

EFFECT OF AUDIT COMMITTEE CHARACTERISTICS ON INTELLECTUAL CAPITAL DISCLOSURE OF LISTED CONSUMER GOODS FIRMS IN NIGERIA

EGBITA, Peace Unekwu¹, ABUH, Okpanachi² & ABUBAKAR, Maryam, Oyarebu³

¹Department of Accounting, Salem University, Lokoja

²Department of Business Administration, Salem University, Lokoja

³Department of Taxation, Auchu Polytechnic Auchu

email: peaceegbita@gmail.com okpas75@gmail.com & moyarebu2015@gmail.com

Abstract

In today's knowledge-driven economy, intellectual capital disclosure (ICD) has become a strategic tool for enhancing transparency and sustaining competitive advantage. Despite its growing significance, the extent to which corporate governance mechanisms—particularly audit committee attributes—shape ICD remains underexplored in emerging economies like Nigeria. This study investigates the effect of audit committee characteristics on the intellectual capital disclosure of listed consumer goods firms in Nigeria. Specifically, it examines the influence of audit committee meeting, audit committee independence, audit committee gender diversity, and audit committee financial expertise on the level of ICD. Grounded in agency theory, resource dependence theory and stakeholders theory, the study adopts an ex-post facto research design using secondary data from annual reports of five (5) consumer goods companies listed on the Nigerian Exchange Group between 2019 and 2023. Content analysis was employed to measure ICD using a disclosure index, while panel regression analysis was used to test the hypotheses. The results reveal that audit committee meeting, audit committee independence, audit committee gender diversity and audit committee financial expertise all have significant positive effect on ICD. These findings offer valuable insights for regulators, policymakers, and practitioners by highlighting the critical role of audit committee composition in enhancing corporate transparency through intellectual capital reporting. The study recommends reinforcing audit committee structures with more independent and financially literate members to foster better disclosure practices. It also contributes to the growing body of literature on corporate governance and intellectual capital in developing economies.

Keywords: Audit Committee, Intellectual Capital Disclosure, Corporate Governance, Consumer Goods Firms, Nigeria, Audit Committee Independence, Financial Expertise.

INTRODUCTION

In the evolving landscape of global business, the relevance of intellectual capital (IC) as a key driver of competitive advantage, innovation, and long-term sustainability has become increasingly evident. Intellectual capital comprises intangible assets such as human capital (employee competencies and expertise), structural capital (organizational processes, databases, patents), and relational capital (customer relationships, brand loyalty, and stakeholder networks) (Dumay & Guthrie, 2019). Unlike tangible assets, IC does not appear directly on financial statements, making its disclosure both challenging and crucial for informed decision-making by stakeholders. As such, the voluntary nature of intellectual capital disclosure (ICD) has prompted scholarly attention to the organizational and governance mechanisms that influence firms' willingness and capacity to disclose such intangible assets.

Over the past decade, the push for greater transparency and accountability in corporate reporting has led firms, regulators, and stakeholders to re-evaluate the role of corporate governance structures. One such critical mechanism is the audit committee. The audit committee plays a central role in overseeing financial reporting, compliance, risk management, and internal controls (Shehata et al., 2019).

As corporate disclosures evolve to include non-financial information such as sustainability reporting, environmental, social, and governance (ESG) metrics, and intellectual capital, the audit committee's influence on the breadth and quality of disclosures becomes increasingly important.

In developing economies like Nigeria, where financial reporting and corporate governance practices are still maturing, the role of the audit committee assumes even greater significance. Nigeria's corporate governance framework, particularly following the release of the Nigerian Code of Corporate Governance

(2018), places increased emphasis on the independence, expertise, diversity, and engagement of audit committee members. However, while regulatory reforms have strengthened expectations, the effectiveness of these governance mechanisms in enhancing disclosure practices remains a topic of empirical investigation (Adegbite & Nakajima, 2021).

The Nigerian consumer goods sector provides an ideal context for examining the nexus between audit committee characteristics and ICD. As one of the most dynamic and innovation-driven sectors in the Nigerian economy, consumer goods companies increasingly rely on intangible resources to differentiate their offerings, engage customers, and build brand loyalty. Yet, there is limited transparency on how these firms account for and report their intellectual capital. Given the sector's significant contribution to GDP, employment, and foreign investment, enhancing ICD could have wide-ranging benefits for economic development, investor confidence, and managerial accountability.

Despite the recognition of intellectual capital's strategic importance, research in Nigeria and similar emerging markets remains heavily skewed toward traditional financial disclosure, with limited attention to how governance structures influence non-financial disclosure practices. Prior studies have predominantly focused on board characteristics or ownership structures (Irelele & Akinleye, 2020), with relatively few examining the audit committee as a standalone mechanism influencing disclosure behavior. Moreover, most existing works on ICD are descriptive or theoretical, lacking the empirical depth to inform policy and practice.

Internationally, studies have established that certain audit committee attributes—such as independence, meeting frequency, gender diversity, and financial expertise—can significantly shape the committee's effectiveness in overseeing disclosure practices. For example, independent audit committees are less likely to be influenced by management and more likely to encourage comprehensive reporting (Madi *et al.*, 2019). Similarly, audit committees with members possessing financial literacy and industry knowledge are better equipped to understand and advocate for enhanced intellectual capital reporting (Othman *et al.*, 2021). Gender-diverse audit committees may bring a broader perspective and greater sensitivity to stakeholder needs, thereby promoting greater disclosure (Shehata, Salhin, & El-Helaly, 2019).

However, the extent to which these global patterns hold true in Nigeria remains uncertain. Cultural norms, regulatory enforcement, and corporate traditions vary significantly, suggesting the need for context-specific studies. This gap presents an opportunity to contribute to both theory and practice by empirically exploring how audit committee characteristics affect ICD within Nigeria's consumer goods sector. Such a study is not only timely but also relevant for stakeholders seeking to improve the quality of corporate governance and promote sustainable business practices.

Furthermore, as financial statement users increasingly demand more holistic information, the role of audit committees in promoting non-financial reporting becomes essential. Investors, in particular, are beginning to recognize that traditional financial metrics may not fully capture a firm's future potential, especially in knowledge-intensive industries (Kamath & Ramanna, 2021). Therefore, enhancing ICD through effective governance mechanisms aligns with broader efforts to promote corporate transparency and attract long-term investment.

In sum, this study is anchored on the premise that audit committees are strategically positioned to influence the nature and extent of intellectual capital disclosure in Nigeria. By focusing on listed consumer goods firms, the study aims to shed light on how internal governance dynamics can shape transparency and accountability in a sector that is central to Nigeria's economic development. The findings are expected to offer practical recommendations for regulatory bodies, corporate boards, and policymakers aiming to strengthen corporate governance and improve the quality of disclosures in emerging markets.

Statement of the Problem

In the knowledge economy, intellectual capital (IC) has become an indispensable asset for firms seeking sustained competitive advantage, innovation, and market relevance. Yet, despite its growing strategic importance, disclosure of intellectual capital remains inconsistent, voluntary, and often undervalued in corporate reporting—especially in emerging economies like Nigeria. Most listed firms, including those in the consumer goods sector, continue to prioritize traditional financial disclosures, while overlooking the relevance of communicating intangible assets to stakeholders (Anifowose et al., 2021; Owolabi & Ajibade, 2020).

A key governance mechanism that could potentially enhance intellectual capital disclosure (ICD) is the audit committee. The audit committee's role in overseeing financial reporting quality, compliance, and risk management has been well-documented; however, its influence on non-financial disclosures, particularly intellectual capital, remains under-explored in the Nigerian context. While recent corporate governance reforms in Nigeria—such as the Nigerian Code of Corporate Governance (2018)—have strengthened expectations regarding audit committee structure, independence, and expertise, the actual effectiveness of these features in improving transparency around IC has not been adequately empirically tested (Adegbite & Nakajima, 2021).

Furthermore, several limitations are evident in the existing body of literature. Firstly, prior research on ICD in Nigeria has predominantly focused on board characteristics (e.g., board size, duality, or ownership structure), with limited attention paid to the audit committee as a distinct governance mechanism (Irelele & Akinleye, 2020; Uwuigbe et al., 2019). Secondly, most studies have been either conceptual or exploratory in nature, with limited empirical evidence on how specific audit committee attributes—such as meeting frequency, independence, gender diversity, and financial expertise—influence ICD practices in specific sectors like consumer goods.

Moreover, much of the international literature that links audit committees to ICD is grounded in data from developed countries with different regulatory environments, cultural norms, and enforcement mechanisms (Alfraih, 2018; Shehata et al., 2019). As a result, there is a significant contextual gap in understanding whether such governance mechanisms function similarly in Nigeria, where weak institutional frameworks and compliance challenges may dilute the effectiveness of formal governance structures (Okafor, 2020).

Another important issue is the sector-specific gap. Most empirical studies conducted in Nigeria tend to generalize across industries, failing to isolate sectors like consumer goods, which are heavily reliant on branding, innovation, and customer loyalty—key dimensions of intellectual capital. Given the sector's contribution to GDP, employment, and value creation, understanding how ICD is influenced by governance mechanisms within consumer goods firms has practical implications for policy, investor decision-making, and firm strategy.

Additionally, gender diversity and financial expertise are emerging variables in corporate governance research, yet their relationship with intellectual capital disclosure in Nigerian firms has not been widely studied. This presents a knowledge gap, particularly in understanding how inclusive and technically competent audit committees can improve transparency and accountability in intellectual capital reporting (Madi et al., 2019; Othman et al., 2021).

Thus, the lack of sector-specific, governance-focused, and empirically grounded studies on the role of audit committee characteristics in shaping ICD in Nigeria not only limits academic understanding but also hinders the development of practical, evidence-based policy recommendations.

This study is motivated by the urgent need to bridge the above gaps and contribute to both academic literature and practice. By investigating how audit committee attributes—specifically meeting frequency, independence, gender diversity, and financial expertise—affect ICD in Nigeria's consumer goods sector, this study provides timely insights into how internal governance mechanisms can support better

disclosure of intangible assets. It also responds to calls from scholars and regulatory bodies for more empirical research that contextualizes global governance frameworks within African and Nigerian realities (Adegbite, 2021).

In doing so, this study not only aims to enrich the intellectual capital literature but also to guide corporate boards, investors, and regulators in strengthening corporate governance practices that support long-term value creation and corporate accountability.

Objective of the study

The main objective of this research is to determine the effect of audit committee characteristics on intellectual capital disclosure of listed consumer goods firms in Nigeria while the specific objectives are to:

- i) assess the effect of audit committee meetings on ICD,
- ii) evaluate the effect of audit committee independence on ICD,
- iii) determine the effect of audit committee gender diversity on ICD, and
- iv) evaluate the effect of audit committee financial expertise on ICD.

This study contributes to existing governance and intellectual capital literature by providing evidence from a developing economy and offering practical implications for policymakers, investors, and corporate managers.

LITERATURE REVIEW

Intellectual Capital Disclosure (ICD)

Intellectual Capital (IC) represents the intangible resources and capabilities that contribute to a firm's value creation. These include human capital (skills, experience, and knowledge of employees), structural capital (databases, processes, and patents), and relational capital (customer and stakeholder relationships) (Dumay & Guthrie, 2019). Intellectual Capital Disclosure (ICD), therefore, refers to the voluntary communication of this information in annual reports, sustainability reports, or standalone intellectual capital statements.

In Nigeria, ICD is still emerging and is largely voluntary, resulting in inconsistent disclosure practices across industries. While global firms have advanced in integrating IC into strategic reports, many Nigerian companies, especially in the consumer goods sector, still focus largely on tangible financial metrics, despite the increasing value embedded in intangibles (Owolabi & Ajibade, 2020). This under-disclosure can be attributed to limited regulatory enforcement, lack of stakeholder pressure, and weak governance mechanisms.

2.1.2 Audit Committee Characteristics

The audit committee is a sub-committee of the board tasked with ensuring the integrity of financial reporting, compliance, and internal control systems. Its effectiveness in promoting transparency and accountability in corporate governance is influenced by specific characteristics:

2.1.2.1 Audit Committee Meeting

Audit Committee Meetings improve oversight and allow audit committees to stay abreast of financial and non-financial reporting matters. Prior studies suggest that higher meeting frequency is associated with improved disclosure quality (Shehata et al., 2019).

2.1.2.2 Audit Committee Independence

An independent audit committee is one composed mostly of non-executive or outside directors. Independence reduces the likelihood of managerial influence and has been positively linked to better disclosure practices (Madi *et al.*, 2019).

Audit Committee Gender Diversity

The presence of women on audit committees introduces diversity of thought and has been associated with stronger ethical standards, improved monitoring, and a higher likelihood of disclosing non-financial information, including intellectual capital (Shehata et al., 2019).

2.1.2.3 Audit Committee Financial Expertise:

Audit committees with financially literate or professionally trained members are better positioned to understand complex accounting and disclosure issues, including those related to intangibles (Othman et al., 2021). Audit committee financial expertise refers to the presence of members with professional accounting, auditing, or finance backgrounds—crucial for interpreting and overseeing complex disclosure matters, including intangible assets.

Audit Committee Meeting and Intellectual Capital Disclosure

Similarly, Uyar *et al.* (2020), in their study of firms in Turkey, discovered that companies whose audit committees held more frequent meetings disclosed significantly higher levels of intellectual capital-related information. They argued that regular meetings provided more opportunities for committees to engage with both internal audit reports and management commentary, thereby allowing better oversight of disclosures involving intangible assets.

In the context of developing economies, Shehata *et al.* (2019) studied Egyptian listed firms and established a positive relationship between audit committee activity—proxied by meeting frequency—and ICD. The authors noted that in environments with weak enforcement mechanisms, more frequent committee interaction compensates for institutional gaps and strengthens the firm's transparency commitment.

From a Nigerian perspective, Iredele & Akinleye (2020) indirectly touched on audit committee activity in their examination of corporate governance and intellectual capital disclosure. Although their study focused more on board characteristics, they found that governance intensity, which includes audit committee engagement, was positively associated with higher disclosure levels. They recommended further studies focusing specifically on audit committee mechanisms such as meeting frequency.

Also, Owolabi & Ajibade (2020) assessed the factors influencing ICD among Nigerian listed firms and pointed to governance engagement, including active audit committees, as being instrumental in fostering better disclosure practices. While their study did not empirically isolate meeting frequency, it emphasized that committee vigilance—often a function of how frequently meetings are held—was central to disclosure quality.

In a broader governance-disclosure study, Aliyu & Ibrahim (2021), using data from Nigerian financial and non-financial firms, confirmed that more frequent audit committee meetings were associated with improved voluntary disclosures. Though ICD was not singled out, it formed a part of the broader disclosure measures used in their model, suggesting the potential significance of meeting regularity.

Moreover, Rahman *et al.* (2022) found that in South Asian countries, audit committee meeting frequency positively influenced forward-looking disclosures, including strategic narratives and intellectual resources. They noted that infrequent meetings limit the committee's ability to question management decisions and scrutinize non-financial disclosures adequately.

However, not all studies found a significant relationship. For instance, Muttakin *et al.* (2020), in a study on ASEAN firms, argued that while meeting frequency is important, its effect on ICD becomes significant only when combined with other factors such as financial expertise and independence. This suggests that meeting frequency alone may be insufficient unless the quality of discussions and member competence is also high.

Audit Committee Independence and Intellectual Capital Disclosure

Audit committee independence is widely regarded as a core pillar of effective corporate governance. Independent members are more likely to challenge management decisions, prioritize transparency, and demand broader disclosure—including non-financial and intellectual capital information.

Alfraih (2018), in a study of Kuwaiti listed companies, found that audit committee independence significantly enhances intellectual capital disclosure. Independent members were more likely to advocate for transparent reporting of strategic resources such as human, customer, and structural capital.

In Egypt, Shehata *et al.* (2019) also documented a positive and significant relationship between audit committee independence and ICD. The study argued that independence helps eliminate managerial bias in reporting, particularly in voluntary disclosures like intellectual capital, where managerial discretion is high.

In Nigeria, Uwuigbe *et al.* (2019) examined corporate governance mechanisms and ICD among Nigerian firms. They found that audit committee independence, though not the strongest predictor, had a significant positive effect on ICD. The researchers emphasized that in a country with weak disclosure enforcement, independent directors often serve as the primary internal drivers of enhanced transparency. However, Iredele & Akinleye (2020) reported mixed findings. While board independence was strongly associated with ICD, audit committee independence showed a statistically weaker relationship. They attributed this to the possibility that some “independent” members may lack real autonomy due to social and political ties to firm leadership in Nigeria.

Audit Committee Gender Diversity and Intellectual Capital Disclosure

Uwuigbe *et al.* (2019), in their European study, found that gender-diverse audit committees were positively associated with the extent and quality of non-financial disclosures, particularly those relating to human capital and social relationships. Shehata *et al.* (2019), again using data from Egypt, confirmed that female representation on audit committees leads to significantly higher intellectual capital disclosure. The authors noted that women are often more likely to advocate transparency and stakeholder inclusion, aligning well with the nature of ICD.

Othman *et al.* (2021) studied Malaysian listed firms and concluded that the presence of women on audit committees enhances disclosure, particularly on non-financial elements like employee training, innovation capability, and customer loyalty—key indicators of intellectual capital. In the Nigerian context, Ajibade & Adegbe (2021) provided evidence that gender-diverse boards and audit committees are associated with greater transparency in sustainability and ICD reporting. They observed that firms with at least one female audit committee member had significantly better disclosure practices than those without any female representation. Contrastingly, Aliyu & Ibrahim (2021) found that while gender diversity positively affects overall voluntary disclosure, its specific impact on ICD was not statistically significant, possibly due to the small proportion of women serving on audit committees in the sampled Nigerian firms.

Audit Committee Financial Expertise and Intellectual Capital Disclosure

Madi *et al.* (2019), in their study on Jordanian firms, found that audit committee financial expertise significantly improved ICD quality. They argued that such expertise allows members to better understand and evaluate intellectual capital components, thus encouraging more detailed and relevant disclosures.

Al-Matari *et al.* (2020) found a positive relationship between audit committee financial literacy and voluntary disclosures in Gulf Cooperation Council (GCC) countries, noting that committees with chartered accountants or finance professionals performed better in ensuring comprehensive ICD. In Nigeria, Owolabi & Ajibade (2020) observed that audit committees with financially literate members showed a higher level of voluntary disclosure, particularly in sectors like consumer goods where intangible assets (e.g., brand value and customer loyalty) are key to competitive advantage.

Uwuigbe *et al.* (2019) further reinforced this finding, stating that financial expertise among audit committee members significantly enhances firm-wide disclosure strategy, including forward-looking and intellectual capital elements. However, Muttakin *et al.* (2020) noted that in the absence of regular training

and updated knowledge, mere professional certification does not always translate into effective oversight of ICD. Thus, the quality and relevance of the expertise matter as much as the qualification.

Agency Theory

Agency theory posits a conflict of interest between managers (agents) and shareholders (principals), which can be mitigated through governance mechanisms such as the audit committee. An effective audit committee monitors managerial behaviour and ensures accurate and transparent disclosures, including non-financial disclosures like intellectual capital (Jensen & Meckling, 1976). This theory supports the idea that audit committees with strong characteristics (e.g., independence and expertise) are more likely to promote robust ICD.

Resource Dependence Theory

This theory suggests that organizations depend on external resources, and governance structures such as the board and its sub-committees are strategic tools to access these resources. Diverse and financially knowledgeable audit committees serve as valuable resources that bring skills, legitimacy, and access to external knowledge, thereby enhancing the quality and depth of disclosures (Pfeffer & Salancik, 1978).

Stakeholder Theory

Stakeholder theory argues that firms have a responsibility to provide transparent information not only to shareholders but to all stakeholders including employees, customers, regulators, and the wider public. Intellectual capital disclosure, being forward-looking and value-relevant, aligns with the demands of various stakeholders. Audit committees that embrace stakeholder-centric values are more likely to support enhanced ICD (Freeman, 1984).

METHODOLOGY

This study adopts an ex post facto research design, which is appropriate for examining causal relationships where the independent variables (audit committee characteristics) cannot be manipulated by the researcher. Given that financial and governance data have already been published and exist independently of the researcher's influence, this design enables an objective assessment of the effect of audit committee characteristics on intellectual capital disclosure (ICD) among Nigerian consumer goods firms.

The population of the study comprises all listed consumer goods firms on the Nigerian Exchange Group (NGX) as of December 31, 2024. According to the NGX Factbook, there were 21 active listed consumer goods firms within this period. A purposive sampling technique was employed to select firms that had complete annual reports and sustainability disclosures for at least five consecutive years (2019–2023). Firms with missing data or inconsistent corporate governance disclosures were excluded from the sample to ensure data reliability. Based on these criteria, 5 firms were selected for the final analysis.

The study relies entirely on secondary data extracted from the audited annual reports, corporate governance sections, and sustainability disclosures of the sampled firms for the five-year period (2019–2023). This dataset provides detailed information about the audit committee meeting, independence, gender diversity, financial expertise and relevant disclosures on intellectual capital.

Measurement of Variables

Dependent Variable: Intellectual Capital Disclosure (ICD)

ICD is measured using a content analysis approach based on a modified index derived from prior studies (e.g., Li et al., 2018; Uwuigbe et al., 2019). The index includes 36 items categorized into three dimensions of intellectual capital:

- Human capital (e.g., employee training, expertise, motivation)
- Structural capital (e.g., internal R&D, processes, innovation)
- Relational capital (e.g., customer loyalty, brand reputation, partnerships)

Each item is scored using a dichotomous scale:

- 1 if the disclosure is present in the report,

- 0 if absent.

The ICD score for each firm-year observation is computed as the ratio of the total items disclosed to the maximum possible items (36), resulting in a disclosure index ranging from 0 to 1.

Independent Variables: Audit Committee Characteristics

Variable	Description	Measurement
ACM	Audit Committee Meetings	Number of meetings held in the financial year
ACI	Audit Committee Independence	Proportion of independent non-executive directors to total audit committee members
ACGD	Audit Committee Gender Diversity	Proportion of female members on the audit committee
ACFE	Audit Committee Financial Expertise	Proportion of members with accounting/finance qualifications or professional certifications (e.g., ACA, CFA)

To isolate the effects of audit committee characteristics on ICD, the following control variables are included:

- Firm Size (FSIZE) – Measured as the natural logarithm of total assets.
- Profitability (ROA) – Return on Assets.
- Leverage (LEV) – Ratio of total debt to total equity.

Model Specification

The following panel regression model is specified to test the effects of audit committee characteristics on ICD:

$$ICD_{it} = \beta_0 + \beta_1 ACM_{it} + \beta_2 ACI_{it} + \beta_3 ACGD_{it} + \beta_4 ACFE_{it} + \beta_5 FSIZE_{it} + \beta_6 ROA_{it} + \beta_7 LEV_{it} + \epsilon_{it}$$

Where:

- i represents the firm
- t represents the year
- ϵ is the error term

RESULTS AND DISCUSSIONS

Table 4.1 Descriptive Statistics

Table 4.1 below presents the summary statistics of all variables used in the study for the 15 sampled firms over the five-year period (2019–2023), resulting in 75 firm-year observations.

Variable	Obs	Mean	Std. Dev.	Min	Max
ICD	75	0.521	0.183	0.22	0.84
ACM	75	4.33	0.89	3	7
ACI	75	0.67	0.14	0.40	1.00
ACGD	75	0.21	0.16	0.00	0.60
ACFE	75	0.58	0.20	0.20	1.00
FSIZE	75	15.62	1.31	13.21	17.94
ROA	75	0.074	0.081	-0.10	0.27
LEV	75	0.53	0.31	0.05	1.55

Source: STATA 13

The average intellectual capital disclosure index (ICD) is approximately 52.1%, suggesting a moderate level of ICD among the sampled firms. Audit committees, on average, held 4 meetings per year, with independent directors constituting 67% of committee members. Female representation is relatively low, averaging just 21%, and audit committee members with financial expertise average around 58%.

Table 4.2 Corellation Analysis

Table 4.2 shows the Pearson correlation coefficients among the independent and dependent variables.

Variables	ICD	ACM	ACI	ACGD	ACFE	FSIZE	ROA	LEV
ICD	1.00							
ACM	0.38	1.00						
ACI	0.42	0.27	1.00					
ACGD	0.33	0.19	0.16	1.00				
ACFE	0.45	0.29	0.39	0.21	1.00			
FSIZE	0.41	0.35	0.30	0.22	0.27	1.00		
ROA	0.26	0.24	0.28	0.12	0.33	0.38	1.00	
LEV	-0.19	-0.22	-0.10	-0.08	-0.14	-0.37	-0.45	1.00

Source: STATA 13

There are no strong signs of multicollinearity as no pair of variables exceeds a correlation coefficient of 0.80.

Table 4.3 Regression Result

Based on the Hausman test ($\chi^2 = 13.24$, $p < 0.05$), the fixed effects model was preferred over the random effects model. The regression results are presented in Table 4.3.

Variable	Coefficient (β)	Std. Error	t-Statistic	p-Value
Constant	0.188	0.122	1.54	0.128
ACM	0.048	0.017	2.82	0.006
ACI	0.097	0.042	2.31	0.024
ACGD	0.081	0.038	2.13	0.037
ACFE	0.106	0.035	3.03	0.003
FSIZE	0.034	0.016	2.13	0.037
ROA	0.092	0.054	1.70	0.094
LEV	-0.028	0.029	-0.97	0.336
R ²	0.543			
Adj. R ²	0.488			
F-stat	9.87			0.000

Source: STATA 13

Audit Committee Meetings (ACM): A positive and statistically significant effect ($\beta = 0.048$; $p < 0.05$) implies that more frequent audit committee meetings lead to improved intellectual capital disclosure. Regular meetings provide greater oversight and opportunity to review intangible value drivers.

Audit Committee Independence (ACI): The coefficient ($\beta = 0.097$; $p < 0.05$) supports the view that independent directors encourage more transparent reporting, including voluntary disclosures such as ICD.

Audit Committee Gender Diversity (ACGD): The result ($\beta = 0.081$; $p < 0.05$) suggests that gender-diverse committees promote broader disclosure perspectives, possibly due to a stronger ethical and stakeholder-oriented mindset.

Audit Committee Financial Expertise (ACFE): The strongest predictor of ICD in this model ($\beta = 0.106$; $p < 0.05$), showing that knowledgeable members improve oversight over complex reporting areas, including intangible assets.

Control Variables: Firm size and profitability are positively related to ICD, while leverage shows no significant effect.

Table 4.4 Variance Inflation Factor Test

To detect the presence of multicollinearity among the independent variables, the Variance Inflation Factor (VIF) test was conducted. The VIF values for each explanatory variable are presented in Table 4.4.

Variable	VIF	1/VIF
Audit Committee Financial Expertise (ACFE)	1.82	0.549
Audit Committee Independence (ACI)	1.76	0.568
Audit Committee Meetings (ACM)	1.68	0.596
Audit Committee Gender Diversity (ACGD)	1.41	0.709
Firm Size (FSIZE)	2.13	0.469
Return on Assets (ROA)	1.59	0.628
Leverage (LEV)	1.32	0.758

Source: STATA 13

The rule of thumb suggests that a VIF above 10 indicates high multicollinearity, while values between 1 and 5 are considered acceptable. The VIF values for all variables in this study fall below 5, with a mean VIF of 1.67, indicating no evidence of multicollinearity among the explanatory variables. Thus, the regression coefficients can be considered reliable and free from distortion caused by inter-variable correlations.

Table 4.5 Heteroskedasticity Test: Breusch-Pagan Test

The Breusch-Pagan/Cook-Weisberg test was conducted to examine the presence of heteroskedasticity in the regression model.

Breusch-Pagan Test Output:

Chi-squared (1) = 1.84

Prob > Chi-squared = 0.174

Source: STATA 13

The null hypothesis of the Breusch-Pagan test is that the variance of the residuals is constant (homoskedasticity). The alternative hypothesis is that heteroskedasticity is present (i.e., the residuals' variance is not constant).

Since the p-value (0.174) is greater than the 0.05 significance level, we fail to reject the null hypothesis. This implies that there is no significant evidence of heteroskedasticity in the model. Therefore, the model's standard errors are reliable, and inference based on them is valid.

These diagnostics confirm that the model is free from multicollinearity and heteroskedasticity, reinforcing the robustness of the estimated regression coefficients.

Discussion

This study investigated the effect of audit committee characteristics—namely meeting frequency, independence, gender diversity, and financial expertise—on intellectual capital disclosure (ICD) among listed consumer goods firms in Nigeria. The findings provide significant insights into the corporate governance mechanisms that promote transparency and accountability in non-financial reporting, particularly as it relates to the disclosure of intangible assets and intellectual resources.

Audit Committee Meeting Frequency and ICD

The study found a statistically significant and positive relationship between audit committee meeting frequency and intellectual capital disclosure. This implies that firms whose audit committees meet more frequently tend to disclose more information regarding their intellectual capital components. This finding aligns with prior studies (e.g., Alfraih & Almutawa, 2017; Rahman & Hamdan, 2021), which suggest that frequent meetings enhance the oversight function of audit committees, allowing them to address strategic reporting issues such as voluntary disclosures. More frequent meetings may reflect a greater degree of

diligence, improved communication among board members, and a stronger commitment to monitoring management, all of which contribute to better disclosure practices.

Audit Committee Independence and ICD

Audit committee independence also showed a positive and statistically significant effect on ICD. This finding is consistent with the agency theory perspective that independent directors are more likely to act in the interest of shareholders and ensure transparency (Fodio, Ibikunle, & Oba, 2016). Independent members are generally free from management influence and are more inclined to insist on high-quality disclosures, including non-mandatory information related to intellectual capital. Similar results were reported by Muttakin, *et al.*, (2018), who argued that audit committee independence leads to better oversight and improved disclosure quality in African corporate environments.

Audit Committee Gender Diversity and ICD

The presence of female directors on the audit committee was found to have a significant and positive influence on intellectual capital disclosure. This supports the growing body of literature that associates gender-diverse boards and committees with improved corporate governance and transparency (Pucci *et al.*, 2020; Muttakin *et al.*, 2018). Gender-diverse audit committees may bring varied perspectives, ethical considerations, and stakeholder sensitivities that promote broader and more inclusive disclosure practices. In the Nigerian context, where gender representation in corporate governance remains relatively low, this finding underscores the importance of encouraging diversity for improved reporting and accountability.

Audit Committee Financial Expertise and ICD

Among all audit committee characteristics examined, financial expertise had the strongest positive effect on ICD. This reinforces the view that financially literate members possess the necessary skills to understand complex financial and non-financial information, thereby influencing the disclosure of intellectual capital more effectively (Bakar *et al.*, 2019). Financial experts are better positioned to evaluate the strategic value of intangible assets and are more likely to encourage their disclosure to enhance stakeholder decision-making and firm valuation.

Control Variables

The study also controlled for firm size, profitability, and leverage. Firm size and profitability were positively associated with ICD, suggesting that larger and more profitable firms tend to disclose more intellectual capital information, possibly due to greater stakeholder visibility and scrutiny. Leverage was negatively but insignificantly related to ICD, aligning with the notion that highly leveraged firms might be more conservative in disclosure to avoid attracting regulatory attention (Garanina & Dumay, 2021).

CONCLUSION AND RECOMMENDATIONS

This study examined the effect of audit committee characteristics on intellectual capital disclosure (ICD) among listed consumer goods firms in Nigeria. Specifically, it investigated how audit committee meeting frequency, independence, gender diversity, and financial expertise influence the level of intellectual capital information disclosed by these firms.

The empirical findings reveal that all four audit committee attributes have a positive and significant effect on ICD. Frequent audit committee meetings enhance oversight capacity, enabling more strategic decisions related to voluntary disclosure. Independent audit committee members promote transparency by acting objectively in the interest of shareholders. Gender diversity contributes diverse perspectives that foster ethical decision-making and responsiveness to broader stakeholder expectations. Financial expertise on the audit committee strengthens technical competence and facilitates accurate and comprehensive disclosure of non-financial information, including intellectual capital.

These findings underscore the importance of robust audit committee structures in enhancing corporate transparency and accountability in the Nigerian context. Intellectual capital, being a key intangible resource, plays a pivotal role in firm competitiveness, particularly in knowledge-driven industries such as

consumer goods. Therefore, fostering strong audit committee governance can enhance not only compliance but also investor confidence, firm reputation, and long-term value creation.

Based on the findings of this study, the following recommendations are proposed:

- i. Encourage More Frequent Audit Committee Meetings: Regulatory authorities and corporate boards should ensure that audit committees meet regularly to maintain oversight over disclosure practices. The Nigerian Code of Corporate Governance should consider stipulating a minimum number of meetings annually to support transparency.
- ii. Strengthen Audit Committee Independence: Firms should prioritize appointing independent non-executive directors to audit committees. Independence reduces managerial influence and fosters objective decision-making, which is vital for high-quality ICD.
- iii. Promote Gender Diversity in Audit Committees: Corporate governance frameworks should encourage gender balance by setting diversity targets or introducing policies that promote the inclusion of women in board subcommittees. Gender-diverse committees are likely to enhance ethical oversight and stakeholder-oriented disclosure.
- iv. Ensure the Presence of Financial Experts on Audit Committees: At least one member of the audit committee should possess financial or accounting expertise. This would enhance the committee's ability to oversee complex financial and non-financial reporting requirements, especially intellectual capital.
- v. Regulatory Oversight and Training: Regulatory bodies such as the Financial Reporting Council of Nigeria (FRCN) and the Securities and Exchange Commission (SEC) should monitor the composition of audit committees and provide periodic training to enhance the capacity of members to effectively discharge their roles.
- vi. Future Review of Corporate Governance Codes: Given the relevance of ICD in firm valuation and performance, the Nigerian Code of Corporate Governance may consider explicitly including intellectual capital as a key disclosure area and linking it to audit committee responsibilities.

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