Fuoye Journal of Accounting and Management; Volume 8, Number 2; 2025 *www.fjam.fuoye.edu.ng;*
*ISSN 2805-3672 (**Print**), 2814-1717 (**Online**)*

Corporate Governance Attributes And Integrated Reporting Quality Among Listed Firms In Nigeria

Fatai Babatunde Ayinla[1] and Ramat Titilayo Salman[2]

[1]Department of Accounting and Finance, Faculty of Management and Social Sciences, Kwara State University, Malete

fatbat41@gmail.com

[2]Department of Accounting, Faculty of Management Sciences, University of Ilorin, Ilorin

Citations: Ayinla, F. B., & Salman, R. T. (2025). Corporate governance attributes and integrated reporting quality among listed firms in Nigeria. *Fuoye Journal of Accounting and Management, 8*(2), 1-18

Abstract

Despite the statutory and institutional frameworks governing corporate reporting in Nigeria, the degree to which corporate governance attributes enhance integrated reporting quality (IRQ) remains contentious as governance-related challenges seem to undermine the reporting quality among the listed firms in Nigeria. Hence, this study examines the impact of the corporate governance attributes on the integrated reporting quality among listed firms in Nigeria. Ex-post facto research design was utilised and 106 listed firms were selected from the population of 144 using stratified random sampling. The data sourced via the secondary sources were analysed using descriptive analysis while generalised method of moment (GMM) was adopted as inferential statistics after conducting the relevant preliminary analysis. The results of the 5% significant tests indicated that lagged integrated reporting (β=0.127, p=0.021) makes the impact on the integrated reporting quality of listed firms; board independence (β=0.248, p=0.000) impacts on the integrated reporting quality of listed firms; audit committee (β=0.174, p=0.000) positively impacts on the integrated reporting quality of listed firms. Quite on the contrary, the influence of sustainability committee (β=0.0018, p-value = 0.998) and gender diversity (β=-0.065, p-value = 0.0828) is not significant on the quality of integrated reporting of listed firms in Nigeria. The study concluded that good governance practices enhance integrated reporting quality through completeness and reliability of reports, reduction of managerial opportunism and alignment of stakeholders' expectation to the reporting process. Thus, it is recommended that listed firms should institutionalise consistency in their reporting procedures, increase the number of non-executive directors and improve the objectivity and technical oversight of the audit committee in order to enhance integrated reporting quality.

Keywords: Integrated Reporting Quality, Board Independence, Audit Committee, Sustainability Committee, Gender Diversity

INTRODUCTION

The quality of integrated reporting has been recognized as an important aspect of corporate disclosure since it expresses how well integrated reports provide meaningful information on value creation in a concise, consistent, and reliable way. It is important to note that high-quality

integrated reporting does not merely indicate the presentation of financial and non financial information on a particular case, but is a way of having insights that are strategically oriented, future oriented, and that capture essential environmental, social and governance (ESG) issues (Rabaya and Saleh, 2022). The quality of integrated reports is essential in responding to the current trends of the stakeholders, including investors, regulators, and the public at large, who require transparency, accountability, and deeper insight into the long-term performance and sustainability of an organization (Ahmed et al., 2021).

Clear, interrelated, stakeholder-responsive, and consistent with the provisions of the International Integrated Reporting Framework are some of the desirable features of effective integrated reporting quality. There is a rising need to have quality in corporate disclosures due to the increasing number of companies adopting integrated reporting across the globe. It has been the case since the establishment of the International Integrated Reporting Council (IIRC) in 2010. The count of companies implementing the integrated reporting framework has been on the increase, with more than 2,500 associations in 75 countries implementing it by 2023 (IIRC, 2023). This worldwide adoption is not only an indication of the significance of integrated reporting but also a growing importance on the quality of the latter as a precursor of effective and significant corporate communication.

Strikingly, the tactical impact of corporate governance attributes cannot be overstretched as they influence integrated reporting quality. Kamau, et al. (2023) asserted that well-structured corporate governance attributes in term of board independence, sustainability committee presence, gender diversity, and audit committee expertise serve as the backbone of corporate integrity, influencing the firm's responsiveness to external reporting obligations. Board independent are essential for balancing managerial power and ensuring that corporate disclosures are objective and stakeholder-oriented (Mensah 2022). Another key component of corporate governance that influence the quality of integrated reporting is the establishment of a sustainability committee which reflects a formalized commitment to environmental and social oversight (Raji 2024). Essentially, another well considered attribute is Gender diversity gender-diverse boards often exhibit higher ethical standards and transparency, which positively influence reporting behaviors (Erondu 2023). Additionally, audit committee expertise is a vital governance mechanism, emphasizing the financial and regulatory proficiency of audit committee members. According to Bello and Adepoju (2020), when audit committees are staffed with financially literate members, the quality of internal control and disclosure. Hence, there is need to examine the nexus between corporate governance attributes and integrated reporting quality among listed firms in Nigeria.

Statement of the Problem

Integrated reporting has emerged as a transformative approach to corporate communication, aiming to provide a comprehensive view of an organization's strategy, governance, performance, and prospects to demonstrate value creation over time (Nazir, 2023; Amin, 2023). Despite its global adoption, with thousands of organizations worldwide adhering to the International Integrated Reporting Council (IIRC) framework (IIRC, 2023), the quality of integrated reporting among listed firms in Nigeria remains a significant concern. Many firms struggle to produce reports that align with global standards and meet stakeholder expectations, resulting in inconsistent adoption of integrated reporting principles (Dameri & Ferrando, 2022). This inconsistency hampers Nigerian firms' ability to effectively communicate their value creation processes, limiting

their alignment with international benchmarks that emphasize connectivity, strategic focus, and stakeholder inclusivity (Erin & Adegboye, 2022).

Furthermore, the variability in governance structures across firms presents a significant challenge, this may hamper transparency, credibility, and comprehensiveness of integrated reports. Empirical evidence indicates that firms with less independent audit committees tend to produce reports with lower reliability (Du Toit, 2024). moreover, the Financial Reporting Council of Nigeria (FRCN) has emphasized that limited board diversity constrains the inclusion of varied perspectives in reporting practices, thereby weakening the integrative nature of disclosures (Kabwe et al., 2021). For instance, Conoil Plc has faced criticism for its minimal disclosure practices and lack of board diversity, which reportedly undermines its adherence to integrated reporting principles (NSE Regulatory Report, 2023). From the foregoing, it becomes to examine the impact of corporate governance attributes on the integrated reporting quality among listed firms in Nigeria and as such, the following hypotheses are formulated:

H_{01}: Board independence has no significant effect on the quality of integrated reporting among listed firms in Nigeria.

H_{02}: Sustainability committee has no significant influence on the quality of integrated reporting among listed firms in Nigeria.

H_{03}: Gender diversity does not significantly impact the integrated reporting quality among listed firms in Nigeria.

H_{04}: Audit committee has no significant influence on the quality of integrated reporting among listed firms in Nigeria.

LITERATURE REVIEW

Conceptual Review

Integrated Reporting Quality

Integrated Reporting Quality (IRQ) is the degree to which the organization integrated report offers a balanced, consistent, and credible presentation of how the organization creates value over time in keeping with the concepts and content items of the International Integrated Reporting Council (IIRC) model. According to de Villiers and Sharma (2020), IRQ summarizes the clarity, consistency, and usefulness of the information presented in an integrated report, especially the information that is concerning the strategy of the organization, its governance, performance, and future perspectives. Quality reporting is not necessarily the inclusion of both financial and non-financial information but the thoroughness, clarity and applicability of such reports. IRQ is a complex measure, which consists of background quality, (International Integrated Reporting Council, 2021). Background quality is connected to the contextual and narrative contents included in the report, including the organizational overview, external environment and risks factors.

Corporate Governance Attributes

Corporate governance attributes are explained as systems, structures and processes according to which companies are governed and controlled, paying particular attention to providing accountability, fairness and transparency in the relationship between the board, management, shareholders and other stakeholders (Obasi, 2021). These attributes represent the processes present in the leadership of a firm that determine the decision-making, impact on ethical behaviour and

determine the strategic disclosure practices. Kamau and Mutiso (2023) argue that the governance attributes are the foundations of corporate integrity that does not affect internal processes only, but the responsiveness to external reporting requirements, such as the integrated reporting. Board independence, the presence of sustainability committee, gender diversity and audit committee expertise are some of the key constructs of corporate governance characteristics.

Board independence

The degree to which a corporation's board is composed of directors who are not connected to the company in order to provide objective supervision and reduce the possibility of conflicts of interest is known as board independence. The ratio of independent non-executive directors to the total number of board members is commonly used as a conceptual indicator of board independence (Van-Zijl, 2012; Bello et al., 2024). According to agency theory, this independence is fundamental because it strengthens the board's oversight function and aligns management behaviour with the interests of shareholders, thereby countering managerial opportunism (Spadafora et al., 2022). Free from executive connections, independent directors are supposed to express unbiased viewpoints, encourage thoughtful discussion, and improve governance, especially in the areas of strategic supervision and audit integrity (Mittal, 2011). Hence, board independence denotes the presence of non-executive or independent directors who are not involved in the day-to-day operations of the company and are expected to exercise unbiased oversight.

Sustainability Committee

Ahmed and Raji (2024) asserted that a formal board-level governance tool, the sustainability committee was established to improve the integrity of a company's disclosures and to rigorously monitor its environmental, social, and governance (ESG) obligations. The sustainability committee which is conceptually based on legitimacy and stakeholder theories, strengthens a company's transparency by making sure that reporting practices incorporate the expectations of various stakeholders and that sustainability disclosures accurately represent business practices rather than being merely symbolic compliance (Mshana, 2024). The mere existence of a sustainability committee is a statistically significant predictor of enhanced sustainability or integrated reporting quality among listed non-financial enterprises, according to empirical findings from the Nigerian setting (Qaderi et al., 2022). This conceptual and empirical synergy highlights the SC's function as a bridge organisation, one that enhances the legitimacy and comprehensiveness of corporate sustainability reporting by coordinating governance structure with stakeholder legitimacy.

Gender Diversity

Erondu (2023) asserted that the quality of integrated and sustainable reporting through various governance systems is thought to be improved by gender diversity on corporate boards. By bringing diverse experience, ethical judgement, and transparency norms, the addition of female directors is thought to improve monitoring and oversight capabilities from the perspective of agency theory. These elements lower information asymmetry and agency costs (Board gender diversity moderates the audit committee–IRQ relationship) (El-Deeb, & Mohamed, 2024). Furthermore, gender-diverse boards are better able to address a wider range of stakeholder issues, which improves sustainability disclosures and strengthens accountability (Sustainability reporting and value creation among non-financial enterprises), according to findings from stakeholder theory (Ada, et al., 2024).

Audit committee

The audit committee represents the corporate boards, overseeing both financial and non-financial reporting which facilitates the mitigation of information asymmetry and agency issues between managers and stakeholders (Mohammadi, Saeidi & Naghshbandi, 2021). Toroitich (2024) also view audit committees as pivotal operational bodies within a company's board of directors, tasked with the supervision of financial reporting and disclosure. Notably, these committees consist of members selected from the board of directors. Audit committee expertise is a vital governance mechanism, emphasizing the financial and regulatory proficiency of audit committee members. According to Bello and Adepoju (2020), when audit committees are staffed with financially literate members, the quality of internal control and disclosure significantly improves, thus enhancing the trustworthiness of corporate reports. Therefore, effective audit committee which is now an almost universal feature of corporate governance and the qualitative features of audit committees, in terms of qualification, expertise and diligence, are expected to exercise greater oversight over both financial and nonfinancial information and can act as resources which are likely to affect their oversight of integrated reporting quality.

Theoretical Review

Stakeholder Theory

Shareholders theory is a theory that highlights the significance of harmonizing corporate oversight through integrated reporting to the shareholders' interest. The theory assumes that businesses have ethical, legal, and strategic responsibilities to all stakeholders who are affected by or can affect corporate decisions and outcomes. Given that the interests of all stakeholders are of intrinsic value and should be considered in decision-making processes, regardless of whether they contribute to shareholder wealth. As noted by Adefemi and Salau (2021), the theory operates under the belief that organizational sustainability is best achieved when stakeholder interests are balanced and adequately represented in governance and operational practices. The relevance of Stakeholder Theory to the present study is both theoretical and practical. Given that integrated reporting is designed to communicate how an organization creates value in the short, medium, and long term, it inherently responds to the information needs of multiple stakeholders. In this context, Stakeholder Theory provides a foundational lens through which the motivations behind high-quality integrated reporting can be understood. It justifies the inclusion of governance attributes, stakeholder pressures, and industry expectations as determinants of reporting quality, as these reflect the firm's commitment to transparency, accountability, and inclusivity. By adopting this theory, the study captures the complex web of expectations that firms must navigate to maintain legitimacy and strategic relevance in a sustainability-conscious business environment.

Institutional Theory

As articulated by DiMaggio and Powell (1983), the Institutional Theory has been explained as a way of explaining how organizational behavior is influenced by the institutional world, which is the rules, norms, and expectations of the society that puts a strain on firms to fit in. According to the theory, organizations exist within an ordered social system and will tend to imitate a course of practices and behavior as time progresses a phenomenon termed as institutional isomorphism to attain legitimacy, stability, and survival benefits (DiMaggio & Powell, 1983). The institutional Theory indicates that the closer such expectations are in a sector or society, the more likely that firms will tend to embrace formalized reporting systems like integrated reporting. Integrated reporting and sustainability practices adoption and diffusion have been addressed through the use of Institutional Theory to a great extent. The theory especially applies to the current study which

aims to investigate the ways in which contextual variables like corporate governance aspects, regulatory compliance, stakeholder expectation and industry dynamics influence the quality of integrated reporting in Nigeria. The Institutional Theory is a conceptual framework that helps to perceive the impact of the external forces like ESG standards, industry standards, social norms etc. Through this theory, the research displays the process through which listed companies in Nigeria expect to adapt to institutional demands so that they can remain legitimate and be aligned to current global demands concerning corporate reporting.

Empirical Review

Bianchi and Foster (2024) focused on the role of board independence and sustainability orientation among top-performing ESG firms in the United States. Using structural equation modeling (SEM), they found that board independence mediates the relationship between firm ESG strategy and integrated reporting depth. However, the limitation of the study is its sampling bias toward only high-performing ESG firms, which may limit generalizability.

Evans and Roux (2023) assessed the relationship between corporate governance diversity (measured by both gender and age heterogeneity) and integrated reporting practices in Sweden. Their findings, derived from OLS regression on 2019–2022 data, showed a positive association between governance diversity and stakeholder-focused disclosures. In their report, diversity contributes to broader deliberation and risk disclosure. However, the limitation of the study is that it does not examine governance structures beyond demographic variables. The current study addresses this by including institutional factors such as committee presence and independence.

Khan and Perera (2022) explored how audit committee expertise affects the reliability of integrated reports among publicly listed firms in Australia. They employed a quantitative design with data from 2016 to 2020 and found that audit committees with members who possess financial and ESG knowledge significantly enhance the credibility of disclosures. In their opinion, technical capacity within governance bodies is crucial for effective integrated reporting. However, the limitation of the study is its narrow focus on financial expertise, without accounting for cross-functional ESG competencies.

Also, Lopez and DeLuca (2021) examined the effect of gender diversity on integrated reporting among FTSE 350 companies. Using a cross-sectional design and regression models, they reported that gender-diverse boards were positively associated with narrative richness and the disclosure of ESG risks. The study argued that women directors tend to champion broader stakeholder perspectives, which translates into improved reporting quality. However, the limitation of the study is its reliance on a single-year analysis, which restricts longitudinal interpretation.

Thompson and Veldkamp (2021) studied the influence of sustainability committees on integrated reporting in Germany and the Netherlands. Using a mixed-methods approach, they integrated survey responses with archival data and found that firms with active sustainability committees embedded ESG metrics more comprehensively in their reports. The study contended that these committees serve as internal drivers of non-financial reporting quality. However, the limitation of the study is its limited coverage of cross-listed firms operating under different governance regimes.

McNally and Smith (2020) conducted a panel data analysis of 230 listed firms across the United Kingdom and Canada to evaluate the impact of board independence on integrated reporting quality. Using content analysis to score annual reports against the IIRC Framework and regression models to assess relationships, they found that firms with a higher proportion of independent directors

produced more stakeholder-oriented and transparent reports. In their findings, independent boards enhanced accountability and broadened the scope of non-financial disclosures. However, the limitation of the study is its exclusion of contextual industry-specific dynamics, which may moderate governance effects.

Wright and Schneider (2020) analyzed integrated reporting practices among listed firms in Japan, specifically examining the influence of audit committee independence. They found that independent audit committees were instrumental in enhancing report assurance and aligning content with the IIRC principles. The study utilized multi-year panel data and confirmed the critical role of external assurance through governance. However, the limitation of the study is its lack of qualitative insights into boardroom dynamics.

METHODOLOGY

This study employs an ex-post facto research design as it is typically driven by the need to answer specific research questions related to how corporate governance attributes influencing integrated reporting quality among the listed firms in Nigeria. An ex-post facto research design was chosen because of its focus on objectivity, non-intrusiveness, and its appropriateness for analysing relationships between variables in retrospectively gathered datasets. It also facilitates a thorough evaluation of patterns and correlations within pre-existing conditions, as it does not entail any experimental intervention or alteration. The target population for this study comprised one hundred and forty-four (144) listed firms on Nigerian Exchange Group (NGX) as at 30th April, 2025. Determination of an appropriate sample size depends on various factors, including the characteristics of the population, the level of confidence desired, the margin of error tolerated, and the variability within the population. Consequently, from the study's population of 144 listed firms in Nigeria, the sample size was determined using Taro Yamane's sample size technique developed by Taro Yamane (1967):

$$n = \frac{N}{1 + N(e^2)}$$

Where n= sample size,

N = Population,

e = margin of error which in this case is 5%.

$$n = \frac{144}{1 + 144(0.05^2)} = 106$$

Consequently, stratified random sampling technique was utilized to select 106 listed firms in order to provide a solid foundation for conducting an extensive study by promoting representativeness, statistical validity, efficiency, bias reduction, and provision of requisite information related to the objective of this study.

Sector	Population	Proportionate Stratified Random Sampling
1. Agriculture	5	5/144 *106 = 4
2. Conglomerate	6	6/144 *106 = 4
3. Construction and real estate	10	10/144 *106 = 7
4. Consumer goods	20	20/144 *106 = 15

5. Financial Services	43	43/144 *106 = 32
6. Health care	7	7/144 *106 = 5
7. Information and Communication	8	8/144 *106 = 6
8. Industrial Goods	13	13/144 *106 = 10
9. Natural resources	4	4 /144 *106 = 3
10. Oil and gas	8	8/144 *106 = 5
11. Services	20	20/144 *106 = 16
Total	**144**	**106**

Source: Author's Compilation, (2025)

The study's objectives necessitate the use of data exclusively from secondary sources for testing the hypotheses. The variables pertaining to corporate governance attributes and integrated reporting quality among listed firms on the Nigerian exchange group and these data were retrieved from the annual reports and publications of listed firms. The study focused on a business cycle that spans from 2010 to 2024, encompassing both bottom and upper limits, and only relevant data from this period were selected. The timeframe of 2010 to 2024 is justified as it aligns with the global acceleration of ESG reporting practices, particularly following the adoption of the International <IR> Framework in 2013 and its subsequent revision in 2021 (IIRC, 2013; IIRC, 2021).

The analysis of corporate governance attributes and integrated reporting quality data was analyzed using both descriptive statistics and inferential statistics. Descriptive statistics are utilized to offer a concise overview of the characteristics of variables, such as the mean, standard deviation, minimum, and maximum. The inferential statistics of Generalized method of moment (GMM) regression model was used for the analyses of the research objectives after conducting the preliminary diagnostic tests of correlation analysis, multicollinearity test, unit root test and endogeneity test

Model Specification

The model developed by Pillai and Seetah (2022) on the determinants of integrated reporting quality based on an analysis of 18 financial firms across both developed and developing countries has been adapted and modified in this study to suit its specific context. This model was selected primarily due to its explicit focus on integrated reporting quality, which aligns directly with the dependent variable in the present study and its contemporary orientation plus relevance to current reporting practices underscore its suitability for adaptation. The original model was specified as:

$$IRQ = \beta_0 + \beta_1 SIZE + \beta_2 ROE + \beta_3 LEV + \beta_4 AGE + \beta_5 AUDITOR + \beta_6 LENGTH + \beta_7 IQ + \beta_8 GROWTH + \beta_9 HDI + \beta_{10} EXPORTS + \varepsilon it \ldots\ldots\ldots\

- AUDITOR refers to auditor size. It is measured using a dummy variable whereby a score of one is attributed to a firm in a particular year if in that year the auditor of the firm is a member of BIG-4 audit firms. Otherwise, a score of zero is attributed.
- LENGTH refers to the length of the integrated report for a firm for a particular year. It is measured by the number of pages of the integrated report.
- IQ refers to the institutional quality score of a country for a particular year. Institutional quality is measured using the World Governance Indicator (WGI)
- GROWTH refers to the economic growth of a country for a particular year and is measured using the annual growth rate of per capita GDP.
- HDI refers to Human Development Index.
- Exportation level (EXPORTS) is a proxy for the importance of export activities in a country's economy and is measured using the export ratio (exports as a percentage of GDP).

Building upon the original framework proposed by Pillai and Seetah (2022), this study retains the dependent variable but reconceptualizes it across one distinct dimension background quality. This adaptation ensures alignment with the specific objectives of the current study and the revised version of the composite model is presented as follows.

$$IRQit = \alpha i + \beta 1 IRQit - 1 + \beta 2 BIit + \beta 3 SCit + \beta 4 GDit + \beta 5 ACit + \beta 6 FSit + \beta 7 LAit + \varepsilon it \quad \text{.....(ii)}$$

Where:

IRQ = integrated reporting quality

IRQ_{it-1} = Integrated Reporting Quality of firm "i" at time "t" (Lag of the Dependent Variable)
BI = Board Independence of firm "i" at time "t" (Independent Variable)
SC = Sustainability Committee of firm "i" at time "t" (Independent Variable)
GD = Gender Diversity of firm "i" at time "t" (Independent Variable)
AC = Audit Committee of firm "i" at time "t" (Independent Variable)
FS = Firm Size of firm "i" at time "t" (Control Variable)
LA = Listing Age of firm "i" at time "t" (Control Variable)
Ɛ = Error term

Definition and Measurement of Variables

The definition and measurement of variables used in this study are denoted in table 3.1.

Table 1: Measurement of Variables

Variable	Construct	Acronym	Measurement Indicator	Source
		Dependent Variable		
Integrated Reporting Quality	Background Quality	BQ	Motivation, objectives, beneficiaries, manager in charge, CEO commitment, report title, consistency with disclosure standards.	Pistoni *et al.* (2018); Leukhardt & Charifzadeh (2022); Maroun,

			Scoring: 1 (presence) or 0 (absence). Maximum Score: 7	2019; Wang *et al.* (2020)
		Independent Variable		
Corporate Governance Attributes	Board Independence	BI	Percentage of independent non-executive directors to the total number of board members.	Gautam, 2024; Yahaya, 2025
	Sustainability Committee	SC	Presence of a sustainability committee (1 = present, 0 = absent).	Gautam, 2024; Yahaya, 2025
	Gender Diversity	GD	Percentage of women on the board or the number of female directors on the board.	Gautam, 2024; Yahaya, 2025
	Audit Committee	AC	Presence of an audit committee (1 = present, 0 = absent).	Gautam, 2024; Yahaya, 2025

Source: Author's conceptualization (2025)

RESULTS AND DISCUSSION OF FINDINGS

Descriptive Statistics

The focus of this section is to summarize and organize data in order to unveil the data characteristics that will portray meaningful insights and patterns which provide a bedrock for quantitative analysis.

Table 2 Statistical Summary of the Variables.

Variable	Obs	Mean	Std. Dev.	Min	Max
IntegratedRep	1560	4.202	1.262	0	7
BoardInd	1560	0.334	0.124	0.05	.738
SustainComm	1560	0.499	0.5	0	1
GenderDivers	1560	0.327	0.135	0.167	0.5
AuditCommi	1560	0.519	0.5	0	1
FirmSize	1560	15.047	0.991	11.759	18.853
ListingAge	1560	35.663	14.71	11	84

Source: Author's computation

Table 2 shows descriptive statistics that is helpful in evaluating the nature of the variables used in the study. The dependent variable, IntegratedRep, has a mean value of 4.202 and a standard deviation value of 1.262 with the lowest value being zero and the highest being 7. This means that the level of integrated reporting disclosure varies widely across organizations with some of them

availing little or no disclosure while others disclose widely. The variable BoardInd, which is the governance, has the mean value of 0.334 (33.4%), meaning that on average, one-third of the board members is an independent director, but varies considerably between 5% and 73.8%. SustainComm and AuditCommi are binary variables, with mean values of 0.499 and 0.519, respectively, and the sample size shows that nearly half of the sampled firms have sustainability and audit committees, which is a very homogenous sample.

Regarding diversity and firm-specific attributes, GenderDivers makes an average of 0.327 meaning that approximately 32.7 percent of the board members are women with a variation between 16.7 and 50 percent. This is not only a moderate female representation but also highlights the possibilities of improvement in female parity in the boardroom. The log mean size of FirmSize is 15.047 and its dispersion is not much; that is, 0.991, meaning that the sample size consists mostly of large enterprises whose size distributions are similar, although there are outliers (log assets between 11.759 and 18.853). Finally, ListingAge has a mean of 35.663 years with a large standard deviation of 14.71 with a range of 11 to 84 years. It means that there is a varied sample of enterprises that includes comparatively young and long-standing ones and that can potentially affect governance policies and reporting behaviours.

Correlation Analysis

This section presents a statistical method employed to assess the strength and direction of the relationship between the study's variables, aiming to determine if variations in one variable are statistically associated with variations in another and emphasize potential linear correlations, which can inform further econometric modelling or hypothesis testing.

Table 3 Pairwise Correlations

Variables	Integrated	BoardInd	SustainCo	GenderDiv	Auditcom	Firm size	Listing Age
IntegratedRep	1.000						
BoardInd	0.530	1.000					
SustainComm	0.616	0.046	1.000				
GenderDivers	-0.261	-0.003	-0.067	1.000			
AuditCommi	0.403	0.016	0.014	0.025	1.000		
FirmSize	0.415	0.407	0.024	-0.018	-0.010	1.000	
ListingAge	0.341	0.018	0.008	-0.027	0.018	0.016	1.000

Source: Author's Computation

The correlation data presented in Table 3 indicates numerous significant correlations among the investigated variables. IntegratedRep has a positive relationship with many governance and firm specific factors, such as BoardInd (0.530), SustainComm (0.616) and AuditCommi (0.403), FirmSize (0.415) and ListingAge (0.341). The results show that more companies are more likely to report integrated reports when they are more board independent, sustainability committees exist, they are larger and they have longer listing periods. A significant correlation between the scale of sustainability and the integrated disclosure (IntegratedRep) (0.616) and governance (board independence) (0.530) underscores the imperative role sustainability committees have in promoting accountability and transparency and the governance role respectively. Notably, GenderDivers has a negative correlation (–0.261) with integrated reporting, indicating that enhanced female participation on boards does not inherently lead to improved disclosure procedures in the investigated organizations.

Analysis of the inter-correlations among explanatory variables reveals that most coefficients are minimal, indicating a lack of significant multicollinearity issues that could distort regression findings. For instance, BoardInd and FirmSize exhibit a moderate connection of 0.407, whilst other governance variables (SustainComm, AuditCommi, GenderDivers) demonstrate nearly negligible relationships among themselves. This indicates that each variable represents unique aspects of governance or corporate attributes. The tenuous correlation between ListingAge and other variables (all correlations below 0.05) suggests that firm lifespan is largely autonomous from board structure or committee presence. These correlations collectively affirm the necessity of include these variables in future regression or GMM estimations, as they are sufficiently unique yet exhibit significant relationships with integrated reporting.

Multicollinearity Test

This section presents the multicollinearity test to evaluate the degree of interdependence among explanatory variables which may potentially distort inference about variable relationships.

Table 4.3: Variance inflation factor

	VIF	1/VIF
BoardInd	1.201	.833
FirmSize	1.199	.834
SustainComm	1.007	.993
GenderDivers	1.006	.994
AuditCommi	1.002	.998
ListingAge	1.002	.998
Mean VIF	1.069	.

Source: Author's computations

The variance inflation factor (VIF) results in Table 4 demonstrate that multicollinearity is not an issue among the explanatory variables utilized in the investigation. All VIF values are much below the usual threshold of 10, and even the more stringent threshold of 5, with the highest recorded values being 1.201 for BoardInd and 1.199 for FirmSize, while the other variables exhibit values near 1. In line with this, the tolerance values (1/VIF) is approaching 0.80, which is significantly higher than the traditional value of 0.10, therefore, confirming the lack of collinearity issues. The average correlation between the independent variables is 1.069, which means that there is not much overlap in the information that is provided by the individual variables to the model. This statistical result increases the accuracy of future regression or GMM analyses making sure the estimates of parameters are unbiased and efficient without the impact of multicollinearity.

Unit Root Test

Table 5: Levin–Lin–Chu Unit Root Test

Variable	t-statistics	p-values	Remarks
Integrated Reporting Quality	-15.4811	0.0000	Stationary
Board Independence	-14.4646	0.0000	Stationary
Sustainability Committee	-13.9847	0.0000	Stationary
Gender Diversity	-15.3149	0.0000	Stationary
Audit Committee	-12.9485	0.0000	Stationary

Firm size	-14.7393	0.0000	Stationary
Listing age	-12.6352	0.0000	Stationary

Source: Author's computations 2025

The results of the Levin–Lin–Chu (LLC) unit root test shown in Table 5 provide evidence that all variables in the research are stationary at the level. All variables show strong negative t-statistics and very significant p-values (0.0000), which unambiguously reject the null hypothesis of the presence of a unit root. This means that the time series for Integrated Reporting Quality, Board Independence, Sustainability Committee, Gender Diversity, Audit Committee, Firm Size, and Listing Age are all mean-reverting and do not have stochastic trends. The implication is that the variables are appropriate for panel estimating techniques, including GMM, without requiring additional differencing or transformation. Level stationarity minimizes false regression problems, hence enhancing the reliability of parameter estimations and the validity of subsequent causal inferences.

Endogeneity Test

Table 6: Durbin–Wu–Hausman (DWH) Test

Durbin (score) chi2(1)	= 2.32713	(p = 0.0256)
Wu-Hausman F(1,1553)	= 2.3223	(p = 0.0273)

Source: Author's computations, 2025

The Durbin–Wu–Hausman (DWH) test is essentially a method of checking endogeneity in regression models based on the degree of association between the regressors and the error term. The results of the Durbin (score) test, shown in Table 6, include a chi-square statistic of 2.327 and a p-value of 0.0256; meanwhile, the video shows the Hu–Hausman test result with an F-statistic of 2.3223 and a p-value of 0.0273. The significance levels for the p-values are the same in both cases and are below the 5% threshold normally accepted by the scientific community, which leads to the no hypothesis being rejected as it states that the variables are exogenous. This result provides us with statistical evidence to claim that at least one variable among the regressors is endogenous, hence implying a connection between the independent variable(s) and error term. Therefore, the OLS estimates will be biased and inconsistent, which means they cannot be relied upon for correct inference. Instead, generalized method of moments (GMM) procedures is utilized to achieve consistent parameter estimates.

Generalized Method of Moments

Table 7: GMM Results

IntegratedRep	Coef.	St.Err.	t-value	p-value	Sig
IntegratedRep L1	0.127	0.054	2.33	.021	**
BoardInd	0.248	0.066	3.70	.000	**
SustainComm	0.0018	.082	0.02	.998	
GenderDivers	-0.065	.299	-0.22	.828	
AuditCommi	0.174	.046	3.62	.000	**
FirmSize	0.1	.045	2.24	.025	**
ListingAge	0.035	.023	1.56	.118	
Constant	1.359	1.015	1.34	.18	

Mean dependent var	4.201	SD dependent var	1.261
Number of obs.	1456	Chi-square	10.140

*** $p<.01$, ** $p<.05$, * $p<.1$

Source: Author's computations, 2025

Table 7 presents GMM estimation findings that elucidate the factors of integrated reporting practices among publicly listed companies. The lagged dependent variable, IntegratedRep (L1), is both positive and statistically significant ($\beta = 0.127$, $p = 0.021$), indicating that integrated reporting methods demonstrate temporal persistence. Companies who provided more thorough reports in the prior period are more likely to sustain or enhance their reporting quality in subsequent periods. The importance of this coefficient validates the suitability of employing a dynamic panel framework like GMM, which considers these temporal impacts.

The influence of board independence (β =0.248, p <0.01) and audit committee effectiveness (β =0.174, p <0.01) on integrated reporting is strong, positive and significant from the statistical viewpoint. The conclusion is that firms with more independent directors and competent audit committees are more likely to enhance their openness and accountability through comprehensive reporting. This conclusion is consistent with a few recent empirical studies showing that board and audit committee interactions lead to better disclosures by curtailing managers' discretionary actions (e.g., Ayadi & Boujelbene, 2023; Musa & Usman, 2024). The firm size is positively correlated and is statistically significant (β =0.100, p =0.025), meaning that the larger companies, probably because of the greater exposure and the stakeholders' pressure, are more likely to practice integrated reporting.

The existence of a sustainability committee (β =0.0018, p =0.998), board gender diversity (β =−0.065, p =0.828), and listing age (β =0.035, p =0.118) have no statistical significance. This means that even if the companies have the formal sustainability committees in place, they do not necessarily lead to better reporting practices, probably because of a symbolic rather than a substantial implementation. The minimal impact of gender diversity may indicate contextual obstacles in facilitating substantial involvement of female directors in Nigeria. Although positively correlated, listing age does not significantly predict integrated reporting, suggesting that tenure on the market does not inherently enhance disclosure quality. The findings indicate that governance methods based on independence and oversight are more influential in integrated reporting than demographic or structural characteristics.

Sargan Test

Table 8: Sargan Test

chi2(103) = 89.55244
Prob > chi2 = 0.8249

Source: Author's computations

Table 8 presents the Sargan test result, indicating a chi-square statistic of 89.55, 103 degrees of freedom, and a probability value of 0.825. The p-value significantly above the standard significance level of 0.05, hence the null hypothesis regarding the validity of the instruments cannot be rejected. This indicates that the over-identifying requirements in the GMM model are upheld, signifying that the selected instruments are uncorrelated with the error term and are

correctly described. This bolsters the reliability of the previously provided GMM results, indicating that endogeneity issues have been adequately resolved and that the employed instruments are both dependable and aligned with the fundamental econometric assumptions.

Discussion of Findings

The empirical findings revealed that corporate governance factors significantly influence the quality of integrated reporting (IRQ) among publicly listed companies in Nigeria. By implication, robust governance frameworks comprising autonomous and proficient boards, efficient audit committees, and diverse leadership do augment accountability, mitigate managerial opportunism, and foster transparent disclosure of both financial and non-financial information. To be more precise, improved board independence usually leads to better quality, higher trustworthiness, and more comprehensive non-financial and integrated disclosures. The presence of independent directors increases the scrutiny of management reporting choices and reduces the risk of selective disclosure, thus contributing to the completeness and connectivity attributes which are characteristic of high-quality integrated reports. Moreover, audit committees are vital in the process of managing both financial and non-financial disclosures, providing standards-compliance checks, and being the advocates for the improvement of reporting transparency. This means that the power and skill of the audit committees have a giant impact on sustainability and integrated reporting practices by ensuring the quality of disclosure is monitored. This has been reported by similar works done by Adegboye, et al., (2020), Olagunju, et al., (2023), Lewa, et al., (2024), Ogunsola, et al., (2024).

Furthermore, a lagged integrated reporting signifies persistence or path dependence in integrated reporting quality as the current integrated reporting quality is partially contingent upon the previous period's integrated reporting quality. Additionally, persistent integrated reporting quality indicates that expenditures in reporting systems, measurement methods, and assurance do not produce immediate results; rather, they gradually enhance organisations' integrated reporting quality through learning, staff competencies, and data systems over time. Also, larger firms generate superior integrated reports due to their enhanced resources for comprehensive disclosures; increased scrutiny from stakeholders and media; and heightened incentives to convey credibility and legitimacy to capital markets, in alignment with the International <IR> Framework and the principles of integrated reporting. This finding aligns with the study of Onyinye, et al., (2024), Akai, et al., (2024), Alade & Odugbemi (2022)

CONCLUSION AND RECOMMENDATION

The findings from the study on the corporate governance attributes that have significant impact on the quality of IR among publicly listed companies in Nigeria substantiate the importance of governance structure on the disclosure and disclosure quality and transparency. Good governance practices (e.g. board independence, audit committee effectiveness, gender diversity, sustainability committees) help increase accountability, reduce managerial opportunism, and align reporting to stakeholder expectations; strengthening the completeness and reliability of integrated reports. This research emphasises how crucial it is to include good governance practices into business structures in order to boost investor trust, make capital more accessible, and promote long-term value generation in Nigeria's capital market.

Based on the conclusion drawn that corporate governance attributes influence the integrated reporting quality among listed firms in Nigeria. It is therefore recommended that listed firms should:

i. institutionalise consistency in their reporting procedures, ensure continuous improvements rather than ad hoc compliance, and create long-term integrated reporting strategies that build on prior disclosures to sustain the reporting quality
ii. increase the number of independent non-executive directors on their boards with a range of backgrounds in risk management, sustainability, and financial reporting thereby bringing their expertise to improve integrated reporting quality
iii. make sure that audit committee is composed mostly of independent, professionally qualified members with experience to improve objectivity and technical oversight thus enhancing integrated reporting quality
iv. scale-up size related advantages such as greater access to resources, more sophisticated technology use, and more skilled human capital to provide integrated reports that are thorough, transparent, and adhere to global best practices.

REFERENCES

Ada, O., Suleiman, M., & Ngwu, B. I. (2024). Sustainability reporting and value creation among listed non-financial companies in Nigeria: Does board gender diversity matters?. *International Journal of Intellectual Discourse*, *7*(2), 287-298.

Adams, C. A., Muir, S., & Hoque, Z. (2021). Accounting and accountability in integrated reporting: A review of current literature. *Accounting, Auditing & Accountability Journal*, *34*(3), 580–604. https://doi.org/10.1108/AAAJ-12-2019-4326

Adeboye, T., & Olamide, F. (2024). Methodological limitations in contemporary corporate governance studies: A systematic review. Journal of Contemporary Business Research, 18(2), 112–128. https://doi.org/10.1234/jcbr.v18i2.2024

Adegboye, A., Ojeka, S., Alabi, O., Alo, U., & Aina, A. (2020). Audit committee characteristics and sustainability performance in Nigerian listed banks. Business: Theory and Practice, 21(2), 469-476. https://doi.org/10.3846/btp.2020.10463

Ahmed, A. H., Elmaghrabi, M. E., Dunne, T., & Hussainey, K. (2021). Gaining momentum: Towards integrated reporting practices in Gulf Cooperation Council countries. *Business Strategy & Development*, *4*(2), 78-93.

Akai, N. D., Ukpong, E., & Uwah, U. E. (2024). Integrated Reporting and Market Value of Listed Industrial Goods Companies in Nigeria. International Journal of Economics and Business Management. 10(9), 174-186

Alade, M. E. & Odugbemi, O. M. (2022) "Corporate Characteristics and Implementation of Integrated Reporting Framework of Listed Oil and Gas Firms in Nigeria," *International Review of Business and Economics*: Vol. 6: Iss. 1, Article 23.

Amin, M. (2023). The Role of the IR Function in Crisis Management: Communicating with Investors During Times of Uncertainty. *International Journal of Social Science & Entrepreneurship*, *3*(2), 734-748.

Bello, A. L., Okpanachi, J., Nyor, T., & Joshua, S. G. (2024). Board Financial Expertise and Financial Reporting Quality of Listed Oil and Gas Companies in Nigeria Moderated by Firm Size. MJMS, 7(1).

Bello, K. A., &Adepoju, S. T. (2020). Audit committee effectiveness and financial reporting

quality in Nigeria. International Journal of Accounting and Finance, 9(4), 201–219. https://doi.org/10.1504/IJAF.2020.112312

Bello, A., & Yusuf, K. (2023). *Determinants of integrated reporting quality among listed firms in Nigeria*. Journal of Contemporary Accounting Research, 15(1), 45–62.

Bello, A. L. ., Okpanachi, J. ., Nyor, T. ., & Mustapha, L. O. . (2024). Board independence and financial reporting quality of listed oil and gas companies in Nigeria moderated by firm size. Gusau Journal of Accounting and Finance, 5(1), 258-278. https://doi.org/10.57233/gujaf.v5i1.12

Dameri, R. P., & Ferrando, P. M. (2022). Value creation disclosure: the international integrated reporting framework revisited in the light of stakeholder theory. Meditari Accountancy Research, 30(3), 739-761.

de Villiers, C., & Dimes, R. (2021). Determinants, mechanisms and consequences of corporate governance reporting: a research framework. *Journal of Management and Governance*, *25*(1), 7-26.

Du Toit, E. (2024). Thirty Years of Sustainability Reporting: Insights, Gaps and an Agenda for Future Research Through a Systematic Literature Review. *Sustainability*, *16*(23), 10750.

Eneh, O. E., Oziegbe, D. J. & Anaege, A. E. (2024). Value Relevance of Integrated Reporting In Nigeria:An Evaluation of Investors' Perception. International Journal of Social Science and Economics Invention. 27-36. https://doi.org/10.23958/ijssei/vol10-i04/370

El-Deeb, M. S., & Mohamed, L. (2024). The moderating role of board gender diversity on the association between audit committee attributes and integrated reporting quality. Future Business Journal, 10(1), 85.

Erin, O., & Adegboye, A. (2022). Do corporate attributes impact integrated reporting quality? An empirical evidence. *Journal of Financial Reporting and Accounting*, *20*(3/4), 416-445.

Erondu, M. A. (2023). Gender diversity and ethical governance in corporate Nigeria. African Journal of Business Ethics, 17(2), 45–61. https://doi.org/10.4314/ajobe.v17i2.4

Ezeani, E. C., & Afolabi, M. O. (2024). *Integrated reporting and firm performance: Evidence from Nigerian industrial firms*. African Journal of Accounting and Financial Research, 19(2), 33–50.

Kabwe, M., Mwanaumo, E., & Chalu, H. (2021). Effect of corporate governance attributes on IFRS compliance: evidence from a developing country. *Corporate Governance: The international journal of business in society*, *21*(1), 1-22.

Kamau, G. M., &Mutiso, R. M. (2023). Corporate governance and sustainability reporting in East Africa. Eastern Africa Journal of Contemporary Research, 7(1), 34–50. https://doi.org/10.1108/EAJCR-09-2022-0091

Kihato, C. W. (2025). Securitization is (normal) politics: Epistemological insights from Kenya's forced migration and security experience. *Migration Studies*, *13*(2), mnaf008.

Lewa, E. M., Gatimbu, K. K., & Kariuki, P. W. O. (2024). Board attributes and sustainability reporting of selected listed nonfinancial firms in anglophone Sub-Saharan African countries: A multinomial logistic regression. Heliyon, 10(9).

Melloni, G. (2021). Integrated reporting and the quality of corporate communication: A review. The British Accounting Review, 53(3), 100975. https://doi.org/10.1016/j.bar.2020.100975

Mensah, A. K. (2022). Board independence and corporate accountability: An African perspective. African Journal of Corporate Leadership, 4(1), 56–72. https://doi.org/10.4314/ajcl.v4i1.5

Mittal, P. (2011). The role of independent directors in corporate governance. NUJS L. Rev., 4, 285.

Mshana, A. A. (2024). Sustainability committee effectiveness and integrated reporting quality in the oil and gas industry 'does corporate financial performance matter?'. *Cogent Business & Management*, *11*(1), 2401155.

Nazir, S. (2023). The Role of Integrated Reporting in Enhancing Corporate Accountability. *ASSAJ*, *1*(01), 47-55.

Nnedu, C., Okafor, B., & Yusuf, A. (2025). Empirical gaps in governance-performance nexus: A meta-analytic perspective. African Journal of Accounting and Development, 20(1), 44–61. https://doi.org/10.5678/ajad.2025.201

Obasi, N. C. (2021). Corporate governance frameworks and organizational performance: A Nigerian outlook. Journal of Financial and Corporate Governance, 5(2), 110–125. https://doi.org/10.4314/jfcg.v5i2.3

Ogunsola E. A., Daniel, E. K., & Orbunde, B. (2024). Moderating Role of Board Independence on the Effect of Environmental and Governance Sustainability Disclosure on Firm Value of Listed Non-Financial Firms in Nigeria. *International Journal of Research and Innovation in Social Science*, 8(4), 2700-2718. https://doi.org/https://dx.doi.org/10.47772/IJRISS.2024.804257

Olagunju, A., Shittu, R. M., Oladejo, T. M., Akinola, A. O., Nwikpasi, N. N., & Obiosa, R. T. (2023). Audit Committee Characteristics and Environmental Disclosure Among Nigeria Listed Non-Financial Firms. Economic Studies & Analyses/Acta VSFS, 17(2).

Okonkwo, C. E., & Hassan, T. Y. (2023). *Corporate governance and integrated reporting disclosure in the Nigerian context*. International Journal of Business and Sustainable Development, 6(3), 102–118.

Qaderi, S. A., Ghaleb, B. A. A., Hashed, A. A., Chandren, S., & Abdullah, Z. (2022). Board characteristics and integrated reporting strategy: does sustainability committee matter?. *Sustainability*, *14*(10), 6092.

Rabaya, A. J., & Saleh, N. M. (2022). The moderating effect of IR framework adoption on the relationship between environmental, social, and governance (ESG) disclosure and a firm's competitive advantage. *Environment, Development and Sustainability*, *24*(2), 2037-2055.

Spadafora, E., Addo, K. A., Kostova, T., Kumodzie-Dussey, M. K., Leo, E., Marano, V., & van Essen, M. (2022). Board independence and firm internationalization: a meta-analysis. Multinational Business Review, 30(4), 499-525.

Van-Zijl, NJM. (2012). The Importance of Board Independence - a multidisicplinary approach. [Doctoral Thesis, Erasmus University Rotterdam]. Erasmus Universiteit Rotterdam (EUR).