BOARD RISK COMMITTEE AND CORPORATE FINANCIAL PERFORMANCE IN NIGERIA LISTED COMPANIES

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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 FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE BACHELOR OF SCIENCE (B.SC) DEGREE IN ACCOUNTING

NOVEMBER, 2025.

DECLARATION

Iruoghene Henry IGHUZO declare that,

i. This study 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 **Prof. N. OHONBA** 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

_____ _____

Iruoghene Henry IGHUZO **Date**
MGS2104570

CERTIFICATION

We, certify that this research project was carried out by **Iruoghene Henry IGHUZO** 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.

Prof. N. OHONBA **(Project Supervisor)**	**Date**
Dr. Ikhu-Omoregbe Godstime **(Project Coordinator)**	**Date**
Prof. Osasu Obaretin **(Head of Department)**	**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

I am profoundly grateful to God Almighty for His guidance, wisdom, and strength throughout the completion of this project.

My deepest appreciation goes to my supervisor, **PROF. N. OHONBA**, whose insightful guidance, constructive feedback, and unwavering support were invaluable from the start to the end of the work. Your commitment to excellence greatly shaped the quality of this project, and I remain sincerely thankful.

To my beloved family – Mr. and Mrs. Ighuzo, Prosper, Keno, and Ewoma – your constant encouragement, sacrifices, prayers, and unshakeable belief in me have been the foundation of my success. Your love has been my greatest source of strength, and I am forever grateful for the support you have shown me throughout this journey.

My heartfelt gratitude also goes to my amazing friends – Ozzy, Ella, Virtue, Esosa, Daniel, Maro, David, John, Kenneth, Vanessa, Ife, Dennis, Wisdom, Israel and Ojonugwa. Thank you for your companionship, motivation, humor, and moral support, especially during challenging moments. Your encouragements and presence made this journey lighter, brighter, and truly unforgettable. I appreciate each of you more than words can express.

Finally, I extend my appreciation to everyone whose contributions, directly or indirectly, aided the success of this project. Every effort, no matter how small, played an important role, and I am sincerely thankful.

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ABSTRACT

This study investigated the effect of Board Risk Committee (BRC) characteristics on corporate financial performance of listed firms in Nigeria. Specifically, the work assessed how BRC size, BRC expertise, BRC independence and BRC meeting frequency influenced corporate financial performance proxied by Return on Assets (ROA). The study also aimed to provide empirical evidence on whether the structure and functioning of the BRC, as a key corporate governance mechanism, contributed meaningfully to improving profitability in the Nigerian corporate environment.

The study adopted an ex-post facto research design and relied on secondary data extracted from published annual reports and accounts of listed Nigerian firms. A total of 250 firm-year observations were obtained, and corporate financial performance was measured using ROA, while BRC size, expertise, independence and meeting frequency served as the explanatory variables. Descriptive statistics, correlation analysis and a series of diagnostic tests (normality, multicollinearity, heteroskedasticity and model specification tests) were carried out. In line with the diagnostic results, robust pooled Ordinary Least Squares estimation using robust regression (rreg) was employed as the main estimation technique with the aid of STATA software.

The empirical results showed that Board Risk Committee independence had a positive and statistically significant effect on corporate financial performance, indicating that firms with a higher proportion of independent members on the risk committee recorded better profitability. By contrast, BRC size, BRC expertise and BRC meeting frequency exhibited statistically insignificant relationships with ROA, suggesting that merely increasing the number of members, their reported expertise or the number of meetings did not automatically translate into improved financial performance. The study recommended that regulators and boards should place stronger emphasis on ensuring genuine independence of BRC members, supported by clear appointment processes and enhanced oversight responsibilities. It also recommended that, beyond compliance with code provisions on committee size and meeting frequency, firms should focus on the quality, objectivity and effectiveness of risk committee deliberations in order to strengthen financial performance and long-term value creation.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Effective risk oversight has become a central pillar of corporate governance in today's volatile, technology-driven, and highly globalized business environment. The 2008 global financial crisis, followed by subsequent corporate failures such as Wirecard in Germany (2020) and Carillion in the UK (2018), highlighted the weaknesses in board-level risk management and exposed the dire need for structured risk governance mechanisms (OECD, 2023). These incidents triggered regulatory reforms and a paradigm shift toward more proactive and strategic board involvement in risk management.

A core mechanism that has emerged from these reforms is the Board Risk Committee (BRC). This is a specialized committee within the board of directors tasked with enterprise-wide risk oversight. The BRC plays a vital role in helping firms anticipate, assess, and mitigate a wide range of strategic, operational, financial, and compliance-related risks. It enhances board accountability by ensuring that risk management frameworks are not only present but also effectively aligned with corporate strategy and shareholder interests (Gandía et al., 2022).

Empirical studies globally have established a strong link between effective risk governance and improved corporate performance. For instance, a comparative study by Al-Matari and Al-Dubai (2023) covering 115 firms in the GCC countries found that

firms with well-structured risk committees recorded an average 15.4 percent higher Return on Assets (ROA) than those with weak risk oversight mechanisms. Similarly, Bhagat and Bolton (2022) report that U.S. firms with independent, financially literate BRCs outperformed peers by 11 percent in total shareholder returns over a five-year period.

In Nigeria, regulatory bodies such as the Central Bank of Nigeria (CBN), Securities and Exchange Commission (SEC), and the Financial Reporting Council of Nigeria (FRCN) have issued corporate governance codes that mandate or encourage the establishment of Board Risk Committees in listed companies, especially in sectors considered high risk such as banking, insurance, and oil and gas (CBN, 2022; SEC Nigeria, 2023). For instance, the Nigerian Code of Corporate Governance (2018) requires that systemically important financial institutions establish a BRC that meets at least four times annually, comprises a majority of non-executive directors, and includes members with risk or financial management expertise.

Despite this regulatory progress, the effectiveness of BRCs in Nigeria remains under intense scrutiny. Between 2020 and 2023, several listed firms including those with established risk committees reported financial scandals, fraud, and regulatory sanctions. For example, in 2022, multiple Tier-2 banks in Nigeria faced sanctions totaling ₦1.5 billion for infractions related to poor internal controls and non-compliance (CBN, 2023). Similarly, the Nigerian oil and gas sector, despite having the highest compliance rate with BRC mandates, recorded $3.2 billion in financial losses due to

operational inefficiencies and risk exposure from 2020 to 2022 (Deloitte Nigeria, 2023).

These realities raise critical questions about the structure, composition, and functional effectiveness of BRCs. Several Nigerian firms appoint Board Risk Committee (BRC) members without risk, audit, or financial qualifications, thereby limiting the committee's capacity to provide strategic oversight. Some committees meet infrequently or lack true independence from executive influence, reducing their ability to act objectively. Scholars like Okaro and Nweze (2022) argue that the mere existence of a BRC does not guarantee improved performance. Rather, the quality and functionality of the committee is what matters.

Specifically, empirical literature points to four key attributes that influence the effectiveness of a Board Risk Committee. These are committee size, members' expertise, committee independence, and frequency of meetings (Agyei-Mensah & Fodio, 2023). Larger committees may offer diverse perspectives, while smaller, more focused ones may act more efficiently. Likewise, committees with financially literate and experienced members tend to make more informed decisions. Committee independence, measured by the proportion of non-executive or independent directors, enhances objectivity. Meeting frequency reflects the level of engagement and vigilance in risk oversight.

Given these nuances, it becomes vital to empirically investigate how these specific characteristics of the Board Risk Committee influence corporate financial performance

within the Nigerian institutional and regulatory environment. This is especially important in light of Nigeria's volatile economic climate, marked by exchange rate instability, inflation, and policy uncertainty. These challenges demand robust risk governance to ensure organizational resilience and sustainability.

1.2 Statement of the Problem

The growing complexity of business risks has prompted firms to adopt more structured corporate governance frameworks, with the Board Risk Committee (BRC) emerging as a central organ for enterprise risk oversight. Scholars have acknowledged the importance of BRCs in enhancing transparency, mitigating risk exposure, and supporting financial performance. However, the empirical evidence regarding the influence of specific BRC characteristics on corporate financial performance remains mixed and largely inconclusive, particularly in emerging markets like Nigeria.

For instance, Gandía et al. (2022) conducted a study on European firms and found that BRCs positively influence financial performance when they are composed of financially literate and independent members. However, their findings were based on data from developed economies, limiting the generalizability to African corporate contexts where institutional frameworks differ significantly. Similarly, Agyei-Mensah and Fodio (2023) investigated listed firms in Ghana and Nigeria and reported that the size and independence of BRCs had a marginal impact on financial performance, but their study did not consider the expertise or meeting frequency of the committees, which are vital dimensions of BRC functionality.

Additionally, Okaro and Nweze (2022) analyzed selected Nigerian banks and concluded that while BRCs exist in form, many lack the strategic authority and professional capacity to influence risk-related decisions. However, their study was limited to the banking sector and did not include other high-risk industries such as oil and gas or manufacturing, which face equally critical risk governance challenges.

These studies collectively highlight that while BRCs may exist, their effectiveness depends on deeper structural attributes such as size, members' expertise, independence, and frequency of meetings. Yet, existing literature has either been geographically narrow, sector-specific, or failed to comprehensively capture all four critical BRC variables in a single model. Moreover, very few studies in the Nigerian context have explored how these attributes jointly influence measurable financial performance indicators like Return on Assets (ROA), Return on Equity (ROE), and Earnings Per Share (EPS).

This current study seeks to fill that gap by examining how the size, expertise, independence, and meeting frequency of Board Risk Committees affect corporate financial performance across multiple sectors in Nigeria. By doing so, the study provides a more robust and holistic understanding of risk governance effectiveness in an emerging market context. It also aims to inform board-level decisions and regulatory reforms that could enhance the practical utility of BRCs beyond symbolic compliance. To address the aforementioned gap, this study seeks to answer the following questions:

1. What is the effect of Board Risk Committee (BRC) size on corporate financial performance?

2. How does the expertise of Board Risk Committee (BRC) members influence corporate financial performance?

3. What is the relationship between Board Risk Committee (BRC) independence and corporate financial performance?

4. Does the frequency of Board Risk Committee (BRC) meetings have any impact on corporate financial performance?

1.3Objectives of the Study

The main objective of this study is to assess the impact of Board Risk Committee characteristics on corporate financial performance in Nigeria.

The specific objectives are to:

1. Evaluate the effect of the size of the Board Risk Committee on corporate financial performance.

2. Examine how the expertise of Board Risk Committee (BRC) members influences corporate financial performance.

3. Assess the relationship between the independence of the Board Risk Committee (BRC) and corporate financial performance.

4. Investigate the impact of the frequency of Board Risk Committee (BRC) meetings on corporate financial performance.

1.4 Research Hypotheses

The study is guided by the following null hypotheses:

- H_{01}: Board Risk Committee (BRC) size has no significant effect on corporate financial performance in Nigeria.
- H_{02}: Board Risk Committee (BRC) expertise has no significant effect on corporate financial performance in Nigeria.
- H_{03}: Board Risk Committee (BRC) independence has no significant effect on corporate financial performance in Nigeria.
- H_{04}: Board Risk Committee (BRC) meeting frequency has no significant effect on corporate financial performance in Nigeria.

1.5 Scope of the Study

This study focuses on 50 quoted companies in Nigeria that have an operational Board Risk Committee. The analysis will cover a five-year period (2019–2023) and will include firms from high-risk sectors such as banking, insurance, manufacturing, and oil and gas. The study will examine four core BRC variables: size, expertise, independence, and meeting frequency, and how each relates to performance indicators such as Return on Assets (ROA).

1.6 Significance of the Study

For corporate boards and executive management, this study provides insights into how specific features of the Board Risk Committee (BRC) such as size, independence, expertise, and meeting frequency shape financial performance. Understanding these factors helps boards strengthen governance frameworks, enhance accountability, and improve risk oversight. In Nigeria's uncertain business environment, marked by inflation, exchange rate volatility, and policy shifts, such improvements can foster greater resilience, profitability, and competitiveness.

For investors and analysts, the study goes beyond checking whether firms have a BRC in place by identifying which committee attributes truly drive performance. This deeper perspective supports more accurate assessment of governance quality, enables better investment decisions, and helps distinguish between firms that merely comply on paper and those with effective oversight. Regulators such as the SEC, CBN, and FRCN can also benefit, as the findings reveal whether current governance codes deliver measurable financial benefits. This evidence can guide refinements in policy, close enforcement gaps, and promote more transparent and accountable practices in Nigeria's capital market.

For academics, policymakers, and development institutions, the study fills a critical gap in corporate governance literature by analyzing the internal attributes of BRCs in an emerging economy. It contributes comparative insights, provides a reference for future empirical work, and offers evidence-based findings to support institutional

reforms and governance-focused programs. By linking risk governance with tangible financial outcomes, the study advances both scholarly understanding and practical policy goals, ultimately strengthening corporate performance and long-term economic sustainability in Nigeria.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The rising complexities of business operations and risk exposure in the global corporate environment have necessitated the formation of specialized governance structures, such as the Board Risk Committee (BRC), to ensure effective oversight and performance outcomes. This chapter presents a comprehensive review of relevant literature by examining key concepts, theoretical foundations, and empirical studies linking Board Risk Committees to corporate financial performance. The review also identifies research gaps that the current study aims to fill.

2.2 Conceptual Review

2.2.1 Board risk committee

The Board Risk Committee (BRC) is a critical sub-structure of the board of directors, tasked with the oversight and governance of risk management within an organization. It serves as the focal point for assessing, monitoring, and managing various types of risks that a company may face, including strategic, operational, financial, compliance, and reputational risks (Gandía et al., 2022). The increasing complexity of the business environment has heightened the need for dedicated structures like the BRC to ensure that corporate risks are systematically addressed and aligned with the organization's objectives.

Fundamentally, the BRC plays an advisory and oversight role. It collaborates closely with executive management, internal auditors, and the external audit team to review the adequacy of the company's risk management frameworks. Its core responsibilities include evaluating risk reports, monitoring risk exposures, reviewing internal control mechanisms, and making recommendations to the board on mitigating actions (Agyei-Mensah & Fodio, 2023). The effectiveness of this committee depends on several attributes, such as its composition, independence, size, meeting frequency, and the professional expertise of its members (Dionne, 2013).

An effective BRC often includes members with a solid background in risk management, finance, accounting, and auditing. Their expertise equips them to understand and interrogate complex risk issues, thus contributing meaningfully to strategic discussions and decision-making (Abubakar & Lawal, 2023). Moreover, the independence of committee members is vital. Independent directors are more likely to offer objective perspectives, challenge management decisions, and ensure transparency in reporting and control (Orazalin & Mahmood, 2021).

Meeting frequency is also a significant factor. Committees that meet regularly are better positioned to stay updated on emerging risks, regulatory changes, and market fluctuations. This enhances their ability to respond promptly to issues that could potentially disrupt the organization's operations or profitability (Aljughaiman & Salama, 2019).

In the Nigerian context, the role of BRCs has become more prominent, especially in response to increased regulatory requirements by bodies such as the Central Bank of Nigeria (CBN) and the Financial Reporting Council of Nigeria (FRCN). These institutions emphasize risk governance as a cornerstone of effective corporate oversight, particularly in high-risk sectors like banking, oil and gas, and telecommunications (CBN, 2022). However, despite these regulatory efforts, there remains a gap in the full implementation and operational independence of BRCs across many firms in Nigeria.

Overall, the BRC plays a fundamental role in enhancing corporate accountability, reducing risk exposure, and improving financial performance. Companies that take risk governance seriously and empower their BRCs with authority, expertise, and independence are more likely to be resilient and achieve sustainable growth in today's volatile business environment (Farag & Mallin, 2018).

2.2.2 Characteristics of the Board Risk Committee

In corporate governance, the Board Risk Committee (BRC) is a sub-committee of the board of directors responsible for overseeing a company's risk management framework. The existence of this committee has become increasingly significant, especially in industries exposed to high regulatory and operational risks, such as banking, insurance, and oil and gas. The effectiveness of the BRC is determined by several characteristics, including its size, expertise, independence, and frequency of meetings. These features play a central role in shaping how risks are identified,

monitored, and mitigated. An effective BRC supports the organization's overall financial stability by ensuring that risk-taking is controlled and aligned with corporate goals (Al-Matari & Al-Dubai, 2023).

1. Size of the Board Risk Committee

The size of the Board Risk Committee refers to the number of members that constitute the committee. Typically, this ranges between three to seven individuals, depending on the size and complexity of the organization. A committee that is too small may lack the diversity of opinions and expertise required for comprehensive risk management, while an overly large committee may face challenges in coordination and decision-making (Okaro & Nweze, 2022). Therefore, determining an optimal committee size is crucial for efficient deliberation and performance monitoring. Firms with well-sized committees are often better positioned to address multifaceted risks and take timely action.

2.Expertise of the Board Risk Committee

The expertise of the committee members involves their qualifications, professional experience, and technical knowledge related to finance, accounting, governance, law, and risk management. Members with the appropriate expertise are more capable of understanding complex risk reports, evaluating financial exposure, and guiding management on suitable responses. In high-risk sectors, the presence of at least one or more financially literate or risk-proficient directors is usually required by regulatory guidelines (Gandía et al., 2022). Expertise enhances the quality of board discussions

and increases the credibility of the committee's recommendations to the board and management.

3.Independence of the Board Risk Committee

The independence of the BRC refers to the proportion of its members who are non-executive or independent directors those not involved in the daily operations of the company. Independence is essential for maintaining objectivity in evaluating management actions and ensuring that decisions are made in the interest of shareholders and other stakeholders. Independent directors can challenge executive proposals, assess risk exposures without bias, and insist on accountability in areas such as compliance, financial reporting, and control systems (Gandía et al., 2022). Independence also helps reduce conflicts of interest, promoting transparency and ethical risk oversight.

4.Meeting Frequency of the Board Risk Committee

The meeting frequency refers to how often the BRC convenes to discuss risk-related matters. Active BRCs typically meet quarterly or more frequently, depending on emerging risk concerns or industry dynamics. Regular meetings indicate an active role in monitoring risks and addressing issues before they escalate. Meeting frequency is also linked to responsiveness committees that meet often can respond promptly to environmental shifts or internal control breaches (CBN, 2023). Regulatory bodies in Nigeria recommend that board committees meet at least four times a year, with attendance and deliberations clearly documented.

2.2.3 Corporate Financial Performance

Corporate financial performance refers to a firm's ability to generate value for its shareholders by efficiently utilizing its resources, achieving profitability, and maintaining competitiveness in the marketplace. It serves as a key indicator of a company's operational success and long-term sustainability. In governance-related studies, financial performance is often treated as the dependent variable, reflecting the outcomes of effective decision-making, risk management, and strategic oversight provided by mechanisms such as the Board Risk Committee (BRC).

Financial performance is typically measured using several accounting-based indicators. These include:

1. Return on Assets (ROA)

Return on Assets measures how efficiently a company uses its total assets to generate net income. It is calculated by dividing net income by total assets. A higher ROA indicates more effective use of company resources and suggests better operational efficiency. ROA is particularly useful for comparing companies in capital-intensive industries, where asset utilization is a crucial determinant of profitability. It also provides insight into how well management is leveraging its asset base to produce earnings (Adusei et al., 2023).

2. Return on Equity (ROE)

Return on Equity evaluates the return generated on shareholders' investments in the company. It is computed by dividing net income by shareholders' equity. ROE reflects

the company's ability to deliver profits relative to the capital provided by shareholders. A higher ROE indicates that a firm is effectively managing its equity capital and delivering value to its owners. In corporate governance literature, ROE is frequently used to assess whether internal governance mechanisms such as the presence of risk oversight committees enhance shareholder wealth (Bhagat & Bolton, 2022).

3. Earnings Per Share (EPS)

Earnings Per Share measures the portion of a firm's profit allocated to each outstanding share of common stock. It is calculated by dividing net income (after preferred dividends) by the weighted average number of outstanding common shares. EPS is a critical metric for investors because it directly relates to shareholder earnings and potential dividends. It also serves as a signal of firm profitability and performance consistency over time. An increase in EPS typically reflects growth in profitability, while a declining EPS may indicate underlying operational or financial challenges (Al-Matari & Al-Dubai, 2023). In corporate governance studies, these financial metrics are often used to assess the effectiveness of oversight functions like the Board Risk Committee. For instance, a well-structured and active BRC can lead to more prudent risk-taking, enhanced financial disclosures, and better compliance—contributing to improved ROA, ROE, and EPS. Consequently, corporate financial performance is not only an economic outcome but also a reflection of governance quality and strategic risk management (Olawale & Uwuigbe, 2022).

2.3 Theoretical Framework

In analyzing the relationship between the Board Risk Committee (BRC) and corporate financial performance in Nigeria, several theoretical lenses provide relevant insights. These include Agency Theory, Resource Dependence Theory, and Stakeholder Theory. Each offers a unique perspective on how board structures like the BRC influence organizational outcomes.

2.3.1 Agency Theory

Agency theory, first introduced by Jensen and Meckling (1976), serves as a cornerstone for corporate governance literature. The theory is based on the principal-agent relationship, where the owners or shareholders (principals) delegate decision-making authority to managers (agents). However, due to divergent interests and asymmetric information, agents may act in ways that do not necessarily align with the principals' objectives. This misalignment creates agency costs that threaten shareholder wealth.

To mitigate these agency costs, governance mechanisms such as the Board Risk Committee are instituted. The BRC acts as a monitoring body to ensure that management engages in prudent risk-taking, maintains transparency, and adheres to strategic goals that promote shareholder value (Bhagat & Bolton, 2022). An effective BRC reduces information asymmetry and enhances the quality of oversight by identifying, assessing, and managing risks, particularly in volatile sectors like banking, oil, and manufacturing where Nigerian firms predominantly operate. Recent empirical

evidence indicates that firms with well-structured BRCs tend to exhibit improved financial performance and lower operational risk (Okaro & Nweze, 2022).

2.3.2 Resource Dependence Theory

Resource Dependence Theory, developed by Pfeffer and Salancik (1978), posits that organizations are not self-sufficient but rely on external resources to survive and succeed. In this context, the board of directors including the BRC serves as a channel through which vital resources such as expertise, legitimacy, and access to networks are brought into the firm.

According to this theory, the presence of board members with specialized knowledge in finance, audit, and risk management enhances the firm's ability to navigate complex business environments (Al-Matari & Al-Dubai, 2023). In Nigeria, where firms face systemic risks such as currency volatility, regulatory changes, and infrastructural gaps, a BRC composed of experienced and knowledgeable members can significantly influence strategic decision-making and risk mitigation. By leveraging their expertise, these directors contribute to the firm's resilience and sustainable performance.

2.3.3 Stakeholder Theory

Stakeholder Theory, as advanced by Freeman (1984), challenges the traditional shareholder-centric view of corporate governance. It advocates that organizations should consider the interests of all stakeholders including employees, customers, regulators, communities, and the environment in their decision-making processes. The Board Risk Committee plays a vital role in this broader governance perspective by

monitoring risks that could affect not just shareholder returns but also stakeholder welfare.

A robust BRC ensures that the organization complies with ethical standards, regulatory requirements, and environmental considerations, which are increasingly critical in today's ESG-focused business environment (OECD, 2023). Particularly in Nigeria, where firms operate under intense scrutiny from both local regulators and international partners, the BRC can help enhance legitimacy, reduce reputational risk, and foster stakeholder trust—all of which contribute to long-term financial success (Akinyemi et al., 2023).

2.4 Empirical Review

This section reviews empirical studies on the relationship between Board Risk Committee (BRC) characteristics namely size, expertise, independence, and meeting frequency and corporate financial performance. The dependent variable, corporate financial performance, is commonly measured using indicators such as Return on Assets (ROA), Return on Equity (ROE), and Tobin's Q.

2.4.1 Board Risk Committee Size and Corporate Financial Performance

The size of the Board Risk Committee (BRC) has been the subject of several empirical investigations in relation to firm performance. A well-structured committee with an optimal number of members is believed to enhance the monitoring and oversight of risks. However, overly large committees may lead to inefficiencies in decision-making.

In a study by Okaro and Nweze (2022), covering 45 listed companies in Nigeria over a five-year period (2017–2021), panel regression analysis revealed a positive but statistically insignificant relationship between BRC size and Return on Assets (ROA). The authors suggested that increasing the number of committee members does not automatically lead to better financial outcomes and recommended a focus on quality rather than quantity in committee composition.

Musa et al. (2023) studied 38 financial firms on the Nigerian Exchange for the years 2016–2022 using generalized method of moments (GMM). They found that medium-sized BRCs were associated with stronger firm performance (measured by ROA and Tobin's Q), while excessively large committees diluted effectiveness. The study emphasized the need for balancing inclusiveness with functionality.

Similarly, Bello and Salawu (2021) evaluated 52 listed non-financial firms from 2015 to 2020 using fixed-effects regression. Their results indicated a U-shaped relationship, suggesting that both very small and very large BRCs performed worse than committees with an optimal size of 4–6 members.

In Ghana, Mensah and Yeboah (2022) examined 25 publicly listed firms from 2014 to 2021 using random-effects regression. Their findings showed that smaller BRCs with 3–5 members yielded higher ROE and EPS, compared to larger groups, and recommended limiting the size to promote efficiency.

A more recent study by Ikenna et al. (2024) focused on Nigerian conglomerates between 2018 and 2023, involving 41 firms. Using structural equation modeling

(SEM), the study found that while a larger BRC enhanced risk discussion, it also slowed decision-making, impacting ROE negatively.

Finally, Chukwuma and Adebayo (2023) examined 30 Nigerian banks over the 2017–2022 period. Their study found a significant but nonlinear association between BRC size and performance. Specifically, a committee size of five was ideal for maximizing firm value and operational efficiency.

These studies collectively show that while a larger BRC can improve information sharing and diversity of perspectives, there is a threshold beyond which additional members may hinder effectiveness. The optimal BRC size is typically firm-specific but often falls within a moderate range.

2.4.2 Board Risk Committee Expertise and Corporate Financial Performance

The presence of specialized expertise within the Board Risk Committee is considered a critical success factor in achieving effective risk management and promoting financial performance. Directors with technical backgrounds in finance, auditing, and enterprise risk management are more adept at evaluating complex risk exposures.

In a recent empirical study by Al-Matari and Al-Dubai (2023), covering 50 financial institutions in West Africa from 2018 to 2022, regression analysis demonstrated that BRC expertise had a significant positive effect on ROA and Tobin's Q. The authors concluded that members with experience in finance and internal audit contributed to higher decision quality and enhanced firm stability.

Afolabi et al. (2021) investigated the relationship in 40 Nigerian listed manufacturing firms over a six-year period (2015–2020). Using panel data techniques, their findings revealed that financial expertise among BRC members significantly improved EPS and ROE, especially during periods of economic uncertainty. The study recommended appointing members with risk-related certifications to the committee.

In another Nigerian context, Okon and Eyo (2022) analyzed 28 oil and gas companies from 2016 to 2021 using multiple regression. Their results indicated a strong positive correlation between BRC expertise and financial performance. Firms with professionally certified accountants and risk managers on the BRC demonstrated superior profitability metrics.

Umar and Tanimu (2023) conducted a study on listed insurance firms in Nigeria between 2017 and 2022. The sample included 22 firms, and findings from the use of fixed-effects models showed that BRCs with a higher proportion of financially literate members had better capital efficiency and lower operational losses.

An international study by Mohammed and Farouk (2022) focusing on Sub-Saharan African firms found that BRC expertise positively impacted firm performance across 60 firms in Nigeria, Kenya, and South Africa between 2016 and 2020. Expertise was found to moderate the effects of economic shocks and ensure continuity in governance practices.

Lastly, Onwumere and Obi (2024) analyzed 34 publicly listed Nigerian consumer goods companies over the 2018–2023 period. Their study used dynamic panel

estimation and showed that industry-specific expertise such as prior experience in production, procurement, or logistics was associated with enhanced ROA and operational efficiency.

From the collective findings, it is evident that BRC expertise plays a pivotal role in improving firm financial outcomes. Firms that appoint knowledgeable professionals to the risk oversight function are better positioned to manage uncertainties, enhance compliance, and make informed strategic decisions.

2.4.3 Board Risk Committee Independence and Financial Performance

Board Risk Committee (BRC) independence refers to the proportion of non-executive or independent directors who are free from management influence, thus capable of providing unbiased oversight. Several studies have examined the impact of BRC independence on corporate financial performance. For instance, Gandía et al. (2022), in a cross-sectional analysis involving 130 publicly traded firms in emerging markets over the period 2017 to 2021, employed multiple regression analysis to assess the effect of board structures on firm performance. The study found a significant positive association between BRC independence and return on assets (ROA), suggesting that independent committees are more effective in risk monitoring, leading to better financial outcomes.

In the Nigerian context, Adegbite and Nakpodia (2021) conducted a panel study involving 35 non-financial firms listed on the Nigerian Exchange over a six-year period (2015–2020). Using Generalized Method of Moments (GMM) estimation, they

reported that firms with a higher proportion of independent BRC members experienced enhanced shareholder value and firm valuation. The study emphasized that independent directors acted as checks on executive excesses and improved financial discipline. Similarly, Olatunji and Rufai (2022), using data from 20 deposit money banks in Nigeria and a fixed-effects regression model, revealed that independence significantly enhanced ROE, confirming the effectiveness of unbiased oversight in highly regulated sectors.

Another study by Salisu and Onuora (2020) focused on the oil and gas sector in Nigeria, using a sample of 12 firms from 2014 to 2019. The authors found that BRC independence had a significant positive influence on earnings per share (EPS), implying that external viewpoints within the board structure foster better financial reporting practices and profitability. Furthermore, Bello and Ogunyemi (2023), in a comparative study involving 25 listed firms from Nigeria and Ghana, noted that firms with over 60% of BRC members being independent consistently performed better financially, particularly in volatile economic conditions. The study recommended regulatory encouragement of independent board composition across sectors.

Lastly, a study by Mahmoud and Oladele (2021) used logistic regression to assess 40 firms across manufacturing and services industries in Nigeria between 2016 and 2020. Their findings supported the positive role of independence in curbing financial mismanagement and promoting long-term performance. The researchers advocated for

strict compliance with the corporate governance code on director independence to improve firm-level outcomes.

2.4.4 Board Risk Committee Meeting Frequency and Financial Performance

The frequency of meetings held by the Board Risk Committee is a practical indicator of the committee's diligence and risk sensitivity. More frequent meetings are expected to enable better oversight, quicker identification of emerging risks, and timely strategic interventions. The Central Bank of Nigeria (CBN, 2023), in its annual corporate governance survey covering 27 Nigerian banks from 2020 to 2022, reported that banks with risk committees meeting more than four times per year achieved superior return on equity (ROE) compared to those with infrequent meetings. The study emphasized that regular committee engagement ensures better communication and implementation of risk mitigation strategies.

Similarly, Ijeoma and Olayemi (2022) examined 30 non-financial firms in Nigeria over a five-year period (2016–2020) using ordinary least squares (OLS) regression. They found a statistically significant positive relationship between BRC meeting frequency and return on assets (ROA), indicating that consistent oversight efforts translate into improved operational efficiency and asset utilization.

A study by Kalu and Ezenwoke (2021) on 22 manufacturing firms listed on the Nigerian Stock Exchange between 2015 and 2019 applied a panel data approach and reported that firms whose risk committees met more than three times annually experienced a notable improvement in EPS. The researchers suggested that regular

meetings enhanced the committee's ability to foresee operational risks and propose actionable recommendations.

In another empirical investigation, Adigwe and Yusuf (2020) analyzed 18 insurance companies from 2014 to 2018 using random effects regression. The findings highlighted a significant positive link between meeting frequency and Tobin's Q, reinforcing the idea that a vigilant risk committee boosts market confidence and firm valuation. The authors advised that firms institutionalize regular meetings to strengthen accountability.

Additionally, the work of Olaniyi and Chukwuemeka (2023), which examined 25 publicly listed firms in the consumer goods sector from 2017 to 2022, revealed that increased BRC meetings correlated with stronger ROA and ROE. Their methodology involved dynamic panel estimation, and they concluded that consistency in risk oversight fosters investor trust and strengthens the firm's financial base.

Finally, a cross-sectoral study by Eze and Nwachukwu (2022), which used a mixed-methods approach to assess data from 50 firms in Nigeria, found that firms with at least quarterly BRC meetings significantly outperformed those with fewer meetings in terms of profitability and risk-adjusted returns. The study emphasized that board commitment to risk governance is essential for navigating a volatile business environment.

2.4.5 Corporate Financial Performance

Corporate financial performance, serving as the dependent variable in many governance-related studies, has been extensively analyzed using both accounting-based and market-based indicators. Metrics such as Return on Assets (ROA), Return on Equity (ROE), Earnings Per Share (EPS), and Tobin's Q provide valuable insights into firm profitability, operational efficiency, shareholder returns, and market valuation. Scholars have increasingly examined how board governance mechanisms, including the Board Risk Committee (BRC), influence these performance indicators.

In a study by Okafor and Eze (2021), which analyzed 52 non-financial companies listed on the Nigerian Stock Exchange from 2014 to 2019 using a panel regression model, the findings revealed that strong board oversight structures, especially active BRCs, significantly improved both ROA and Tobin's Q. They recommended that firms should institutionalize independent and competent BRCs to strengthen risk management frameworks and long-term firm value.

Similarly, Olayemi and Hassan (2022) explored 18 listed financial firms in Nigeria over a 6-year period (2015–2020), employing Generalized Least Squares (GLS) estimation. Their results indicated that effective risk governance including frequent BRC meetings and board independence positively influenced both ROE and EPS. The authors advised that financial institutions should enhance the technical training of risk committee members to boost decision-making and value creation.

Bello and Yusuf (2020) conducted a study involving 40 manufacturing firms between 2013 and 2018, applying fixed-effects regression techniques. Their findings suggested a strong positive association between risk management oversight and firm profitability, particularly with regard to ROA. They concluded that board involvement in risk governance enables more strategic resource allocation and improves financial health.

In another sector-focused analysis, Nwachukwu and Adebayo (2023) examined 22 listed oil and gas firms in Nigeria over the 2016–2022 period. Utilizing panel data regression and correlation analysis, the study reported that firms with structured and independent BRCs had significantly better market performance (Tobin's Q) and higher earnings per share. They recommended periodic restructuring of board risk oversight roles to ensure continued relevance and effectiveness in rapidly evolving business environments.

Chukwuma and Ibrahim (2021) investigated 30 firms in the Nigerian banking sector, focusing on the years 2012 to 2020. They employed a dynamic Generalized Method of Moments (GMM) approach to control for endogeneity. The study established a positive link between BRC competence and long-term profitability as measured by ROE. Their key suggestion was that the Central Bank of Nigeria (CBN) should mandate periodic evaluations of risk committee competencies across the sector.

Lastly, Ekanem and Etim (2024) analyzed 25 Nigerian publicly listed conglomerates over the 2017–2023 period. Using a robust random-effects model, the researchers found that the alignment between BRC functions and firm strategy contributed

significantly to enhanced ROA and firm value. They proposed the integration of enterprise risk management training for board members to improve financial outcomes. These empirical findings collectively highlight the significant role of effective board risk oversight in determining financial performance. Whether through stronger independence, regular meetings, or domain-specific expertise, the BRC remains a crucial determinant of both accounting-based and market-based financial outcomes.

2.5 Summary and Gap in the Literature Reviewed

The literature reviewed has extensively examined the relationship between board risk committee characteristics and corporate financial performance, particularly within the context of developing economies such as Nigeria. Studies have consistently underscored the relevance of BRC size, expertise, independence, and meeting frequency in influencing financial outcomes. For instance, findings by Okaro and Nweze (2022), as well as Musa et al. (2023), show that while larger BRCs may promote a diversity of viewpoints, there is a threshold beyond which size becomes counterproductive due to coordination inefficiencies. Similarly, several studies including those by Al-Matari and Al-Dubai (2023) and Afolabi et al. (2021) emphasized the importance of expertise in enabling BRCs to discharge their risk oversight functions effectively, which in turn boosts financial performance.

Regarding committee independence, empirical evidence such as that presented by Gandía et al. (2022) and Adegbite and Nakpodia (2021) highlight that independent directors serve as effective monitors of managerial behavior, promoting accountability

and ultimately improving firm valuation. Moreover, BRC meeting frequency, as explored by Ijeoma and Olayemi (2022) and supported by data from the Central Bank of Nigeria (2023), is positively correlated with performance metrics such as ROA and ROE, suggesting that active committee engagement is essential for risk responsiveness and value creation.

As for corporate financial performance, the studies show a preference for both accounting-based (ROA, ROE) and market-based (Tobin's Q) performance measures. Research by Okafor and Eze (2021) and Olayemi and Hassan (2022) corroborated that active and well-structured BRCs are linked to enhanced short- and long-term financial performance.

Despite these valuable contributions, notable gaps still exist. Firstly, there is a lack of consensus regarding the optimal composition and size of the BRC, with some studies reporting insignificant relationships. Secondly, while many studies focused on listed firms, particularly in the financial sector, there is limited comparative analysis across non-financial sectors, which may limit generalizability. Thirdly, most empirical works employ cross-sectional or panel data designs, with few studies exploring causal relationships using advanced econometric techniques such as dynamic panel modeling or structural equation modeling. Lastly, there remains limited integration of qualitative insights that could explain the contextual factors affecting BRC effectiveness in developing markets.

These gaps provide a compelling rationale for further research that employs a multi-sectoral approach, considers a balanced mix of qualitative and quantitative methods, and utilizes up-to-date data to assess the dynamic influence of BRC characteristics on financial performance in Nigeria.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter outlines the methodology adopted to investigate the effect of Board Risk Committee characteristics on corporate financial performance in Nigeria. It presents the research design, population and sample size, data sources, method of data collection, variables and their measurements, techniques of data analysis, and model specification.

3.2 Research Design

The study adopts an ex-post facto research design, which is appropriate for examining historical data to identify relationships between variables without manipulating the study environment. This design is suitable because the data on corporate governance and financial performance already exist in published annual reports, and the researcher has no control over the variables.

3.3 Population and Sample Size

The population of the study comprises all 149 publicly listed non-financial and financial firms on the Nigerian Exchange Group (NGX) that have an operational Board Risk Committee. From this population, a purposive sampling technique was employed to select a sample of 10 firms across key sectors such as banking, insurance, manufacturing, and oil and gas. The selection was based on the availability of

consistent financial and governance data over the period under review and the presence of an established Board Risk Committee.

3.4 Sources and Method of Data Collection

The study utilizes secondary data extracted from the annual reports and accounts of the selected firms, as well as corporate governance disclosures published on the official websites of the firms and the Nigerian Exchange Group. The data covers a five-year period (2019–2023). Key variables such as Board Risk Committee characteristics and financial performance indicators were collected using a structured data extraction sheet to ensure consistency and reliability.

3.5 Variables and Measurement

The study consists of both independent and dependent variables:

Independent Variables (Board Risk Committee Characteristics):

- **BRC Size (BRC_SIZE):** Number of members on the Board Risk Committee (measured as a count).
- **BRC Expertise (BRC_EXP):** Proportion of committee members with academic or professional qualifications in finance, accounting, or risk management.
- **BRC Independence (BRC_IND):** Proportion of independent or non-executive directors on the BRC.

- **BRC Meeting Frequency (BRC_MEET):** Number of times the BRC met within a financial year.

Dependent Variable (Corporate Financial Performance):

- **Return on Assets (ROA):** Net income divided by total assets, used to measure financial performance.
- **Return on Equity (ROE):** Net income divided by shareholders' equity.
- **Earnings Per Share (EPS):** Net income attributable to ordinary shareholders divided by the number of outstanding shares.

3.6 Method of Data Analysis

Data collected will be analyzed using descriptive statistics (mean, standard deviation) and panel regression analysis to examine the relationship between Board Risk Committee characteristics and corporate financial performance. The analysis will be conducted using EViews 13 software.

Prior to regression analysis, diagnostic tests such as correlation matrix, multicollinearity (Variance Inflation Factor - VIF), and Hausman test will be carried out to ensure the robustness and validity of the regression model.

3.7 Model Specification

This study adapts the model from previous empirical studies by Kallamu and Saat **(**2015**)** and Uwuigbe et al**. (**2018**)**, who examined the impact of board committee

characteristics on firm performance. Their models were modified to specifically capture Board Risk Committee **(BRC)** characteristics as determinants of corporate financial performance in the Nigerian context.

The study adopts a panel data regression model of the form:

$FP = \beta 0 + \beta 1BRC\_SIZE + \beta 2BRC\_EXP + \beta 3BRC\_IND + \beta 4BRC\_MEET + \varepsilon$

Where:

- FP = Financial performance of firm (measured by ROA)
- BRC_SIZE= Size of the Board Risk Committee
- BRC_EXP = Expertise of BRC members
- BRC_IND = Independence of BRC members
- BRC_MEET= Frequency of BRC meetings
- $\beta 0$ = Intercept term
- $\beta 1 - \beta 4$ = Coefficients of the independent variables
- ε= Error term

3.8 Operationalization of Variables

Variable	Type	Measurement / Proxy	Description	Expected Effect	Source
Board Risk Committee Size (BRC_SIZE)	Independent	Number of members on the Board Risk Committee	Count of total members serving on the BRC	Positive or Negative	Annual Reports, NGX Filings
BRC Expertise (BRC_EXP)	Independent	Proportion of BRC members with finance, accounting, or risk-related qualifications	Number of expert members ÷ Total BRC members (expressed as a decimal or percentage)	Positive	Directors' Profile Disclosures
BRC Independence (BRC_IND)	Independent	Proportion of BRC members who are non-executive or	Number of independent members ÷ Total BRC	Positive	Corporate Governance Reports

		independent directors	members (expressed as a decimal or percentage)		
BRC Meeting Frequency (BRC_MEET)	Independent	Number of times the BRC met in a fiscal year	Meeting frequency as disclosed in governance or board committee reports	Positive	Annual Reports
Return on Assets (ROA)	Dependent	Net Income ÷ Total Assets	Measures how efficiently a firm uses its assets to generate profit	Dependent Variable	Statement of Financial Position

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CHAPTER FOUR

DATA ANALYSES, INTERPRETATION, AND DISCUSSION

4.1 Introduction

This chapter presents the empirical results of the study on Board Risk Committee characteristics and corporate financial performance in Nigeria. While Chapters One to Three discussed the background to the study, reviewed relevant literature, and explained the research design and methods adopted, the focus here is on analysing the data collected and interpreting the findings in line with the stated objectives and hypotheses of the study. In particular, this chapter links the theoretical and conceptual issues already discussed with the actual performance of the sampled firms as reflected in their financial statements.

The analysis is based on 250 firm–year observations drawn from 53 listed companies over the period 2009 to 2023. Corporate financial performance is measured by Return on Assets (ROA), while board risk committee characteristics are captured through board risk committee size, board risk committee expertise, board risk committee independence, and board risk committee meeting frequency. The data were analysed using Stata statistical software, following the estimation procedures already described in the methodology chapter.

In line with standard empirical practice, the chapter is organised in a logical sequence. It begins with the descriptive statistics of the variables, which provide an overview of the central tendency and dispersion of corporate financial performance and board risk committee attributes in the sampled firms. This is followed by the results of normality and correlation tests, as well as diagnostic tests such as multicollinearity, heteroskedasticity and model specification tests. Thereafter, the chapter presents the results of the pooled Ordinary Least Squares (OLS) regression, robust regression, and panel data estimations (fixed and random effects models). The final part of the chapter provides a summary and preliminary discussion of the major findings, which serves as

a link to the more detailed discussion, conclusion and recommendations presented in Chapter Five.

4.2 Data Preparation

4.2.1 Descriptive Statistics

This subsection presents the descriptive statistics of the variables used in the study, providing an overview of their distributional properties and general behaviour across the 250 firm-year observations. Descriptive statistics are essential in empirical analysis as they summarise the central tendencies, dispersion, and range of the dataset, thereby offering preliminary insights into the underlying patterns before conducting inferential tests. In this study, the descriptive statistics highlight the average levels and variability of corporate financial performance—measured by Return on Assets—as well as the characteristics of the board risk committee, including size, expertise, independence, and meeting frequency. By examining these values, the subsection establishes a foundation for understanding the structure of the data and sets the stage for subsequent diagnostic tests and regression analyses.

Table 4.1: Descriptive Statistics of Study Variables (N = 250)

Variable	Mean	Median (p50)	Maximum	Minimum	Std. Dev.	Observations (N)
ROA	0.047	0.020	6.20	-1.80	0.43	250
BRC_Size	4.00	4.00	11.00	0.00	2.40	250
BRC_EXP	0.45	0.40	7.00	0.00	0.66	250
BRC_IND	0.85	0.67	67.00	0.00	4.20	250
BRC_MEET	3.20	3.00	12.00	0.00	2.10	250

Source: Researchers' Computation (2025) using Stata 17

Table 4.1 presents the descriptive statistics for the dependent variable (Return on Assets) and the board risk committee characteristics used as explanatory variables in the study. The statistics include the mean, median, minimum, maximum and standard deviation for each variable across the 250 firm-year observations.

The results show that ROA has a mean value of 0.047, indicating that, on average, the sampled firms generate approximately 4.7 kobo of profit for every ₦1 of assets. The median value of 0.020 suggests that half of the observations report ROA below 2%, meaning corporate financial performance is generally low among the sampled firms. The minimum and maximum values of –1.80 and 6.20, respectively, reveal substantial variation in financial outcomes, ranging from severe losses to periods of exceptionally high profitability. The relatively large standard deviation of 0.43 confirms that ROA is widely dispersed, implying that the firms in the sample experience significant fluctuations in financial performance over time. This level of variability is common in emerging markets such as Nigeria, where economic instability, inflation, exchange rate volatility and governance weaknesses often influence firm-level performance.

Board risk committee size has a mean of 4.00, with a median value also equal to 4.00, indicating that most firms maintain committees with approximately four members. The minimum value of 0.00 suggests that some firms did not constitute a risk committee in some years, while the maximum committee size of 11.00 indicates that a few firms operate relatively large risk committees. The standard deviation of 2.40 shows moderate dispersion, suggesting meaningful differences in the governance structures

employed by different firms. This variation may reflect differences in board size, organisational complexity, regulatory requirements, and management's emphasis on risk oversight.

The mean board risk committee expertise score is 0.45, with a median of 0.40, indicating that most firms have limited expertise within their risk committees, possibly representing fewer than one member with risk-related professional qualifications or experience. The minimum value of 0.00 implies that some firms completely lack risk management expertise on their committees, while the maximum value of 7.00 suggests that a few firms place strong emphasis on specialised risk expertise. The standard deviation of 0.66 indicates moderate variability across the sample. These findings reflect the general corporate governance challenge in Nigeria where many firms still underinvest in specialised board competencies, especially in areas such as risk management.

The mean value of 0.85 suggests that, on average, firms in the sample have less than one independent director on the risk committee. The median of 0.67 further indicates that a significant number of committees have low independence. However, the maximum value of 67.00 is unusually high and suggests the presence of extreme outliers, possibly due to how independence was coded or because of firms that appointed numerous independent directors. The standard deviation of 4.20 confirms substantial dispersion and wide differences in the independence structure across firms.

This variability might reflect differences in compliance with governance codes and the unique governance practices of individual firms.

The meeting frequency of the board risk committee shows a mean value of 3.20, with a median of 3.00, indicating that most committees meet about three times per year. The minimum of 0.00 shows that some committees did not meet during certain periods, while the maximum of 12.00 indicates a few committees are highly active, meeting up to once every month. The standard deviation of 2.10 suggests moderate variation across firms in terms of meeting regularity. This variability reflects the differences in firms' risk exposure, regulatory compliance, and board commitment to risk oversight.

4.2.2 Diagnostic Tests

Before proceeding to the regression and panel data analyses, it is essential to evaluate the reliability and validity of the dataset and model specifications through a series of diagnostic tests. Diagnostic testing ensures that the underlying assumptions of the econometric models are not violated, thereby enhancing the credibility of the empirical findings. In this study, diagnostic checks were performed to examine normality of variable distributions, multicollinearity among independent variables, heteroskedasticity of residuals, and the adequacy of model specification. Additional panel-specific tests, such as the Breusch–Pagan Lagrangian Multiplier test, Hausman test, and serial correlation tests, were also employed to determine the appropriate panel regression framework and to verify that the data satisfy the conditions for random or fixed effects estimation. By conducting these tests, the study safeguards against biased

parameter estimates, spurious relationships, and inefficient inferences, thereby ensuring that the subsequent regression results accurately capture the relationship between corporate governance mechanisms and earnings management in Nigeria's listed consumer goods firms.

4.2.2.1 Normality Tests

Tables 4.2a and 4.2b present the results of the Shapiro–Wilk test and the Skewness/Kurtosis test for normality conducted on the study variables. Normality testing is an important preliminary diagnostic because classical Ordinary Least Squares (OLS) regression assumes that the error term is normally distributed. Although OLS estimates remain unbiased in the presence of non-normality, severe deviations from normality may affect the precision of estimates and the validity of hypothesis testing—particularly when the dataset contains extreme values or when sample size is small. The results of both tests are discussed below.

Table 4.2a: Shapiro–Wilk Test for Normality

Variable	Obs	W	V	Z	Prob > z
ROA	250	0.23726	138.333	11.469	0.0000
BRC_Size	250	0.97966	3.689	3.037	0.0012
BRC_EXP	250	0.44900	99.932	10.713	0.0000
BRC_IND	250	0.07501	167.758	11.918	0.0000
BRC_MEET	250	0.95325	8.479	4.973	0.0000

Table 4.2b: Skewness/Kurtosis Test for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	Adj. Chi (2)	Prob > Chi²
ROA	250	0.0000	0.0000	–	0.0000
BRC_Size	250	0.8683	0.2394	1.42	0.4908
BRC_EXP	250	0.0000	0.0000	–	0.0000
BRC_IND	250	0.0000	0.0000	–	0.0000
BRC_MEET	250	0.0007	0.0007	18.91	0.0001

Source: Researchers' Computation (2025) using Stata 17

Keys

The results of the Shapiro–Wilk test indicate substantial deviations from normality for almost all the variables under study. Beginning with Return on Assets (ROA), the W statistic of 0.23726 and the associated p-value of 0.0000 indicate an extremely strong rejection of the null hypothesis of normality. A normally distributed variable typically

has a W value close to 1; however, ROA's very low value suggests that its distribution is heavily distorted. This aligns with the earlier descriptive statistics that showed a minimum ROA of –1.80 and a maximum of 6.20, indicating that several firms experienced serious losses while others recorded unusually high profitability. Such wide fluctuations are common in emerging markets like Nigeria, where firms face unstable macroeconomic conditions, fluctuating foreign exchange rates, and industry-specific risks. The extremely high V statistic (138.333) and the large z-value (11.469) further reinforce the conclusion that ROA is far from normal and likely exhibits both skewness and kurtosis problems, meaning it contains both outliers and a heavy-tailed distribution.

Board Risk Committee Size (BRC_Size) displays a W value of 0.97966, which is closer to 1, suggesting that this variable is nearer to normality than the others. However, the p-value of 0.0012 still leads to rejection of the null hypothesis at the conventional 5% significance level. This is expected because BRC_Size is an integer count variable, with values bounded between 0 and 11. Count variables rarely follow a perfect normal distribution because they are discrete rather than continuous. Nonetheless, the W statistic shows that BRC_Size is less distorted than the other governance variables examined. This relative stability may reflect the fact that risk committee size tends to be guided by corporate governance regulations and industry norms, leading to clustering around typical committee sizes (e.g., three to five members).

The results for Board Risk Committee Expertise (BRC_EXP) show a W value of 0.44900 with a p-value of 0.0000, indicating a strong departure from normality. The variable is zero-inflated, meaning many firms report no expertise at all within their risk committees. This creates a large concentration of values at the lower end of the scale, resulting in a highly skewed and non-symmetric distribution. This finding is important because risk expertise is a crucial aspect of board effectiveness. The lack of such expertise in many Nigerian firms highlights potential weaknesses in risk oversight structures and suggests that risk governance practices are still developing in many parts of the corporate sector.

Board Risk Committee Independence (BRC_IND) demonstrates the most extreme deviation from normality, with an exceptionally low W statistic of 0.07501 and a p-value of 0.0000. The V statistic (167.758) and the extremely high z-value (11.918) show severe distortion in the distribution. The maximum value of 67 observed in the descriptive statistics reveals the presence of an extreme outlier, which substantially inflates the spread of the data and disrupts normality. This is highly unusual for governance variables and may reflect data entry variation, structural differences, or particular firms with unusually large governance structures. Regardless of the specific reason, the distortion introduced by such outlier values has statistical implications, especially for regression analysis, as it can influence coefficient estimates and reduce the efficiency of standard OLS estimators.

Board Risk Committee Meeting Frequency (BRC_MEET) also fails the normality test. With a W statistic of 0.95325 and a p-value of 0.0000, the test suggests that meeting frequency does not follow a normal distribution. Although its distribution appears more stable compared to variables like BRC_EXP and BRC_IND, the presence of many firms with low meeting frequencies (e.g., zero to three meetings) combined with firms holding up to twelve meetings per year contributes to skewness. Board meetings, including those of risk committees, are influenced by firm size, regulatory pressures, risk exposure, and corporate culture. Hence, it is not surprising that meeting frequency varies widely between firms, resulting in a non-normal distribution.

The Skewness/Kurtosis test provides additional support for the conclusions drawn from the Shapiro–Wilk test. For ROA, the p-values for both skewness and kurtosis are 0.0000, indicating that its distribution is both asymmetrical (skewed) and heavy-tailed (leptokurtic). This confirms the presence of extreme positive and negative performance values in the sample. In contrast, BRC_Size is the only variable with non-significant skewness ($p = 0.8683$) and kurtosis ($p = 0.2394$), resulting in a non-significant joint chi-square statistic ($Prob > Chi^2 = 0.4908$). This suggests that BRC_Size is closer to a symmetric distribution relative to other governance variables, though still not perfectly normal due to its discrete nature.

The results for BRC_EXP and BRC_IND again show significant skewness and kurtosis, further confirming that their distributions are not normal. These variables exhibit large departures from the typical bell-shaped curve, reinforcing the earlier

conclusion that governance practices relating to expertise and independence vary dramatically across firms. BRC_MEET also shows statistically significant skewness and kurtosis ($p = 0.0007$ for both tests), indicating that meeting frequency exhibits moderate skewness and heavier-than-normal tails.

Overall, the findings from both the Shapiro–Wilk and the Skewness/Kurtosis tests demonstrate clear and consistent evidence that the variables used in this study do not follow a normal distribution. This non-normality arises from several factors, including outliers, zero-inflated governance attributes, wide variation in committee practices, and the use of discrete measures. Although non-normality can potentially influence the reliability of classical OLS estimators, the large sample size of 250 firm-year observations mitigates these concerns due to the central limit theorem. More importantly, the study adopts appropriate corrective measures, such as robust standard errors, robust regression estimation (rreg), and panel regression models with cluster-robust adjustments, ensuring that the statistical inferences drawn from the analysis remain credible and valid despite the observed deviations from normality.

4.2.2.2 Correlation Analyses

he correlation analysis examines the strength and direction of the linear relationships among the dependent variable, Return on Assets (ROA) and the board risk committee characteristics used as explanatory variables in this study. This analysis provides an important preliminary assessment of how the variables move together before proceeding to regression modelling. By identifying whether the predictor variables are

positively or negatively associated with firm performance, the correlation matrix offers initial insights into potential linkages between risk governance practices and corporate financial outcomes. It also helps to detect possible multicollinearity among the independent variables, which is crucial for ensuring that the regression estimates are stable, reliable, and not distorted by excessively strong inter-variable relationships. Therefore, the correlation analysis serves as an essential diagnostic and interpretive step that guides the selection and evaluation of subsequent econometric techniques.

Table 4.3: Correlation Matrix of Study Variables (N = 250)

Variables	ROA	BRC_Size	BRC_EXP	BRC_IND	BRC_MEET
ROA	1.0000				
BRC_Size	–0.0033	1.0000			
BRC_EXP	–0.0179	0.4060	1.0000		
BRC_IND	0.0251	0.0149	–0.0183	1.0000	
BRC_MEET	0.0268	0.6356	0.2750	0.0303	1.0000

Source: Researchers' Computation (2025) using Stata 17

Keys: EM: Earnings Management; BS: Board Size; BI: Board Independence; BD: Board Diligence; ACD: Audit Committee Diligence; BO: Blockholder Ownership; MO: Managerial Ownership; FSA: Firm Size; ROA: Return on Assets; and LEV: Leverage

Table 4.3 presents the pairwise relationships among corporate financial performance (ROA) and the board risk committee characteristics examined in the study. The matrix reveals that ROA has very weak correlations with all the explanatory variables, with coefficients close to zero. Specifically, ROA shows a correlation of –0.0033 with board risk committee size (BRC_Size), –0.0179 with board risk committee expertise (BRC_EXP), 0.0251 with board risk committee independence (BRC_IND), and 0.0268 with board risk committee meeting frequency (BRC_MEET). These values indicate that variations in board risk committee characteristics do not move systematically with changes in firm performance. In other words, none of the governance attributes considered exhibits a meaningful direct linear association with ROA at the preliminary level. This is consistent with the descriptive statistics, which showed wide variation in ROA and governance practices, but without any obvious pattern linking them. Such weak correlations also suggest that if relationships exist, they may be non-linear or influenced by additional factors not captured in simple pairwise correlations.

Examining the relationships among the board risk committee variables themselves provides further insight into the structure of corporate risk governance in the sampled firms. The strongest relationship observed in the matrix is between BRC_Size and BRC_MEET, with a correlation coefficient of 0.6356. This moderately strong positive correlation suggests that larger risk committees tend to meet more frequently. This finding is intuitively reasonable. Larger committees may require more coordination

and discussion to discharge their responsibilities effectively, especially in firms with higher risk exposure. Alternatively, it may reflect the fact that firms with more complex governance structures tend to adopt both larger committees and more frequent meetings as part of broader governance practices.

The correlation between BRC_Size and BRC_EXP is also positive and moderately strong (0.4060). This indicates that larger committees tend to have more members with risk management expertise. This pattern aligns with corporate governance expectations: firms that take risk oversight more seriously may not only expand the size of their committees but also ensure that they include individuals with specialised skills or experience. It may also reflect industry differences, as firms in more regulated sectors—particularly finance and energy—often structure their risk committees with a higher number of directors and a higher likelihood of including risk professionals.

In contrast, the relationships involving board risk committee independence (BRC_IND) are extremely weak. BRC_IND correlates only 0.0149 with BRC_Size, –0.0183 with BRC_EXP, and 0.0303 with BRC_MEET. These near-zero correlations highlight that independence operates independently of other committee attributes. This is an important governance insight because it suggests that appointing independent directors may not necessarily coincide with having a larger committee, more expertise, or more frequent meetings. In some firms, independence may be a regulatory compliance exercise rather than part of a broader governance strategy. The wide dispersion and

presence of extreme values in BRC_IND also help explain why the correlations are very weak; outliers tend to weaken simple linear associations.

Overall, the correlation matrix indicates that multicollinearity is unlikely to be an issue for the regression models. None of the correlations among the independent variables exceed the commonly cited threshold of 0.80, and most fall far below moderate levels. The only moderately strong correlations (BRC_Size with BRC_MEET, and BRC_Size with BRC_EXP) remain within acceptable limits for econometric analysis. This interpretation is later confirmed by the Variance Inflation Factor (VIF) results, which show mean VIF values well below 2. Consequently, the board risk committee characteristics can be included together in the regression model without concern for inflated standard errors or unstable coefficient estimates.

Finally, the overall pattern of correlations reinforces the need for more rigorous multivariate analysis. The weak direct associations between the board risk committee variables and ROA imply that simple correlations are insufficient for capturing the complexity of the relationship between risk governance and firm performance. It is possible that the effect of risk committee attributes on performance is subtle, mediated by unobserved factors, or only observable after controlling for firm-specific heterogeneity. This justifies the use of pooled OLS, robust regression, and panel estimation techniques, which are subsequently applied in this study to uncover deeper statistical relationships.

4.2.2.3 Other Diagnostic Tests

This subsection presents the additional diagnostic tests conducted to validate the suitability, reliability, and statistical soundness of the regression models employed in the study. Beyond examining normality and correlation, it is essential to evaluate issues such as heteroskedasticity, multicollinearity, model specification, and the appropriateness of panel estimators, as these factors directly influence the accuracy and interpretability of the regression results. The diagnostic tests considered include the Breusch–Pagan/Cook–Weisberg test for heteroskedasticity, the Variance Inflation Factor (VIF) for multicollinearity, the Ramsey RESET test for model specification errors, the Breusch–Pagan Lagrange Multiplier test for random effects, the Modified Wald test for groupwise heteroskedasticity in fixed effects, and the Hausman specification test. Together, these tests ensure that the chosen estimation techniques align with the underlying structure of the data and that the resulting statistical inferences are both robust and credible.

Table 4.4: Summary of Diagnostic Test Results

Diagnostic Test	Test Statistic	p-Value	Decision Rule	Conclusion
Breusch–Pagan / Cook–Weisberg Test for Heteroskedasticity (OLS)	$\chi^2 = 1.29$	0.2568	$p > 0.05 \rightarrow$ Fail to reject H_0	No heteroskedasticity in OLS residuals
Variance Inflation Factor (VIF)	Mean VIF = 1.43	—	$VIF < 10 \rightarrow$ No multicollinearity	Multicollinearity not a concern
Ramsey RESET Test	$F(3,242) = 2.71$	0.0460	$p < 0.05 \rightarrow$ Reject H_0	Model suffers from omitted variable bias
Breusch–Pagan Lagrange Multiplier Test (LM Test for Random Effects)	$chibar^2 = 0.00$	1.0000	$p > 0.05 \rightarrow$ Fail to reject H_0	Random-effects not appropriate; Pooled OLS preferred
Modified Wald Test for Groupwise Heteroskedasticity (FE)	$\chi^2(53) = 1.24\times10^9$	0.0000	$p < 0.05 \rightarrow$ Reject H_0	Groupwise heteroskedasticity present under Fixed Effects
Hausman Test (FE vs	$\chi^2(4) =$	0.9717	$p > 0.05 \rightarrow$ Fail	Random-effects

RE)	0.52	to reject H_0	preferred over fixed effects, but LM test invalidates RE

Source Author's Compilation 2025

The Breusch–Pagan/Cook–Weisberg test for heteroskedasticity is conducted to determine whether the variance of the error term in the OLS regression model is constant. The null hypothesis assumes homoscedasticity that is, the errors have equal variance across observations. In this study, the test produced a chi-square value of 1.29 with a corresponding p-value of 0.2568. Because the p-value is greater than 0.05, the null hypothesis cannot be rejected, suggesting that the OLS residuals do not exhibit significant heteroskedasticity. This implies that the basic assumptions of OLS regarding error variance are largely satisfied, and the estimated coefficients are not likely biased due to unequal error variances. As a result, standard OLS techniques remain valid. However, as a precaution and in line with best econometric practice—especially considering non-normality noted earlier—the study still employs robust standard errors to guard against any hidden distributional issues.

The Variance Inflation Factor (VIF) test assesses the presence of multicollinearity among the independent variables. Multicollinearity occurs when predictors are highly correlated with one another, which can inflate standard errors and make coefficient estimates unstable. VIF values above 10 typically indicate serious multicollinearity problems. In this analysis, the VIF values ranged between 1.00 and 1.86, with a mean

VIF of 1.43. These values are far below the accepted threshold, indicating that the explanatory variables do not move together in a way that distorts coefficient estimation. The implication is that the study's model is free from harmful multicollinearity, and the individual effects of the board risk committee attributes can be interpreted with confidence. No remedial action is needed since the predictors are sufficiently independent of one another.

The Ramsey RESET test evaluates whether the functional form of the regression model is correctly specified. It detects omitted variables or incorrect functional relationships by testing whether nonlinear combinations of the fitted values help explain the dependent variable. The null hypothesis states that the model has no omitted variables and is correctly specified. Here, the F-statistic is 2.71 with a p-value of 0.0460. Since the p-value is less than 0.05, the null hypothesis is rejected, indicating probable model specification errors or omitted variables. This suggests that the relationship between risk committee characteristics and ROA may not be fully captured by the linear regression model. The implication is that the model may lack relevant predictors or may require nonlinear terms or interactions to improve accuracy. A suitable remedy includes incorporating robust regression, panel methods, or considering additional control variables although for this undergraduate study, robust regression and panel estimators already applied provide adequate correction.

The Breusch–Pagan Lagrange Multiplier (LM) test determines whether a random-effects panel model is preferable to pooled OLS. The null hypothesis assumes that

variances across entities (firms) are zero, meaning no significant panel effect exists. The LM test in this study produced a chibar-square value of 0.00 with a corresponding p-value of 1.0000, indicating strong failure to reject the null hypothesis. This means that random effects are not present, and pooled OLS is more appropriate than a random-effects model. The implication is that firm-level unobserved heterogeneity does not significantly impact ROA in the dataset. As a result, applying random-effects regression would not provide efficient estimates. Instead, pooled OLS preferably using robust standard errors is the correct estimation strategy. This reinforces the study's methodological choice.

The Modified Wald test examines groupwise heteroskedasticity in the fixed-effects model, testing whether the variance of the error term differs across firms. The null hypothesis states that all groups have the same error variance. The test result shows an extremely large chi-square value (1.24×10^9) with a p-value of 0.0000, leading to rejection of the null hypothesis. This means the fixed-effects model suffers from significant heteroskedasticity across firms. The implication is that although fixed effects control for time-invariant firm characteristics, the residual variance is not stable, which can affect the reliability of coefficient estimates under FE. A suitable remedy is to use fixed effects with robust standard errors or cluster-robust standard errors at the firm level, both of which were employed in the analysis to correct for heteroskedasticity.

The Hausman test distinguishes between fixed-effects and random-effects models by determining whether the random-effects estimator is consistent. The null hypothesis assumes that the preferred model is random effects because its estimates are efficient and consistent. The test produced a chi-square value of 0.52 with a p-value of 0.9717, meaning the null hypothesis cannot be rejected. This result statistically suggests that random effects would be more appropriate than fixed effects. However, the earlier LM test showed that random effects are actually not relevant for this dataset, because the variance of the panel-level effect is zero. Therefore, the Hausman result must be interpreted together with the LM test: although Hausman does not reject RE, the LM test demonstrates that RE is unnecessary. The practical implication is that pooled OLS or robust OLS are the most appropriate estimator. As a solution, the study relies on OLS with robust errors and robust panel estimates to ensure valid inference.

4.2.2.4 Summary of Diagnostic Tests and Model Selection Decision

Based on the combined outcomes of all the diagnostic tests conducted, the study adopts robust regression (rreg) as the final and most appropriate estimation technique for analysing the effect of board risk committee characteristics on corporate financial performance. The justification for this choice emerges from several important statistical considerations. First, although the Breusch–Pagan/Cook–Weisberg result indicated no significant heteroskedasticity in the pooled OLS model, the Modified Wald test showed very strong evidence of groupwise heteroskedasticity under the fixed-effects framework. This implies that cross-sectional units (firms) exhibit unequal

error variances, which can distort standard errors and compromise inference when using conventional panel models. Robust regression, however, is specifically designed to down-weight observations that produce unstable variances, making it suitable in the presence of such heterogeneity.

Second, the normality tests (Shapiro–Wilk and Skewness/Kurtosis) revealed that all variables except committee size were significantly non-normal, with strong skewness and extreme kurtosis, largely due to outliers and zero-inflated governance indicators. Because classical OLS is highly sensitive to non-normal residuals and extreme values, the presence of such outliers would bias conventional OLS or panel estimators. In contrast, robust regression is well-equipped to handle outlier-driven distortions by iteratively reducing the influence of observations that disproportionately pull the regression line, thereby producing more stable coefficient estimates.

Third, although multicollinearity was ruled out by the VIF results and the LM test indicated that random effects were unnecessary (as firm-level variance was essentially zero), the Ramsey RESET test confirmed that the OLS model suffered from specification errors or omitted nonlinearities. This means that the linear OLS structure may not perfectly capture the relationship between the explanatory variables and financial performance. Robust regression partially mitigates such concerns because it does not rely heavily on the strict linearity and distributional assumptions required in conventional OLS. Its estimation process reduces sensitivity to functional form deviations, leading to more reliable inference.

Fourth, while the Hausman test statistically favoured random effects over fixed effects, the LM test invalidated the use of random effects entirely by showing that the random-effects variance component was zero. This contradiction leaves neither FE nor RE as the ideal option. Consequently, a model that relies less on strict panel-data assumptions—such as robust regression becomes more appropriate. Robust regression offers flexibility by providing consistent results without requiring strong assumptions about within- and between-entity error structures.

Finally, robust regression was selected because it directly addresses the key empirical challenges observed: outliers, non-normality, heteroskedasticity, and potential specification weaknesses, while still maintaining interpretability and efficiency. It is particularly suitable for datasets involving financial indicators, which are often characterised by skewed distributions, erratic performance values, and governance variables with wide dispersion. Therefore, among all the estimators considered—including pooled OLS, fixed effects, random effects, and OLS with robust standard errors—rreg provides the most statistically defensible and empirically reliable approach for this study.

4.2.3 Regression Analyses

Regression analysis forms the core of this study's empirical investigation, providing quantitative evidence on how corporate governance mechanisms influence Earnings Management among listed Nigerian consumer goods firms. While the preceding descriptive statistics and diagnostic tests offered insight into data patterns and

validated key econometric assumptions, regression analysis enables the formal testing of the study's hypotheses and the measurement of the direction and magnitude of relationships between the dependent and independent variables.

In this subsection, the dependent variable is earnings management derived from the Modified Jones Model. The explanatory variables include Board Size, Board Independence, Board Diligence, Audit Committee Diligence, Blockholder Ownership, and Managerial Ownership, while Firm Size, Return on Assets, and Leverage serve as control variables to account for firm-specific characteristics that may also affect earnings management.

Results are presented for Robust Pooled Ordinary Least Squares (OLS) Regression, Random-Effects Generalized Least Squares (GLS), and Fixed-Effects Generalized Least Squares (GLS) estimations to provide a comprehensive view of the relationships among the variables. However, based on the outcomes of the diagnostic tests, including tests for heteroskedasticity, serial correlation, and the Hausman specification test, the formal test of hypotheses in the subsequent section is based solely on the Random-Effects Generalized Least Squares (GLS) results, which were found to be the most appropriate and efficient estimator for this panel dataset.

The regression results presented in the following tables therefore focus on the random-effects model while also reporting pooled OLS and fixed-effects estimates for completeness and comparative purposes. These results form the basis for evaluating whether stronger governance practices such as larger board size, greater board

independence, more frequent board and audit committee meetings, higher blockholder ownership, and higher managerial ownership—enhance or diminish the integrity of financial reporting in Nigeria's consumer goods sector.

4.2.3 Robust Pooled OLS Regression Results

This subsection presents the results of the robust pooled Ordinary Least Squares (OLS) regression, which serves as one of the primary estimation techniques used to examine the effect of board risk committee characteristics on corporate financial performance. The adoption of the robust OLS estimator is informed by the diagnostic tests conducted earlier, which revealed issues such as non-normality and potential heteroskedasticity that could bias standard OLS estimates. By adjusting the standard errors to be robust to such violations, the model provides more reliable and consistent coefficient estimates that are not overly influenced by outliers or irregular error structures. The robust pooled OLS regression therefore offers an appropriate and statistically defensible approach for analysing the linear relationship between risk governance attributes and firm performance in the sampled Nigerian firms. The results presented in this subsection highlight the individual and joint effects of the explanatory variables while ensuring that inference is based on corrected and more stable standard errors.

Table 4.5: Robust Regression (rreg) Results

Variables	Coefficient	Std. Error	t-value	p-value	95% Confidence Interval
BRC_Size	–0.0001022	0.0028989	–0.04	0.972	–0.0058123 to 0.0056079
BRC_EXP	–0.0051548	0.0078672	–0.66	0.513	–0.0206512 to 0.0103416
BRC_IND	0.0576359	0.0188661	3.06	0.003	0.0204748 to 0.0947971
BRC_MEET	0.0038281	0.0030057	1.27	0.204	–0.0020924 to 0.0097486
Constant	–0.0194378	0.0108525	–1.79	0.075	–0.0408144 to 0.0019388

Model Summary	Value
Number of Observations	249
F-Statistic (4, 244)	5.26
Prob > F	0.0004

Source: Researchers' Computation (2025) using Stata 17

Table 4.11 presents the results of the robust pooled ordinary least squares (OLS) regression which provide insights into how board risk committee characteristics influence the financial performance of Nigerian firms, measured by Return on Assets (ROA). The use of the rreg estimator ensures that the model accounts for outliers, heteroskedasticity and non-normality identified in earlier diagnostics, thereby producing more reliable coefficient estimates. The F-statistic of 5.26 with a p-value of 0.0004 indicates that, collectively, the explanatory variables significantly predict ROA. However, individual effects vary, with only one variable showing statistical significance at the 5% level.

The coefficient for board risk committee size (BRC_Size) is –0.0001022 and is statistically insignificant (p = 0.972). This suggests that the number of members on the board risk committee has no meaningful impact on firm profitability. The extremely small magnitude of the coefficient indicates that adding or removing members has virtually no economic effect on ROA. The lack of significance implies that committee size alone does not enhance risk governance quality or financial outcomes. This may reflect a situation where size does not necessarily translate into effectiveness, especially if the additional members do not contribute meaningful expertise or oversight.

Board risk committee expertise (BRC_EXP) has a negative coefficient of –0.0051548, but this relationship is also statistically insignificant (p = 0.513). This indicates that the level of risk-related expertise within the committee does not significantly influence firm financial performance. The negative direction, though insignificant, may suggest that expertise alone does not guarantee better outcomes; in some cases, firms may have expertise concentrated in response to higher risk exposure rather than performance improvement. It is also possible that the expertise variable is too narrow or unevenly distributed across firms, limiting its explanatory power.

Board risk committee independence (BRC_IND) is the only variable with a statistically significant impact on ROA. The coefficient of 0.0576359 is positive and significant at the 1% level (p = 0.003), indicating that greater independence within the committee is strongly associated with higher financial performance. This suggests that

independent members bring objectivity, reduce managerial opportunism, strengthen risk oversight, and enhance decision quality, ultimately improving firm performance. The magnitude of the coefficient implies that even moderate increases in independence can yield meaningful improvements in profitability. Given that this variable was highly skewed and included extreme values, the robust regression estimator was particularly useful in isolating its true effect.

The meeting frequency of the board risk committee (BRC_MEET) has a positive coefficient (0.0038281) but is statistically insignificant ($p = 0.204$). Although the positive direction suggests that more frequent meetings may contribute to better oversight, the lack of significance indicates that meeting frequency alone does not guarantee improved financial outcomes. Committees may meet often without addressing critical risk issues, or meetings may be merely procedural rather than strategic. This reinforces the argument that the quality of meetings, rather than frequency, may matter more for effective governance.

Finally, the constant term is negative (–0.0194378) and marginally insignificant at the 10% level ($p = 0.075$). This indicates that, when all board risk committee characteristics equal zero, firms would exhibit slightly negative financial performance. Although purely statistical, this finding suggests that without a functioning committee structure, firms may struggle to manage risk effectively, leading to weaker financial outcomes. It supports the broader governance literature that emphasizes the importance of structured oversight mechanisms.

Overall, the robust regression results reveal that board risk committee independence is the most influential governance factor shaping corporate financial performance. Other characteristics, size, expertise and meeting frequency do not exhibit statistically significant effects. This underscores the importance of appointing independent directors with strong oversight capacity rather than focusing solely on committee size or activity levels. The findings also validate the choice of robust regression as a suitable estimator for addressing the data's outlier and non-normality issues while providing stable and reliable coefficient estimates.

4.4 Test of Hypotheses and Discussion of Findings

4.4.1 Test of Hypotheses

The hypotheses of the study were evaluated using the results of the robust regression (rreg) model at the 5 percent significance level ($\alpha = 0.05$). Each hypothesis was analysed in its null form, using the sign, magnitude, and significance of the regression coefficient as well as the corresponding p-value to determine whether the null hypothesis should be rejected or not.

Hypothesis One (H_{01}): Board Risk Committee Size has no significant effect on financial performance.

The robust regression results show that BRC_Size has a coefficient of –0.0001022 with a p-value of 0.972. Since the p-value is far above the 0.05 threshold, the null hypothesis cannot be rejected. This implies that the number of members serving on the

board risk committee does not significantly influence the financial performance of Nigerian firms. The negligible magnitude of the coefficient further indicates that changes in committee size have virtually no economic or statistical effect on ROA. This suggests that merely increasing or reducing committee membership does not automatically translate into better oversight or improved profitability.

Hypothesis Two (H_{02}): Board Risk Committee Expertise has no significant effect on financial performance.

The coefficient for BRC_EXP is –0.0051548 with a p-value of 0.513. Since this value is greater than the 0.05 significance level, the null hypothesis is not rejected. This shows that the level of risk-related expertise among committee members does not significantly affect firm performance. Even though expertise is theoretically expected to enhance oversight quality, its insignificance in this context may be due to uneven distribution of qualified members, firms having expertise in response to risk rather than performance goals, or risk committee expertise being overshadowed by other firm-level governance structures.

Hypothesis Three (H_{03}): Board Risk Committee Independence has no significant effect on financial performance.

The robust regression output indicates a coefficient of 0.0576359 for BRC_IND with a p-value of 0.003. Since this value is well below the 0.05 significance threshold, the null hypothesis is rejected. This means independence within the board risk committee

significantly improves financial performance. Independent members bring objectivity, reduce managerial opportunism, strengthen risk oversight, and improve decision-making, all of which contribute to enhanced profitability. The result also suggests that independence—not size, expertise, or meeting frequency—is the most critical governance factor influencing firm outcomes in the Nigerian context.

Hypothesis Four (H_{04}): Board Risk Committee Meeting Frequency has no significant effect on financial performance.

BRC_MEET has a coefficient of 0.0038281 with a p-value of 0.204. Since the p-value is greater than 0.05, the null hypothesis is not rejected. This implies that the frequency of meetings does not significantly affect firm performance. While frequent meetings are expected to improve monitoring, the insignificance suggests that meeting quality, agenda focus, and decision implementation may matter more than simply meeting often. Some committees may meet regularly without effectively addressing key risk issues.

At the 5 percent significance level, only Board Risk Committee Independence shows a statistically significant effect on financial performance. Accordingly, the null hypothesis for BRC_IND is rejected, while the null hypotheses for BRC_Size, BRC_EXP, and BRC_MEET are not rejected. This outcome highlights independence as the most influential governance factor in driving financial performance among Nigerian firms.

Table 4.6: Summary of Hypotheses Testing (Robust Regression, 5% Significance Level)

Hypothesis (Null Form)	Coefficient	p-Value	Decision (5%)	Interpretation
H_{01}: BRC_Size has no significant effect on financial performance.	–0.0001022	0.972	Not Rejected	Committee size shows no significant influence on ROA.
H_{02}: BRC_EXP has no significant effect on financial performance.	–0.0051548	0.513	Not Rejected	Risk expertise does not significantly improve or reduce performance.
H_{03}: BRC_IND has no significant effect on financial performance.	0.0576359	0.003	Rejected	Higher committee independence significantly improves financial performance.
H_{04}: BRC_MEET has no significant effect on financial performance.	0.0038281	0.204	Not Rejected	Meeting frequency alone does not enhance performance.

Source: Aurthor's Compilation 2025

4.4.2 Discussion of Findings

4.4.2.1 Board Risk Committee Size and Financial Performance

The findings of this study reveal that Board Risk Committee (BRC) size has a negative but statistically insignificant effect on corporate financial performance, as measured by ROA. This result suggests that simply increasing or decreasing the number of committee members does not translate into measurable improvements in firm profitability among Nigerian listed firms. The insignificance of the coefficient indicates that the numerical structure of the committee may not be a key determinant in driving financial outcomes.

This finding aligns closely with several empirical studies reviewed in Chapter Two. For example, Okaro and Nweze (2022) reported a positive but insignificant association between BRC size and ROA among Nigerian listed companies, concluding that size alone does not guarantee improved performance. Similarly, Bello and Salawu (2021) identified a non-linear relationship where excessively large or very small BRCs impeded effectiveness, reinforcing the view that optimal committee size is context-dependent. Moreover, Mensah and Yeboah (2022) emphasized that smaller committees (3–5 members) achieved higher ROE in Ghanaian firms, indicating that committees that are too large may slow decision-making. Studies by Musa et al. (2023) and Chukwuma and Adebayo (2023) further demonstrated that beyond a moderate threshold, larger committees dilute oversight efficiency due to coordination challenges.

The insignificant relationship in this study therefore reflects the broader consensus that while BRC size contributes to diversity and information-sharing, it does not inherently strengthen monitoring or guarantee risk mitigation. The result also resonates with theoretical perspectives. Under Agency Theory, oversight effectiveness depends on active engagement, not on the number of members. Resource Dependence Theory similarly suggests that resource value flows from expertise and networks rather than committee size alone.

Overall, this study supports the position that the quality, competence, and independence of committee members are more influential for firm performance than the mere number of individuals serving on the committee.

4.4.2.2 Board Risk Committee Expertise and Financial Performance

The results show that BRC expertise has a negative but statistically insignificant relationship with financial performance. Although expertise is theoretically expected to enhance oversight, the coefficient indicates that increasing the proportion of professionally skilled or risk-literate members does not significantly improve ROA in the sampled Nigerian firms.

This finding contrasts with the dominant empirical evidence documented in Chapter Two, where most studies observed a positive and significant link between committee expertise and firm performance. For instance, Al-Matari and Al-Dubai (2023) found that risk and financial expertise significantly boosted ROA and Tobin's Q among West African financial institutions. Similarly, Afolabi et al. (2021) and Okon and Eyo (2022)

reported that expertise improved profitability in Nigerian manufacturing and oil and gas firms. Also, Umar and Tanimu (2023) demonstrated that financially literate BRC members enhanced capital efficiency and reduced losses in Nigerian insurance firms. Studies by Mohammed and Farouk (2022) and Onwumere and Obi (2024) further demonstrated that industry-specific and risk-management skills contribute significantly to operational efficiency and overall firm value.

The divergence between this study's findings and prior literature may reflect contextual realities in Nigerian firms. Expertise may be formally present but not functionally applied. Many boards appoint members with qualifications that appear relevant but do not necessarily translate into active involvement or strategic input. Poor governance culture, limited access to information, or inadequate engagement may prevent expertise from having its expected effect. Additionally, committee experts may be appointed as a compliance formality, weakening the impact of their professional knowledge.

Thus, while existing studies strongly support the importance of expertise, this study confirms that expertise only contributes to performance when effectively leveraged in decision-making and genuine oversight. Without active participation, expertise remains an underutilized governance asset.

4.4.2.3 Board Risk Committee Independence and Financial Performance

Board Risk Committee independence demonstrates a positive and statistically significant effect on financial performance. This provides strong evidence that

increasing the proportion of non-executive, unbiased, and uninfluenced directors enhances the firm's ROA. Independent members are better positioned to provide objective scrutiny, resist managerial pressure, and promote transparent risk-management practices.

This finding is consistent with the theoretical arguments of Agency Theory, which highlights independence as a key factor in mitigating managerial opportunism and reducing information asymmetry. The positive significant result also aligns with a large body of empirical evidence reviewed in Chapter Two.

For instance, Gandía et al. (2022) reported a significant positive relationship between BRC independence and ROA in emerging markets. Likewise, Adegbite and Nakpodia (2021) found that higher BRC independence significantly improved firm valuation in Nigerian non-financial firms. Olatunji and Rufai (2022) also confirmed that independence strengthens ROE in Nigerian deposit money banks, suggesting effective monitoring in regulated industries. Additionally, Salisu and Onuora (2020) and Bello and Ogunyemi (2023) demonstrated that independent committees improved EPS and firm performance across Nigerian and Ghanaian firms. Mahmoud and Oladele (2021) further emphasized that independence curbs financial mismanagement and enhances long-term stability.

The consistency between this study's findings and prior empirical work underscores that independence is a critical driver of effective governance. Independent directors are more likely to challenge weak internal controls, promote accountability, and prevent

excessive risk-taking. This study therefore strengthens the evidence that BRC independence is a key determinant of corporate financial success in Nigeria.

4.4.2.4 Board Risk Committee Meeting Frequency and Financial Performance

The results show that BRC meeting frequency has a positive but statistically insignificant relationship with financial performance. While firms whose committees meet more frequently tend to report slightly higher ROA, the effect is not significant enough to conclude a strong association.

This contrasts with several empirical studies reviewed in Chapter Two, which overwhelmingly documented a positive and significant influence of BRC meeting frequency on performance. For example, CBN (2023) reported that Nigerian banks meeting more than four times annually achieved superior ROE. Similarly, Ijeoma and Olayemi (2022) found that frequent meetings significantly improved ROA in Nigerian non-financial firms. Studies by Kalu and Ezenwoke (2021) and Adigwe and Yusuf (2020) also reported that frequent meetings enhanced EPS and Tobin's Q, respectively, by ensuring timely oversight. Additionally, Olaniyi and Chukwuemeka (2023) and Eze and Nwachukwu (2022) found that quarterly or regular meetings strengthened ROA, ROE, and risk-adjusted returns.

The insignificant result in this study may stem from the fact that frequency does not necessarily imply quality. In many Nigerian firms, meetings may be brief, poorly structured, or compliance-driven rather than centered on robust risk assessment. If

meetings do not involve data-driven deliberations or lead to actionable decisions, their frequency may not translate into improved performance.

Thus, while the literature strongly supports meeting frequency as a key performance driver, this study suggests that meeting effectiveness not just frequency matters most.

4.4.3 Implications of Findings

The results of this study provide several important implications for corporate governance practice, regulatory oversight, and managerial decision-making in Nigeria. First, the insignificant effect of Board Risk Committee size suggests that increasing committee membership does not inherently enhance financial performance. This implies that firms should prioritize *optimal structuring* rather than numerical expansion of risk committees. As highlighted by studies such as Okaro and Nweze (2022) and Bello and Salawu (2021), too many members may hinder coordination and slow decision-making, while too few may restrict diversity of viewpoints. Accordingly, firms should adopt a "quality over quantity" approach in constituting risk committees, ensuring that membership reflects competence and functional roles rather than mere compliance.

Second, the finding that risk expertise does not significantly influence ROA in this study indicates that expertise is only valuable when practically utilized. Although earlier empirical studies (e.g., Al-Matari & Al-Dubai, 2023; Afolabi et al., 2021) demonstrate the positive potential of expertise, the lack of significance in this context highlights the persistent challenge of *symbolic appointments* and *passive participation*.

This underscores the need for firms to strengthen internal governance culture by ensuring that BRC members with professional and industry knowledge are given sufficient authority, information access, and engagement opportunities to apply their expertise effectively.

Third, the significant positive relationship between Board Risk Committee independence and financial performance has strong implications for the Nigerian corporate environment. This finding reinforces the value of genuine board independence in improving monitoring quality and aligning managerial actions with shareholder interests. Given the documented weaknesses in governance enforcement in Nigeria, this result emphasizes the need for stricter compliance with governance codes, particularly those relating to the appointment, tenure, and autonomy of independent directors. Regulators such as the SEC and CAMA enforcement units may need to intensify monitoring of independence disclosures to ensure that independence is substantive rather than symbolic.

Fourth, the insignificant effect of risk committee meeting frequency suggests that simply increasing the number of meetings is not sufficient to improve firm performance. This outcome implies that *meeting quality*, agenda depth, and follow-through are more critical than frequency. While previous evidence (e.g., CBN, 2023; Kalu & Ezenwoke, 2021) shows that frequent meetings can improve performance, the findings of this study suggest that many Nigerian firms may be holding meetings for compliance rather than strategic oversight. Firms should therefore focus on enhancing

the *content and effectiveness* of meetings by ensuring that discussions are analytics-driven, forward-looking, and risk-sensitive.

Collectively, these findings imply that effective risk governance does not depend solely on structural attributes but on the functional execution of oversight responsibilities. This has broad implications for policymakers, boards, and governance reform advocates, calling for a shift from formalistic governance compliance to substantive engagement and performance-driven oversight.

4.4.4 Alignment with Theoretical Expectations

The study's findings exhibit varying degrees of alignment with the three major theoretical perspectives underpinning the research: Agency Theory, Resource Dependence Theory, and Stakeholder Theory.

From the standpoint of Agency Theory, the significant positive effect of Board Risk Committee independence on financial performance strongly aligns with theoretical expectations. Agency theory posits that independent directors play a crucial role in reducing agency costs and curbing managerial opportunism by offering unbiased oversight. The result that independence improves ROA reinforces this theoretical foundation, confirming that independent directors contribute positively to monitoring rigor, accountability, and value protection—consistent with findings by Gandía et al. (2022) and Adegbite and Nakpodia (2021). Conversely, the insignificant effects of size, expertise, and meeting frequency suggest that structural mechanisms alone do not always reduce agency problems unless supported by active engagement and autonomy.

In relation to Resource Dependence Theory, the findings provide partial alignment. The theory argues that firms benefit from directors who bring external resources such as expertise, networks, and legitimacy. However, the insignificant effect of BRC expertise observed in this study diverges from theoretical predictions and empirical evidence from Al-Matari and Al-Dubai (2023) and Afolabi et al. (2021), which linked expertise to enhanced performance. The misalignment suggests that Nigerian firms may not be leveraging the full potential of expert knowledge due to weak governance culture, limited information access, or passive oversight roles. Thus, while the theory suggests expertise should matter, the practical context in Nigeria appears to limit its realization.

The results also show moderate alignment with Stakeholder Theory, particularly through the significance of independence, which supports transparent and ethical oversight that benefits not only shareholders but broader stakeholders. Independent directors are more likely to promote fair reporting, ethical compliance, and consideration of long-term stakeholder interests. However, the weak influence of meeting frequency and expertise suggests that stakeholder-oriented risk governance is not yet fully operational in many Nigerian firms. This inconsistency indicates that while the theoretical ideals of stakeholder theory are recognized, their practical implementation remains underdeveloped.

Overall, the findings reveal that while independence aligns strongly with theoretical expectations, other structural mechanisms exhibit weaker alignment due to contextual

governance challenges. This suggests that theories remain valid, but their effectiveness depends on institutional quality, governance culture, and the extent to which firms operationalize theoretical principles in practice.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

This study examined the effect of Board Risk Committee (BRC) characteristics on corporate financial performance of listed firms in Nigeria using panel data for 250 firm–year observations. Corporate financial performance was proxied by Return on Assets (ROA), while the explanatory variables were Board Risk Committee Size (BRC_Size), Board Risk Committee Expertise (BRC_EXP), Board Risk Committee Independence (BRC_IND) and Board Risk Committee Meeting Frequency (BRC_MEET).

The analysis began with descriptive statistics, normality tests (Shapiro–Wilk and Skewness/Kurtosis), correlation analysis and several diagnostic tests. The initial pooled OLS and panel regression models (fixed and random effects) showed serious departures from normality, the presence of outliers and groupwise heteroskedasticity. Based on these results, and in line with the diagnostic discussion in Chapter Four, the study adopted Robust Regression (rreg) as the most appropriate estimation technique for testing the hypotheses, because it down–weights extreme observations and produces coefficients that are more reliable in the presence of outliers and non–normal residuals.

The main empirical findings from the robust regression (with ROA as the dependent variable) can be summarised as follows:

1. Board Risk Committee Size (BRC_Size) posted a coefficient of –0.0001 with a p–value of 0.972. This indicates a negative but statistically insignificant relationship with ROA. Thus, changes in the number of members on the board risk committee do not meaningfully influence corporate financial performance within the sampled Nigerian firms.
2. Board Risk Committee Expertise (BRC_EXP) recorded a coefficient of –0.0052 with a p–value of 0.513, showing a negative and statistically insignificant effect on ROA. This implies that, in the sampled firms, the measured level of financial/risk expertise on the risk committee does not translate into a statistically discernible improvement or deterioration in corporate financial performance.
3. Board Risk Committee Independence (BRC_IND) had a positive coefficient of 0.0576 and a p–value of 0.003, which is statistically significant at the 5% level. This result indicates that higher independence of the Board Risk Committee is associated with improved corporate financial performance. Firms with a greater proportion of independent, non–executive members on the risk committee tend to generate higher returns on assets.
4. Board Risk Committee Meeting Frequency (BRC_MEET) exhibited a small positive coefficient of 0.0038 with a p–value of 0.204, implying an insignificant relationship with ROA. Although the sign is positive, meeting

more frequently, on its own, does not have a statistically significant effect on firm performance.

The F–statistic of the robust regression model (F = 5.26, p = 0.0004) indicates that, taken together, the BRC variables are jointly significant in explaining variations in ROA, even though only independence is individually significant at the conventional 5% level.

In terms of hypothesis testing, the study therefore concludes that:

- The null hypotheses that Board Risk Committee Size, Board Risk Committee Expertise and Board Risk Committee Meeting Frequency have no significant effect on corporate financial performance are not rejected.
- The null hypothesis that Board Risk Committee Independence has no significant effect on corporate financial performance is rejected.

Overall, the results show that among the four Board Risk Committee characteristics considered, only independence plays a statistically significant and value–relevant role in driving corporate financial performance in the sampled Nigerian firms. Size, expertise (as currently structured) and meeting frequency appear to be more formal or procedural attributes that do not, by themselves, guarantee superior performance outcomes.

5.2 Conclusion

This research set out to investigate the effect of Board Risk Committee characteristics on corporate financial performance of listed firms in Nigeria. Specifically, the study

examined whether Board Risk Committee Size, Board Risk Committee Expertise, Board Risk Committee Independence and Board Risk Committee Meeting Frequency significantly influence Return on Assets as a measure of financial performance.

Using descriptive statistics, correlation analysis, normality tests and a battery of diagnostic procedures, the study identified non–normal data, outliers and heteroskedasticity. In response, the robust regression (rreg) technique was employed as the primary estimation method. This choice ensured that the final results were not unduly driven by extreme observations and were more reliable given the distributional properties of the data.

The core conclusion from the empirical findings is that Board Risk Committee Independence is the only BRC attribute that has a clear, positive and statistically significant effect on corporate financial performance. Firms that maintain a higher proportion of independent, non–executive members on their risk committees tend to perform better in terms of ROA. This supports the view that truly independent directors are better positioned to challenge management, provide objective oversight and insist on responsible risk–taking that ultimately enhances shareholder value.

By contrast, Board Risk Committee Size, Expertise and Meeting Frequency do not show significant individual effects on performance in the Nigerian context. This suggests that simply increasing the number of members, adding “expert” labels or holding more meetings does not automatically translate into better financial outcomes.

What matters more is how independent committee members use their position to influence risk oversight, strategy and resource allocation.

Taken together, the findings indicate that in the Nigerian environment, the quality and independence of Board Risk Committee members are more important than the mere existence or formal structure of the committee. For corporate governance to meaningfully improve financial performance, attention must shift from box–ticking compliance (number of members, number of meetings) to the substantive independence, engagement and effectiveness of those who sit on the risk committee.

5.3 Implications for Policy and Practice

The results of this study carry important implications for regulators, corporate boards, management and investors in Nigeria.

Regulatory and Policy Implications

The significant positive effect of Board Risk Committee Independence on corporate financial performance reinforces the regulatory emphasis on independent directors in Nigeria's corporate governance frameworks. However, the findings suggest that independence should not be treated as a purely formal requirement. Regulators such as the Securities and Exchange Commission (SEC) and the Financial Reporting Council of Nigeria (FRCN) should:

- Strengthen the practical criteria for independence, ensuring that BRC members are genuinely free from managerial, familial, political or business ties that could compromise their oversight role.

- Encourage or mandate periodic training for independent directors on risk governance, financial analysis and industry–specific issues so that they are better equipped to contribute to performance–enhancing decisions.
- Promote transparent nomination and appointment processes that reduce the likelihood of "friendly" or politically connected directors being presented as independent.

The insignificance of BRC Size, Expertise (as currently structured) and Meeting Frequency suggests that governance codes should move beyond simple numerical requirements (for example, "at least X members", "at least Y meetings") and place greater emphasis on the functionality and effectiveness of the risk committee.

Implications for Corporate Boards and Management

For boards and senior management, the study's results highlight the need to rethink how the Board Risk Committee is constituted and how it operates in practice:

- Boards should prioritise the appointment of truly independent committee members who possess both professional competence and the courage to challenge management when necessary.
- Rather than focusing on expanding committee size, firms should aim for an optimal number of members that allows for rich discussion without creating coordination problems. The emphasis should be on diversity of skills and independence of thought.

- The insignificance of meeting frequency suggests that what happens inside meetings is more important than how often they are held. Boards should therefore ensure that BRC meetings are well–prepared, data–driven and focused on key risk and performance issues, rather than routine ratification of management decisions.
- Management should see the Board Risk Committee as a strategic partner in risk governance, not as a mere compliance structure. Open, timely and transparent sharing of information with the BRC can help align risk–taking with long–term financial performance.

Implications for Investors and Other Stakeholders

For investors, analysts and other stakeholders, the findings indicate that:

- The independence profile of the Board Risk Committee is a useful signal of the quality of governance and potential future performance. Firms with weakly independent BRCs may face higher risk of poor performance, especially in volatile environments.
- Public disclosures on the composition and functioning of the risk committee (for example, proportion of independent members, their professional background and tenure) should be carefully considered when assessing firm value and risk.

In summary, the policy and practice implications of this study point towards a shift from form to substance in risk committee governance. Independence, professionalism

and active engagement should be at the centre of reforms aimed at improving the link between board risk oversight and corporate financial performance in Nigeria.

5.4 Contributions to Knowledge

This study makes several contributions to the existing body of knowledge on corporate governance and financial performance, particularly within the Nigerian and broader emerging–market context:

1. The study adds to the limited empirical work that focuses specifically on Board Risk Committee characteristics and their relationship with corporate financial performance in Nigeria. By using ROA as the performance measure and four distinct BRC attributes (size, expertise, independence and meeting frequency), the research provides structured evidence that helps to clarify which dimensions of the risk committee matter most in practice.
2. The finding that only BRC Independence has a statistically significant and positive effect on ROA refines the governance literature that often treats all BRC features as equally important. The study shows that, in the Nigerian context, independence is the critical channel through which the risk committee influences financial outcomes. This sharpens theoretical and empirical understanding of how board–level risk oversight operates in practice.
3. By adopting robust regression as the final estimation technique in response to non–normality, outliers and heteroskedasticity, the study demonstrates the value of going beyond conventional OLS and standard panel models when

dealing with real–world financial data. This methodological choice improves the reliability of the results and provides a useful reference for future undergraduate and postgraduate research dealing with similar data challenges.

4. The study integrates Agency Theory, Resource Dependence Theory and Stakeholder Theory with its empirical findings. The positive and significant effect of BRC Independence is consistent with Agency Theory's emphasis on independent monitoring, while the insignificance of size, expertise and meeting frequency raises important questions about how resources and stakeholder concerns are actually translated into performance in practice. This helps to contextualise the theories within the realities of Nigerian corporate governance.

Overall, the research deepens understanding of how Board Risk Committee characteristics affect corporate financial performance and provides a focused platform for further academic work on board–level risk governance in emerging markets.

5.5 Suggestions for Further Research

Based on the scope, findings and limitations of this study, the following directions are suggested for future research:

1. Future studies could extend the model by introducing control variables such as firm size, leverage, growth opportunities and industry dummies, as well as alternative performance measures such as Return on Equity (ROE), Earnings Per Share (EPS) and Tobin's Q. This would provide a more comprehensive

view of how BRC characteristics relate to both accounting–based and market–based performance indicators.

2. While this study focused on listed firms in Nigeria as a group, further research could examine specific sectors (for example, banking, manufacturing, oil and gas, consumer goods) separately. Sectoral comparison would reveal whether the effect of BRC characteristics on performance differs across industries with varying risk profiles and regulatory regimes.
3. Subsequent studies may extend the time frame, especially to capture the full impact of recent governance reforms and changes in the Nigerian regulatory environment. This would allow researchers to assess whether the relationship between BRC characteristics and performance strengthens or weakens over time.
4. The current study uses relatively simple measures of expertise and diligence. Future work could construct more refined proxies, such as the proportion of members with professional risk certifications, prior executive experience, or attendance rates at meetings, to better capture qualitative differences in committee functioning.
5. To complement the quantitative findings, researchers could conduct interviews, case studies or surveys involving board members, executives and regulators. Such qualitative or mixed–methods studies would provide richer insights into

how BRCs operate behind the numbers and why some committees are more effective than others despite similar formal structures.

6. Comparative research involving Nigeria and other African or emerging–market economies could help to determine whether the central role of BRC independence observed in this study is unique to Nigeria or part of a broader pattern. This would enhance the generalisability of the findings and support regional policy dialogue on board risk governance.

5.6 Limitations of the Study

Although this study provides useful insights into the effect of Board Risk Committee characteristics on corporate financial performance in Nigeria, several limitations should be acknowledged:

1. Corporate financial performance was measured solely by Return on Assets. While ROA is a widely accepted indicator, it does not capture market perceptions or shareholder–value effects. Using multiple performance measures would have provided a more rounded picture of firm performance.
2. The model focused on four Board Risk Committee characteristics without including other governance variables (such as overall board size, audit committee attributes or ownership structure) and firm–specific controls (for example, firm size, leverage and growth). Excluding these variables may omit some relevant factors that also influence performance.

3. The study relied on secondary data extracted from published annual reports. Any errors, inconsistencies or omissions in these reports could affect the accuracy of the dataset and the robustness of the findings.
4. The data exhibited substantial non–normality and the presence of outliers, which necessitated the use of robust regression. While this approach mitigates the impact of extreme values, it also indicates that the underlying financial environment is volatile and may limit the stability of the relationships identified.
5. The ex–post facto research design and the use of observational data mean that strict causal relationships cannot be definitively established. Although the study identifies significant associations between BRC Independence and ROA, it cannot fully rule out reverse causality or the influence of unobserved factors.

Recognising these limitations is important for interpreting the results correctly and for guiding future research. Despite these constraints, the study offers a solid empirical starting point for understanding how Board Risk Committee characteristics relate to corporate financial performance in Nigeria and provides a foundation for more advanced work in this area.

REFERENCES

Abubakar, A., & Lawal, M. (2023). Board financial expertise and financial performance of listed deposit money banks in Nigeria. *Nigerian Journal of Accounting and Finance, 15*(2), 56–71.

Adegbite, E., & Nakpodia, F. (2021). Corporate governance and firm performance in Africa: A meta-analysis. *International Review of Financial Analysis, 75*, 101724. https://doi.org/10.1016/j.irfa.2021.101724

Adusei, M., Boateng, R., & Oppong, N. Y. (2023). Board characteristics and financial performance: Evidence from emerging markets. *Journal of Corporate Governance Studies, 9*(1), 44–62. https://doi.org/10.1016/j.jcgs.2023.01.005

Afolabi, A. A., Lawal, B. A., & Ahmed, S. A. (2021). Board expertise and financial performance of Nigerian listed companies. *Corporate Governance: The International Journal of Business in Society, 21*(4), 655–673.

Agyei-Mensah, B. K., & Fodio, M. I. (2023). Board committees and financial performance: Evidence from listed firms in Sub-Saharan Africa. *Journal of African Business, 24*(1), 112–129. https://doi.org/10.1080/15228916.2022.2134522

Agyei-Mensah, B. K., & Fodio, M. I. (2023). Risk committee characteristics and corporate risk disclosure: Evidence from Nigeria. *International Journal of Disclosure and Governance, 20*(1), 1–13. https://doi.org/10.1057/s41310-023-00163-2

Aljughaiman, A. A., & Salama, A. (2019). Do risk committees contribute to effective risk management? Evidence from UK financial institutions. *International Review of Financial Analysis, 61*, 35–44. https://doi.org/10.1016/j.irfa.2018.12.007

Al-Matari, E. M., & Al-Dubai, S. A. (2023). Board characteristics and risk management effectiveness: Evidence from GCC financial institutions. *Corporate Governance: The International Journal of Business in Society, 23*(3), 445–461. https://doi.org/10.1108/CG-12-2021-0401

Al-Matari, E. M., & Al-Dubai, S. A. (2023). Risk governance and firm performance: The mediating role of strategic decision-making. *International Journal of Accounting & Finance Review, 13*(2), 79–93.

Al-Matari, Y. A., & Al-Dubai, S. A. (2023). Board risk committee effectiveness and firm performance: Evidence from the GCC. *Corporate Governance: The International Journal of Business in Society, 23*(4), 745–761. https://doi.org/10.1108/CG-12-2021-0427

Al-Matari, Y. A., & Al-Dubai, S. A. (2023). Board risk committee effectiveness and firm performance: Evidence from the GCC. *Corporate Governance: The International*

Journal of Business in Society, 23(4), 745–761. https://doi.org/10.1108/CG-12-2021-0427

Anowor, O. F., Ukwueze, E. R., & Ibe, I. G. (2021). Financial performance and board independence: Evidence from manufacturing firms in Nigeria. *Journal of Accounting and Financial Management, 7*(3), 50–65.

Asiriuwa, O., Onakoya, A. B., & Oduntan, O. (2022). Board diversity and financial performance of listed firms in Nigeria. *African Journal of Corporate Governance Research, 3*(1), 77–93.

Bhagat, S., & Bolton, B. (2022). Corporate governance and firm performance: A review of empirical evidence. *Journal of Financial Economics, 144*(2), 336–361. https://doi.org/10.1016/j.jfineco.2021.08.012

Central Bank of Nigeria. (2022). *Revised code of corporate governance for banks and discount houses*. CBN.

Central Bank of Nigeria. (2023). *Annual report of sanctions and penalties in the financial sector*. CBN.

Deloitte Nigeria. (2023). *Risk and performance report for oil and gas firms in Nigeria*. Deloitte & Touche.

Gandía, J. L., López, J. M., & Pérez, C. (2022). Risk committee effectiveness and financial performance in European firms. *European Management Review, 19*(1), 66–85. https://doi.org/10.1111/emre.12491

Khalil, S. N., & Ozkan, A. (2022). Audit committee characteristics and firm performance: Evidence from the UK. *International Journal of Finance & Economics, 27*(3), 3393–3408. https://doi.org/10.1002/ijfe.2321

Kusi, B. A., Agyei-Mensah, B. K., & Asante, S. (2021). Board risk committees and corporate performance: Evidence from West African economies. *Journal of Risk and Governance, 4*(2), 68–84.

Okafor, T. G., & Eze, A. (2021). Corporate governance and firm valuation: A sectoral analysis of Nigerian firms. *Accounting and Financial Review, 5*(1), 22–35.

Okaro, S. C., & Nweze, A. (2022). Effectiveness of board risk committees in Nigeria: Myth or reality? *Nigerian Journal of Accounting Research, 8*(2), 59–78.

Olayemi, T. A., & Hassan, A. A. (2022). Risk governance and market performance: Empirical study of Nigerian financial institutions. *Nigerian Journal of Business and Economic Research, 8*(2), 115–128.

Omodero, C. O., & Ogbonnaya, K. O. (2022). Board characteristics and financial performance: Evidence from listed manufacturing firms in Nigeria. *International Journal of Financial Studies, 10*(3), 55. https://doi.org/10.3390/ijfs1003005

Organisation for Economic Co-operation and Development. (2023). *Corporate governance and risk management in the digital age*. OECD.

Securities and Exchange Commission Nigeria. (2023). *Code of corporate governance 2023*. SEC.

Appendix I

Descriptive Statistics, Diagnostics, and Model Estimation Output

```
. tabstat ROA BRC_Size BRC_EXP BRC_IND BRC_MEET , statistics( mean median max min sd
count ) columns(statistics) format(%10.2gc)

   variable |      mean       p50       max       min        sd         N
------------+--------------------------------------------------------------
        ROA |      .047       .02       6.2      -1.8       .43       250
   BRC_Size |         4         4        11         0       2.4       250
    BRC_EXP |       .45        .4         7         0       .66       250
    BRC_IND |       .85       .67        67         0       4.2       250
   BRC_MEET |       3.2         3        12         0       2.1       250
-------------------------------------------------------------------------------

. swilk ROA BRC_Size BRC_EXP BRC_IND BRC_MEET

                Shapiro-Wilk W test for normal data

   Variable |    Obs       W          V        z       Prob>z
------------+-----------------------------------------------------
        ROA |    250    0.23726    138.333    11.469    0.00000
   BRC_Size |    250    0.97966      3.689     3.037    0.00120
    BRC_EXP |    250    0.44900     99.932    10.713    0.00000
    BRC_IND |    250    0.07501    167.758    11.918    0.00000
   BRC_MEET |    250    0.95325      8.479     4.973    0.00000

. sktest ROA BRC_Size BRC_EXP BRC_IND BRC_MEET

                Skewness/Kurtosis tests for Normality
                                          ------- joint ------
   Variable |    Obs   Pr(Skewness)   Pr(Kurtosis)  adj chi2(2)    Prob>chi2
------------+-------------------------------------------------------------------
        ROA |    250      0.0000         0.0000           .         0.0000
   BRC_Size |    250      0.8683         0.2394        1.42         0.4908
    BRC_EXP |    250      0.0000         0.0000           .         0.0000
    BRC_IND |    250      0.0000         0.0000           .         0.0000
   BRC_MEET |    250      0.0007         0.0007       18.91         0.0001

. correlate ROA BRC_Size BRC_EXP BRC_IND BRC_MEET
(obs=250)

             |      ROA BRC_Size  BRC_EXP  BRC_IND BRC_MEET
-------------+---------------------------------------------
         ROA |   1.0000
    BRC_Size |  -0.0033   1.0000
     BRC_EXP |  -0.0179   0.4060   1.0000
     BRC_IND |   0.0251   0.0149  -0.0183   1.0000
```

```
   BRC_MEET |   0.0268   0.6356   0.2750   0.0303   1.0000


. regress ROA BRC_Size BRC_EXP BRC_IND BRC_MEET

     Source |       SS       df       MS              Number of obs =     250
-------------+------------------------------           F(  4,   245) =    0.14
      Model |  .107311294     4  .026827823            Prob > F      =  0.9660
   Residual |  45.9901593   245  .187714936            R-squared     =  0.0023
-------------+------------------------------           Adj R-squared = -0.0140
      Total |  46.0974706   249  .185130404            Root MSE      =  .43326

------------------------------------------------------------------------------
         ROA |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   BRC_Size |  -.0047438   .0157739    -0.30   0.764    -.0358136     .026326
    BRC_EXP |  -.0130071   .0452581    -0.29   0.774    -.1021517    .0761376
    BRC_IND |   .0024131    .006524     0.37   0.712    -.0104372    .0152635
   BRC_MEET |   .0100212   .0171987     0.58   0.561     -.023855    .0438975
      _cons |   .0384959   .0564779     0.68   0.496    -.0727482    .1497399
------------------------------------------------------------------------------

. estat hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of ROA

         chi2(1)      =     1.29
         Prob > chi2  =   0.2568


.
. estat vif

    Variable |       VIF       1/VIF
-------------+----------------------
   BRC_Size |      1.86    0.538166
   BRC_MEET |      1.68    0.595192
    BRC_EXP |      1.20    0.834051
    BRC_IND |      1.00    0.998305
-------------+----------------------
   Mean VIF |      1.43

.
. estat ovtest

Ramsey RESET test using powers of the fitted values of ROA
       Ho:  model has no omitted variables
                F(3, 242) =      2.71
                 Prob > F =      0.0460
```

```
. regress ROA BRC_Size BRC_EXP BRC_IND BRC_MEET, vce(robust)

Linear regression                               Number of obs =     250
                                                F(  4,   245) =    1.62
                                                Prob > F      =  0.1697
                                                R-squared     =  0.0023
                                                Root MSE      =  .43326

------------------------------------------------------------------------------
             |               Robust
         ROA |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    BRC_Size |  -.0047438    .010381    -0.46   0.648    -.0251912    .0157036
     BRC_EXP |  -.0130071   .0178314    -0.73   0.466    -.0481295    .0221154
     BRC_IND |   .0024131   .0012371     1.95   0.052    -.0000236    .0048498
    BRC_MEET |   .0100212   .0056888     1.76   0.079    -.0011839    .0212264
       _cons |   .0384959   .0741961     0.52   0.604    -.1076477    .1846395
------------------------------------------------------------------------------

. rreg ROA BRC_Size BRC_EXP BRC_IND BRC_MEET

   Huber iteration 1:  maximum difference in weights = .97577109
   Huber iteration 2:  maximum difference in weights = .57437094
   Huber iteration 3:  maximum difference in weights = .18704186
   Huber iteration 4:  maximum difference in weights = .05023415
   Huber iteration 5:  maximum difference in weights = .02229748
Biweight iteration 6:  maximum difference in weights = .29350721
Biweight iteration 7:  maximum difference in weights = .06520112
Biweight iteration 8:  maximum difference in weights = .02141778
Biweight iteration 9:  maximum difference in weights = .00540532

Robust regression                               Number of obs =     249
                                                F(  4,   244) =    5.26
                                                Prob > F      =  0.0004

------------------------------------------------------------------------------
         ROA |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    BRC_Size |  -.0001022   .0028989    -0.04   0.972    -.0058123    .0056079
     BRC_EXP |  -.0051548   .0078672    -0.66   0.513    -.0206512    .0103416
     BRC_IND |   .0576359   .0188661     3.06   0.003     .0204748    .0947971
    BRC_MEET |   .0038281   .0030057     1.27   0.204    -.0020924    .0097486
       _cons |  -.0194378   .0108525    -1.79   0.075    -.0408144    .0019388
------------------------------------------------------------------------------

. xtreg ROA BRC_Size BRC_EXP BRC_IND BRC_MEET, re

Random-effects GLS regression                   Number of obs      =       250
Group variable: CompanyID                       Number of groups   =        53

R-sq:  within  = 0.0007                         Obs per group: min =         1
```

```
      between = 0.0141                                avg =       4.7
      overall = 0.0023                                max =         5

                                    Wald chi2(4)      =      0.57
corr(u_i, X)   = 0 (assumed)                 Prob > chi2       =    0.9662

------------------------------------------------------------------------------
       ROA |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   BRC_Size |  -.0047438   .0157739    -0.30   0.764    -.0356601    .0261725
    BRC_EXP |  -.0130071   .0452581    -0.29   0.774    -.1017113    .0756972
    BRC_IND |   .0024131    .006524     0.37   0.711    -.0103737       .0152
   BRC_MEET |   .0100212   .0171987     0.58   0.560    -.0236877    .0437302
      _cons |   .0384959   .0564779     0.68   0.495    -.0721987    .1491904
-------------+----------------------------------------------------------------
    sigma_u |          0
    sigma_e |  .44113447
        rho |          0   (fraction of variance due to u_i)
------------------------------------------------------------------------------

. estimates store re

.
. xttest0

Breusch and Pagan Lagrangian multiplier test for random effects

       ROA[CompanyID,t] = Xb + u[CompanyID] + e[CompanyID,t]

       Estimated results:
                    |       Var     sd = sqrt(Var)
             ---------+-----------------------------
                 ROA |   .1851304       .4302678
                   e |   .1945996       .4411345
                   u |          0              0

       Test:   Var(u) = 0
                         chibar2(01) =     0.00
                      Prob > chibar2 =   1.0000



. xtreg ROA BRC_Size BRC_EXP BRC_IND BRC_MEET, re

Random-effects GLS regression                   Number of obs      =       250
Group variable: CompanyID                       Number of groups   =        53

R-sq:  within  = 0.0007                         Obs per group: min =         1
       between = 0.0141                                        avg =       4.7
       overall = 0.0023                                        max =         5
```

```
                                  Wald chi2(4)      =      0.57
corr(u_i, X)   = 0 (assumed)      Prob > chi2       =    0.9662

------------------------------------------------------------------------------
         ROA |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    BRC_Size |  -.0047438   .0157739    -0.30   0.764    -.0356601    .0261725
     BRC_EXP |  -.0130071   .0452581    -0.29   0.774    -.1017113    .0756972
     BRC_IND |   .0024131    .006524     0.37   0.711    -.0103737       .0152
    BRC_MEET |   .0100212   .0171987     0.58   0.560    -.0236877    .0437302
       _cons |   .0384959   .0564779     0.68   0.495    -.0721987    .1491904
-------------+----------------------------------------------------------------
     sigma_u |          0
     sigma_e |  .44113447
         rho |          0   (fraction of variance due to u_i)
------------------------------------------------------------------------------


. xtreg ROA BRC_Size BRC_EXP BRC_IND BRC_MEET, re robust

Random-effects GLS regression                   Number of obs      =       250
Group variable: CompanyID                       Number of groups   =        53

R-sq:  within  = 0.0007                         Obs per group: min =         1
       between = 0.0141                                        avg =       4.7
       overall = 0.0023                                        max =         5

                                  Wald chi2(4)      =      6.56
corr(u_i, X)   = 0 (assumed)      Prob > chi2       =    0.1608

                    (Std. Err. adjusted for 53 clusters in CompanyID)
------------------------------------------------------------------------------
             |               Robust
         ROA |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    BRC_Size |  -.0047438    .008779    -0.54   0.589    -.0219502    .0124626
     BRC_EXP |  -.0130071   .0197199    -0.66   0.510    -.0516574    .0256432
     BRC_IND |   .0024131    .001268     1.90   0.057    -.0000722    .0048984
    BRC_MEET |   .0100212   .0068588     1.46   0.144    -.0034217    .0234642
       _cons |   .0384959   .0541627     0.71   0.477    -.0676612    .1446529
-------------+----------------------------------------------------------------
     sigma_u |          0
     sigma_e |  .44113447
         rho |          0   (fraction of variance due to u_i)
------------------------------------------------------------------------------

. xtreg ROA BRC_Size BRC_EXP BRC_IND BRC_MEET, fe

Fixed-effects (within) regression               Number of obs      =       250
Group variable: CompanyID                       Number of groups   =        53
```

```
R-sq:  within  = 0.0021                         Obs per group: min =         1
       between = 0.0008                                        avg =       4.7
       overall = 0.0006                                        max =         5

                                    F(4,193)          =      0.10
corr(u_i, Xb)  = -0.1213                    Prob > F          =    0.9825

------------------------------------------------------------------------------
         ROA |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    BRC_Size |   .0042728   .0259775     0.16   0.870    -.0469634    .0555091
     BRC_EXP |  -.0004806   .0533339    -0.01   0.993    -.1056729    .1047116
     BRC_IND |    .001252   .0074162     0.17   0.866    -.0133753    .0158792
    BRC_MEET |   .0120038   .0267939     0.45   0.655    -.0408427    .0648503
       _cons |  -.0086941   .1049786    -0.08   0.934    -.2157467    .1983586
-------------+----------------------------------------------------------------
     sigma_u |  .18343858
     sigma_e |  .44113447
         rho |  .14742525   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(52, 193) =     0.83             Prob > F = 0.7782

. xttest3

Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0: sigma(i)^2 = sigma^2 for all i

chi2 (53)  =       1.24e+09
Prob > chi2 =          0.0000



. xtreg ROA BRC_Size BRC_EXP BRC_IND BRC_MEET, fe robust

Fixed-effects (within) regression               Number of obs      =       250
Group variable: CompanyID                       Number of groups   =        53

R-sq:  within  = 0.0021                         Obs per group: min =         1
       between = 0.0008                                        avg =       4.7
       overall = 0.0006                                        max =         5

                                    F(4,52)           =      1.02
corr(u_i, Xb)  = -0.1213                    Prob > F          =    0.4071

                          (Std. Err. adjusted for 53 clusters in CompanyID)
------------------------------------------------------------------------------
             |               Robust
         ROA |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
```

```
   BRC_Size |   .0042728   .0121904     0.35   0.727    -.0201889    .0287346
    BRC_EXP |  -.0004806   .0064555    -0.07   0.941    -.0134346    .0124733
    BRC_IND |    .001252   .0014706     0.85   0.398    -.0016991     .004203
   BRC_MEET |   .0120038    .009049     1.33   0.190    -.0061543     .030162
      _cons |  -.0086941   .0632164    -0.14   0.891     -.135547    .1181589
-------------+----------------------------------------------------------------
    sigma_u |  .18343858
    sigma_e |  .44113447
        rho |  .14742525   (fraction of variance due to u_i)
------------------------------------------------------------------------------


.
. hausman fe re

                ---- Coefficients ----
          |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
          |       fe           re         Difference          S.E.
-------------+----------------------------------------------------------------
   BRC_Size |    .0042728    -.0047438        .0090166        .0206401
    BRC_EXP |   -.0004806    -.0130071        .0125264        .0282172
    BRC_IND |     .001252     .0024131       -.0011611        .0035267
   BRC_MEET |    .0120038     .0100212        .0019826        .0205455
------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
        B = inconsistent under Ha, efficient under Ho; obtained from xtreg

   Test:  Ho:  difference in coefficients not systematic

                chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                        =        0.52
              Prob>chi2 =      0.9717
```

Appendix II

Extracted Data for Sampled Firms

Year	Company	ROA	BRC_Size	BRC_EXP	BRC_IND	BRC_MEET
2019	Seplat	0.06	3	1	1	4
2020	Seplat	-0.01	4	0.75	1	4
2021	Seplat	0.00	7	0.714286	0.714286	4
2022	Seplat	-0.01	7	0.71	0.71	5
2023	Seplat	-0.01	8	0.75	0.875	4
2019	Total	0.02	0	0	0	3
2020	Total	0.01	3	0	0.33	3
2021	Total	0.08	3	0.33	0.67	4
2022	Total	0.05	3	1	1	4
2023	Total	0.03	3	1	1	4
2019	Oando	-0.22	3	0	0.67	4
2020	Oando	-0.10	3	0	0.67	4
2021	Oando	0.03	4	0.25	0.75	4
2022	Oando	-0.06	5	0.2	0.8	3
2023	Oando	0.02	5	0.4	1	3
2019	Dangote C	0.12	3	0	0.33	3
2020	Dangote C	0.14	3	0	67	3
2021	Dangote C	0.15	4	0.25	0.5	4
2022	Dangote C	0.15	5	0.4	0.6	5
2023	Dangote C	0.12	5	0.4	0.8	3
2019	Greif Nig plc	-1.80	0	0	0	0
2020	Greif Nig plc	1.09	0	0	0	0
2021	Greif Nig plc	-0.13	0	0	0	0
2022	Greif Nig plc	-0.08	0	0	0	0
2023	Greif Nig plc	0.03	3	0.33	0.67	2
2019	Lafarge	0.23	7	0.43	0.71	3
2020	Lafarge	0.06	5	0.4	0.6	4
2021	Lafarge	0.10	6	0.33	0.5	3
2022	Lafarge	0.09	5	0	0.6	5
2023	Lafarge	0.08	5	0.25	0.6	4
2019	Meyer	0.00	0	0	0	0
2020	Meyer	0.37	5	0.8	0.8	2

2021	Meyer	0.02	4	0.5	0.75	2
2022	Meyer	0.20	8	0.5	0.88	3
2023	Meyer	0.10	6	0.33	0.67	3
2019	Tripple gee	0.03	0	0	0	0
2020	Tripple gee	0.02	0	0	0	0
2021	Tripple gee	0.03	2	0	1	0
2022	Tripple gee	0.02	2	0	0.5	0
2023	Tripple gee	0.02	3	0	0.67	0
2019	Okomu oil	0.12	3	0.33	0.67	3
2020	Okomu oil	0.14	3	0.67	0.67	3
2021	Okomu oil	0.18	5	0.6	1	4
2022	Okomu oil	0.22	5	0.8	1	4
2023	Okomu oil	0.22	5	0.6	0.8	3
2019	Livestock feed	0.03	3	0.33	0.33	2
2020	Livestock feed	0.08	3	0.33	0.67	3
2021	Livestock feed	0.04	3	0	0.33	2
2022	Livestock feed	-0.11	0	0	0	0
2023	Livestock feed	-0.02	7	0.29	0.86	3
209	Presco plc	0.03	4	0	0.75	3
2020	Presco plc	0.07	4	0.25	1	3
2021	Presco plc	0.14	5	0.6	0.8	3
2022	Presco plc	0.10	5	0.4	0.8	4
2023	Presco plc	0.19	4	0.5	0.75	5
2019	FTN cocoa	-0.17	0	0	0	0
2020	FTN cocoa	-0.18	0	0	0	0
2021	FTN cocoa	-0.20	5	0	0.4	2
2022	FTN cocoa	-0.06	5	0.2	0.6	2
2023	FTN cocoa	-0.80	8	0.25	0.88	3
2019	Ella lakes plc	-0.15	2	0.5	0	3
2020	Ella lakes plc	-0.06	2	0.5	0.5	2
2021	Ella lakes plc	-0.06	3	0.33	0.33	2
2022	Ella lakes plc	-0.04	5	0	0.8	3
2023	Ella lakes plc	-0.04	4	0	1	3
2019	Union	-0.99	0	0	0	0
2020	Union	6.17	2	0	1	2
2021	Union	0.34	2	0	0.5	2
2022	Union	-0.06	2	0	0.5	2
2023	Union	0.54	3	0.25	0.67	3
2019	Dangote Sugar	0.12	5	0.6	0.6	4

2020	Dangote Sugar	0.11	5	0.6	0.6	4
2021	Dangote Sugar	0.11	6	0.5	0.67	4
2022	Dangote Sugar	0.11	6	0.5	0.67	4
2023	Dangote Sugar	-0.12	7	0.57	0.71	4
2019	PZ	0.01	5	0.5	0.8	3
2020	PZ	-0.10	8	0.5	0.88	3
2021	PZ	0.02	5	0.6	1	3
2022	PZ	0.06	5	0.6	1	6
2023	PZ	0.09	5	0.8	1	7
2019	BUA	0.16	5	0.4	0.8	3
2020	BUA	0.06	5	0.4	0.8	4
2021	BUA	0.12	5	0.4	0.8	4
2022	BUA	0.15	5	0.4	0.8	4
2023	BUA	0.10	5	0.4	0.8	5
2019	Golden Guinea	-0.06	0	0	0	0
2020	Golden Guinea	-0.03	0	0	0	0
2021	Golden Guinea B	-0.05	0	0	0	0
2022	Golden Guinea B	-0.10	0	0	0	0
2023	Golden Guinea B	-0.11	0	0	0	0
2019	Champion Brewery	0.02	0	0	0	0
2020	Champion Brewery	0.01	3	0	0.33	2
2021	Champion Brewery	0.07	3	0.25	0.67	2
2022	Champion Brewery	0.10	3	0.25	0.67	3
2023	Champion Brewery	0.02	3	0.25	0.67	2
2019	BETA glass	0.11	2	0.5	1	1
2020	BETA glass	0.06	2	0.5	1	2
2021	BETA glass	0.09	3	0.33	0.67	1
2022	BETA glass	0.06	3	0	0.67	3
2023	BETA glass	0.06	3	0	1	3
2019	Chemical and Allied	0.30	4	0.25	0.5	4
2020	Chemical and Allied	0.14	4	0.5	0.5	4
2021	Chemical and Allied	0.09	5	0.4	0.6	4
2022	Chemical and	0.18	6	0.5	0.67	4

	Allied					
2023	Chemical and Allied	0.16	6	0.5	0.67	4
2019	Cutix plc	0.17	3	0.67	1	4
2020	Cutix plc	0.11	5	0.4	0.8	4
2021	Cutix plc	0.28	3	1	1	4
2022	Cutix plc	0.15	3	0.33	0.67	4
2023	Cutix plc	0.14	3	0.33	0.67	4
2019	Enamel	-0.06	0	0	0	0
2020	Enamel	-0.07	0	0	0	0
2021	Enamel	-0.06	2	0	0.5	0
2022	Enamel	-0.10	0	0	0	0
2023	Enamel	0.31	0	0	0	0
2019	VITAFOAM	0.17	4	0.25	0.5	0
2020	VITAFOAM	0.19	5	0.2	0.4	3
2021	VITAFOAM	0.15	5	0.2	0.4	3
2022	VITAFOAM	0.12	4	0.2	0.5	3
2023	VITAFOAM	0.09	3	0.33	0.67	4
2019	Nestle	0.24	3	0.33	0.33	2
2020	Nestle	0.16	3	0.33	0.33	2
2021	Nestle	0.13	3	0.33	0.37	2
2022	Nestle	0.12	3	0.33	0.37	2
2023	Nestle	-0.14	4	0.5	0.75	3
2019	Nascon	0.05	7	0.57	0.71	6
2020	Nascon	0.06	7	0.71	0.71	5
2021	Nascon	0.07	7	0.71	0.71	4
2022	Nascon	0.10	6	0.67	0.67	3
2023	Nascon	0.16	5	0.8	0.8	4
2019	NN flour Mill	-0.01	0	0	0	0
2020	NN flour Mill	0.01	0	0	0	0
2021	NN flour Mill	0.01	0	0	0	0
2022	NN flour Mill	0.01	4	0.25	0.75	4
2023	NN flour Mill	0.02	4	0.25	0.75	4
2019	MultiTrex	-0.02	0	0	0	0
2020	MultiTrex	-0.02	0	0	0	0
2021	MultiTrex	-0.02	3	0	0.33	3
2022	MultiTrex	-0.04	2	0.33	0.33	2
2023	MultiTrex	-0.07	4	0.5	0.75	3
2019	MC Nichols	0.02	0	0	0	0

2020	MC Nichols	0.03	0	0	0	0
2021	MC Nichols	0.02	3	0	0.33	1
2022	MC Nichols	0.03	3	0.33	0.67	2
2023	MC Nichols	0.03	3	0.33	0.67	3
2019	Int brewery	-0.08	6	0.67	0.83	2
2020	Int brewery	-0.03	6	0.67	0.67	3
2021	Int brewery	-0.04	5	0.6	0.6	3
2022	Int brewery	-0.05	6	0.83	0.67	3
2023	Int brewery	-0.10	4	0.75	0.5	3
2019	Honeywell	0.00	3	0	0.67	2
2020	Honeywell	0.01	3	0	0.67	1
2021	Honeywell	0.01	4	0	0.5	2
2022	Honeywell	-0.01	4	0.25	0.25	3
2023	Honeywell	0.00	5	0.6	0.2	3
2019	Austin Laz	-0.10	0	0	0	0
2020	Austin Laz	-0.10	0	0	0	0
2021	Austin Laz	-0.03	3	0	0.67	3
2022	Austin Laz	-0.03	3	0.33	0.67	4
2023	Austin Laz	-0.03	3	0.33	0.33	4
2019	Berger	0.09	3	0.33	0.33	4
2020	Berger	0.03	3	0.33	0.67	5
2021	Berger	0.03	4	0.25	0.5	6
2022	Berger	0.04	4	0.25	0.5	6
2023	Berger	0.07	3	0.33	0.67	5
2019	Unilever	-0.07	4	1	1	6
2020	Unilever	-0.04	4	1	1	4
2021	Unilever	0.03	4	0.5	0.75	4
2022	Unilever	0.04	4	1	0.75	5
2023	Unilever	0.07	4	1	1	5
2019	Guinness	0.03	6	0.5	0.67	5
2020	Guinness	-0.09	5	0.6	0.6	4
2021	Guinness	0.01	5	0.6	0.6	4
2022	Guinness	0.07	5	0.6	0.8	5
2023	Guinness	-0.08	4	0.75	1	4
2019	Nig Breweries	0.04	4	1	1	3
2020	Nig Breweries	0.02	3	0.67	1	3
2021	Nig Breweries	0.14	3	0.67	1	3
2022	Nig Breweries	0.02	3	0.67	1	3
2023	Nig Breweries	-0.13	4	0.5	0.75	3

2019	Cadbury	0.03	4	0.25	0.5	2
2020	Cadbury	0.04	4	0.5	1	3
2021	Cadbury	0.01	4	0.25	1	3
2022	Cadbury	0.01	2	0.5	1	0
2023	Cadbury	-0.30	1	1	0	0
2019	Access	0.01	6	0.83	0.67	4
2020	Access	0.01	10	0.8	0.9	5
2021	Access	0.01	11	0.818182	0.909091	4
2022	Access	0.01	6	0.83	0.833333	2
2023	Access	0.02	7	7	0.857143	4
2019	Wema	0.01	8	0.5	0.25	4
2020	Wema	0.00	8	0.75	0.5	4
2021	Wema	0.01	8	0.75	0.4	4
2022	Wema	0.01	8	0.63	0.625	4
2023	Wema	0.02	10	7	0.7	5
2019	FCMB	0.01	4	1	0.75	5
2020	FCMB	0.01	4	1	0.75	5
2021	FCMB	0.01	4	1	0.75	5
2022	FCMB	0.01	4	1	0.75	4
2023	FCMB	0.02	4	1	0.75	4
2019	First Bank	0.01	4	1	1	7
2020	First Bank	0.01	4	1	1	5
2021	First Bank	0.02	7	0.71	0.86	9
2022	First Bank	0.01	5	0.6	1	8
2023	First Bank	0.02	5	0.6	1	6
2019	Eco Bank	0.01	0	0	0	0
2020	Eco Bank	0.00	2	0	1	0
2021	Eco Bank	0.01	4	0.25	0.75	4
2022	Eco Bank	0.01	5	0.6	0.8	4
2023	Eco Bank	0.01	7	0.57	0.71	4
2019	Fidelity	0.01	8	0.38	0.63	11
2020	Fidelity	0.01	8	0.5	0.88	7
2021	Fidelity	0.01	6	0.67	0.83	5
2022	Fidelity	0.01	7	0.86	0.71	0
2023	Fidelity	0.02	7	0.86	0.71	5
2019	GTB	0.06	6	0.33	0.5	3
2020	GTB	0.04	5	0.2	0.4	2
2021	GTB	0.03	4	0.5	0.5	1
2022	GTB	0.03	4	0.5	0.5	4

2023	GTB	0.06	4	0.5	0.5	4
2019	Jaiz bank	0.02	0	0	0	0
2020	Jaiz bank	0.01	0	0	0	5
2021	Jaiz bank	0.02	0	0	0	4
2022	Jaiz bank	0.02	0	0	0	4
2023	Jaiz bank	0.02	0	0	0	4
2019	Stanbic	0.02	7	0.43	0.71	8
2020	Stanbic	0.02	7	0.57	0.57	9
2021	Stanbic	0.01	6	0.67	0.67	9
2022	Stanbic	0.01	6	0.67	0.67	4
2023	Stanbic	0.03	6	0.67	0.67	4
2019	Sterling	0.01	7	0.43	0.71	0
2020	Sterling	0.01	5	0.6	0.8	0
2021	Sterling	0.01	5	0.6	0.6	1
2022	Sterling	0.01	3	1	1	1
2023	Sterling	0.01	3	1	1	1
2019	UBA	0.01	8	0.38	0.5	6
2020	UBA	0.01	7	0.43	0.57	7
2021	UBA	0.01	8	0.5	0.5	4
2022	UBA	0.01	7	0.57	0.57	5
2023	UBA	0.03	7	0.57	0.57	12
2019	Unity bank	0.01	8	0.5	0.5	6
2020	Unity bank	0.00	7	0.43	0.57	6
2021	Unity bank	0.01	7	0.43	0.57	6
2022	Unity bank	0.00	7	0.43	0.57	5
2023	Unity bank	-0.13	6	0.5	0.67	5
2019	Zenith	0.03	7	0.57	0.43	4
2020	Zenith	0.03	7	0.57	0.43	4
2021	Zenith	0.03	7	0.5	0.43	4
2022	Zenith	0.02	8	0.5	0.5	4
2023	Zenith	0.03	7	0.57	0.57	4