

# Innovations

## Effects of Board Gender Diversity on Audit Quality

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**Abstract:** *There exist inconsistent findings in the prior studies on the diversity on the board's impact on audit quality. The aforementioned is despite the crucial role which a robust and a diversified board of directors play in the success and sustainability of any corporate entity. Firmly rooted in agency theory, this research examined the effect that gender diversity on the board has on audit quality among the quoted Nigerian Exchange Group's consumer goods companies. Relevant information was extracted from audited yearly reports from the specified organizations for the 2012-2022 financial period. In an attempt compile necessary information and make conclusions about the population under study, descriptive and inferential statistics were used. The Multiple Least Square Regression was employed in evaluating the hypotheses. Based on the study's outcome, we concluded that board female gender has a favorable and noteworthy effect on the quoted consumer goods companies' audit quality ( $p < .000$ ). Furthermore, among Nigerian listed consumer goods companies, board size has a slight but favorable impact on audit quality ( $p < .225$ ). Consequently, the study recommends that as a matter of policy, board of directors should be made to compulsorily include one third of the female gender.*

**Keywords:** 1. Gender Equality 2. Corporate Governance 3. Audit Quality 4. Board Diversity 5. Nigeria

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### Introduction

In the past, there have been several attempts to define "audit quality." None, meanwhile, have produced a definition that is widely acknowledged and accepted. In essence, audit quality is a complicated and multifaceted idea. Nevertheless, Akinyomi and Joshua (2022) describes audit as the likelihood of auditors detecting and disclosing substantial misstatements of financial information through professional capability. The term "audit

quality" refers to factors that influence the possibility that the auditor will: (i) accomplish the primary goal of having a reasonable assurance that the financial report is free of material misstatement; and (ii) guarantee that any material flaws found are rectified or reported in the audit report. This involves properly questioning important accounting treatments and estimates that have the potential to significantly impact the reported financial situation and outcomes.

There are numerous direct and indirect variables on audit quality. Although some might highlight the direct impacts of audit quality more than others, this viewpoint is inadequate on its own to answer the question of whether audit quality has been attained in a more comprehensive context. Stakeholders' perceptions of the quality of audits differ based on their level of direct involvement in the audits as well as the lens through which they view the audits. Diverse viewpoints from stakeholders about audit quality indicate that no single factor should be taken for granted as having the primary impact on audit quality. This suggests that a more comprehensive study of audit quality is necessary to have a wider and deeper understanding of the intricacies and subtleties of the subject. It also means that each stakeholder should think more carefully about whether the activities they support could negatively impact other people's perceptions of the quality of the audit. Thus, improving audit quality requires that everyone understand one another's perspectives and how their actions may affect others' perceptions of audit quality. Because they follow high-quality auditing standards, accredited audit firms contribute to ensuring the validity, integrity, and transparency of the financial statements of audited companies. Thorough audits have the potential to enhance financial performance in addition to promoting sound internal control and corporate governance.

Corporate governance is defined as the set of procedures, norms, and practices that govern how organizations are run (Chartered Governance Institute of UK and Ireland, 2022). The system ascertains who has authority and responsibility, and who makes decisions (Akinyomi, 2012). It represents a mechanism that assists both the board of directors and management to effectively manage the difficulties of operating an organization. One of the cornerstones of a robust corporate governance framework is the board of directors (Bamwa, Akinyomi & Agama, 2020). "The corporate governance framework should ensure the strategic guidance of the company, the effective monitoring of management by the board, and the board's accountability to the company and the shareholders," according to the OECD Principles of Corporate Governance, serve as evidence of this (Oriakhi, 2020).

The board of directors must first carry out its primary duties in an efficient manner for the company to reach its objectives. The foundation of the board's responsibility for overseeing the business and making sure it succeeds consists of these duties. Generally,

the directors' board plays principal roles in the success and sustainability of any establishment; and in decreasing the possibility of financial crises and management conflicts (Bamwa, et al, 2020).The board plays a crucial role in corporate governance, strategic decision-making, accountability, and determining the future of a company. The board protects long-term success and looks out for the interests of the shareholders (Adam, 2023).The board must make decisions that support the company's financial interests and answer to the shareholders. The board also establishes and enforcesgovernance procedures to guarantee efficient management and operation oversight.The board prioritizes increasing profits, market share, and shareholder returns when determining strategic direction. In addition, it conducts financial planning, risk management, and market analysis in order to promote profitability, competitive positioning, and revenue generation.The board has a legal duty to act in the company's best interest and is principally answerable to the shareholders. In addition to managing risk, safeguarding shareholder interests, and adhering to legal requirements, its responsibilities also include financial performance.

The variety of backgrounds, ages, professions, levels of education, and life experiences that board directors collectively possess is referred to as board diversity. Although the term "diversity" is most frequently used to refer to demographics, other diverse attributes should also be included in the definition as it relates to the functioning of boards. This means that diversity can be defined in several ways, including: gender, race, age, experience from various boards of directors, experience in a variety of industries, perspective, features, and personality traits. Boards consisting of individuals with similar gender and racial backgrounds, similar ages, and similar experiences and backgrounds may find that they frequently reach the same conclusions that have worked for them in the past. While some organizations might find success with this, there are frequently better and more efficient ways to proceed. A board with greater diversity is better able to approach problems in novel ways and come up with fresh answers. Liberating oneself from "safe" thinking makes it simpler to innovate and prosper. Because diverse boards are more representative of society as a whole, they are likely to make better and more informed decisions. In addition to offering the ideal blend of creativity and experience to understand how things should operate, they should also have a balance of personality types and know how to positively disrupt their industry. The general objective of the current study is to establish the effects of board diversity on audit quality in Nigeria. The specific objectives of the study include to ascertain the effect of foreign board member, female board gender, and board size on audit quality. Firm size serves as a control variable.

## **Review of Literature**

### **Female Gender and Audit Quality**

Board diversity and auditor turnover have been connected, according to some research. (Mustafa, Chen-Ahmad & Chadron, 2018). Directors who are of the female gender are thought to enhance the capability of the board's supervisory responsibility; consequently, they are equipped with a powerful predisposition to employing a higher-ranking auditor to safeguard their prestige and maintain the organization's stakeholders' trust of the organization's stakeholders (Ilaboya & Lodikero, 2017). A company's internal control systems will be strengthened by hiring qualified auditors, which will greatly lessen information asymmetry and enhance the accuracy of accounting data (Gul, Srinidhi & Tsul, 2008).

Despite the aforementioned claims, academics have argued that the existence of directors of the female gender on an organization's board does not affect the quality of audits (Mustafa et al., 2018). They contended that the choice of an organization's auditor is made without the input of female directors. Their lack of representation on the board may be the cause of this. However, Gul et al. (2008) and Kuange (2011) claimed that the inclusion of directors of the female gender on the board considerably and favourably affects the quality of audits. Therefore, we conjecture that:

**H0<sub>i</sub>: Board female gender has no significant effect on quality of audit amidst listed consumer goods sector in Nigeria.**

#### **Board Size and Audit Quality**

Board size can be described as the entire number of directors seated on a board of directors at a given moment in time. Indeed, it is frequently regarded as a crucial component in ascertaining the board's vitality (Khudhaira, Khudhair, Al-Zubaidia, & Raja, 2019). Jensen and Mackling (1976) cited in Saidu and Aifuwa (2020) surmised that an upward change in the board's size would boost its suitability to help the administration in considerably lower agency expenses caused by unsatisfactory management. To a reasonable extent this upward change would favour the company, yet not if there are an excessive number of directors, making coordination difficult. On the other hand, McDonald and Westphal (2013) maintained larger boards have the capacity to devote sufficient time and energy to reviewing decisions of management. In contrast to this idea, Hutchinson, Mack and Plaistow (2015) claimed that inadequate decision-making by a large board could offset the advantages of a higher level of oversight. Therefore, it is thought that a smaller board will lessen processing issues and improve board monitoring. There is still much debate over whether a larger or smaller board is preferable for an organization. Researchers like Al-Najjar (2018) and Khudhaira et al (2019), found a substantial and positive correlation between the size of the board and the caliber of the audit. A little different from this perspective, Mustafa et al (2018) stated that board size has a detrimental impact on audit quality. Nevertheless, Mustafa, Che-Ahmad and

Chadron (2017) discovered no proof of a connection between audit quality and board size. Consequently, we postulate that:

**H0<sub>ii</sub>: Board size has no significant effect on quality of audit amidst listed consumer goods sector in Nigeria.**

### **Firm Size and Audit Quality**

Similar to the practice in some prior studies, the current study introduced firm size as a control variable (Aifuwa & Embele, 2019; Akinyomi & Joshua, 2022). Because more often than smaller firms, larger firms are likely to hire the services of the Big Four auditors, the size of the firms has an impact on the quality of the audits (Aifuwa & Embele, 2019). The big four audit firms are noted for their efficiency and effectiveness. They also have capable manpower. It is therefore expected that due to the capability to use the large audit firms' services, large firms are likely to secure quality audit.

### **Theoretical Framework**

#### **Agency theory**

Agency theory represents a difference of opinion between the managers and owners that is somewhat resolved by the financial reporting. Regular financial reporting is one way the owners can keep an eye on the employment agreements. The theory looks at the relationship between incentives and self-interest and contends that self-interest underpins a large portion of organizational life. Managers have the ability to selectively disclose information to shareholders due to the information asymmetry that exists between them. This kind of control over important information exacerbates the conflict between shareholders (the principals) and managers (the agents). The purpose of the board of directors is to serve as a trustworthy informational resource for large company shareholders, enabling efficient management oversight. (Reddy & Jadhav, 2019).

Managerial actions could be compatible with the interests of shareholders if boards disseminate more comprehensive and trustworthy information to shareholders. Among the parameters that are utilized for assessing the capacity of board are quantum of subcommittees, size of board memberships with experience in administration and the business sector, proportion of long-serving membership, meetings' regularity, as well as the quantity of members who stand in for particular ownership groups. Some previous researches have employed agency theory in assessing the effect of diversity of genders on corporate decision-making (Ntim, 2015; Reddy & Jadhav, 2019).

#### **Methodology**

The research design used in the study was called "ex-post facto." The consumer goods listed in the Nigerian Exchange Group as at December 2022 represented the general population. The audited annual reports of the chosen companies for the years 2012–2022

provided secondary data. The analysis was carried out using multiple regression. The model for the study is as follows:

$$ADQ_{it} = \alpha_0 + \alpha_1 BFG_{it} + \alpha_2 BSZ_{it} + \alpha_3 FSZ_{it} + \mu \dots\dots\dots (1)$$

**Where:** ADQ = Audit quality, BFG = board female gender, BSZ = board size, FSZ = firm size,

$\alpha_0$  = Constant. The parameters:  $\alpha_1$ ,  $\alpha_2$ , and  $\alpha_3$  symbolize the coefficients.  $it$  = firm (i) at time (t). In line with previous studies the study's variables are measured like this: audit quality is measured as '1' indicates that the client has used a Big Four auditor's services during the fiscal year; '0' indicates otherwise (Khudhair et al., 2019). Board female gender is measured as a percentage of a woman on the team (Aifuwa & Embele, 2019). The sum total of directors is used for estimating the size of the board (Mustafa, et al., 2018). Meanwhile the natural logarithm of the total assets of the chosen companies is used to calculate firm size (Aifuwa & Embele, 2019).

**Results and Discussion**

**Table 1: Descriptive Statistics**

	ADQ	BFG	BSZ	FSZ
Minimum	.00	.00	7.00	6.83
Maximum	1.00	57.14	17.00	8.86
Mean	.9545	19.5524	10.4205	7.8655
Std. Deviation	.20949	8.92993	2.61614	.55279

Table 1 presented that audit quality (ADQ) was at minimum value of .00, while the maximum value was at 1.00. In addition, it displayed that the mean value of audit quality was at .9545, and a standard deviation of .20949. This implies that majority of the companies selected engaged the services of the big four audit firms in conducting the audit and assurances of their financial statements.

Similarly, the table showed that board female gender (BFG) was at minimum value of .00, while the maximum value was at 57.14. In addition, it displayed that the mean value of board female gender was at 19.5524, and a standard deviation of 8.92993. This means that although few of the companies do not have the presence of female gender in their board membership, majority have female gender in the board. On the average, the table indicated 20 percent female gender in the board.

Furthermore, the table showed that board size (BSZ) was at minimum value of 7.00, while the maximum value was at 17.00. In addition, it displayed that the mean value of board size was at 10.4205, and a standard deviation of 2.61614. This indicates that the typical board membership of selected companies stands at 10.

**Table 2: Correlation of Variables**

	ADQ	BFG	BSZ	FSZ
ADQ	1.000	.481**	.077	.311**
BFG		1.000	-.212*	.195
BSZ			1.000	.298**
FSZ				1.000

Table 2 displayed correlations between the variables under investigation. The findings demonstrated a positive correlation of 0.481 and 0.077, respectively, between the size of the board and the presence of women when audit quality was at unit value. The firm size was positive, at 0.311. The Pearson correlation matrix results also showed that there was no multicollinearity, with none of the related variables showing perfect correlations. When a Pearson's correlation coefficient exceeds 0.80, multicollinearity is typically suspected.

**Table 3: Multiple Least Square**

Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	.092	.275	.334	.739
BFG	.011	.002	4.820	.000
BSZ	.010	.008	1.221	.225
FSZ	.069	.038	1.826	.071
R-squared	.293	Mean dependent var	.9545	
Adjusted R Square	.267	S.D. dependent var	.20949	
S.E. of regression	.17932			
Sum squared residual	2.701			
F-statistic	11.579			
Prob(F-statistic)	.000			

In Table 3, the coefficient of determination (R<sup>2</sup>) with audit quality was found to be 0.293, meaning that only 29% of the variations could be accounted for by the variables that are independent. The 0.267 value for the adjusted coefficient of determination suggests that only roughly 26.7% of the systematic variations are explained, leaving 73.3% unexplained and thus captured by the stochastic disturbances.

The small determination coefficient was a signal of extremely high audit quality amid selected companies. The results are suitable for prediction, as indicated by the minimal standard error of regression value of 0.17932 and overall coefficient statistic of 11.579. The outcome demonstrated that, in contrast to board size and firm size which were not statistically significant, board female gender is.

## Discussion of Findings

The result displayed the board female gender as statistically important, denoting that board female gender has a remarkable impact on the audit quality of Nigerian quoted consumer goods sector. The outcome defies the a priori prediction that there would be no statistical significance. It follows that having a female director on the board gives her the authority to question the executive director, which raises the caliber of the annual reports and, consequently, the caliber of the audit. This implies that higher audit quality levels are linked to the presence of a female director. This supported recent research findings such as Laboya and Lodikero (2017), Gul et al. (2008), and Kuange (2011) who asserted that having directors of the female gender on the board significantly and favourably affects the quality of audits. However, this finding runs counter to Mustafa et al. (2018)'s contention that the presence of a female director is not significantly associated with higher audit quality.

Furthermore, the outcome of the current study affirms the a priori expectation of no statistical significance. The inference is that board size has no discernible effect on quality of audit in Nigerian consumer goods companies that are quoted. This assertion aligns with Hutchinson, et. A. (2015) who made the case that bad decision-making by a large board could offset the advantages of a boosted degree of oversight by an extensive one. This result contradicts those of researchers such as Al-Najjar (2018) and Khudhaira et al (2019) who revealed a favorable and significant relationship between audit quality and board size.

Lastly, firm size has a positive coefficient value but is not statistically significant. This suggested that audit quality is not significantly impacted by the size of the firm. This, nevertheless, contradicts the outcome of Aifuwa and Embele (2019) which suggest that larger firms are associated with higher audit quality.

## Conclusion and Recommendations

The crucial role of a robust and a diversified board of directors in the success and sustainability of any corporate entity cannot be overemphasized. The current research assessed the effect of gender diversity on corporate board of directors and the quality of audit among the quoted consumer goods companies in the Nigerian Exchange Group. Considering the study's outcomes, we concluded that board female gender has a major and favourable impact on the audit quality among the listed consumer goods firms in Nigeria. Furthermore, the quality of audits is positively but marginally impacted by board size among listed Nigerian consumer goods companies. Consequently, the study recommends that as a matter of policy, board of directors should be made to compulsorily include one third of the female gender. The more the proportion of the females in the board, the better for such an organization.

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