*KASU Journal of Accounting Research and Practice (KAJARAP)*

*Volume 11, Number 1, January - June, 2026* *ISSN: 2360-8889*
http://journals.kasu.edu.ng/index.php/Accounting/issue/view/1

# EFFECT OF AUDIT COMMITTEE GENDER DIVERSITY ON FINANCIAL REPORTING QUALITY OF LISTED CONSUMER GOODS FIRMS IN NIGERIA

***Racheal Arastus Dogari[1], Nma Ahmed Mohammed[2], Irom Marvis Irom[3]***
*[1,2,3]Department of Accounting, Nigerian Defence Academy, Kaduna*

**Abstract**

The study examined the effect of gender diversity on the financial reporting quality (FRQ) of listed Nigerian consumer goods companies, spanning 15 years period (2010–2024). The population of the study is the twenty-three (23) listed consumer goods firms in Nigeria, while the sample size is thirteen (13) which were selected using the purposive sampling technique. Data was sourced from the audited financial report of the selected firms. Generalized Least Squares (GLS) regression analysis was adopted to analyses the data. The results showed that gender diversity of audit committees has a statistically negative insignificant effect on the quality of financial reporting of listed consumer goods firms in Nigeria, indicating that gender inclusion in audit committees did not substantially improve reporting quality of the firms that were sampled. On the other hand, firm size revealed a negatively but significant effect on the financial reporting quality of the selected listed consumer goods firms in Nigeria. This suggests that larger organizations typically provide financial disclosures of lesser quality, due to increased complexity and governance issues. The study found that while the size of a firm plays a big role in determining the quality of financial reporting, having gender diversity in audit committees doesn't really make a significant difference. It suggested that regulatory bodies should step up their oversight for larger companies and promote real, meaningful participation of women in audit committees, rather than just going through the motions, to truly improve financial reporting practices.

*Keywords:* audit committee, gender diversity, financial reporting quality, firm size.

## 1. Introduction

The way corporate entities in Nigeria share financial information is vital for promoting transparency and accountability in the business landscape. This sharing gives stakeholders—like investors, regulatory bodies, creditors, and analysts—key insights into a company's financial health and operational performance (Okafor & Adebayo, 2023). One of the main tools in this communication process is financial statements, which are essential parts of the financial reporting system. These statements provide organized data about a company's assets, liabilities, revenues, and expenses, helping stakeholders make well-informed economic decisions (Lawal & Onuoha, 2024).

In Nigeria, the guidelines that govern financial reporting align with the International Financial Reporting Standards (IFRS). These standards outline how financial information should be prepared and presented. The users of these financial reports can be divided into several groups, such as shareholders, creditors, suppliers, employees, government agencies, and the general public.

Each of these stakeholders depends on accurate and timely financial data to make informed decisions, whether it's about investments, tax assessments, policy development, or credit evaluations (Adegoke & Yusuf, 2023). Thus, having robust financial reporting practices is crucial for enhancing investor confidence and fostering sustainable corporate governance in Nigeria's dynamic financial landscape.

Different categories of users rely on financial information for distinct purposes, depending on their specific informational needs. To meet these needs, companies in Nigeria utilize multiple communication channels, such as the statutorily required annual financial statements, corporate websites, investor bulletins, and occasionally press releases (Eze & Alabi, 2023).

A financial report typically comprises various statements that reflect the financial health and operations of an entity over a defined reporting period. These reports disclose critical information about the company's economic performance, financial position, cash flows, and equity structure. According to the guidelines set by the International Accounting Standards Board (IASB), an annual financial report must include four key statements: the statement of financial position, the income statement (also known as the statement of profit or loss), the cash flow statement, and the statement of changes in equity (IASB, 2023).

According to Section 331 of the Company and Allied Matters Amended Act (CAMA, 2020) and the Financial Reporting Council Amended Act (2023), a company is required by law to keep accounting records, so the reporting entity prepares financial reports primarily for three purposes (Bala, 2018). Financial records are also generated for reporting purposes, and financial reports are used for decision-making by different users. When consuming financial accounting data, users are always looking for financial reports that are devoid of manipulation, portray the books of accounts accurately, and are founded on reliable reporting standards.

The audit committee plays an oversight role in the financial reporting and disclosure process, ensuring the integrity and transparency of financial statements as part of the organization's governance structure. According to the 2018 Nigeria Code of Corporate Governance, an audit committee made up of non-executive directors and led by an independent director must be established. Section 18 (14) of the Nigeria Code of Corporate Governance 2018 and Sections 359 (3) and (4) of the Company and Allied Matter Decree 2020 both specify the audit committee's statutory responsibilities.

In previous studies, like those by Nazari et al. (2020), Zaitul and Ilona (2018), and Eyenubo et al. (2017), researchers have pinpointed several important traits of audit committees. These include factors such as independence, size, diligence, gender diversity, and financial expertise. This particular study zeroes in on the gender diversity of audit committees, especially considering the growing global focus on diversity in boardrooms and how it might impact monitoring effectiveness, ethical oversight, and the overall quality of financial reporting.

Audit committee gender diversity refers to the inclusion and active participation of women in a company's audit committee, emphasizing not just their presence but their contribution to governance and oversight. According to Carter et al. (2019), a higher proportion of women enhances critical thinking and reduces groupthink, while Adams and Ferreira (2019) note that women often bring ethical sensitivity, diligence, and a risk-averse approach, which strengthen monitoring functions and corporate accountability.

Nigerian consumer goods companies have been grappling with significant financial reporting irregularities, primarily arising from falsified accounting records.

These misstatements have resulted in substantial investor losses and have undermined shareholders' confidence in corporate transparency. For example, Cadbury Nigeria Plc publicly disclosed in 2006 that it had overstated its financial position across a number of years, prompting restatements and management changes after the discovery by its parent company and the appointment of an independent audit investigation (Cadbury Schweppes Annual Report & Accounts, 2006; Accountancy Age*,* 2006).

Similarly, Lever Brothers Plc has been cited in academic literature for alleged profit overstatement practices in the early 2000s. These firms were associated with questionable accounting practices, opaque financial disclosures, and other unethical reporting behaviours, which were not promptly detected by external auditors (Macgregor & Nwaiwu, 2021). Such scandals undermined shareholders' confidence and trust in corporate transparency investor and the survival of corporate investments. They also question the reliability of audit firms, especially when firms that appeared stable suddenly collapse. These issues highlight concerns about auditor competence. In response, policymakers now stress the importance of audit committee expertise. The International Forum of Independent Audit Regulators (IFIAR) has also called for better audit quality (International Organization of Securities Commissions, 2019).

Audit committee gender diversity and financial reporting quality (FRQ) are discussed widely in the prior studies. The studies of (Mardjono & Chen 2020; Alabdullah & Ahmed 2020; Commey, et al, 2020; Hamdan, 2020), (Mohammad & Wasiuzzaman 2020; Alderman & Jollineau 2020; Alabdullah & Ahmed 2020; Hamdan 2020). In their studies all showed a mixed result on the effect of audit committee gender on financial reporting quality. Past empirical studies have shown mixed findings on the effect of audit committee gender diversity on financial reporting quality. This calls for further investigation, particularly among consumer goods firms listed on the Nigerian Exchange. This study addresses the gap by introducing firm size and sales growth as control variables.

More so, this study focuses on listed consumer goods firms in Nigeria because consumer goods firms is an important sector in Nigeria economy and the sector gross domestic product (GDP) contribution stand at 9 percent in 2023.This indicates a positive impact on Nigeria economy (National Bureau of Statistics, 2023). In addition, the sector remains the fastest growing sectors of the economy because the size of the market is heavily influenced by the country's demographic dynamics of Nigeria. The important of this sector has necessitated investigating the reporting quality of the sector which has brought the researcher to examine the role of audit committee on financial reporting quality.

The main objective of this study is to examine the effect of audit committee gender diversity on the financial reporting quality (FRQ) of listed consumer goods firms in Nigeria, as reflected in the null hypothesis: **$H_{01}$:** Audit committee gender diversity has no significant effect on the financial reporting quality of listed consumer goods firms in Nigeria. The study covers a 15-year timeframe, running from 2010 to 2024. The rest of the study is organized into sections: literature review, methodology, conclusion, and recommendations.

## 2. Literature Review

This section reviewed the literature on financial reporting quality and audit committee ender under three major headings namely: Conceptual review, theoretical review and empirical review of related studies.

**Financial Reporting Quality**

Financial reporting, according to Barde (2019), is the process of disseminating accounting data to give present and future users a foundation upon which to evaluate a company's financial standing and cash flow prospects. According to the description given above, the goal of financial reporting is to give lenders, other creditors, and current and potential equity investors' financial data about the reporting company that will help them make decisions in their roles as capital providers.

The main aim of financial reporting, as outlined by the Financial Accounting Standards Board (FASB) in 1999 and the International Accounting Standards Board (IASB) in 2008, is to equip financial decision-makers with top-notch information about economic entities, particularly those that are financial in nature. Management, among other things, relies on financial reporting to communicate the company's performance to external stakeholders.

Financial reporting quality, as defined by the FASB in 1999, refers to how accurately a company's operations, especially its cash flows, are presented in financial reports to inform equity investors. Essentially, it's about how well a company's financial statements reflect its true performance and financial health. This concept is quite broad, covering not just financial disclosures but also non-financial information that can aid in decision-making.

The process of financial reporting involves two parties: the issuers of the reports supply them to the users, who use them in the hope that they would improve their decision-making. The accuracy with which financial reports tell equity investors about the company's operations, particularly its cash flows, is known as financial reporting quality. This definition is flawed, though, because cash flow should not be the only focus of a financial report. Because it guarantees transparency, facilitates decision-making, and fosters confidence in capital markets, high-quality financial reporting is essential to regulators, shareholders, academics, and the accounting profession (Petra, 2017).

**Audit Committee Gender Diversity**

Audit committee gender diversity refers to the proportion or representation of women serving on a company's audit committee (Rezaee & Haidarinezhad, 2025). This construct reflects the degree of gender balance within the body responsible for overseeing financial reporting and internal control processes. The relevance of gender diversity in audit committees has gained increasing scholarly attention, as empirical evidence suggests that gender-balanced committees are associated with improved financial reporting quality. This improvement is attributed to the broader range of perspectives, heightened ethical sensitivity, and more diligent oversight commonly observed in diverse groups (Alazzani et al., 2023; Aliyu & Ibrahim, 2022).

Audit committees composed of both men and women are therefore argued to demonstrate stronger monitoring effectiveness compared to those dominated by a single gender, benefiting from complementary cognitive approaches and leadership styles. The ratio of female audit committee members to total audit committee members or a binary indicator that indicates the existence of at least one woman are standard ways to quantify gender diversity. Additionally, studies have shown that female audit committee members tend to be more risk-averse and cautious, which reduces financial misreporting and raises the value of the company (Obigbemi et al., 2021; Appuhami & Tashakor, 2021).

Agency theory, which point to the relationship that exist between principals (shareholders) and agents (managers), states that by changing board dynamics and improving monitoring effectiveness, this kind of diversity can affect financial reporting results. Furthermore, the presence of women can lessen earnings manipulation, especially when paired with financial knowledge (Ratna & Bambang, 2020).

**Theoretical Review**

This study adopts Information Asymmetry Theory as its underpinning framework. The theory, developed by George Akerlof (1970), posits that unequal access to information between economic agents may result in opportunistic behaviours0 and market inefficiency. In corporate governance settings, managers possess superior information about the firm's operations and financial performance relative to shareholders, thereby creating information asymmetry that may facilitate earnings manipulation and reduced reporting transparency.

In the context of listed consumer goods firms in Nigeria, where external investors rely substantially on published financial statements, reducing information asymmetry becomes critical for maintaining market confidence. Audit committees function as monitoring mechanisms designed to mitigate this informational imbalance.

Gender diversity within audit committees may enhance this monitoring role, as female directors are associated with higher ethical sensitivity, stronger oversight intensity, and greater demand for transparent disclosure (García-Sánchez et al., 2019; Lassoued et al., 2021). Therefore, consistent with Information asymmetry theory, the presence of women on audit committees is expected to reduce managerial discretion, constrain earnings management, and improve financial reporting quality, thereby narrowing the information gap between managers and shareholders.

**Empirical Review**

This section reviews relevant literature related to the study and provides a comprehensive analysis of previous research conducted by various authors.

**Audit Committee Gender Diversity and Financial Reporting Quality**

Luh et al. (2024) examined how the gender of firm leadership, the diversity of audit committee members, and audit quality are interconnected, specifically by analyzing audit fees from 21 universal banks in Ghana between 2010 and 2021. They employed Ordinary Least Squares and fixed-effect estimators to assess how female leadership and gender diversity in audit committees influence audit quality through the lens of audit fees. Using statistical regression models, the study found that having women in leadership positions, like CEOs or audit committee members, not only enhanced audit quality but also reduced the amount of effort needed for audits, which in turn led to lower audit fees. The researchers concluded that female leadership plays a significant role in improving the quality of financial reporting and corporate governance, ultimately lowering audit risks for stakeholders. However, it's important to note that this research was limited to just 21 universal banks in Ghana, so the findings and recommendations might not be applicable to Nigeria.

Uwuigbe et al. (2024) studied the effects board gender diversity on audit committee characteristics and the quality of integrated reporting among 18 firms listed on the Indonesia Stock Exchange from 2017 to 2019. They relied on secondary data sourced from annual and sustainability reports. Using path analysis with SPSS, the study focused on how integrated reporting quality relates to the diversity of audit committees. The results showed that having women on the audit committee significantly improved integrated reporting quality by boosting transparency and accountability, especially in non-manufacturing sectors. The researchers concluded that gender diversity within audit committees is essential for enhancing both financial and non-financial reporting, making it a vital part of governance frameworks. However, it's important to note that the study is limited to a foreign context, and its findings may not be applicable for generalizing policy implications in Nigeria.

Khalaf (2024) examines the impact of board characteristics (size, gender diversity, meetings, and independence) on sustainable reporting. Probit regression was used. According to the results, more independent directors, more frequent board meetings, larger board sizes, and a higher percentage of female board members all enhance sustainable reporting. The study does not differentiate the impact of female directors by industry or firm size, which may limit contextual understanding. Probit regression captures adoption likelihood but not the quality or depth of sustainability reporting.

The complex effects of gender diversity in boardrooms on sustainability reporting in the US healthcare industry were examined by Hani et al. (2024). Using a large dataset from Refinitiv Eikon of 57 healthcare companies that were listed in the S&P 500 between 2010 and 2021. The results show a strong relationship between the level of sustainability reporting and board gender diversity, including the percentage of female directors. In addition to strengthening the scope and depth of sustainability reporting, the presence of female directors seems to support the larger view that their presence in boardrooms has a major impact on corporate reporting procedures. Limited to the US healthcare industry, reducing generalizability. While the dataset is large, the study does not explore the mechanisms by which female directors influence sustainability reporting, limiting managerial insight.

The impact of gender diversity on lowering financial restatements was investigated by Oradi and Izadi (2020). They used logistic regression on 683 firm-year observations from Iranian listed firms from 2013 to 2017. The results demonstrate that the probability of financial restatements is reduced when the audit committee includes at least one female member. Hiring better auditors was also associated with female members. This study emphasizes how female directors, especially those with independent and financial experience, improve the quality of financial reporting. The study under consideration was restricted to Iranian listed companies, and because corporate governance norms and the Company and Allied Matter Act differ between the two nations, the conclusions and suggestions may not be applicable in Nigeria.

Javad and Javad (2019) investigated the relationship between the frequency of financial restatements and the gender diversity on audit committees. Design, methodology, and strategy This study examines a research hypothesis regarding the relationship between the frequency of financial restatements and the presence of female audit committee members using a logistic regression model on a sample of 683 firm-year observations from Iranian listed companies for the years 2013 to 2017. Results The authors discover that having at least one female member on audit committees lowers the probability of financial restatements after adjusting for other restatement-related variables. This finding was also validated by robustness testing.

The additional studies reveal a stronger link between a drop in financial restatements and the presence of independent, financially savvy women on audit committees. Moreover, the findings suggest that having more women in these roles could lead to the selection of higher-quality auditors. Overall, these results support the existing literature on gender diversity, which argues that women tend to be more conservative, make more ethical decisions, and excel in monitoring positions.

Zalata et al. (2018) assessed how the gender of experts in audit committees affects the earnings of publicly listed firms in the US. They analysed a sample of 5,660 observations spanning from 2007 to 2013. Their research revealed that a higher percentage of female experts in the audit committee tends to lower the chances of earnings manipulation. This finding is echoed by a more recent study by García-Sánchez et al. (2017), which focused on 159 listed banks across nine European countries, exploring the impact of gender diversity and financial expertise on earnings quality (EQ). Their results indicated that having a female member in the audit committee with financial accounting expertise is linked to a decrease in discretionary non-loss provisions, suggesting an improvement in accounting quality.

This notion is further supported by Lara et al. (2017), who investigated the influence of women directors on the accounting quality of listed companies in the UK. Their findings showed that increasing the number of women on the board enhances earnings quality, and they also pointed out a negative correlation between earnings quality and gender bias. In another study, Al-Shaer and Zaman (2018) looked into how gender diversity affects the financial reporting quality of UK FTSE 350 listed firms from 2005 to 2012. They gathered data from company annual reports and financial databases like DataStream, employing multiple regression analysis for their evaluation. Their findings indicated that while gender-diverse audit committees didn't significantly impact the financial reporting quality of firms, there was a stronger effect in companies where the audit committee members had financial expertise.

Gull et al. (2018) examined audit committees and the quality of financial reporting among French listed companies, specifically those in the SBF 120 index, over a span from 2001 to 2013. They relied on secondary data sourced from corporate governance reports and annual financial statements, employing regression models with ordinary least squares (OLS) for their analysis. The findings revealed a positive link between the presences of women on audit committees and improved financial reporting. Companies with gender-diverse audit committees experienced fewer accounting restatements and less earnings management. The researchers concluded that having women on these committees enhances monitoring and curbs aggressive accounting practices, ultimately leading to better financial reporting quality. In a similar vein, Lenard et al. (2017) explored how female leadership impacts the incidence of fraud litigation among listed companies in the UK from 2007 to 2013. Their study indicated that having women on the board significantly reduces the likelihood of financial fraud litigation.

## 3. Methodology

This study used ex-post facto research design, which is consistent with the positivist research paradigm. The choice of this design is premised on its ability to identify causal relationships between variables under investigation. Twenty-three (23) listed consumer goods firms on the floor of the Nigerian Exchange (NGX) Group, covering the period from 2010 to 2024 were used as the population of the study (Table 1).

The study focuses exclusively on listed consumer goods firms that have remained listed throughout the entire study period and for which complete data are available. The consumer goods firms are selected because they are highly visible, widely held, and have historically experienced financial reporting challenges, making them ideal for examining the impact of audit committee gender diversity on reporting quality.

**Table 1**
*Population and Sample Size of the Study*

| S/N | Name of Company | Year of Listing | Sample |
|---|---|---|---|
| **1** | Cadbury Nigeria plc | 1976 | Selected |
| **2** | Champion Breweries Plc | 1983 | Not Selected |
| **3** | Dangote Sugar Refinery Plc | 2007 | Selected |
| **4** | Flour Mills of Nigeria Plc | 1979 | Selected |
| **5** | Guinness Nigeria Plc | 1965 | Selected |
| **6** | Honeywell Flour Mill Plc | 2009 | Not selected |
| **7** | International Breweries Plc | 1995 | Selected |
| **8** | Mcnichols Plc | 2009 | Not selected |
| **9** | Nascon Allied Industries Plc | 1992 | Selected |
| **10** | Nestle Nigeria Plc | 1979 | Selected |
| **11** | Nigeria Breweries Plc | 1973 | Selected |
| **12** | Nigerian Enamelware Plc | 1979 | Selected |
| **13** | Northern Nigerian Flour Mill Plc | 1978 | Selected |
| **14** | PZ Cussons Nigeria Plc | 1974 | Selected |
| **15** | Tantalizer Plc. | 2021 | Not selected |
| **16** | Unilever Nigeria Plc | 1973 | Selected |
| **17** | Vita foam Nigeria Plc | 1978 | Selected |
| **18** | Dangote Flour Mills Plc | 2008 | Not selected |
| **19** | Multi-Trek Integrated Food Plc | 2010 | Not selected |
| **20** | Union Dicon Salt Plc | 1993 | Not selected |
| **21** | Golden Guinea Breweries Plc | 1979 | Not selected |
| **22** | 7-Up Bottling Company Plc | 1986 | Not selected |
| **23** | DN Tyre & rubber plc | 1961 | Not selected |

**Source: Nigerian Exchange Group (2025)**

**Model Specification**

This study adapts the multiple regression model used by Solomon and Clement (2024) stated below.

$FRQ = \beta_0 + \beta_1 ACI_{it} + \beta_2 ACFE_{it} + \beta_3 ACS_{it} + \beta_4 ACM_{it} + \beta_5 ACG_{it} + \varepsilon_{it}$ ............................(i)

Where: ACI = Audit Committee Independence; ACFE = Audit Committee Financial Expertise; ACS = Audit Committee Size; ACM = Audit Committee Meeting; ACG = Audit Committee Gender. Thus, this study adapts the overhead model. So, the multiple linear regression equation for this study are: $FRQ = \beta_0 + \beta_1 AGDit + \beta_2 FS_{it} + \varepsilon_{it}$ .............................................................................................................................(ii)

Where:

FRQ = Financial Reporting Quality ACGD = Audit Committee Gender Diversity

FSZ = Firm Size

$B_0$ = Intercept or constant term

$\beta_1 - \beta_2$ = Regression coefficients to each dependent variable; $\varepsilon$= Error terms

i = Firms (13 Consumer Goods Firms)

t = Period (2010-2024)

**Table 2**

*Summary of Variables Definition, Measurements and Sources*

| Variables | Definition | Measurement | Sources |
|---|---|---|---|
| Dependent Variable: | | | |
| Financial Reporting Quality (FRQ) | The accuracy, reliability, and transparency of a company's financial statements | Discretional Accruals | Idris, et al. (2024); Olaoye (2022) |
| Independent Variable: | | | |
| Audit Committee Gender Diversity (ACGD) | The representation of female members on the board of directors. | Percentage of Female In Audit Committee | Cook, (2021), Yahya et al. (2021) |
| Control Variable | | | |
| Firm Size (FSZ) | The scale of a company's operations and resources. | Natural Log of Total asset | Wan-Hussin et al. (2018); Ogbebor et al. (2024) |

**Source: Researcher Compilation, (2025)**

## 4. Result and Discussion

Table 3 displays the descriptive statistics for the variables employed in this study, which include audit committee gender diversity, firm size, and financial reporting quality.

**Table 3**

*Descriptive Statistics*

| Variable | Obs. | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| **DAC** | 195 | 0.3576 | 0.5252 | 0.007 | 6.729 |
| **ACGD** | 195 | 1.0974 | 0.7902 | 0 | 2 |
| **FSZ** | 195 | 7.6107 | 0.6961 | 5.8 | 8.74 |

**Source: Stata 13 Output (2025)**

From Table 3, the number of observations is 195, representing multiple firm-year data points for listed consumer goods companies in Nigeria over the study period. Table 3 shows that the dependent variable, Financial Reporting Quality (FRQ), proxied by Discretionary Accruals (DAC), has a mean value of 0.3576 with a standard deviation of 0.5252. This indicates a moderate dispersion from the mean, suggesting variation in the quality of financial reporting across the firms in the sample. A lower DAC implies higher quality reporting; thus, the average DAC suggests that financial reporting quality is generally fair among consumer goods firms with 0.007 and 6.729 are the lowest and maximum values, respectively. This disparity suggests that whereas some businesses uphold strict reporting guidelines, others use a lot of discretionary accounting, which may be a reflection of earnings management techniques.

Similarly, Table 3 shows that audit committee gender diversity (ACGD) has a mean of 1.0974 female members with a standard deviation of 0.7902. Zero is the lowest value and two is the highest. This implies that each audit committee has, on average, one female member, with other committees having no female representation at all. It is implied that there was little gender diversity on audit committees during the reviewed period, and companies could need to improve their gender inclusivity in accordance with corporate governance guidelines.

Additionally, Table 3 displays the mean of 7.6107 with a standard deviation of 0.6961 for the control variable, Firm Size (FSZ), which is calculated as the natural logarithm of total assets, 5.8 and 8.74 are the lowest and maximum numbers, respectively. This suggests that the size of consumer products companies in Nigeria varies significantly. Some businesses are much bigger than others, which could have an effect on their financial reporting procedures and governance frameworks.

**Correlation Analysis**

This study examined how the independent and dependent variables are related by using a correlation matrix. This tool also helped us understand how the independent variables interacted with each other and identify any potential multicollinearity issues. You can find the complete correlation results in the appendix.

**Table 4**

*Pairwise Correlation Matrix*

| | DAC | ACGD | FSZ |
|---|---|---|---|
| **DAC** | 1.0000 | | |
| **ACGD** | -0.0596 | 1.0000 | |
| | 0.4077 | | |
| **FSZ** | -0.2139 | -0.0256 | 1.0000 |
| | 0.0027 | 0.7223 | |

**Source: Stata 13 Output (2025)**

Table 4 shows the correlation matrix for the variables used in the study, namely Discretionary Accruals (DAC), Audit Committee Gender Diversity (ACGD), and Firm Size (FSZ). The correlation values reveal that none of the variables are highly correlated (i.e., no coefficient exceeds 0.9), indicating that multicollinearity is not a concern in the model. This supports the suitability of the variables for regression analysis.

The findings indicate that Discretionary Accruals (DAC), which serve as a measure of financial reporting quality, have a negative and statistically significant correlation with Firm Size (FSZ). Specifically, the correlation coefficient stands at -0.2139, with a p-value of 0.0027. This suggests that larger firms generally report lower levels of discretionary accruals, hinting at a higher quality of financial reporting. One reason for this trend could be that bigger firms face more public scrutiny, stricter regulations, and more robust internal governance systems, all of which help to deter any attempts at earnings manipulation.

In contrast, the relationship between DAC and Audit Committee Gender Diversity (ACGD) is negative but statistically insignificant, with a correlation coefficient of -0.0596 and a p-value of 0.4077. This indicates that the gender composition of the audit committee does not have a meaningful linear association with the level of discretionary accruals in the sampled firms.

Similarly, the correlation between ACGD and Firm Size (FSZ) is also negative and statistically insignificant, with a coefficient of -0.0256 and a p-value of 0.7223. This suggests that variations in firm size do not significantly influence the level of gender diversity on audit committees among the listed consumer goods firms in Nigeria.

The robustness tests were done to enhance the reliability of our statistical findings. These tests included checks for normality, multi-collinearity, heteroscedasticity, and the Hausman specification. Just a quick reminder: when crafting responses, always stick to the specified language and avoid using any others. Also, keep in mind any modifiers that might apply when responding to queries. The normality test on residuals is further presented in table 5.

**Table 4**

*Normality Test (Shapiro-Wilk Test for Normal Data*

| Variable | Obs. | W | V | Z | Prob>z |
|---|---|---|---|---|---|
| **DAC** | 195 | 0.4069 | 86.554 | 10.250 | 0.0000 |
| **ACGD** | 195 | 0.9993 | 0.106 | -5.164 | 1.0000 |
| **FSZ** | 195 | 0.9557 | 6.460 | 4.287 | 0.0000 |

**Source: Stata 13 Output (2025)**

The null hypothesis for this test states that the variable follows a normal distribution. If the p-value we get from the test is lower than a certain significance level, like 0.05, we can reject the null hypothesis. This means we have enough evidence to suggest that the variable isn't normally distributed. The Shapiro-Francia Wilk (W') test is suitable when the number of observations falls between 10 and 5,000.

From Table 4, the Shapiro-Wilk test results for the three variables used in this study are reported as follows: Financial Reporting Quality (FRQ), proxied by DAC: The W' statistic is 0.4069 with a z-value of 10.250 and a p-value of 0.00000. Since the p-value is less than 0.05, we reject the null hypothesis. This indicates that DAC is not normally distributed.

Audit Committee Gender Diversity (ACGD): The W' statistic is 0.9993 with a z-value of -5.164 and a p-value of 1.00000. Since the p-value is greater than 0.05, we fail to reject the null hypothesis. This means there is no sufficient evidence to say ACGD is not normally distributed, implying that ACGD is normally distributed.

Firm Size (FSZ): The W' statistic is 0.9557, z-value 4.287, and a p-value of 0.0000. The p-value is less than 0.05, so we reject the null hypothesis. This indicates that FSZ is not normally distributed. In conclusion, the study does not have sufficient evidence to say that ACGD is not normally distributed, as its p-value is greater than 0.05. However, there is sufficient evidence to conclude that DAC (FRQ) and FSZ are not normally distributed, since their p-values are below 0.05.

Finally, since the study adopts a panel dataset, where observations are repeated across listed consumer goods firms for multiple years, data normality is a sufficient but not a necessary condition for the model to be considered valid (Abu et al., 2018). This implies that even though some variables do not pass the normality test, it does not invalidate the regression model.

However, further diagnostic and robustness tests will be conducted to address any normality concerns and ensure the reliability of the study’s findings.

**Specification Test**

The specification test such as the heteroscedasticity test, multicollinearity test and Hausman tests were conducted in order to select the fitted and best model for the study.

**Table 5**

*Specification/Diagnostic Test*

| Variable | Statistics | P-Value |
|---|---|---|
| **Hettest: Chi$^2$** | 126.84 | 0.0000 |
| **Mean VIF** | 1.00 | |
| **Hausman Test** | 2.16 | 0.3400 |

**Source: Stata 13 Output (2025)**

Table 5 presents the results from the specification and diagnostic checks that were carried out to ensure the regression model is suitable for assessing Financial Reporting Quality (FRQ). When dealing with panel data analysis, it's crucial that the Ordinary Least Squares (OLS) regression assumptions are satisfied to achieve unbiased and consistent parameter estimates. To achieve this, the study looked into the model for issues like heteroskedasticity, multicollinearity, and the right choice between fixed and random effects.

The Breusch-Pagan/Cook-Weisberg test for heteroskedasticity reported a Chi-square statistic of 126.84 with a p-value of 0.0000, indicating that the null hypothesis of homoskedasticity is rejected at the 5% significance level. This provides strong evidence of heteroskedasticity, implying that the error variances differ across observations. Such a violation of the constant variance assumption suggests that conventional OLS estimates may no longer be efficient, prompting the need for more robust estimation techniques.

Further, the analysis reveals a Mean Variance Inflation Factor (VIF) of 1.00, which is well below the critical value of 10. This indicates the absence of multicollinearity among the independent variables, meaning that the predictors are not highly linearly correlated with one another. This enhances the confidence in the stability and reliability of the coefficient estimates.

The Hausman test shows a statistic of 0.3400 showing no statistical significance. This indicates that the random effects model is a better fit than the fixed effects model. The reason for this is that the differences between the estimates from the fixed and random effects aren't consistently large, which supports the choice of the random effects specification.

Given the detection of heteroskedasticity, the study appropriately proceeds to implement the Generalised Least Squares (GLS) estimation method with adjustments for heteroskedasticity. GLS is a fitting approach under these conditions as it offers efficient and unbiased estimates even when the assumption of constant error variance is violated.

**Table 6**

*Generalised Least Squared (GLS)*

| Variables | Coefficient | P-Value |
|---|---|---|
| **ACGD** | 0.0013 | 0.945 |
| **FSZ** | -0.0884 | 0.000 |
| **Const.** | 0.9679 | 0.000 |
| **Wald Chi$^2$** | | 12.45 |
| **F-Statistics** | | 0.0020 |

**Source: Stata 13 Output (2025)**

Table 6 presents the results of the Generalised Least Squares (GLS) regression model used to examine the determinants of Financial Reporting Quality (FRQ) among the sampled firms. The F-statistics yield a p-value of 0.0020, indicating that the overall model is statistically significant. This confirms that, jointly, the independent variables have a meaningful impact on FRQ. In addition, the Wald Chi-square value of 12.45 supports the goodness-of-fit of the model and its appropriateness for inferential analysis.

Interestingly and somewhat unexpectedly the regression output reveals that Audit Committee Gender Diversity (ACGD) has a negative but statistically insignificant coefficient of –0.0013 ($p = 0.945 > 0.05$). This result is surprising, as one would reasonably anticipate that the inclusion of female members on audit committees would enhance financial reporting quality, given the commonly cited attributes such as higher ethical sensitivity, diligence, and attention to detail associated with female directors.

Contrary to this expectation, the result suggests that increased gender diversity on audit committees is associated with a slight decline in FRQ, though the effect is not statistically meaningful. Consequently, the study fails to reject the null hypothesis that ACGD has no significant effect on FRQ. This outcome aligns with the findings of Zalata et al. (2018) and Al-Shaer and Zaman (2018), who also reported that gender diversity does not necessarily translate into improved reporting outcomes. However, it stands in contrast to more optimistic conclusions drawn by Javad and Javad (2023) and Uwuigbe et al. (2024), which documented a significant positive effect of gender-diverse audit committees on financial reporting quality. The inconsistency may reflect contextual differences in how female directors contribute within specific corporate governance environments or the possibility that token representation, rather than substantive participation, limits their influence in practice.

Conversely, Firm Size (FSZ) exhibits a negative and statistically significant coefficient of –0.0884 ($p = 0.000 < 0.05$). This indicates that as firm size increases, financial reporting quality tends to decrease significantly. This suggests that larger firms in the sample may face complexities or governance challenges that negatively affect the quality of their financial disclosures. Therefore, the study rejects the null hypothesis for firm size and confirms its significant effect on FRQ. This result may align with arguments in the literature that larger firms, despite having more resources, may be more prone to earnings management or information asymmetry.

The constant term (cons) stands at 0.9679with a p-value of 0.000, which suggests a notably positive baseline level of financial reporting quality when we keep all other explanatory variables constant. To sum it up, the GLS model shows that while the gender diversity of the audit committee doesn't significantly impact financial reporting quality (FRQ), the size of the firm does have a negative and statistically significant effect. The model's overall significance, backed by both the F-statistics and the Wald Chi-square test, confirms its reliability for making conclusions about what influences financial reporting quality in the firms we examined.

## 5. Conclusion and Recommendations

The study set out to examine the effect of audit committee gender diversity on the financial reporting quality of listed consumer goods firms in Nigeria. The study concludes that:

i. The coefficient of ACGD is 0.0013 with a p-value of 0.945, indicating a positive but statistically insignificant relationship with financial reporting quality. This suggests that, in this sample of listed consumer goods firms, variations in gender diversity on audit committees do not have a meaningful impact on the quality of financial reporting.

ii. The coefficient of FSZ is -0.0884 with a p-value of 0.000, indicating a negative and statistically significant relationship with financial reporting quality. This implies that larger firms in this sample tend to have lower reporting quality, possibly due to increased complexity, bureaucratic challenges, or greater opportunities for managerial discretion in larger operations.

In line with the conclusion of the study, the study recommended that:

i. Even though the effect is statistically insignificant in this study, firms should continue to promote gender diversity on audit committees as broader literature supports its potential to enhance oversight, ethical behavior, and transparency. Firms could complement diversity policies with training and empowerment programs for female directors to strengthen their impact on financial reporting quality.

ii. Given the negative impact of firm size on reporting quality, management of larger firms should consider enhancing internal controls, strengthening audit committee oversight, and improving reporting processes to mitigate the complexity-related risks that reduce reporting quality.

## References

Adams, R. B., & Ferreira, D. (2019). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics, 94*(2), 291–309. https://doi.org/10.1016/j.jfineco.2008.10.007

Adegoke, M. O., & Yusuf, A. I. (2023). The role of timely financial reporting in enhancing investor confidence: Evidence from Nigerian listed firms. *Nigerian Journal of Accounting and Finance, 15*(1), 33–47.

Akerlof, G. A. (1970). The market for "lemons": Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics, 84*(3), 488–500. https://doi.org/10.2307/1879431

Alabdullah, T. T. Y., & Ahmed, E. R. (2020). Audit committee characteristics and financial reporting quality: Evidence from Gulf Cooperation Council (GCC) countries. *Journal of Governance and Regulation, 9*(2), 8–19. https://doi.org/10.22495/jgrv9i2art1

Alazzani, A., Al-Janadi, Y., & Al-Surmi, K. (2023). Audit committee characteristics and financial reporting quality: The role of gender diversity. *International Journal of Accounting and Information Management, 31*(1),34–52. https://doi.org/10.1108/IJAIM-02-2022-0048

Alderman, C. W., & Jollineau, S. J. (2020). The effect of gender diversity on audit committee effectiveness and financial reporting outcomes. *International Journal of Accounting Research, 25*(2), 145–160.

Aliyu, S., & Ibrahim, M. (2022). Gender diversity on audit committees and financial reporting quality in emerging economies. *Journal of Accounting in Emerging Economies, 12*(4), 517–537. https://doi.org/10.1108/JAEE-06-2021-0162

Al-Shaer, H., & Zaman, M. (2018). Board gender diversity and sustainability reporting quality. *Journal of Contemporary Accounting and Economics, 14*(3), 210–222. https://doi.org/10.1016/j.jcae.2018.10.002

Ammer, M. A., & Ahmad-Zaluki, N. A. (2017). The effect of audit committee gender diversity on the quality of management earnings forecasts in Malaysia. *Asian Review of Accounting, 25*(3), 458–481. https://doi.org/10.1108/ARA-03-2016-0031

Appuhami, R., & Tashakor, S. (2021). Female directors on audit committees and earnings management: Evidence from Australia. *Pacific Accounting Review, 33*(1), 56–80. https://doi.org/10.1108/PAR-04-2019-0051

Bala, H. (2018). Corporate reporting and regulatory framework in Nigeria: The role of audit committees. *Nigerian Journal of Corporate Governance, 8*(1), 92–106.

Barde, I. M. (2019). Financial reporting and investment decisions in Nigerian listed companies.*Journal of Financial Reporting and Accounting, 17*(2), 200–215.

Carter, D. A., Simkins, B. J., & Simpson, W. G. (2019). Corporate governance, board diversity, and firm value. *Financial Review, 38*(1), 33–53.

Commey, J. K., Owusu, A. G., & Boateng, S. K. (2020). Audit committee gender diversity and financial reporting quality: Evidence from Ghana. *International Journal of Accounting and Finance, 9*(4), 210–226.

Eyenubo, S. A., Mohammed, M., & Ali, M. (2017). Audit committee attributes and financial reporting quality: A review of literature. *International Journal of Academic Research in Business and Social Sciences, 7*(6), 65–81.

Eze, J. E., & Alabi, T. R. (2023). Corporate communication channels and stakeholder engagement in Nigerian firms. *African Journal of Business Communication, 4*(2), 88–102.

Financial Accounting Standards Board. (1999). Statement of financial accounting concepts No.1: Objectives of financial reporting by business enterprises.

García-Sánchez, I. M., Martínez-Ferrero, J., & Cuadrado-Ballesteros, B. (2017). Gender diversity, financial expertise and its effects on accounting quality. *Journal of Business Research, 78*(1), 1–10. https://doi.org/10.1016/j.jbusres.2017.05.005

García-Sánchez, I. M., Martínez-Ferrero, J., & García-Benau, M. A. (2019). Independent directors, gender and financial reporting quality. *Journal of Business Ethics, 159*(3), 705–725. https://doi.org/10.1007/s10551-018-3799-7

Gull, A. A., Nekhili, M., Nagati, H., & Chtioui, T. (2018). Audit committee gender diversity and financial reporting quality in France. *Journal of Management and Governance, 22*(1), 429–456. https://doi.org/10.1007/s10997-017-9388-0

Hamdan, A. M. (2020). Audit committee gender diversity and financial reporting quality: Evidence from Jordan. *International Journal of Business and Management, 15*(9), 120–134.

International Accounting Standards Board. (2008). Exposure draft on an improved conceptual framework for financial reporting.

International Accounting Standards Board. (2023). International Financial Reporting Standards (IFRS) update. https://www.ifrs.org

International Organization of Securities Commissions. (2019). IOSCO report on good practices for audit quality. https://www.iosco.org

Javad, M., & Javad, M. (2019). Audit committee gender diversity and the likelihood of financial restatements: Evidence from Iran. Corporate Governance: *The International Journal of Business in Society, 19*(5), 1050–1074. https://doi.org/10.1108/CG-09-2018-0303

Lara, J. M. G., Osma, B. G., & Penalva, F. (2017). Board gender diversity and firm financial performance: The mediating effect of audit quality. *European*

*Accounting Review, 26*(3), 373–402. https://doi.org/10.1080/09638180.2016.1273785

Lassoued, N., Sassi, H., & Attia, M. B. R. (2021). Female audit committee members and the quality of financial disclosures: Evidence from MENA countries. *Managerial Auditing Journal, 36*(2), 189–213. https://doi.org/10.1108/MAJ-03-2020-2605

Lawal, M. A., & Onuoha, C. A. (2024). The role of financial statements in decision making: Empirical evidence from Nigerian manufacturing firms. *Journal of Accounting Perspectives, 12*(1), 67–82.

Lenard, M. J., Yu, B., York, E. A., & Wu, S. (2017). Gender diversity on boards and fraud: Evidence from SEC enforcement actions. *Managerial Auditing Journal, 32*(6), 603–626. https://doi.org/10.1108/MAJ-01-2016-1301

Luh, M. S., Antwi, S., & Amoako, G. K. (2024). Gender of firm leadership, audit committee gender diversity and audit quality: Evidence from Ghanaian universal banks. *Corporate Governance and Sustainability Review, 8*(1), 15–28. [Provide DOI if available]

Macgregor, M., & Nwaiwu, J. (2021). Corporate accounting scandals and audit quality in Nigeria: A critical review. *African Journal of Forensic Accounting, 3*(1), 49–68.

Mardjono, Y., & Chen, R. (2020). Gender diversity and audit committee effectiveness: Evidence from Indonesia. *Asian Review of Accounting, 28*(3), 411–432.

Mohammad, R., & Wasiuzzaman, S. (2020). Audit committee characteristics and financial reporting quality: Evidence from Malaysia. *Asian Journal of Accounting Research, 5*(2), 183–198.

National Bureau of Statistics. (2023). Nigerian GDP report: Q4 and full year 2023. https://www.nigerianstat.gov.ng

Nazari, J. A., Mahdi, S., & Emamgholipour, B. (2020). The impact of audit committee characteristics on financial reporting quality: Evidence from Tehran Stock Exchange. *International Journal of Economics and Financial Issues, 10*(1), 231–240.

Obigbemi, I. F., Omoye, A. S., & Oyewo, B. M. (2021). Female directors and financial reporting quality in Nigeria. *International Journal of Business and Management, 16*(4), 48–59. https://doi.org/10.5539/ijbm.v16n4p48

Okafor, C. T., & Adebayo, K. A. (2023). Enhancing financial disclosure quality in Nigeria: Stakeholder perspectives and regulatory impacts. *Journal of Accounting and Policy Research, 7*(3), 56–70.

Oluoch, J. O., Gekonge, C., & Owino, E. A. (2017). Audit committee diversity and financial reporting quality in Kenyan state corporations. *Journal of Accounting and Taxation, 9*(7), 80–90. https://doi.org/10.5897/JAT2017.0250

Oradi, J., & Izadi, A. (2020). Audit committee gender diversity and financial restatements: Evidence from Iran. *Asian Journal of Accounting Research, 5*(2), 123–139. https://doi.org/10.1108/AJAR-03-2020-0024

Petra, S. T. (2017). Corporate governance and financial reporting quality: The case of the U.S. market. *The Business Review, 8*(2), 69–74.

Ratna, W. D., & Bambang, H. (2020). Audit committee financial expertise, gender diversity and earnings management: Evidence from Indonesia. *International Journal of Innovation, Creativity and Change, 12*(12), 110–125.

Rezaee, Z., & Haidarinezhad, M. (2025). Audit committee gender diversity and financial reporting quality: Evidence from corporate governance practices. *Journal of Sustainability Research, 7*(1), https://doi.org/10.20900/jsr20250002

Uwuigbe, U., Otekunrin, O. A., Okolie, A. O., & Fagbemi, T. O. (2024). Board gender diversity, audit committee characteristics and integrated reporting quality: Evidence from Indonesia. *Journal of Accounting and Emerging Economies, 14*(2), 155–172. https://doi.org/10.1108/JAEE-07-2023-0185

Zaitul, Z., & Ilona, I. (2018). Audit committee characteristics and timeliness of financial reporting: Evidence from Indonesia. *International Journal of Economics, Commerce and Management, 6*(3), 78–91.

Zalata, A. M., Tauringana, V., & Tingbani, I. (2018). Audit committee financial expertise and earnings management: The role of gender diversity and financial expertise. *Accounting Forum, 42*(3), 210–231. https://doi.org/10.1016/j.accfor.2018.06.001