EFFECT OF CORPORATE SOCIAL RESPONSIBILITY ON CORPORATE GOVERNANCE AND PERFORMANCE OF CONSUMER GOODS FIRMS IN NIGERIA

JA'AFAR SALISU ILALLAH
Department of Public Administration, Faculty of Administration, Ahmadu Bello University, Zaria
https://orcid.org/0009-0003-1255-9653 jsalisu@yahoo.com

FATIMA ADAM LABARAN
Department of Public Administration, Faculty of Administration, Ahmadu Bello University, Zaria
https://orcid.org/0009-0009-8926-5796 falabaran@abu.edu.ng

DOI: https://doi.org/10.64633/wissj.v10i2.19

Keywords

Corporate, Social Responsibility (CSR), Corporate Governance, Firm Performance, Consumer Goods Firms, Nigeria, Transparency, Accountability, Sustainability, Stakeholder Trust

Abstract

ResearchProblem:
Despite extensive studies on corporate governance and firm performance, empirical findings remain inconsistent, particularly in emerging economies. In Nigeria's consumer goods sector, it is unclear whether corporate governance mechanisms directly enhance financial performance or whether corporate social responsibility (CSR) strengthens this relationship. The absence of clarity on CSR's moderating role constitutes a significant gap in governance-performance literature.

Methods/Theory:
This study adopts an ex-post facto research design using panel data from 10 listed consumer goods firms in Nigeria covering the period 2018–2024. Data were obtained from annual reports and analyzed using descriptive statistics, correlation analysis, and panel regression techniques (OLS, Fixed Effects, and Random Effects models). The study is theoretically anchored on Agency Theory, extending its application by integrating CSR as a governance-enhancing mechanism that mitigates agency conflicts and strengthens performance outcomes. Return on Equity (ROE) was used as the proxy for firm performance, while board size, board meetings, and board gender diversity represented corporate governance variables.

Results:
The findings reveal that corporate governance mechanismsboard size, board meetings, and board gender diversitydo not exert a statistically

significant direct effect on firm performance. However, CSR demonstrates a strong and positive significant impact on financial performance. Furthermore, the interaction results indicate that CSR significantly moderates the relationship between governance variables and firm performance, strengthening governance effectiveness in enhancing financial outcomes.

1.1 Introduction

The persistent instability in corporate financial performance despite successive governance reforms raises a critical question about the actual effectiveness of corporate governance mechanisms in enhancing firm outcomes. While board structures, oversight functions, and accountability frameworks are designed to improve managerial efficiency and protect shareholder value, performance fluctuations among listed firms in emerging economies suggest that governance mechanisms alone may not be sufficient. Financial performance remains a central indicator of corporate success, reflecting management efficiency and long-term sustainability. Financial statements mandated under CAMA (2004) provide essential information to stakeholders and serve as a benchmark for evaluating corporate effectiveness. However, corporate scandals and governance failures globally have shifted scholarly and regulatory attention toward strengthening governance frameworks, particularly through reforms targeting audit committees, board composition, and ownership structures. Despite these reforms, empirical evidence on the governance–performance relationship remains inconclusive.

Nigeria's consumer goods sector represents a significant segment of the Nigerian Exchange Group (NGX), with approximately 21 consumer goods firms listed on the Main Board as of 2023–2024 (Nigerian Exchange Group [NGX], 2024). The total market capitalization of the NGX exceeded ₦40 trillion in 2024, with the consumer goods sector accounting for an estimated 10–15% of total market value, reflecting its importance within the Nigerian capital market (NGX, 2024). Corporate governance reforms intensified following the issuance of the Nigerian Code of Corporate Governance (2018), which mandates enhanced disclosure requirements, board oversight structures, and governance reporting compliance for listed firms (Financial Reporting Council of Nigeria [FRCN], 2018). Regulatory estimates indicate that approximately 70–80% of listed firms demonstrate substantial compliance with governance reporting requirements (Securities and Exchange Commission [SEC], 2023). Nonetheless, governance structures vary considerably across firms, with average board sizes ranging between 7 and 12 directors and annual board meetings typically occurring between 4 and 10 times per year (SEC, 2023).

Board gender diversity remains modest, with female representation averaging between 10% and 18%, and fewer than 15% of listed companies achieving 30% female participation (NGX, 2024). Although over 60% of listed firms have at least one female director, broader inclusivity targets remain largely unmet. At the same time, corporate social responsibility (CSR) disclosure remains largely voluntary in Nigeria. While 50–65% of listed firms report CSR or sustainability activities and CSR expenditure typically ranges between 1% and 5% of annual profit (FRCN, 2018; SEC, 2023), CSR practices are unevenly institutionalized across firms.

Financial performance in the consumer goods sector remains volatile. Return on Equity (ROE) typically ranges between 5% and 40%, with sector averages between 15% and 30% (NGX, 2024). Macroeconomic pressures further complicate performance stability, as Nigeria's inflation rate exceeded 22% in 2023, with food inflation surpassing 30%, while exchange rate depreciation exceeded 40% (National Bureau of Statistics [NBS], 2023).

Existing studies largely examines corporate governance mechanisms and CSR as independent determinants of firm performance. What remains insufficiently interrogated is how CSR may condition, reinforce, or alter the effectiveness of governance mechanisms within volatile institutional environments. Unlike prior studies that focus on direct relationships, this study repositions CSR as a governance-conditioning mechanism capable of strengthening the relationship between board characteristics and firm performance. By integrating CSR into the governance–performance nexus as a moderating construct, this paper extends existing scholarship and offers a contextualized explanation for the persistent inconsistencies observed in emerging market governance research.

1.2 Objectives of the Study

I. To examine the effect of corporate governance mechanisms (board size, board meetings, and board gender diversity) on the financial performance of listed consumer goods firms in Nigeria.

II. To investigate the moderating role of corporate social responsibility in the relationship between corporate governance mechanisms and firm performance.

1.3 Hypotheses

H1: Corporate governance mechanisms have a significant effect on the financial performance of listed consumer goods firms in Nigeria.

H2: Corporate social responsibility significantly moderates the relationship between corporate governance mechanisms and firm performance.

2.1 Literature Review

This section examines the concepts of firm performance, corporate governance, and corporate social responsibility, as well as the interrelationship among them. It also reviews empirical studies conducted between 2021 and 2024 and presents the theoretical framework underpinning the study.

2.2 Concept of Corporate Governance

Corporate governance relies on structured mechanisms that regulate organizational activities and reduce internal conflicts. Central to this framework is an effective board of directors responsible for monitoring management, minimizing agency costs, and ensuring strategic alignment with organizational objectives (Tyrowicz et al., 2020; Ouni et al., 2022). Board effectiveness is commonly assessed through attributes such as independence, size, meeting frequency, and expertise (Ibrahim et al., 2024). Global governance frameworks, including the Cadbury Report (1992) and the Sarbanes-Oxley Act (2002), emphasize independent audit committees to enhance financial reporting quality, internal controls, and risk oversight (Farhat, 2014; Cheng & Leung, 2006). In this study, corporate governance is proxied by board size, board meetings, and board gender diversity.

2.2.1 Corporate Social Responsibility

Corporate social responsibility (CSR) refers to the integration of social and environmental considerations into business operations beyond mere compliance with legal requirements (Kumar et al., 2022; Mansour et al., 2022). It emphasizes the obligation of firms to give back to the communities and environments affected by their activities. The World Business Council for Sustainable Development defines CSR as a corporate commitment to sustainable development through active engagement with stakeholders. Over time, CSR has transformed from being viewed as a cost burden to becoming a strategic tool for achieving long-term growth and competitiveness. Organizations are encouraged to disclose their CSR initiatives as part of their accountability and transparency obligations. In essence, CSR focuses on mitigating environmental impacts and addressing social challenges, even when such actions may not produce immediate financial returns (Kebede et al., 2022).

2.2.2 Firm Performance

Firm performance is essential to various stakeholders, including investors, owners, and management, as it determines the long-term sustainability and competitiveness of a business. An efficiently performing firm enhances shareholder wealth, delivers sustainable returns, and supports growth in a dynamic market environment. Strong financial performance also positively impacts employees, customers, and society at large (Uremadu, 2012). Performance generally refers to the extent to which organizational goals and objectives are achieved (Nuryaman, 2012; Mardiana et al., 2018). Common indicators used to evaluate firm performance include Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM). For the purpose of this study, financial performance is defined as the firm's ability to utilize its available assets effectively to generate profit.

2.3 Empirical Review

2.3.1 Corporate Governance and Firm Performance — Evidence of Mixed Outcomes

Empirical studies examining the relationship between corporate governance and firm performance have produced inconsistent findings across contexts. A strand of literature reports a positive association between governance mechanisms and organizational performance, suggesting that effective board structures enhance monitoring efficiency and financial outcomes (Islam et al., 2024; Bui &Krajcsak, 2024; Ermalina et al., 2023). Conversely, other studies reveal negative relationships, indicating that certain governance attributes may increase coordination costs or inefficiencies (Fortyfour et al., 2024; Ibrahim et al., 2024; Bako, 2024). A further group of studies finds insignificant relationships, implying that governance mechanisms alone may not be sufficient to drive performance improvements (Al-ahdal&Hashim, 2022; Qeshta et al., 2021).

Evidence from Nigeria reinforces this inconclusiveness. Studies in the construction and real estate sector report negative and insignificant relationships between board characteristics and financial performance (Abolo, 2023). Similarly, research in the oil and gas industry finds no significant relationship between governance variables and return on assets (Asikhia et al., 2023). These patterns suggest that governance structures may not independently guarantee improved financial outcomes within emerging markets.

2.3.2: Mediating and Moderating Mechanisms in the Governance–Performance Nexus

Given the inconsistent direct effects of governance on performance, recent scholarship increasingly argues that the governance–performance relationship may operate indirectly through mediating or moderating variables (Hyarat et al., 2023; Puni&Anlesinya, 2020). Consequently, scholars recommend incorporating contingent factors to better explain performance variations (Bako, 2024; Bhatia & Gulati, 2021).

Empirical evidence supports this conditional perspective. For instance, financial leverage has been shown to mediate the governance–performance relationship across both developed and emerging economies (Kijkasiwat et al., 2023). Similarly, capital structure has been found to strengthen the relationship between governance quality and firm performance in Jordanian firms (Mansour et al., 2022). Although several moderators have been examined, including ownership structure and capital configuration (Atugeba&Acquah-Sam, 2024; Agara&Stainbank, 2023), corporate social responsibility (CSR) remains relatively underexplored as a governance-conditioning mechanism.

2.3.3: Corporate Social Responsibility and Firm Performance

The empirical literature on CSR and firm performance is comparatively more consistent, with many studies documenting positive financial implications. CSR has been shown to enhance firm performance in Finland (Uzhegova et al., 2023), banking institutions in Iraq (Hashem et al., 2023), and Indonesian firms (Juned et al., 2023). Similar positive outcomes are observed in Southern Vietnam (Tiep et al., 2021), Indian manufacturing firms (Deepak-Sardana et al., 2020), the Indian IT industry (Shekar & Kumaran, 2019), Pakistani manufacturing firms (Mahmood et al., 2020), Chinese firms (He et al., 2020), Slovenian firms (Bastic et al., 2020), and post-transitional economies (Stojanovic et al., 2020).

However, CSR outcomes are not universally consistent. Evidence from Ghana indicates that CSR significantly affects environmental performance but does not necessarily translate into improved financial performance (Nsiah et al., 2023). Furthermore, variations exist in the performance impact of specific CSR dimensions, as legal and economic responsibilities may yield stronger performance effects than ethical components (Rinawiyanti et al., 2021).

2.5.1 Corporate Governance and Firm Performance

Empirical evidence on the relationship between corporate governance and firm performance remains inconclusive. Some studies report a positive association between board size and performance (Ayeni-Agbaje et al., 2024), while others reveal negative (Nguyen & Nguyen, 2024) or insignificant effects (Oshim&Igwe, 2024; Ebimobowei, 2023). Similar mixed results have been observed regarding board independence, meeting frequency, and gender diversity. For instance, CEO duality has been linked to adverse performance outcomes in some studies (Adewumi, 2024), whereas gender diversity has been shown to positively influence performance in others (Ogunmakin et al., 2020). These inconsistencies suggest the need for further investigation, including emerging perspectives such as cultural or religious influences on governance (Nguyen, 2021). Therefore:

2.5.2 Corporate Social Responsibility (CSR) and Firm Performance (FP)

Stakeholder theory suggests that corporate social responsibility (CSR) demonstrates an organization's commitment to addressing stakeholder interests, which can enhance its reputation, create competitive advantage, and ultimately improve firm performance (Famiyeh, 2017; Mahrani&Soewarno, 2018). Building and maintaining strong stakeholder relationships are critical for organizational success (Feng et al., 2017; Martinez-Conesa et al., 2017). Freeman's (1984) seminal work on stakeholder theory supports the argument that CSR has a positive impact on firm performance by emphasizing the importance of considering stakeholder needs in decision-making processes.

Empirical findings also indicate that CSR has a positive and significant effect on corporate performance (Soewarno et al., 2021). Integrating CSR into organizational culture fosters responsible business practices, benefiting stakeholders, the environment, and society at large. Such practices improve stakeholder perceptions, drive innovation, strengthen reputation, enhance competitiveness, and promote sustainable business growth (Islam et al., 2021; Javed et al., 2020; Kong et al., 2020). Therefore:

2.5.3 Moderating Effect of Corporate Social Responsibility

This study further investigates the moderating role of CSR in the relationship between corporate governance and firm performance. In developing economies, CSR is increasingly recognized as an essential strategy for improving organizational efficiency and achieving corporate objectives. While prior studies on corporate governance and performance have reported mixed outcomes, CSR has consistently been associated with enhanced firm performance and has been shown to moderate the impact of various factors on performance outcomes. Hence, CSR is expected to strengthen the relationship between corporate governance mechanisms and firm performance.

2.6 Research Gap

Despite extensive empirical investigations into the corporate governance–firm performance relationship, findings remain fragmented and inconclusive, particularly within emerging market contexts. While some studies document positive effects of board characteristics on performance, others report negative or insignificant outcomes, suggesting that governance mechanisms alone may not sufficiently explain variations in financial performance. Although recent research increasingly incorporates mediating and moderating variables such as financial leverage and capital structure, limited attention has been given to corporate social responsibility (CSR) as a governance-conditioning mechanism. Furthermore, existing CSR studies predominantly examine its direct impact on performance, with minimal exploration of its interactive role in strengthening or altering governance effectiveness. This gap is particularly evident within Nigeria's consumer goods sector, where regulatory reforms and governance compliance have intensified, yet financial performance remains volatile. Consequently, there is insufficient empirical evidence explaining how CSR may moderate the relationship between corporate governance mechanisms and firm performance in this sector. This study addresses this conceptual and contextual gap by integrating CSR into the governance–performance nexus as a moderating construct.

2.7 Theoretical Review

This study is anchored on the agency theory.

2.7.1 Agency Theory

This study is anchored on Agency Theory, but it departs from its conventional application in corporate governance research. Traditional governance studies apply Agency Theory to examine how board mechanisms reduce conflicts between principals (shareholders) and agents (managers), assuming that stronger monitoring automatically enhances firm performance. However, empirical inconsistencies in emerging markets suggest that monitoring mechanisms alone may not sufficiently resolve agency conflicts.

Agency Theory, originally advanced by Alchian and Demsetz (1972) and further developed by Jensen and Meckling (1976), conceptualizes the firm as a nexus of contracts where separation of ownership and control generates agency costs. Corporate governance mechanisms such as board oversight, audit committees, and monitoring structures are designed to mitigate information asymmetry and align managerial interests with shareholder objectives. Within this framework, external auditing strengthens accountability by independently verifying management's stewardship, thereby reducing opportunistic behavior and enhancing transparency.

While prior studies predominantly use Agency Theory to justify direct relationships between board characteristics and firm performance, this study advances the theory by arguing that governance effectiveness may depend on complementary strategic mechanisms. Specifically, it conceptualizes Corporate Social Responsibility (CSR) not merely as a reputational tool, but as an agency-reducing mechanism that reinforces stakeholder trust, enhances transparency, and constrains managerial opportunism.

In emerging institutional environments such as Nigeria, where regulatory enforcement may be uneven and monitoring structures imperfect, CSR can function as an informal governance reinforcement mechanism. By voluntarily committing resources to social and environmental responsibilities, firms signal long-term orientation and accountability, thereby reducing residual agency costs beyond what formal board structures alone can achieve.

Thus, this study extends Agency Theory by integrating CSR as a moderating construct within the governance–performance nexus. Rather than assuming that governance mechanisms independently improve financial outcomes, the study proposes that CSR conditions the effectiveness of governance structures in mitigating agency conflicts and enhancing firm performance. This theoretical repositioning contributes to governance scholarship by shifting from a purely monitoring-based interpretation of Agency Theory to a governance-conditioning perspective suited to emerging market realities.

Conceptual Framework

The conceptual framework depicts the relationship between corporate governance as the independent variable and firm performance as the dependent variable, with corporate social responsibility (CSR) serving as the moderating variable. It demonstrates how CSR may influence or alter the strength and direction of the relationship between corporate governance and firm performance.

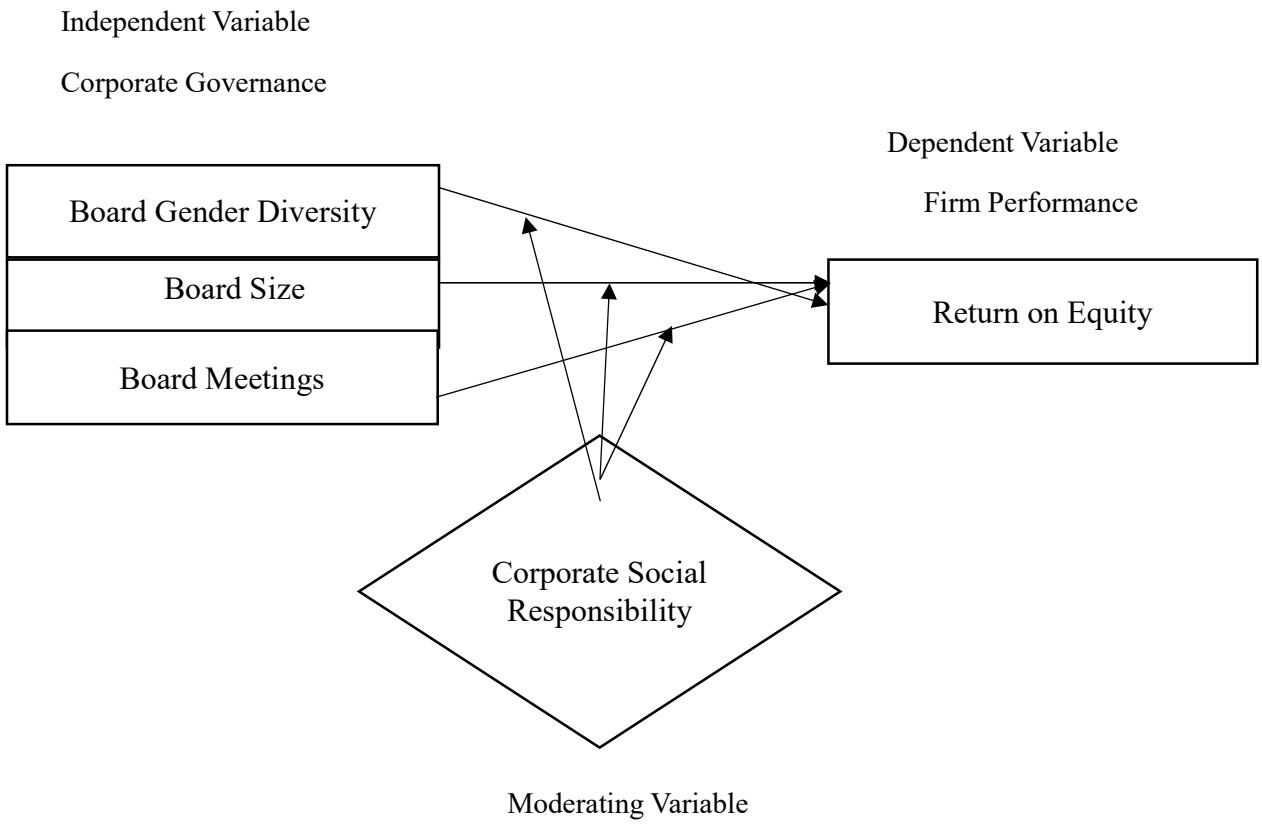


Figure 1: Conceptual Framework of the Study

3.0 Methodology

This study adopted an ex-post facto research design, focusing on 10 listed consumer goods firms in Nigeria, selected from a total population of 21 firms based on predefined criteria. Secondary data were obtained from the firms' annual reports covering the period 2018–2024. The analysis considered Return on Equity (ROE) as the measure of firm performance, corporate governance variables (board size, board meetings, and board gender diversity) as the independent factors, corporate social responsibility (CSR) as the moderating variable, and firm age and firm size as control variables. Data were analyzed using descriptive statistics, correlation analysis, and regression techniques, executed with STATA version 14.

Model Specification

The study employed the following regression models:

Model 1 (Direct Effect):

$$ROE_{it}=\beta_0+\beta_1 BS_{it}+\beta_2 BGD_{it}+\beta_3 BM_{it}+\beta_4 Age_{it}+\beta_5 Size_{it}+e_{it}$$

Model 2 (Moderating Effect of CSR):

$$ROE_{it}=\beta_0+\beta_1(CSR_{it}\times BS_{it})+\beta_2(CSR_{it}\times BGD_{it})+\beta_3(CSR_{it}\times BM_{it})+\beta_4 Age_{it}+\beta_5 Size_{it}+e_{it}$$

Where:
ROE_{it} = Return on Equity of firm *i* at time *t*
BGD_{it} = Board Gender Diversity
BS_{it} = Board Size
BM_{it} = Board Meetings
CSR_{it} = Corporate Social Responsibility

Ageit = Firm Age
Sizeit = Firm Size
β0 = Intercept
β1–β5 = Coefficients of explanatory variables
eit = Error term
i = Individual firm
t = Time period (year)

Table 1: Measurement of Variables

Variable	Abbreviation	Measurement Formula
Return on Equity	ROE	Net Profit ÷ Total Equity (Nguyen &Thi, 2023)
Corporate Social Responsibility	CSR	CSR Expenditure ÷ Total Profit (Ofurum et al., 2018)
Board Gender Diversity	BGD	Number of Female Directors ÷ Total Number of Directors (Khan & Ali, 2017)
Board Size	BS	Total Number of Board Members (Al-Matari&Mgammal, 2019)
Board Meetings	BM	Frequency of Board Meetings in a Year (Mandal & Al-Ahdal, 2018)
Firm Age	Age	Number of Years from Listing to the Study Period (Nguyen et al., 2015)
Firm Size	FSize	Natural Logarithm of Total Assets (Nguyen et al., 2015)

4.0 Discussion of Results

This section presents the outcomes of the data analysis, including descriptive statistics, correlation analysis, and regression results. It highlights the characteristics of the study variables, examines the relationships among them, and evaluates the effects of the independent variables on the dependent variable. These findings form the basis for interpreting and discussing the implications of the study's results.

4.1 Descriptive Statistics

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROE	70	0.152	0.370	0.251	0.243
CSR	70	0.013	0.175	0.220	0.231
BS	70	3.00	6.00	3.06	0.50
ACM	70	6.00	14.00	9.55	3.44
BGD	70	0.01	0.83	0.12	0.11
Age	70	1.000	50.00	18.285	12.151
SIZE	70	8.1119	9.695	8.958	0.496

Note:Computed from Annual Report Data of Sampled Firms using Stata v14

The descriptive statistics presented in Table 2 indicate that listed consumer goods firms in Nigeria recorded an average Return on Equity (ROE) of 25.1%, reflecting relatively strong financial performance, with values ranging from 15.2% to 37.0%. Corporate Social Responsibility (CSR) expenditures averaged 22.0%, while the mean Board Size was 3.06 members, and Board Meetings averaged 9.55 per year. Board Gender Diversity was relatively low, with women representing an average of 12% of board members. Firm Age exhibited significant variation, ranging from 1 to 50 years, while Firm Size had an average value of 8.95%. These findings provide an overview of the structural and operational characteristics of the firms during the study period.

4.2 Diagnostics Testing

A. Multicollinearity Test

The study employed the Variance Inflation Factor (VIF) to test for multicollinearity among the research variables. This approach ensures that multicollinearity does not distort the estimates of the regression model parameters, as recommended by Field (2000) and further supported by Ahsan et al. (2009).

Table 3: Multicollinearity Test

	Collinearity Statistics	
	Tolerance	VIF
BS	0.707	1.42
BM	0.452	2.21
BGD	0.306	3.27
CSR	0.247	4.04
AGE	0.666	1.50
SIZE	0.264	3.79

Note: *Computed from Annual Report Data of Sampled Firms using Stata version 14*

The multicollinearity test results presented in Table 3 show that all independent variables have Variance Inflation Factor (VIF) values below 5, ranging from 1.415 to 4.04, while tolerance values exceed 0.1. According to Myers (1990), VIF values greater than 10 indicate a potential multicollinearity problem; however, the values in this study are well below that threshold.

Hence, it can be concluded that multicollinearity is not a concern in this model, and the estimators used are considered reliable.

B. Heteroscedasticity Tests

Homoscedasticity is an essential assumption in regression analysis, as it ensures that the residuals have constant variance across observations. When this condition holds, the residuals are evenly distributed around the regression line. In contrast, heteroscedasticity, which refers to non-constant residual variance, can distort statistical inferences and lead to unreliable significance tests. To detect heteroscedasticity, the Breusch-Pagan/Cook-Weisberg Test is commonly applied. If heteroscedasticity is present, robust standard error estimation can be employed to address the issue (Gujarati & Porter, 2003).

Table 4: Heteroscedasticity Tests

Breusch-Pagan/Cook-Weisberg	
Chi^2	40.58
Prob. > Chi^2	0.501

Source: Computed from Annual Report Data of Sampled Firms using Stata version 14

The Breusch-Pagan test results presented in Table 4 show a p-value of 0.501, which is greater than the 0.05 significance threshold. This indicates that the null hypothesis of homoscedasticity (equal variance) cannot be rejected, suggesting that the data do not exhibit heteroscedasticity. Therefore, the variance of the error terms remains constant across all values of the explanatory variables.

C. Normality Test

Normality was assessed using both statistical measures and visual inspection, focusing on skewness and kurtosis values. Following the guidelines of Hair et al., the results indicated that all variables satisfied the normality criteria, with skewness values ranging between –1 and +1 and kurtosis values falling within –3 and +3. This confirms that the variables are normally distributed.

Table 5: Tests of Normality

	Skewness	**Kurtosis**
ROE	.225	.913
BS	.945	.374
BM	.191	.550
BGD	.928	.793
CSR	.945	.374
AGE	.225	.913
FSize	.928	.145

Source: Computed using Stata 14, 2025

4.3 Correlation Result

The Pearson correlation analysis was employed to evaluate both the strength and direction of linear relationships among the variables, with coefficients ranging from –1 (perfect negative correlation) to +1 (perfect positive correlation). Based on Cohen's guidelines, correlations are classified as small (0.10–0.29), moderate (0.30–0.49), and strong (0.50–1.0). These benchmarks provide a basis for interpreting the magnitude and direction of the associations between variables.

Table 6: Correlation Result

	ROE	BS	BM	BGD	CSR	AGE	SIZE
ROE	1						
BS	0.517	1					
BM	0.381	-0.233	1				
BGD	0.694	0.541	0.594	1			
CSR	0.726	0.051	0.142	0.131	1		
AGE	0.552	0.372	0.354	0.346	0.256	1	
SIZE	0.468	0.401	0.548	0.236	0.633	0.701	1

Note: *Computed from Annual Report Data of Sampled Firms using Stata v14*

The correlation analysis in Table 6 indicates that Return on Equity (ROE) has strong positive correlations with Board Size (0.517), Board Gender Diversity (0.694), Corporate Social Responsibility (0.726), and Firm Age (0.552). Furthermore, ROE shows moderate positive correlations with Board Meetings (0.381) and Firm Size (0.468). Among these variables, Corporate Social Responsibility exhibits the strongest association with ROE, implying that CSR plays a crucial role in improving firm performance.

4.4 Regression Analysis

Tables 7–9 present the regression outcomes that evaluate the moderating influence of Corporate Social Responsibility (CSR) on the relationship between corporate governance mechanisms and firm performance, as measured by Return on Equity (ROE), for listed consumer goods firms in Nigeria.

Table 7: Regression Models

Variables	(1) OLS	(2) Fixed	(3) Random
BS	0.824	0.718	0.054*
	(0.22)	(0.36)	(1.93)
BM	0.386	0.424	0.386
	(0.87)	(0.80)	(0.87)
BGD	0.820	0.832	0.551
	(0.23)	(0.21)	(0.60)
AGE	0.675	0.592	0.641
	(0.42)	(0.54)	(0.47)

FSize	0.677	0.016**	0.008***
	(0.42)	(2.42)	(2.65)
Cons	0.008**	0.075*	0.497
	(1.168)	(.7329)	(-0.68)
No of obs	70	70	70
R-squared	0.3576		
F-Statistics	55.30***		
Wald Chi^2 Statistics	352.16***		
Root MSE	.33919		

Note: ***, **, * denotes 1%, 5%, and 10% level of significance

Source: Author Research Data Analysis (2025)

The multiple regression analysis results indicate that the explanatory variables accounted for 35.76% of the variation in the financial performance (ROE) of consumer goods firms in Nigeria. The F-statistic and Wald chi-square values were significant at the 1% level, confirming that the model is a good fit. Furthermore, the findings revealed that most of the explanatory variables exerted a statistically significant effect on the financial performance of the firms.

4.4.1 Hausman Specification Test

The Hausman test, also referred to as the M-statistic, is applied to determine the appropriate model for panel regression analysis—whether to use fixed effects or random effects. It is also employed to test for exogeneity of the explanatory variables.

Table 8: HausmanSpecificationTest

IM-Test	
Chi^2	24.92
Prob. > Chi^2	0.0031

Source: Computed from Annual Report Data of Sampled firms using Stata version 14

The null hypothesis was rejected (Chi-sq = 24.92, p = 0.0031), leading to the adoption of the Fixed Effects (FE) model to control for time-invariant unobserved heterogeneity among the sampled firms. This approach, as recommended by Laiho (2011), helps account for unobserved characteristics that may otherwise bias the results. Table 8 presents the findings from the Generalized Least Squares (GLS), Fixed Effects (FE), and Random Effects (RE) estimations.

4.4.2 Regression of Moderation Effect Analysis

Table 9 displays the results of the moderation effect model, presenting the coefficients, standard errors, z-statistics, and p-values for each variable. The table also includes the R-squared value, Wald test statistic for joint significance along with its probability, the specified panel type, and the correlation among

error terms, offering a detailed summary of the model's performance and variable relationships.

Table 9: Regression Results

Explanatory Variables	Coefficients	Std.Err.	t-statistics	P-value
BS	.0055	.0153	0.36	0.718
BM	.0188	.0235	0.80	0.424
BGD	.0189	.0891	0.21	0.832
CSR	.1315	.0128	10.31	0.000***
BS*CSR	.1050	.0794	2.46	0.014**
BM*CSR	.1431	.0001	3.23	0.001***
BGD*CSR	.0316	.0151	2.10	0.036**
AGE	.0057	.0106	0.54	0.592
FSize	.3317	.1370	2.42	0.016**
CONS	.2358	.3476	0.68	0.497
No. of observations	70			
R-squared	0.4132			
F- statistics		30.91***		
Wald Chi2 Statistics		352.16***		
Root MSE		.33919		

Note: ***, ** denotes 1% and 5%, level of significance

Source: STATA Output, 2025

The multiple regression analysis revealed that the explanatory variables accounted for 41.32% of the variation in the financial performance (ROE) of consumer goods firms in Nigeria. Both the F-statistic and Wald chi-square were significant at the 1% level, confirming that the model demonstrates a good fit. Additionally, the results indicated that most of the explanatory variables had a statistically significant effect on the firms' financial performance.

4.5 Test of Research Hypotheses

The study evaluated seven hypotheses to determine the moderating effect of corporate social responsibility (CSR) on the relationship between corporate governance and firm performance. Each hypothesis was tested at a 5% significance level, where a p-value ≤ 0.05 led to the rejection of the null hypothesis, while a p-value > 0.05 indicated its acceptance.

4.5.1 Board Size and Performance of Listed Consumer Goods Firms in Nigeria

The t-test result for board size (BS) produced a t-value of 0.36 and a p-value of 0.718, which is greater than the 0.05 significance threshold. Consequently, the null hypothesis that board size has no significant effect on the performance of listed consumer goods firms in Nigeria is accepted.

4.5.2 Board Meetings and Performance of Listed Consumer Goods Firms in Nigeria

The t-test result for board meetings (BM) yielded a t-value of 0.80 with a p-value of 0.424, exceeding the 0.05 significance level. Hence, the null hypothesis that board meetings have no significant effect on the performance of listed consumer goods firms in Nigeria is accepted.

4.5.3 Board Gender Diversity and Performance of Listed Consumer Goods Firms in Nigeria

The t-test result for board gender diversity (BGD) showed a t-value of 0.21 and a p-value of 0.832, which is above the 0.05 significance level. Therefore, the null hypothesis that board gender diversity has no significant effect on the performance of listed consumer goods firms in Nigeria is accepted.

4.5.4 Corporate Social Responsibility and Performance of Listed Consumer Goods Firms in Nigeria

The t-test result for corporate social responsibility (CSR) produced a t-value of 10.31 and a p-value of 0.000, which is below the 0.05 significance threshold. Accordingly, the null hypothesis that CSR has no significant effect on the performance of listed consumer goods firms in Nigeria is rejected, confirming that CSR significantly influences firm performance.

4.5.5 Moderating Effect of CSR on Board Size and Performance of Listed Consumer Goods Firms in Nigeria

The interaction term BS*CSR produced a t-value of 2.46 and a p-value of 0.014, which is below the 0.05 significance level. Therefore, the null hypothesis that CSR does not moderate the relationship between board size and performance is rejected. These results suggest that CSR strengthens the relationship between board size and performance, as shown by the increase in t-value from 0.36 to 2.46 and the decrease in p-value from 0.718 to 0.014.

4.5.6 Moderating Effect of CSR on Board Meetings and Performance of Listed Consumer Goods Firms in Nigeria

The interaction term BM*CSR produced a t-value of 3.23 and a p-value of 0.001, which is below the 0.05 significance threshold. Consequently, the null hypothesis that CSR does not moderate the relationship between board meetings and performance is rejected. The findings indicate that CSR strengthens the relationship between board meetings and performance, as reflected in the increase in t-value from 0.80 to 3.23 and the decrease in p-value from 0.424 to 0.001.

4.5.7 Moderating Effect of CSR on Board Gender Diversity and Performance of Listed Consumer Goods Firms in Nigeria

The interaction term BGD*CSR generated a t-value of 2.10 and a p-value of 0.036, which is less than the 0.05 significance level. Hence, the null hypothesis that CSR does not moderate the relationship between board gender diversity and performance is rejected. The results demonstrate that CSR enhances the relationship between board gender diversity and performance, evidenced by the increase in t-value from 0.21 to 2.10 and the decrease in p-value from 0.832 to 0.036.

4.6 Discussion of Findings

The first objective of the study evaluated the effect of board size on the performance of listed consumer goods firms in Nigeria. The results indicated a positive but statistically insignificant relationship between board size and firm performance (coefficient = 0.0055, p = 0.718 > 0.05). This implies that an increase in board size does not significantly enhance firm performance. This finding aligns with Al-Hamadsheh et al. (2020) but contrasts with the findings of Al-Matari and Mgammal (2019).

The second objective examined the effect of board meetings on firm performance. The results showed a positive but statistically insignificant relationship between board meetings and firm performance (coefficient = 0.0188, p = 0.424 >

0.05). This indicates that an increase in the frequency of board meetings does not significantly influence firm performance. The outcome is consistent with Mandal and Al-Ahdal (2018) but contradicts Al-Matari and Mgammal (2019).

The third objective assessed the impact of board gender diversity on firm performance. Findings revealed a positive but statistically insignificant relationship between board gender diversity and firm performance (coefficient = 0.0189, p = 0.832 > 0.05). This suggests that increasing gender diversity on boards does not significantly affect firm performance. The result supports Ye et al. (2010) and Kakabadse et al. (2015) but differs from Huynh et al. (2022), Ouni et al. (2022), and Marie et al. (2021).

The fourth objective focused on the effect of corporate social responsibility (CSR) on firm performance. The findings demonstrated a positive and statistically significant relationship between CSR and firm performance (coefficient = 0.1315, p = 0.000 < 0.05), implying that a one-unit increase in CSR activities enhances firm performance by 13.15%. This result is consistent with Deepak-Sardana et al. (2020), Mahmood et al. (2020), and Shekar and Kumaran (2019), although it contrasts with Rehman et al. (2022).

In summary, CSR plays a pivotal role in strengthening the financial performance of consumer goods firms in Nigeria, acting as a key moderating factor in the relationship between governance variables (such as board size, board meetings and board gender diversity) and the firm's financial outcomes. These findings underscore the importance of CSR in aligning corporate governance with financial success and sustainable growth.

5.0 Conclusion and Recommendation

The study concludes that corporate governance indicators namely board size, board meetings, and board gender diversity—do not exhibit a significant direct effect on firm performance. However, corporate social responsibility (CSR) demonstrates a strong and positive significant impact on performance and serves as a moderator that strengthens the relationship between corporate governance and firm performance. The findings of this study extend the understanding of agency theory by offering empirical evidence on how board size, board meetings, board gender diversity, and corporate social responsibility (CSR) influence firm performance. The results indicate that corporate governance mechanisms, when combined with CSR initiatives, can serve as strategic resources that enhance organizational outcomes. From a practical perspective, the study provides valuable policy implications for stakeholders, highlighting the importance of strengthening governance structures and integrating CSR practices to improve overall firm performance and sustainability. Based on these findings, the study recommends that consumer goods firms integrate CSR initiatives into their strategic and operational frameworks, as such practices not only enhance overall performance but also reinforce the effectiveness of corporate governance structures in driving firm success.

5.1 Limitations and Directions for Future Research

This study is limited by its exclusive focus on Nigeria's consumer goods sector, which restricts the generalizability of the findings to other industries. Future research should consider expanding the scope to include firms from non-consumer goods sectors, such as the oil and gas industry or other key sectors of the Nigerian

economy. Such comparative analysis would help determine whether the observed relationships hold true across different contexts and provide broader insights into the interplay between corporate governance, corporate social responsibility, and firm performance.

References

Abol o, A. P. (2023). Board size and financial performance of listed real estate companies in Nigeria. B*W Academic Journal,* 8. Retrieved from https://bwjournal.org/index.php/bsjournal/article/view/1132

Adebayo, O., et al. (2024). Corporate Social Responsibility, Governance, and Firm Performance in Nigeria: Evidence from the Consumer Goods Sector. *Journal of Business Ethics*, 45(4), 98-115.

Adewale, D., et al. (2025). Governance Mechanisms and CSR Effectiveness: A Study of Nigerian Listed Firms. *International Journal of Business Governance and Ethics,* 29(1), 66-82.

Alchian, A. A., & Demsetz, H. (1972). Production, information costs, and economic organization. *American Economic Review*, 62(5), 777-795. Retrieved from https://www.jstor.org/stable/1817024

Al-Matari, Y. A., Al-Swidi, A. K., & Fadzil, F. H. B. (2020). The relationship between board of directors characteristics and firm performance: Evidence from Saudi Arabian listed companies. *International Journal of Economics, Business and Management Studies,* 11(10), 153–168. Retrieved from iiardjournals.org.

Asikhia, O. U., Fabunmi, S. A., Akinlabi, B. H., & Makinde, G. O. (2023). Corporate governance mechanisms and financial performance of listed oil and gas firms in Nigeria: An empirical assessment. *Asian Journal of Economics, Business and Accounting,* 23(16), 41–54. https://doi.org/10.9734/ajeba/2023/v23i161025

Ayeni-Agbaje, A. R., Adebayo, I. A., &Owoniya, B. O. (2024). Corporate governance and performance of listed firms in Nigerian Exchange Group. Asian *Journal of Economics, Business and Accounting,* 24(5), 73–85. https://doi.org/10.9734/ajeba/2024/v24i51294

Bala, J. (2024). Economic Corporate Social Responsibility and Financial Performance of Consumer Goods Firms in Nigeria. ResearchGate.

Cadbury Committee. (1992). The financial aspects of corporate governance. Gee Publishing.

Demsetz, H., &Alchian, A. A. (1972). Production, information costs, and economic organization. *The American Economic Review*, 62(5), 777-795.

Feng, Y., Hassan, A., &Elamer, A. A. (2020). Corporate governance, ownership structure and capital structure: Evidence from Chinese real estate listed companies. *International Journal of Accounting and Information Management,* 28(4), 759–783. https://doi.org/10.1108/IJAIM-04-2020-0042

Financial Reporting Council of Nigeria. (2018). *Nigerian code of corporate governance 2018*. FRCN.

Fola, O., & Oyetunde, I. (2023). CSR Disclosure and Performance of Nigerian Consumer Goods Companies. *International Journal of Business and Economic Research*, 56(3), 23-41.

Hamad, S., Draz, M. U., & Lai, F.-W. (2020). The impact of corporate governance and sustainability reporting on integrated reporting: *A conceptual framework. SAGE Open*, 10(2), 2158244020927431.

Johnson, M., & Nyarko, B. (2025). CSR in the Nigerian Consumer Goods Sector: Examining Costs and Benefits. *Journal of African Business Studies,* 34(2), 52-71.

Musa, A., & Etuk, I. (2024). Stakeholder Engagement and the Impact of CSR in Nigeria's Consumer Goods Industry. *African Business Review,* 11(1), 15-30.

National Bureau of Statistics. (2023). *Consumer price index report 2023*. NBS.

Nguyen, T. T. C., Hong Le, A. T., & Nguyen, C. V. (2023). The impact of liquidity and corporate efficiency on profitability. *Emerging Science Journal*, 8(1), 180–191.

Nigerian Exchange Group. (2024). *Market statistics and sector classification reports*. NGX.

Pucheta-Martínez, M. C., & Gallego-Álvarez, I. (2020). Institutional shareholding as a corporate governance mechanism that drives Chief Executive Officer pay. *Journal of Management & Governance.* Retrieved from https://journals.sagepub.com/doi/10.1177/2340944420941462

Securities and Exchange Commission. (2023). *Corporate governance compliance report*. SEC Nigeria.

Sulaiman, A. S., Ahmadu, A., &Mijinyawa, U. M. (2018). Effect of corporate social responsibility expenditure on the profitability of listed oil and gas firms in Nigeria. *Journal of Accounting and Management,* 1(2), 148–154.