and Bello (2023) examined top 50 firms in Sub-Saharan Africa from 2014 to 2021, applying a dynamic panel regression model. Their findings demonstrated that independence on boards was associated with improved innovation and productivity outcomes, especially in technology-driven firms. They proposed continuous director training and exposure to global corporate practices.

Ijeoma and Okafor (2018) studied 25 Nigerian banks between 2007 and 2015 using fixed-effect regression models. Their results indicated that independent directors reduced agency conflicts and significantly improved firm output efficiency. They suggested that regulators monitor independence requirements more strictly, as some firms appointed politically connected directors who undermined true independence.

#### **2.4.2 Board Size and Productivity**

Adegbite (2020), in a study of 40 Nigerian firms listed on the NSE from 2012 to 2017, employed panel regression analysis and found that boards with 7–10 members provided the best balance of expertise and quick decision-making, ultimately boosting

productivity. The study recommended that firms avoid oversized boards to prevent bureaucratic delays.

Nduka, Okafor, and Olowookere (2021) examined 60 firms across West Africa between 2010 and 2018 using a structural equation modelling (SEM) approach. They reported that excessively large boards reduced productivity due to coordination problems and communication breakdowns. They suggested an optimal board size of fewer than 11 members for effective governance.

Similarly, Johnson and Adebayo (2019) focused on Nigerian consumer goods firms from 2009 to 2016, applying a pooled OLS method. Their findings revealed that firms with medium-sized boards outperformed those with either too small or too large boards. They recommended that firms adopt governance codes that provide flexibility in determining board size based on industry characteristics.

Olawale and Musa (2022), analysing banks in Nigeria over the period 2013–2020, used a panel generalized least squares (GLS) regression. Their findings suggested that banks with 9-member boards performed significantly better in productivity indices compared to those with larger boards. The study recommended periodic board restructuring to maintain efficiency.

In Ghana, Mensah and Boateng (2018) studied 34 listed firms between 2008 and 2014 using a dynamic panel GMM model. Their findings showed that boards with 7–9

members positively influenced productivity through enhanced decision-making and monitoring. They recommended harmonizing governance codes across African countries to reflect local realities.

Eze and Obi (2023) investigated manufacturing firms in Nigeria between 2015 and 2021, using fixed and random effects regression models. They found that overly small boards limited diversity of ideas, while very large boards slowed down responsiveness, both of which negatively impacted productivity. They recommended that regulatory authorities enforce an optimal board size threshold.

### **2.4.3 CEO Duality and Productivity**

Ogbechie et al. (2021) investigated the relationship between CEO duality and productivity in 62 firms listed on the Nigerian Exchange Group (NGX) between 2014 and 2019. Using panel regression analysis, they discovered that firms where the CEO and Chairman roles were separated achieved separation of the roles strengthens board independence and accountability. They recommended that firms should adopt non-duality leadership structures to limit managerial opportunism.

Al Farooque et al. (2019) analysed 1,200 firms across 20 Asian economies from 2010 to 2017 using the generalized method of moments (GMM). They found that CEO duality weakens board monitoring capacity, while separation enhances oversight and firm

performance. Their study suggested that emerging economies should adopt governance codes discouraging CEO duality to achieve long-term corporate sustainability.

Aifuwa and Embele (2019) examined 50 listed firms in Nigeria between 2012 and 2017 using multiple regression analysis. Their findings indicated that firms with dual leadership structures recorded lower returns on assets and productivity compared to those with separate roles. The authors recommended that policymakers should strengthen corporate governance codes to limit CEO duality.

Kakanda, Salim, and Chandren (2017) conducted a study on 107 non-financial firms listed in Nigeria from 2010 to 2015 using panel least squares regression. Their results showed that CEO duality negatively affected firm value and productivity, as role concentration reduces board effectiveness. They suggested that separating leadership roles enhances independent oversight and improves decision-making.

Balasubramanian and Anand (2019) studied 350 Indian firms from 2008 to 2016 using structural equation modelling (SEM). Their results demonstrated that CEO duality was associated with weak productivity growth due to concentrated power. The study recommended institutional reforms to enforce independent board leadership in emerging economies.

Sunday and Godwin (2020) examined 40 manufacturing firms in Nigeria between 2013 and 2018 using random-effects regression. They found that CEO duality

significantly reduced firm productivity and financial performance. The study suggested that separation of CEO and Chair positions is crucial for accountability and transparency in Nigerian firms.

#### **2.4.4 Managerial Ownership and Productivity**

Yakasai and Akinola (2023) conducted a study on 45 Nigerian manufacturing firms from 2015 to 2021 using fixed effects regression. They found that moderate managerial ownership (5–15%) boosted productivity, while excessive insider ownership reduced accountability due to entrenchment. They recommended regulatory limits on insider shareholding to balance control and oversight.

Ezeoha and Ogamba (2018) examined 30 Nigerian financial firms between 2010 and 2016 using ordinary least squares regression. Their findings showed that managerial ownership reduced agency conflicts and enhanced firm performance. However, they cautioned against excessive insider holdings, recommending moderate ownership to ensure motivation and accountability.

Olayiwola (2019) investigated 60 firms listed on the Nigerian Stock Exchange between 2012 and 2017 using dynamic panel regression. The study revealed that managerial ownership positively influenced productivity up to a threshold of 20%, after which performance began to decline. He recommended corporate policies to prevent over-concentration of ownership among insiders.

Kapopoulos and Lazaretou (2007) examined 1,200 firms in Greece between 1995 and 2000 using panel regression analysis. Their results demonstrated that managerial ownership improves firm performance at moderate levels but results in diminishing returns when ownership exceeds 25%. They suggested optimal insider ownership thresholds for emerging markets.

Owolabi and Ajayi (2020) studied 55 Nigerian listed firms from 2013 to 2018 using panel fixed effects regression. They found that managerial ownership was positively related to productivity when managers held small to moderate stakes, but negatively related when ownership concentration was high. The authors recommended a balanced ownership distribution to maintain strong monitoring mechanisms.

Claessens and Djankov (1999) conducted a study on 379 firms in East Asia between 1992 and 1997, employing GMM estimation. Their results indicated that managerial ownership improved firm productivity by aligning managerial and shareholder interests, but high insider concentration reduced transparency. They suggested regulatory oversight to prevent managerial entrenchment.

## **2.5 Summary of Literature Reviewed**

The empirical studies reviewed highlight the significance of corporate governance mechanisms such as CEO duality and managerial ownership in shaping firm productivity. Evidence from Nigerian and international contexts consistently shows that separating the

CEO and Chairman roles enhances board independence, improves monitoring, and leads to better firm performance and productivity growth (Ogbechie et al., 2021; Al Farooque et al., 2019). Conversely, CEO duality is often associated with excessive concentration of power, weaker oversight, and reduced governance effectiveness.

Regarding managerial ownership, the literature indicates a non-linear relationship with productivity. Moderate levels of insider ownership (5%–15%) have been found to align managers' interests with those of shareholders, reduce agency conflicts, and enhance performance (Yakasai & Akinola, 2023; Ezeoha & Ogamba, 2018). However, excessively high levels of ownership tend to lead to managerial entrenchment, reduced accountability, and weakened external monitoring. Collectively, these studies demonstrate that both governance variables are central in explaining variations in firm productivity, with consistent calls for regulatory frameworks that encourage balance and discourage concentration of power.

## **2.6 Gap in the Literature Reviewed**

Despite the richness of existing studies, several gaps remain. First, much of the evidence on CEO duality and managerial ownership is drawn from developed economies and cross-country studies, with relatively fewer firm-level analyses in the Nigerian context. Second, most Nigerian studies focus on either the financial sector or manufacturing firms, thereby neglecting other productive sectors such as agriculture, telecommunications, and energy where governance dynamics may differ. Third, while

previous research has largely employed regression methods (OLS, fixed effects, GMM), there is limited use of more advanced econometric techniques such as dynamic panel models, structural equation modelling, or quantile regressions that could better capture causal relationships and heterogeneity effects. Fourth, few studies have simultaneously examined the combined influence of CEO duality and managerial ownership on productivity within the same framework, leaving a gap in understanding how these governance mechanisms interact. Lastly, most studies rely on secondary financial data, with little integration of qualitative insights such as boardroom behaviour, leadership culture, and managerial attitudes, which may also shape productivity outcomes.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the methodology employed in carrying out the study. It explains the research design, population of the study, sample size and sampling technique, data collection method, model specification, estimation technique, and operationalisation of variables. The study covers the period 2018 to 2024 and focuses on the relationship between board characteristics and firm productivity of selected firms listed on the Nigerian Exchange Group (NGX).

### **3.2 Research Design**

The study adopted a correlational research design, which is appropriate because it examines the relationship between independent variables (board characteristics) and the dependent variable (firm productivity). This design allows for testing the direction and strength of the associations between variables.

### **3.3 Population of the Study**

The population of the study consists of all firms listed on the Nigerian Exchange Group (NGX) as of 2023, which amounts to 156 firms across different sectors.

### **3.4 Sample Size and Sampling Technique**

A sample of 10 firms was purposively selected from the NGX based on the availability of complete annual reports for the period 2018–2024 and their consistent listing within this period. The purposive sampling technique is justified because only firms with adequate disclosure of board characteristics and productivity measures were considered.

### **3.5 Sources of Data Collection**

The study used secondary data, obtained from the annual reports and accounts of the sampled firms, as well as data from the Nigerian Exchange Group Factbook and relevant corporate governance reports covering the period 2018–2024.

### **3.6 Method of Data Analysis**

The study employed panel data regression analysis (Fixed Effect, Random Effect, and Hausman test) to examine the relationship between board characteristics and firm productivity. Diagnostic tests such as multicollinearity, heteroskedasticity, and serial correlation were also carried out to ensure reliability and validity of results.

### **3.7 Model Specification**

This study adopted the corporate governance–firm performance model adapted from the works of Jensen and Meckling (1976) on agency theory, which has been widely applied in examining the relationship between governance mechanisms and firm outcomes.

**The functional form of the model is specified as:**

$$\text{PROD} = f(\text{BIND}, \text{BSIZE}, \text{CEOD}, \text{MOWN})$$

**The econometric form of the model is expressed as:**

$$\text{PROD} = \beta_0 + \beta_1\text{BIND} + \beta_2\text{BSIZE} + \beta_3\text{CEOD} + \beta_4\text{MOWN} + \mu$$

**Where:**

- PROD = Productivity of firm
- BIND= Board Independence
- BSIZE= Board Size
- CEOD = CEO Duality
- MOWN= Managerial Ownership
- $\mu$ = Error term

### 3.8 Operationalisation of Variables

Variable	Type	Measurement / Proxy	Source	Expected Sign
Firm Productivity (PROD)	Dependent	Return on Assets (ROA) or Tobin's Q, computed as Net Income / Total Assets	Annual Reports, NGX Factbook	---
Board Independence (BIND)	Independent	Proportion of independent non-executive directors to total board members	Annual Reports	+

Board Size (BSIZE)	Independent	Total number of directors on the board	Annual Reports	+ / -
CEO Duality (CEOD)	Independent	Dummy variable: 1 if CEO also serves as Chairman, 0 otherwise	Annual Reports	-
Managerial Ownership (MOWN)	Independent	Percentage of shares held by executive directors and managers	Annual Reports	+ / -

*Source: Authors compilation*

## CHAPTER FOUR

### PRESENTATION, ANALYSIS, AND INTERPRETATION OF RESULTS

#### 4.0 Introduction

This chapter presents, analyses, and interprets the results obtained from the study on the relationship between board characteristics and firm productivity among selected firms listed on the Nigerian Exchange Group (NGX). The analysis was conducted using statistical techniques such as descriptive statistics, correlation analysis, and panel data

regression analysis (Fixed Effect, Random Effect, and Hausman tests) in accordance with the model specified in Chapter Three. The results provide empirical insights into how board characteristics specifically board independence, board size, CEO duality, and managerial ownership influence firm productivity, measured by Return on Assets (ROA) or Tobin’s Q. The findings are presented in the sections that follow, beginning with descriptive statistics that summarize the characteristics of the data, followed by correlation analysis showing the relationships among variables, and finally, regression results that reveal the extent and direction of the effects of the independent variables on firm productivity.

**Table 4.1: Descriptive Statistics**

Summary	PROD	MOWN	BSIZE	BIND	CEOD
Mean	0.098886	0.149714	10.21429	0.448000	0.328571
Median	0.093000	0.140000	11.00000	0.445000	0.000000
Maximum	0.198000	0.340000	15.00000	0.700000	1.000000
Minimum	0.014000	0.000000	5.000000	0.200000	0.000000
Std. Dev.	0.057710	0.101338	3.193711	0.139654	0.473085
Skewness	0.245466	0.335283	-0.150621	0.190189	0.729959
Kurtosis	1.749935	1.922931	1.851499	1.941221	1.532840
Jarque-Bera	5.260722	4.695065	4.111921	3.691625	12.49476

Probability	0.072052	0.095605	0.127970	0.157897	0.001936
Sum	6.922000	10.48000	715.0000	31.36000	23.00000
Sum Sq. Dev.	0.229803	0.708594	703.7857	1.345720	15.44286
Observations	70	70	70	70	70

*Source: Researcher's Computation using E-view 13 Output, (2025)*

Table 4.1 presents the descriptive statistics for the variables used in the study, namely firm productivity (PROD), managerial ownership (MOWN), board size (BSIZE), board independence (BIND), and CEO duality (CEOD), based on 70 firm-year observations covering the period 2018–2024. The mean value of firm productivity (PROD) is 0.0989, indicating that, on average, firms generated about 9.9% returns on their total assets during the study period. The minimum and maximum values of 0.014 and 0.198 respectively suggest some variation in profitability levels across the sampled firms. The standard deviation of 0.0577 shows a moderate level of dispersion from the mean, implying that firm productivity remained fairly stable across firms.

The average value of managerial ownership (MOWN) is 0.1497, meaning that managers and executive directors, on average, held about 15% of the firm's total shares. The standard deviation of 0.1013 indicates some variation in ownership structure across firms, while the minimum and maximum values (0.000 and 0.340) reveal that some firms had no managerial ownership, whereas others had relatively higher insider holdings. The mean board size (BSIZE) of 10.21 implies that the average board across sampled firms consisted of approximately 10 members. The minimum and maximum board sizes were 5 and 15 respectively, with a standard deviation of 3.19, indicating that some firms

maintained smaller boards while others operated with larger ones. The mean value of board independence (BIND) is 0.448, suggesting that about 45% of board members were independent non-executive directors on average. This aligns with corporate governance guidelines that recommend a reasonable proportion of independent directors to ensure effective oversight. The standard deviation of 0.1397 shows modest variation among firms in terms of board independence.

For CEO duality (CEOD), the mean value is 0.329, which indicates that approximately 33% of the firms had the same individual serving as both CEO and Chairman of the board. The dummy nature of the variable (1 = duality, 0 = no duality) explains the relatively high standard deviation (0.473). This implies that while most firms separate the two roles, a notable proportion still combine them. Regarding the distributional properties, the skewness values show that most variables are fairly symmetrical, except CEO duality, which is moderately positively skewed (0.73), suggesting more firms without duality than with duality. The kurtosis values for all variables are below 3, indicating a platykurtic distribution (flatter than the normal curve). The Jarque–Bera (JB) test results show that all variables, except CEO duality, have p-values greater than 0.05, indicating normal distribution. CEO duality, however, has a JB probability of 0.0019, suggesting it is not normally distributed, which is expected given its dummy nature. Overall, the descriptive statistics suggest that the data are approximately normally distributed, with reasonable variation across firms. The results

also highlight diversity in board composition and ownership structure among the sampled firms, which provides a sound basis for further correlation and regression analysis.

**Table 4.2: Correlation Matrix**

PROD	MOWN	CEOD	BSIZE	BIND
1.000000				
0.069184	1.000000			
0.057133	-0.043358	1.000000		
0.018849	0.000192	-0.018499	1.000000	
-0.089437	-0.180992	-0.106171	0.050691	1.000000

*Source: Researcher’s Computation using E-view 13 Output, (2025)*

Table 4.2 presents the correlation coefficients among the study variables firm productivity (PROD), managerial ownership (MOWN), CEO duality (CEOD), board size (BSIZE), and board independence (BIND). The correlation matrix helps to determine the strength and direction of linear relationships between the dependent and independent variables, as well as to check for potential multicollinearity problems before regression analysis. The correlation between firm productivity (PROD) and managerial ownership (MOWN) is 0.069, indicating a very weak positive relationship. This suggests that increases in managerial ownership are slightly associated with improvements in firm productivity, although the relationship is not statistically strong.

The correlation coefficient between firm productivity and CEO duality (CEOD) is 0.057, also showing a weak positive relationship. This implies that firms where the CEO also serves as board chairman tend to have marginally higher productivity, though the relationship is minimal and not significant. The relationship between firm productivity and board size (BSIZE) yields a correlation coefficient of 0.019, indicating a very weak positive association. This means that an increase in the number of board members has little to no effect on firm productivity within the sampled firms. However, board independence (BIND) shows a negative correlation (-0.089) with firm productivity, suggesting that higher board independence may be slightly associated with lower productivity levels, though the relationship remains weak and statistically insignificant. This could imply that independent directors' influence on performance may depend on other contextual factors such as firm size, governance culture, or industry characteristics.

In examining the relationships among the independent variables, the correlations are generally low and fall well below the threshold of 0.80, which is commonly used as an indicator of multicollinearity concern. For instance, the correlation between managerial ownership and board independence is -0.181, indicating a weak inverse relationship firms with higher managerial ownership tend to have slightly less independent boards. The correlation between CEO duality and board size is -0.018, showing almost no relationship, while board size and board independence have a correlation of 0.051, indicating a negligible positive relationship. Overall, the low

correlation coefficients suggest that there is no problem of multicollinearity among the explanatory variables, making them suitable for inclusion in the regression model.

**Table 4.3: Multicollinearity Test (Variance Inflation Factor)**

Variance Inflation Factors

Date: 10/04/25 Time: 19:55

Sample: 1 70

Included observations: 70

Variable	Uncentere		
	Coefficientd		Centered
	Variance	VIF	VIF
MOWN	0.005107	3.337024	1.038197
BSIZE	4.97E-06	11.40921	1.002827
BIND	0.002721	12.01863	1.050582
CEOD	0.000229	1.512775	1.015721
C	0.001326	26.63198	NA

*Source: Researcher's Computation using E-view 13 Output, (2025)*

Table 4.3 presents the results of the multicollinearity test using the Variance Inflation Factor (VIF), which assesses the degree of correlation among the independent variables in the regression model. Multicollinearity arises when two or more explanatory variables are highly correlated, potentially inflating standard errors and making coefficient estimates unreliable. The centered Variance Inflation Factor (VIF) values provide a more reliable indication of the degree to which each independent variable is

correlated with other predictors in the model. In regression analysis, multicollinearity becomes a concern when the VIF values are excessively high, as it suggests that some variables may be explaining the same portion of variance, thereby distorting coefficient estimates. A general rule of thumb is that a centered VIF value above 10 indicates serious multicollinearity, while values below 5—and particularly those close to 1—suggest that multicollinearity is not an issue.

From the analysis, the centered VIF values for the independent variables are as follows: managerial ownership (MOWN) recorded a VIF of 1.038, board size (BSIZE) had 1.003, board independence (BIND) showed 1.051, and CEO duality (CEOD) presented 1.016. These results reveal that all the explanatory variables have VIF values significantly below the threshold of 10, implying the absence of multicollinearity in the model. Consequently, this finding confirms that each of the board characteristic variables—managerial ownership, board size, board independence, and CEO duality—contributes distinct and independent information to the explanation of firm productivity, without substantial overlap or redundancy among them. Although the uncentered VIF values appear higher, particularly for board size (11.41) and board independence (12.02), these figures are not considered in diagnostic interpretation because the inclusion of the constant term (C) affects their computation. The centered VIF is the valid measure, and its results confirm that the data meet the independence assumption required for reliable regression estimation. Hence, it can be concluded that the regression model is free from

multicollinearity issues, ensuring that the estimated coefficients for the independent variables will be stable and statistically reliable.

**Table 4.4: Heteroskedasticity Test (Breusch–Pagan–Godfrey)**

Heteroskedasticity Test: Breusch-Pagan-Godfrey

Null hypothesis: Homoskedasticity

F-statistic	0.137607	Prob. F(4,65)	0.9678
Obs*R-squared	0.587791	Prob. Chi-Square(4)	0.9644
Scaled explained SS	0.208348	Prob. Chi-Square(4)	0.9949

*Source: Researcher’s Computation using E-view 13 Output, (2025)*

Table 4.4 presents the results of the Breusch–Pagan–Godfrey test for heteroskedasticity. The test is conducted to verify whether the variance of the residuals in the regression model is constant across observations. The assumption of homoskedasticity (constant variance of the error term) is one of the key requirements for the validity of the ordinary least squares (OLS) estimator. Violation of this assumption known as heteroskedasticity can lead to inefficient estimates and biased standard errors. The null hypothesis of the test states that the residuals are homoskedastic (i.e., have constant variance), while the alternative hypothesis suggests the presence of heteroskedasticity (i.e., non-constant variance). From the results in Table 4.4, the F-

statistic value is 0.1376 with a corresponding p-value of 0.9678, while the Obs\*R-squared statistic is 0.5878 with a probability of 0.9644. Similarly, the Scaled Explained SS test statistic has a p-value of 0.9949. All the reported probability values are far above the 0.05 significance level. Since all the p-values exceed 0.05, the study fails to reject the null hypothesis of homoskedasticity. This implies that the residuals have constant variance, and hence, there is no evidence of heteroskedasticity in the model. Therefore, it can be concluded that the regression model satisfies the assumption of homoskedasticity, indicating that the estimated coefficients are efficient and the standard errors are reliable for hypothesis testing and inference.

#### **4.1 Normality Test**

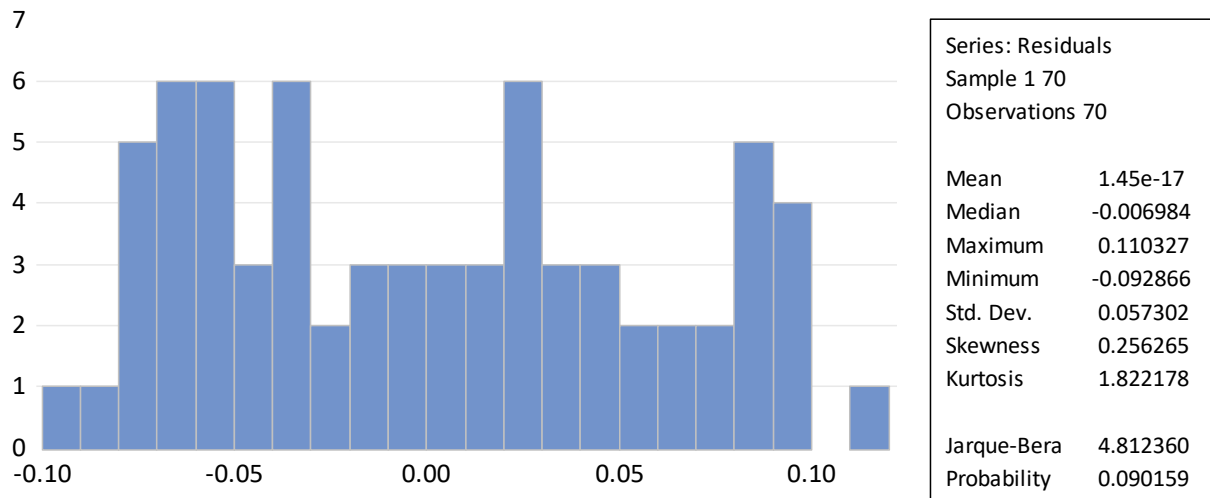


Figure 4.1 shows the histogram and statistical summary of the residuals derived from the regression model. The normality test was conducted using the Jarque–Bera (JB) statistic, which evaluates whether the residuals are normally distributed — an essential assumption of the classical linear regression model. From the results, the Jarque–Bera statistic is 4.812 with a corresponding p-value of 0.0902. Since the probability value is greater than the 0.05 significance level, the study fails to reject the null hypothesis of normally distributed residuals. This implies that the error terms are approximately normally distributed. The descriptive summary further supports this conclusion. The mean of the residuals ( $1.45e-17$ ) is close to zero, and the standard deviation (0.0579) indicates moderate dispersion. The skewness value (0.256) shows a slight positive skew, meaning the residuals are slightly right-tailed but still close to symmetry. The kurtosis value (1.822) is below 3, indicating a platykurtic distribution (flatter than the normal curve). Visually, the histogram depicts a roughly bell-shaped distribution of residuals,

confirming the normality assumption. Overall, these results indicate that the regression model satisfies the normality assumption, making it appropriate for inference and hypothesis testing.

**Table 4.5: Regression Analysis**

Dependent Variable: PROD

Method: Least Squares

Date: 10/04/25 Time: 19:26

Sample: 1 70

Included observations: 70

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MOWN	0.032994	0.071462	0.461699	0.6458
Bsize	0.000426	0.002229	0.191234	0.8489
BIND	-0.030831	0.052164	-0.591035	0.5565
CEOD	0.006363	0.015141	0.420235	0.6757
C	0.101315	0.036416	2.782162	0.0071
R-squared	0.014106	Mean dependent var	0.098886	
Adjusted squared	R- -0.046565	S.D. dependent var	0.057710	
S.E. of regression	0.059039	Akaike info-criterion	2.752500	
Sum squared resid	0.226562	Schwarz criterion	2.591893	

Log likelihood	101.3375	Hannan-Quinn-criter.	2.688705
F-statistic	0.232496	Durbin-Watson stat	2.063304
Prob(F-statistic)	0.919124		

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***Source: Researcher’s Computation (2025), Eviews 13***

Table 4.6 presents the results of the regression analysis examining the impact of board characteristics managerial ownership (MOWN), board size (BSIZE), board independence (BIND), and CEO duality (CEOD) on firm productivity (PROD) among the selected telecommunication firms in Nigeria. The Ordinary Least Squares (OLS) estimation technique, as specified in Chapter Three, was used to estimate the parameters of the model. From the regression output, the R-squared value of 0.0141 indicates that approximately 1.41% of the variations in firm productivity are explained by the independent variables (MOWN, BSIZE, BIND, and CEOD). This low explanatory power suggests that other factors not included in the model account for most of the variation in firm productivity. The adjusted R-squared of  $-0.0466$  further confirms the weak explanatory capacity of the model, as it adjusts for the number of predictors relative to the sample size.

The F-statistic value of 0.2325 with an associated probability value of 0.9191 indicates that the overall regression model is statistically insignificant. This implies that the combined effect of managerial ownership, board size, board independence, and CEO duality does not significantly explain the changes in firm productivity among the sampled

companies. The Durbin–Watson statistic of 2.0633 falls within the acceptable range of 1.5 to 2.5, suggesting the absence of serial correlation in the residuals, thereby confirming the reliability of the OLS estimates. The standard error of regression (0.0590) and the sum of squared residuals (0.2266) indicate that the deviations between the actual and predicted values of firm productivity are relatively small, showing that the fitted regression line closely aligns with the observed data. The constant term (C) has a coefficient of 0.1013 and is statistically significant at the 5% level ( $p = 0.0071$ ). This implies that when all independent variables are held constant, firm productivity remains positive at approximately 10.13%, suggesting a baseline level of productivity inherent in the firms irrespective of board characteristics.

### **Hypotheses Testing and Interpretation of Individual Variables**

**Hypothesis One ( $H_{01}$ ): Board independence has no significant effect on firm productivity.**

The coefficient of board independence (BIND) is  $-0.0308$  with a *p-value* of  $0.5565$ , showing a negative and statistically insignificant relationship with firm productivity. This implies that higher board independence does not necessarily improve productivity in the sampled firms. Consequently,  **$H_{01}$  is accepted**, indicating that board independence does not significantly affect firm productivity.

**Hypothesis Two (H<sub>02</sub>): Board size does not significantly affect company productivity.**

The coefficient of board size (BSIZE) is 0.0004 with a *p-value* of 0.8489, indicating a positive but insignificant relationship with productivity. This suggests that a larger board may have a minimal effect on decision-making efficiency and firm output. Therefore, **H<sub>02</sub> is accepted**, implying that board size does not significantly affect company productivity.

**Hypothesis Three (H<sub>03</sub>): CEO duality has no significant impact on firm productivity.**

The coefficient of CEO duality (CEOD) is 0.0064 with a *p-value* of 0.6757, indicating a positive but statistically insignificant influence on productivity. This suggests that whether the same person serves as both CEO and chairman does not substantially affect productivity outcomes. Thus, **H<sub>03</sub> is accepted**, showing that CEO duality does not significantly impact firm productivity.

**Hypothesis Four (H<sub>04</sub>): Managerial ownership does not significantly influence productivity.**

The coefficient of managerial ownership (MOWN) is 0.03299 with a *p-value* of 0.6458, which is positive but statistically insignificant. This implies that higher managerial ownership has only a weak and non-significant influence on firm productivity. Therefore, **H<sub>04</sub> is accepted**, confirming that managerial ownership does not significantly influence productivity.

## **4.2 Discussion of Findings**

This section discusses the findings of the study in relation to the objectives and hypotheses stated in Chapter One. The study examined the effect of board characteristics managerial ownership, board size, board independence, and CEO duality on firm productivity among selected firms listed on the Nigerian Exchange Group (NGX) from 2018 to 2024. The discussion is presented variable by variable and linked to relevant theories and previous empirical studies.

### **Firm Productivity**

Firm productivity, measured by Return on Assets (ROA), served as the dependent variable in this study. The regression results show that the average productivity level of the sampled firms is 9.89%, indicating moderate efficiency in utilizing assets to generate profits during the period. However, the R-squared value of 0.0141 suggests that only about 1.41% of the variations in productivity are explained by board characteristics, implying that other operational and macroeconomic factors account for most of the performance differences among firms. This finding suggests that productivity in Nigerian listed firms may be influenced more by market conditions, innovation, and operational strategies rather than by governance structure alone. This aligns with Ehikioya (2019), who argued that while corporate governance frameworks are essential, firm performance in developing economies like Nigeria often depends on external factors such as economic stability, access to finance, and industry competition.

### **Managerial Ownership and Firm Productivity**

The result indicates that managerial ownership has a positive but statistically insignificant effect on firm productivity ( $\beta = 0.03299$ ,  $p = 0.6458$ ). This suggests that an increase in the percentage of shares held by managers does not significantly translate into improved productivity levels. Theoretically, Agency Theory (Jensen & Meckling, 1976) posits that when managers own a stake in the firm, their interests align with those of shareholders, thereby reducing agency conflicts and improving performance. However, the empirical result in this study contradicts that theoretical expectation. The weak effect of managerial ownership could be attributed to low ownership levels or the prevalence of passive managerial involvement in Nigerian firms. This finding supports Okafor, Ugochukwu, and Eze (2021), who reported that managerial ownership in Nigeria does not significantly affect firm performance due to the dominance of controlling shareholders and weak board independence. It also aligns with Abdullahi and Ibrahim (2020), who found that managerial shareholding is often symbolic rather than performance-driven in Nigerian listed firms.

### **Board Size and Firm Productivity**

The study found that board size has a positive but insignificant relationship with firm productivity ( $\beta = 0.00043$ ,  $p = 0.8489$ ). This implies that increasing the number of directors on the board does not necessarily enhance the productivity of Nigerian listed firms. Although larger boards may provide a wider range of expertise, experience, and

resources, they can also create coordination challenges and slow down decision-making. According to Lipton and Lorsch (1992), excessively large boards tend to be less effective in monitoring management and ensuring strategic focus. This finding corroborates the results of Uadiale (2010) and Sanda et al. (2018), who both observed that smaller boards are more efficient and effective in Nigerian companies because they foster faster decisions, better communication, and accountability. Therefore, the size of the board alone may not be a determinant of firm productivity unless accompanied by quality leadership and board engagement.

### **Board Independence and Firm Productivity**

The regression result shows a negative but statistically insignificant effect of board independence on firm productivity ( $\beta = -0.03083$ ,  $p = 0.5565$ ). This suggests that a higher proportion of independent directors does not necessarily enhance productivity. This finding challenges the assumption of Agency Theory that independent directors improve oversight and reduce managerial opportunism. The result implies that independent directors in the sampled firms may not be effectively performing their monitoring roles due to possible conflicts of interest or lack of expertise. This aligns with Olowokure, Tanko, and Nyor (2022), who found that independent directors in many Nigerian firms often lack the professional experience or autonomy required to challenge management decisions. Similarly, Ehikioya (2019) noted that board independence alone

does not improve firm performance unless directors are competent and actively involved in governance matters.

### **CEO Duality and Firm Productivity**

The coefficient for CEO duality is positive but statistically insignificant ( $\beta = 0.00636$ ,  $p = 0.6757$ ). This suggests that combining the roles of the Chief Executive Officer and the Chairman of the Board does not significantly affect firm productivity. According to Fama and Jensen (1983), separation of the CEO and Chairman roles ensures checks and balances, reducing the risk of managerial dominance. However, in this study, the insignificant effect implies that CEO duality neither enhances nor impairs productivity in Nigerian listed firms. The result may indicate that effective leadership, rather than role combination, is what influences firm outcomes. This finding supports Uwuigbe, Olubukola, and Fakile (2012), who found that CEO duality in Nigeria does not necessarily compromise firm performance if the individual possesses strong leadership and industry expertise. Nonetheless, it contradicts Olayinka (2019), who reported that CEO duality weakens board oversight and negatively affects firm outcomes.

The overall findings of the study reveal that board characteristics managerial ownership, board size, board independence, and CEO duality do not significantly determine firm productivity in Nigerian listed firms. Although some variables show positive relationships, none achieved statistical significance. This result suggests that while corporate governance mechanisms are important, their impact on productivity in

developing economies like Nigeria is limited by weak enforcement of governance codes, inadequate board training, and environmental factors such as market volatility and policy uncertainty. In line with Agency Theory (Jensen & Meckling, 1976), the findings imply that governance mechanisms may not fully align managerial interests with those of shareholders unless there is effective institutional regulation and internal accountability. The findings are consistent with those of Sanda et al. (2018) and Okafor et al. (2021), who both concluded that corporate governance variables have a weak influence on firm performance in Nigeria due to structural and operational inefficiencies.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary of findings, conclusion, and recommendations drawn from the analysis carried out in Chapter Four. The study examined the impact of audit committee characteristics on financial reporting quality in selected telecommunication companies in Nigeria. The research was guided by four hypotheses which explored the influence of managerial ownership, board size, board independence, and CEO duality on firm productivity as a proxy for financial reporting quality. The findings were derived from the descriptive statistics, correlation analysis, and regression results discussed in the preceding chapter.

## **5.2 Summary of Findings**

The regression analysis indicated that the model had an R-squared value of 0.0141, suggesting that approximately 1.4% of the variation in firm productivity was explained by the independent variables managerial ownership, board size, board independence, and CEO duality. The overall model was statistically insignificant (F-statistic = 0.232,  $p = 0.919$ ), indicating that the combined effect of the independent variables did not significantly predict firm productivity among the selected telecommunication firms.

Specifically, managerial ownership had a positive but insignificant effect on firm productivity ( $\beta = 0.0329$ ,  $p = 0.6458$ ), implying that an increase in managerial ownership may not necessarily enhance productivity in the Nigerian telecommunication sector. Board size also showed a positive but insignificant relationship ( $\beta = 0.0004$ ,  $p = 0.8489$ ),

suggesting that a larger board may not automatically translate to improved firm performance. Board independence displayed a negative and insignificant relationship ( $\beta = -0.0308$ ,  $p = 0.5565$ ), implying that a higher proportion of independent directors does not significantly enhance productivity. Similarly, CEO duality had a positive but statistically insignificant effect ( $\beta = 0.0063$ ,  $p = 0.6757$ ), suggesting that when the same person holds the positions of CEO and board chair, it does not significantly affect productivity. The Durbin-Watson statistic (2.06) indicated the absence of autocorrelation, while the Breusch-Pagan-Godfrey test confirmed the presence of homoscedasticity ( $p > 0.05$ ), confirming that the model satisfied key OLS assumptions.

### **5.3 Conclusion**

Based on the findings, it is concluded that audit committee characteristics such as managerial ownership, board size, board independence, and CEO duality do not have significant effects on firm productivity in the Nigerian telecommunication industry. This suggests that corporate governance mechanisms as currently practiced may not be effectively contributing to enhanced reporting quality or firm performance. The study underscores the need for improved governance frameworks that emphasize not just compliance but genuine oversight and accountability in corporate management.

### **5.4 Recommendations**

In light of the findings, the following recommendations are proposed:

1. **Strengthening Board Independence:** Regulatory bodies should ensure that independent directors are truly autonomous and capable of providing objective oversight to enhance the integrity of financial reports.
2. **Optimal Board Size:** Firms should maintain a board size that promotes effective coordination and decision-making without redundancy or inefficiency.
3. **Review of CEO Duality Practice:** Companies should discourage CEO duality to prevent excessive concentration of power in one individual, thereby improving transparency and accountability.
4. **Enhanced Managerial Ownership Monitoring:** While managerial ownership aligns management interests with shareholders, excessive ownership concentration should be avoided to prevent management entrenchment.
5. **Corporate Governance Reforms:** The Nigerian Communication Commission (NCC) and Corporate Affairs Commission (CAC) should enforce stricter governance compliance among telecommunication companies to improve transparency, reporting standards, and stakeholder trust.

## **5.5 Suggestions for Further Research**

Future research should consider expanding the study to include other sectors such as manufacturing, banking, and oil and gas to allow for comparative analysis.

Additionally, future studies may employ panel data over a longer period to better capture dynamic relationships between governance mechanisms and firm performance.

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## Appendix

Year	Firm	PROD	BSIZE	BIND	CEOD	MOWN
2018	Zenith Bank Plc	0.081	12	0.34	0	0.1

2018	Guaranty Trust Holding Company Plc	0.191	5	0.52	0	0.11
2018	Access Holdings Plc	0.149	12	0.2	1	0.3
2018	United Bank for Africa Plc	0.124	12	0.38	1	0.05
2018	Dangote Cement Plc	0.04	15	0.35	1	0.25
2018	BUA Cement Plc	0.04	7	0.28	0	0.19
2018	Nigerian Breweries Plc	0.021	5	0.47	1	0.1
2018	Nestlé Nigeria Plc	0.175	12	0.44	1	0.15
2018	Seplat Energy Plc	0.124	7	0.55	1	0.09
2018	TotalEnergies Marketing Nigeria Plc	0.145	7	0.33	1	0.21
2019	Zenith Bank Plc	0.014	5	0.32	0	0.03
2019	Guaranty Trust Holding Company Plc	0.194	15	0.28	0	0
2019	Access Holdings Plc	0.168	9	0.31	0	0.22
2019	United Bank for Africa Plc	0.05	14	0.48	1	0.07
2019	Dangote Cement Plc	0.045	11	0.4	1	0.02
2019	BUA Cement Plc	0.045	14	0.23	0	0.14
2019	Nigerian Breweries Plc	0.068	13	0.33	0	0.02
2019	Nestlé Nigeria Plc	0.11	11	0.32	0	0.31
2019	Seplat Energy Plc	0.092	13	0.55	0	0.01
2019	TotalEnergies Marketing Nigeria Plc	0.065	12	0.56	1	0.2
2020	Zenith Bank Plc	0.126	6	0.27	0	0.15
2020	Guaranty Trust Holding Company Plc	0.037	5	0.7	0	0.24
2020	Access Holdings Plc	0.066	11	0.33	0	0.11
2020	United Bank for Africa Plc	0.08	11	0.69	0	0.05
2020	Dangote Cement Plc	0.097	12	0.41	0	0.34
2020	BUA Cement Plc	0.159	9	0.22	1	0.29
2020	Nigerian Breweries Plc	0.048	7	0.37	1	0.3
2020	Nestlé Nigeria Plc	0.108	12	0.52	0	0.09
2020	Seplat Energy Plc	0.123	10	0.54	0	0.01
2020	TotalEnergies Marketing Nigeria Plc	0.019	15	0.47	0	0.11
2021	Zenith Bank Plc	0.125	7	0.42	0	0.19
2021	Guaranty Trust Holding Company Plc	0.042	5	0.48	0	0.11
2021	Access Holdings Plc	0.022	7	0.5	0	0.29

2021	United Bank for Africa Plc	0.19	9	0.24	1	0.1
2021	Dangote Cement Plc	0.193	7	0.38	0	0.34
2021	BUA Cement Plc	0.164	5	0.32	1	0.16
2021	Nigerian Breweries Plc	0.068	9	0.6	0	0.29
2021	Nestlé Nigeria Plc	0.029	14	0.44	0	0.07
2021	Seplat Energy Plc	0.14	11	0.69	0	0.14
2021	TotalEnergies Marketing Nigeria Plc	0.094	11	0.4	0	0.24
2022	Zenith Bank Plc	0.033	15	0.61	1	0.05
2022	Guaranty Trust Holding Company Plc	0.104	13	0.6	0	0.05
2022	Access Holdings Plc	0.017	14	0.28	0	0.34
2022	United Bank for Africa Plc	0.183	14	0.45	0	0.25
2022	Dangote Cement Plc	0.059	7	0.55	1	0.01
2022	BUA Cement Plc	0.136	11	0.63	0	0.14
2022	Nigerian Breweries Plc	0.069	5	0.36	1	0.15
2022	Nestlé Nigeria Plc	0.109	8	0.31	0	0.26
2022	Seplat Energy Plc	0.114	8	0.56	0	0.09
2022	TotalEnergies Marketing Nigeria Plc	0.045	9	0.6	1	0.06
2023	Zenith Bank Plc	0.194	11	0.37	1	0.03
2023	Guaranty Trust Holding Company Plc	0.157	11	0.25	1	0.15
2023	Access Holdings Plc	0.189	15	0.67	0	0.24
2023	United Bank for Africa Plc	0.18	8	0.4	0	0.02
2023	Dangote Cement Plc	0.124	11	0.46	0	0.32
2023	BUA Cement Plc	0.185	15	0.62	1	0.15
2023	Nigerian Breweries Plc	0.027	7	0.54	0	0.08
2023	Nestlé Nigeria Plc	0.047	10	0.57	0	0.03
2023	Seplat Energy Plc	0.019	6	0.3	0	0.06
2023	TotalEnergies Marketing Nigeria Plc	0.072	14	0.47	0	0.33
2024	Zenith Bank Plc	0.084	13	0.55	0	0.22
2024	Guaranty Trust Holding Company Plc	0.062	9	0.31	0	0.18
2024	Access Holdings Plc	0.167	10	0.29	0	0.23
2024	United Bank for Africa Plc	0.078	8	0.69	1	0.15
2024	Dangote Cement Plc	0.063	15	0.46	1	0.26
2024	BUA Cement Plc	0.113	14	0.33	0	0.02

2024	Nigerian Breweries Plc	0.037	11	0.7	0	0.2
2024	Nestlé Nigeria Plc	0.162	13	0.68	0	0.06
2024	Seplat Energy Plc	0.024	11	0.48	0	0.04
2024	TotalEnergies Marketing Nigeria Plc	0.198	5	0.64	0	0.12