

Effect of environmental, social and governance disclosures on earnings quality of listed industrial goods companies in Nigeria

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Abstract

Purpose: This study examines the relationship between environmental, social, and governance disclosures and earnings quality among listed Industrial Goods Companies in Nigeria. The study was motivated by the increasing importance of sustainability reporting and the need to establish whether greater transparency in environmental, social, and governance activities is associated with improved earnings quality.

Methodology: The study employed an ex-post facto research design using panel data from 11 sampled firms over a ten-year period, resulting in 110 firm-year observations. Environmental Disclosure Index, Social Disclosure Index, and Governance Disclosure Index were used as explanatory variables, while earnings quality served as the dependent variable. Data were analysed using descriptive statistics, diagnostic tests, and fixed-effects panel regression with Driscoll–Kraay standard errors.

Results and conclusion: The findings reveal that environmental disclosure, social disclosure, and governance disclosure have positive and statistically significant relationships with earnings quality. The study therefore concludes that greater transparency across the environmental, social, and governance dimensions is associated with improved earnings quality. The findings further support Stakeholder Theory by indicating that comprehensive corporate disclosure can enhance transparency, accountability, stakeholder monitoring, and the credibility of reported earnings.

Implications of findings: The findings imply that firms can strengthen the credibility of their reported earnings by improving the quality and comprehensiveness of their environmental, social, and governance disclosures. Management should integrate ESG information into corporate reporting practices to enhance transparency and accountability, while regulatory authorities should strengthen ESG disclosure guidelines and monitoring mechanisms to promote consistency, comparability, and credibility in sustainability reporting.

Keywords: Earnings Quality, ESG Disclosure, industrial goods, Nigeria

1. Introduction

Corporate reporting has evolved considerably from its traditional emphasis on financial performance to a more comprehensive approach that incorporates environmental, social, and governance (ESG) considerations. This evolution reflects the growing recognition that an organization's long-term success depends not only on its financial outcomes but also on its ability to manage environmental risks, fulfill social responsibilities, and maintain sound governance practices. The increasing prominence of ESG disclosure has been driven by heightened global concerns over climate change, environmental degradation, corporate scandals, social inequality, and governance failures, which have fundamentally reshaped expectations of corporate accountability (Eccles et al., 2014; Friede et al., 2015). Consequently, investors, regulators, creditors, customers, employees, and other stakeholders increasingly demand corporate reports that integrate financial and non-financial information to facilitate more comprehensive assessments of corporate performance and long-term value creation. Responding to these demands, sustainability reporting frameworks such as the Global Reporting Initiative (GRI) Standards and the International Sustainability Standards Board (ISSB) Sustainability Disclosure Standards have strengthened the institutionalization of ESG disclosure as a critical component of modern corporate reporting (GRI, 2023; ISSB, 2023).

ESG disclosure complements conventional financial reporting by providing stakeholders with decision-useful information on firms' environmental stewardship, social responsibility, governance structures, and sustainability-related risks, thereby reducing information asymmetry and enhancing corporate transparency (Dhaliwal et al., 2011; Ioannou & Serafeim, 2017). Environmental disclosure reflects corporate commitment to environmental protection through reporting on issues such as carbon emissions, energy efficiency, waste management, pollution control, and resource conservation (Clarkson et al., 2008). Social disclosure demonstrates organizational responsibility towards employees, customers, suppliers, communities, and other stakeholder groups through information relating to employee welfare, occupational health and safety, diversity and inclusion, human rights, and community development initiatives (Gamerschlag et al., 2011). Governance disclosure, meanwhile, communicates information regarding board effectiveness, executive compensation, ownership structure, internal control systems, audit oversight, and risk management mechanisms established to promote accountability, transparency, and ethical corporate conduct (Shleifer & Vishny, 1997; OECD, 2015). Collectively, these three dimensions provide stakeholders with a broader understanding of firms' sustainability performance and corporate governance beyond the information contained in traditional financial statements.

One important outcome expected from transparent ESG reporting is improved earnings quality. Earnings quality reflects the extent to which reported earnings faithfully represent a firm's underlying economic performance and provide reliable, relevant, and decision-useful information to investors and other stakeholders (Dechow et al., 2010). High-quality earnings are generally characterized by persistence, predictability, reliability, and minimal managerial manipulation (Francis et al., 2004). By contrast, poor earnings quality resulting from aggressive accounting practices and earnings management undermines the credibility of financial statements, increases information asymmetry, weakens investor confidence, raises the cost of capital, and ultimately impairs the efficient allocation of resources within capital markets (Dechow et al., 1995). From a theoretical perspective, Stakeholder Theory suggests that organizations strengthen accountability by responding to stakeholders' information needs through transparent ESG reporting (Freeman, 1984), while Legitimacy Theory argues that firms disclose ESG information to maintain societal approval and organizational legitimacy (Suchman, 1995). Consequently, firms with more comprehensive ESG disclosure are expected to exhibit higher earnings quality because greater transparency and stakeholder monitoring reduce managerial incentives for opportunistic financial reporting.

Despite these theoretical expectations, concerns regarding the credibility of financial reporting remain pervasive across both developed and emerging economies. Although the adoption of sustainability reporting has increased considerably in recent years, recurring cases of earnings management, accounting irregularities, and corporate governance failures continue to raise questions regarding whether ESG disclosure genuinely enhances financial reporting quality or merely represents symbolic compliance with stakeholder expectations. This concern is particularly relevant in emerging economies where regulatory enforcement, institutional quality, and corporate governance practices remain relatively weak. Nigeria presents a particularly important setting for investigating this issue because the industrial goods sector constitutes a critical component of the country's manufacturing industry, contributing significantly to industrialization, infrastructure development, employment generation, and economic diversification. Companies within the industrial goods sector, including those engaged in the production of cement, building materials, chemicals, paints, and other industrial products, have substantial environmental and social footprints arising from greenhouse gas emissions, energy consumption, waste generation, raw material extraction, and community-related impacts. These activities expose them to increasing scrutiny from regulators, investors, host communities, and civil

society organizations regarding their sustainability practices and reporting transparency (Okafor et al., 2021). Although sustainability reporting has become increasingly common among listed industrial goods companies following evolving global reporting expectations and domestic regulatory initiatives, considerable variations remain in both the extent and quality of ESG disclosures across firms. Similarly, concerns regarding earnings management and the credibility of financial reporting continue to undermine investor confidence in the Nigerian capital market.

The persistence of poor earnings quality has important implications for firms, investors, regulators, and the wider economy. Financial statements containing low-quality earnings impair investment decisions, increase information asymmetry between managers and investors, elevate firms' cost of capital, reduce market efficiency, and weaken public confidence in corporate reporting. Furthermore, poor earnings quality exposes firms to reputational damage, regulatory sanctions, litigation risk, and reduced access to long-term finance. Consequently, establishing whether ESG disclosure improves earnings quality extends beyond an academic exercise to become an important policy issue capable of influencing corporate reporting regulation, governance reforms, and sustainable investment decisions.

Recognizing these concerns, a growing body of empirical literature has examined the relationship between ESG disclosure and earnings quality. Existing evidence, however, remains inconclusive. Several studies, including Al-Shaer and Zaman (2018) and Velte (2019), reported that comprehensive ESG disclosure improves earnings quality by strengthening governance mechanisms, reducing information asymmetry, and constraining earnings management. Conversely, Christensen et al. (2021) and several subsequent studies documented weak, mixed, or statistically insignificant relationships, suggesting that the effectiveness of ESG disclosure depends on institutional quality, regulatory environments, reporting standards, governance structures, industry characteristics, and national economic contexts. These conflicting findings indicate that the relationship between ESG disclosure and earnings quality remains far from settled and requires further empirical investigation.

The Nigerian literature exhibits additional limitations. First, existing studies have focused predominantly on the relationship between ESG disclosure and firm performance, financial performance, market valuation, or corporate reputation, with relatively limited attention devoted to earnings quality as a financial reporting outcome, particularly among listed industrial goods companies. Second, many studies have employed aggregate ESG disclosure measures, thereby providing limited evidence regarding the distinct influence of environmental, social, and governance disclosures on earnings quality. Third, empirical evidence from developed economies may not be readily generalizable to Nigeria because of differences in institutional environments, regulatory enforcement, corporate governance structures, sustainability reporting practices, and capital market development. These limitations reveal important conceptual, methodological, and contextual gaps that constrain current understanding of how ESG disclosure influences earnings quality within the Nigerian industrial goods sector. Therefore, this study examines the effect of environmental, social, and governance disclosure on the earnings quality of listed industrial goods companies in Nigeria. By examining the individual dimensions of ESG disclosure, the study seeks to provide empirical evidence on their influence on financial reporting quality within an important subsector of the Nigerian manufacturing industry. The findings are expected to enrich the ESG and financial reporting literature while offering useful insights for regulators, investors, corporate managers, and policymakers in promoting greater transparency, accountability, and high-quality financial reporting.

2. Literature review

This section reviews relevant concepts, theories, and empirical studies related to the study variables. It identifies gaps in existing literature and develops hypotheses based on theoretical arguments and previous empirical findings.

Empirical Review on Environmental Disclosure and Earnings Quality

Empirical research examining the relationship between environmental disclosure and earnings quality has increased significantly in response to the growing emphasis on sustainability reporting and corporate accountability. Despite extensive scholarly attention, empirical findings remain mixed, with studies reporting positive, insignificant, and negative relationships across different institutional settings, industries, and regulatory environments. These inconsistencies suggest that the effect of environmental disclosure on earnings quality is influenced by firm-specific characteristics, governance mechanisms, and the quality of sustainability reporting.

A substantial body of empirical evidence supports a positive relationship between environmental disclosure and earnings quality. Studies by Al-Shaer and Zaman (2018), Velte (2019), Raimo et al. (2021), Buallay (2022), Omololu et al. (2023), Olubode et al. (2025), and Oladele et al. (2025) found that firms with more comprehensive environmental disclosures generally exhibit lower levels of earnings management, reduced discretionary accruals, improved earnings persistence, and higher-quality financial reporting. These studies argue that transparent environmental reporting enhances corporate accountability, reduces information asymmetry, strengthens stakeholder confidence, and is more effective when supported by sound corporate governance mechanisms.

Conversely, some studies report insignificant relationships. Yip et al. (2011) found that environmental disclosure does not significantly improve earnings quality after controlling for firm-specific factors, while Lys et al. (2015) argued that such disclosure is often motivated by legitimacy and reputational concerns rather than genuine improvements in financial reporting. In contrast, Prior et al. (2008) and Sun et al. (2010) documented a negative relationship, suggesting that managers may strategically increase environmental disclosure to divert stakeholders' attention from opportunistic accounting practices and poor earnings quality.

Overall, the empirical literature indicates that environmental disclosure has the potential to enhance earnings quality by promoting transparency, accountability, and credible financial reporting. However, the inconsistent findings suggest that the relationship remains context-dependent and is shaped by institutional quality, regulatory frameworks, corporate governance, and methodological differences. These inconsistencies highlight the need for further empirical investigation, particularly in emerging economies such as Nigeria.

H₀₁ Environmental disclosure has no significant effect on earnings quality.

Empirical Review on Social Disclosure and Earnings Quality

Empirical research examining the relationship between social disclosure and earnings quality has grown significantly due to the increasing emphasis on corporate social responsibility and stakeholder-oriented reporting. However, empirical evidence remains inconclusive, with studies reporting positive, insignificant, and negative relationships across different institutional settings, industries, and regulatory environments. These mixed findings suggest that the effect of social disclosure on earnings quality depends on corporate governance mechanisms, institutional quality, reporting incentives, and the credibility of sustainability reporting.

A substantial body of empirical evidence supports a positive relationship between social disclosure and earnings quality. Studies by Al-Shaer and Zaman (2018), Raimo et al. (2021), Buallay (2022), Omololu et al. (2023), Olubode et al. (2025), and Oladele et al. (2025) found that firms with more comprehensive social disclosures generally exhibit lower levels of earnings management, reduced discretionary accruals, improved earnings persistence, and higher-quality financial reporting. These studies argue that disclosures relating to employee welfare, human rights, customer relations, diversity, and community development enhance transparency, reduce information asymmetry, strengthen stakeholder confidence, and are more effective when supported by sound corporate governance mechanisms.

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In conclusion, the empirical literature indicates that social disclosure has the potential to enhance earnings quality by promoting transparency, accountability, and credible financial reporting. However, the inconsistent findings suggest that the relationship remains context-dependent and is shaped by corporate governance, institutional quality, regulatory frameworks, and methodological differences. These inconsistencies highlight the need for further empirical investigation, particularly in emerging economies such as Nigeria.

H₀₂ Social disclosure does not significantly influence earnings quality.

Empirical Review on Governance Disclosure and Earnings Quality

Empirical evidence on the relationship between governance disclosure and earnings quality has grown substantially as corporate governance assumes a more central role in promoting transparency, accountability, and credible financial reporting. Nevertheless, existing studies provide mixed findings, reporting positive, insignificant, and negative relationships across different institutional and regulatory environments. These variations indicate that the effectiveness of governance disclosure in enhancing earnings quality is influenced by governance structures, regulatory enforcement, institutional quality, and firms' reporting incentives.

Several empirical studies report a positive association between governance disclosure and earnings quality. Rezaee and Tuo (2019), Alareeni and Hamdan (2020), Nekhili et al. (2017), Mahmud (2026), and Yahaya and Bello (2026) found that firms with more comprehensive governance disclosures generally experience lower earnings management, reduced discretionary accruals, and more reliable financial reporting. These studies argue that effective governance disclosure strengthens board oversight, enhances internal controls and audit quality, reduces information asymmetry, and constrains managerial opportunism, thereby improving the credibility of reported earnings.

However, not all studies support this conclusion. Christensen et al. (2021) found that governance disclosure does not significantly improve earnings quality unless supported by strong institutional frameworks and effective regulatory enforcement. Similarly, Grewal et al. (2019) argued that governance disclosure has limited influence where reporting is primarily compliance-driven rather than reflective of sound governance practices. In contrast, Cho et al. (2012) and Kim and Lyon (2015) documented a

negative relationship, suggesting that some managers may use governance disclosure as a symbolic legitimacy or impression management strategy while simultaneously engaging in earnings management.

Summarily, the empirical literature suggests that governance disclosure has the potential to enhance earnings quality by strengthening transparency, accountability, and corporate oversight. However, the inconsistent findings indicate that this relationship remains context-dependent and varies with governance quality, institutional environments, regulatory frameworks, and methodological approaches. These inconsistencies highlight the need for further empirical investigation, particularly in emerging economies such as Nigeria.

H₀₃ Governance disclosure has no significant impact on earnings quality.

Theoretical Framework

This study is anchored on the Stakeholder Theory developed by Freeman (1984) and subsequently extended by Donaldson and Preston (1995), Mitchell et al. (1997), and Phillips (2003). The theory posits that organisations are accountable not only to shareholders but also to a broad range of stakeholders, including employees, customers, suppliers, creditors, governments, and host communities. It argues that organisational success depends on management's ability to address stakeholders' information needs through transparent and accountable reporting.

Within the context of this study, Stakeholder Theory explains that environmental, social, and governance (ESG) disclosures enhance corporate transparency, reduce information asymmetry, and strengthen stakeholder confidence. Comprehensive ESG reporting also improves stakeholder monitoring, discourages earnings management, and enhances the credibility of financial reporting. Consequently, firms that provide more transparent ESG disclosures are expected to report higher-quality earnings.

The theory provides an appropriate framework for this study because it explains how environmental, social, and governance disclosures promote accountability and improve earnings quality by strengthening transparency and reducing opportunistic managerial behaviour.

3. Methodology

This study adopted an ex post facto research design within a quantitative framework using panel data to examine the effect of environmental, social, and governance (ESG) disclosures on the earnings quality of listed industrial goods companies in Nigeria. The study covered eleven (11) actively listed industrial goods companies on the Nigerian Exchange Group (NGX) over the period 2016–2025, selected through a census sampling technique. Secondary data were obtained from the annual reports and accounts of the sampled firms. Data were analyzed using descriptive and inferential statistics. Preliminary diagnostic tests, including normality, multicollinearity, and the Hausman specification test, were conducted to ensure the validity of the model. Thereafter, the Driscoll-Kraay standard error regression estimator was employed to examine the effect of environmental, social, and governance disclosures on earnings quality due to its robustness to heteroskedasticity, serial correlation, and cross-sectional dependence. All analyses were performed using Stata software, with hypotheses tested at the 5% level of significance.

Model Specification

The empirical model for this study is

$$EQ_{it} = \beta_0 + \beta_1 ED_{it} + \beta_2 SD_{it} + \beta_3 GD_{it} + \varepsilon_{it} + \varepsilon_{it}$$

Where:

EQ=Earnings Quality, ED=Environmental Disclosure, SD=Social Disclosure, GD=Governance Disclosure, ε = Error term

Table 1: Measurements of Variables

Variables	Symbol	Measurement	Operational Definition	Previous Studies
Environmental Disclosure	ED	Environmental Disclosure Index	Total environmental disclosure items reported by a firm divided by maximum environmental disclosure items in the disclosure checklist	Eze et al.(2025);Patrick et al.(2025); Yahaya and Bello(2026);Gwar et al. (2024).
Social Disclosure	SD	Social Disclosure Index	Total social disclosure items reported by a firm divided by maximum social disclosure items in the disclosure checklist	Patrick et al.(2025); Yahaya and Bello(2026);Sahar(2025);Omotoso et al. (2024)
Governance Disclosure	GD	Governance Disclosure Index	Total governance disclosure items reported by a firm divided by maximum governance disclosure items in the disclosure checklist	Adebayo et al(2025);Alabi(2026)Sahar(2025)
Earnings Quality	EQ	Earnings Quality	McNichols (2002) Accrual Model	Raimo et al.(2021),Sun et al.(2010)Essien & Akpan(2024)

Source: Author's Compilation (2026)

4. Results and discussion

Descriptive Statistics

The descriptive statistics in Table 2 provide an overview of the characteristics and distribution of the 110 observations used in the study.

Table 2: Descriptive statistics

Variables	OBS	Mean	Std. Dev	Min	Max	Skewness	Kurtosis
EDI	110	0.536	0.030	0.267	1.000	0.014	0.984
SDI	110	0.578	0.140	0.200	1.000	0.278	0.369
GDI	110	0.798	0.361	0.533	1.000	0.241	0.453
EQ	110	0.5631	0.239	0.2698	0.9145	0.174	0.294

Source: Author's Computation (2026)

As presented in Table 2, the descriptive statistics for the 110 observations show that EDI, SDI, GDI, and EQ have mean values of 0.536, 0.578, 0.798, and 0.5631, respectively. GDI records the highest mean value of 0.798, while EDI has the lowest standard deviation of 0.030, indicating the least variability among the variables. The standard deviations of the other variables indicate varying degrees of dispersion around their respective mean values. Furthermore, the skewness values are relatively close to zero, suggesting that the distributions are approximately symmetric. The kurtosis values also indicate no substantial departure from normality based on this descriptive assessment. Overall, the descriptive statistics presented in Table 2 provide an overview of the distribution and variability of the study variables and serve as a basis for the subsequent inferential and regression analyses.

Multicollinearity Test

Multicollinearity analysis is conducted to assess the extent of correlation among the explanatory variables and to determine whether such relationships may adversely affect the reliability of the regression estimates. In this study, the explanatory variables EDI, SDI, and GDI are evaluated using pairwise correlation coefficients, tolerance values, and Variance Inflation Factor (VIF). As a general diagnostic guideline, correlation coefficients below 0.80, tolerance values above 0.10, and VIF values below 10 indicate that multicollinearity is unlikely to pose a serious concern in the regression analysis.

Table 3: Pairwise Correlation Matrix

Variables	EDI	SDI	GDI
EDI	1.00		
SDI	0.297	1.00	
GDI	0.271	0.265	1.00

Source: Author's Computation (2026)

Table 4: Tolerance and VIF

Variables	Tolerance	VIF
EDI	0.639	4.368
SDI	0.514	4.127
GDI	0.631	3.956

Source: Author's Computation (2026)

The correlation results show that EDI, SDI, and GDI are positively but weakly correlated with one another. Specifically, EDI has correlation coefficients of 0.297 with SDI and 0.271 with GDI, while SDI is correlated with GDI at 0.265. These relatively low coefficients indicate that the variables move in the same direction but do not exhibit strong linear associations. The multicollinearity diagnostics further support this finding, with tolerance values of 0.639, 0.514, and 0.631 for EDI, SDI, and GDI, respectively, all exceeding the 0.10 threshold. Similarly, the corresponding VIF values of 4.368, 4.127, and 3.956 remain below the conventional threshold of 10. Although the VIF values indicate some shared variance among the explanatory variables, they do not suggest a serious multicollinearity problem. Overall, the results indicate that EDI, SDI, and GDI can be included simultaneously in the regression model without substantial multicollinearity concerns.

Model Specification test

The Hausman specification test is used in panel data analysis to determine whether the fixed-effects model or random-effects model is more appropriate for the study. It examines whether the unobserved individual-specific effects are correlated with the explanatory variables. The null hypothesis supports the random-effects model, while rejection of the null hypothesis favours the fixed-effects model. Thus, the test provides a basis for selecting the appropriate model for the panel regression analysis.

Table 6: Hausman specification test

Test	Chi-square (χ^2)	Degree of Freedom	P-value	Decision
Hausman	18.792	3	0.0095	Fixed Effects

Source: Author's Computation (2026)

The Hausman test produces a Chi-square statistic of 18.792 with 3 degrees of freedom and a p-value of 0.0095. Since the p-value is less than the 5% significance level (0.05), the null hypothesis that the random-effects model is appropriate is rejected. Therefore, the fixed-effects model is preferred for the panel

regression analysis. This result suggests that the unobserved firm-specific effects are systematically correlated with the explanatory variables, making the fixed-effects estimator more appropriate for the study.

Regression analysis

Based on the model specification results, this study employs the fixed-effects model with Driscoll–Kraay standard errors to estimate the relationships between the explanatory and dependent variables and obtain robust statistical inferences.

Table 7: Fixed Effect Regression Result

Variables	Coefficient	Driscoll-Kraay Std.Error	t-statistic	P-value
EDI	0.391	0.369	0.369	0.047
SDI	0.487	0.294	0.497	0.034
GDI	0.314	0.457	0.532	0.023
Within R Square	0.1936			
Wald X Square	41.369			
Observations	110			
Number of Companies	11			
Number of Years	10			
Estimator	Fixed Effects			
Standard errors	Driscoll-Kraay			

Source: Author's Computation (2026)

The fixed-effects regression results, estimated using Driscoll–Kraay standard errors for 110 observations across 11 companies over 10 years, indicate that EDI, SDI, and GDI have positive and statistically significant relationships with EQ at the 5% level, with coefficients of 0.391 ($p = 0.047$), 0.487 ($p = 0.034$), and 0.314 ($p = 0.023$), respectively. The within R-squared of 0.1936 indicates that the explanatory variables jointly account for approximately 19.36% of the within-firm variation in EQ. The Wald chi-square statistic of 41.369 indicates overall model significance. Overall, the findings suggest that higher levels of EDI, SDI, and GDI are associated with improved earnings quality.

The positive and significant relationship between environmental disclosure and earnings quality suggests that greater environmental transparency is associated with more credible and reliable earnings reporting. From the perspective of Stakeholder Theory, firms have responsibilities to a broad range of stakeholders who require relevant and reliable information about corporate activities and performance. Environmental disclosure provides stakeholders with information regarding firms' environmental policies, risks, impacts, and sustainability initiatives, thereby strengthening stakeholder monitoring, enhancing accountability, and reducing information asymmetry. This increased transparency may constrain opportunistic managerial behaviour and improve the credibility of reported earnings. The finding is consistent with prior studies that documented a positive and significant relationship between environmental disclosure and earnings quality [Al-Shaer and Zaman (2018); Velte (2019); Raimo et al. (2021); Buallay (2022); Omololu et al. (2023); Olubode et al. (2025); Oladele et al. (2025)]. However, the result differs from studies that reported negative, insignificant, or mixed relationships [Prior et al. (2008); Yip et al. (2011); Sun et al. (2010); Lys et al. (2015)], which argued that environmental disclosure may sometimes be motivated by legitimacy, reputational concerns, or impression management rather than substantive improvements in reporting quality. Regarding the corresponding hypothesis, the positive and statistically significant relationship between environmental disclosure and earnings quality indicates that the null hypothesis of no significant relationship is rejected in favour of the alternative hypothesis.

Therefore, the finding supports the hypothesis that environmental disclosure has a significant positive relationship with earnings quality among listed industrial goods companies in Nigeria.

Similarly, the positive and significant relationship between social disclosure and earnings quality indicates that greater attention to social-related information is associated with improved earnings quality. Stakeholder Theory emphasizes the need for firms to respond to the information requirements of employees, customers, communities, investors, and other stakeholder groups. Social disclosure enables firms to communicate information relating to employee welfare, customer relations, community development, health and safety, and other social responsibilities, thereby promoting transparency and strengthening stakeholder confidence. Enhanced social transparency may improve external monitoring and discourage opportunistic reporting practices, resulting in more credible earnings information. This finding is consistent with studies that reported a positive and significant relationship between social disclosure and earnings quality [Al-Shaer and Zaman (2018); Raimo et al. (2021); Buallay (2022); Omololu et al. (2023); Olubode et al. (2025); Oladele et al. (2025)]. However, it contrasts with studies that reported negative, insignificant, or mixed findings [Prior et al. (2008); Yip et al. (2011); Sun et al. (2010); Lys et al. (2015)], suggesting that social disclosure may not always lead to improved reporting quality where disclosure is driven primarily by legitimacy or reputational motives. With respect to the corresponding hypothesis, the positive and statistically significant relationship indicates that the null hypothesis of no significant relationship between social disclosure and earnings quality is rejected in favour of the alternative hypothesis. Consequently, the finding supports the hypothesis that social disclosure has a significant positive relationship with earnings quality among listed industrial goods companies in Nigeria.

Furthermore, the positive and significant relationship between governance disclosure and earnings quality suggests that greater transparency regarding corporate governance practices enhances the credibility of reported earnings. In line with Stakeholder Theory, governance disclosure provides stakeholders with information that enables them to assess management accountability, board effectiveness, ethical practices, internal controls, risk management, and other governance mechanisms designed to protect stakeholder interests. Greater governance transparency strengthens oversight, reduces information asymmetry, and limits managerial opportunism, thereby supporting higher earnings quality. This finding is consistent with studies that reported positive and significant relationships between governance disclosure and earnings quality [Nekhili et al. (2017); Rezaee and Tuo (2019); Alareeni and Hamdan (2020); Mahmud (2026); Yahaya and Bello (2026)]. However, it differs from studies reporting negative, insignificant, or mixed relationships [Cho et al. (2012); Kim and Lyon (2015); Grewal et al. (2019); Christensen et al. (2021)], which argued that governance disclosure may have limited effects where it is symbolic, compliance-driven, or not supported by strong institutional frameworks. In relation to the corresponding hypothesis, the positive and statistically significant relationship indicates that the null hypothesis of no significant relationship between governance disclosure and earnings quality is rejected in favour of the alternative hypothesis. Thus, the result supports the hypothesis that governance disclosure has a significant positive relationship with earnings quality among listed industrial goods companies in Nigeria.

Overall, the findings provide empirical support for the three alternative hypotheses formulated in this study. Environmental disclosure, social disclosure, and governance disclosure each exhibit a positive and statistically significant relationship with earnings quality among listed industrial goods companies in Nigeria. Accordingly, the respective null hypotheses are rejected in favour of the alternative hypotheses. These results suggest that environmental, social, and governance disclosures can serve as important

mechanisms for strengthening corporate transparency, accountability, and stakeholder confidence, thereby contributing to improved earnings quality.

5. Conclusion and Recommendations

The study examined the relationship between environmental disclosure index (EDI), social disclosure index (SDI), governance disclosure index (GDI), and earnings quality (EQ) among the sampled firms. The fixed-effects regression results with Driscoll-Kraay standard errors revealed that EDI, SDI, and GDI have positive and statistically significant relationships with earnings quality at the 5% level. The findings suggest that greater disclosure across environmental, social, and governance dimensions is associated with improved earnings quality. Overall, the study concludes that effective ESG disclosure constitutes an important factor associated with the quality of earnings reported by the sampled firms.

Based on the findings, firms should strengthen their environmental, social, and governance disclosure practices by providing comprehensive, reliable, and transparent information on their environmental activities, social responsibilities, and corporate governance mechanisms. Management should ensure that ESG information is adequately integrated into corporate reporting to enhance transparency and accountability. Regulatory authorities should also strengthen ESG disclosure guidelines and monitoring mechanisms to promote consistency, comparability, and credibility in corporate disclosures. These measures can encourage firms to improve their disclosure practices and support the provision of higher-quality earnings information to investors and other stakeholders.

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