Effect of Environmental, Social, and Governance (ESG) Sustainability Reporting on The Market Value of Listed Industrial Goods Companies in Nigeria

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Abstract
The growing emphasis on sustainable business practices has intensified scholarly and policy interest in the value relevance of sustainability reporting, particularly in emerging capital markets. This study examines the effect of environmental, social, and governance (ESG) sustainability reporting on the market value of listed industrial goods companies in Nigeria. Drawing on stakeholder theory, legitimacy theory, and signaling theory, the study adopts an ex-post facto research design and utilizes panel data obtained from the annual and sustainability reports of quoted industrial goods firms over the period 2015–2024. ESG disclosure indices are constructed through systematic content analysis, while firm market value is proxied by Tobin's Q. Panel regression techniques are employed to analyze the relationship between ESG disclosures and market value, controlling for firm-specific characteristics. The findings provide evidence that environmental and governance sustainability reporting exert a positive and significant effect on market value, whereas social sustainability reporting shows a weaker and statistically insignificant association. The study contributes to the sustainability accounting literature by providing sector-specific evidence from Nigeria and by disaggregating ESG dimensions to reveal their differential value relevance. The findings offer important implications for corporate managers, investors, and regulators seeking to strengthen sustainability disclosure practices and enhance market efficiency in emerging economies.

Keywords: *Sustainability Reporting; Environmental Disclosure; Social Disclosure; Governance Disclosure; Market Value; Tobin's Q; Nigeria.*

Introduction

In recent decades, corporate reporting has undergone a significant transformation, shifting from a narrow focus on financial performance to a broader emphasis on sustainability and long-term value creation. This transformation has been driven by increasing stakeholder awareness of environmental degradation, social inequality, and corporate governance failures, as well as heightened expectations regarding corporate accountability and transparency. Sustainability reporting, encompassing disclosures on environmental, social, and governance (ESG) performance, has emerged as a critical mechanism through which firms communicate their non-financial impacts and strategic responses to sustainability-related risks and opportunities. Globally, sustainability reporting has become increasingly institutionalized, with a substantial

proportion of large corporations producing standalone sustainability reports or integrating ESG information into their annual reports.

The growing prominence of sustainability reporting is underpinned by the recognition that non-financial information can be value relevant to investors. Traditional financial statements, while essential, are increasingly viewed as insufficient for capturing the full spectrum of risks and opportunities that influence firm value in a complex and dynamic business environment. Issues such as climate change, employee welfare, community relations, and corporate governance quality can have material implications for firms' long-term cash flows, cost of capital, and reputational capital. Consequently, investors and other capital market participants are paying closer attention to ESG disclosures when evaluating firms' prospects and making investment decisions. From a theoretical perspective, the relationship between sustainability reporting and market value is commonly explained through stakeholder theory, legitimacy theory, and signaling theory. Stakeholder theory posits that firms create value by addressing the interests and expectations of a broad range of stakeholders, including investors, employees, customers, regulators, and host communities. Sustainability reporting serves as a communication tool that demonstrates a firm's responsiveness to stakeholder concerns and its commitment to responsible business practices. Legitimacy theory suggests that firms engage in sustainability reporting to maintain or repair their social license to operate, particularly in industries with significant environmental and social impacts. By aligning their disclosures with societal norms and expectations, firms can enhance their legitimacy and reduce the risk of adverse stakeholder reactions that may negatively affect market value. Signaling theory, on the other hand, emphasizes the role of sustainability reporting in reducing information asymmetry between corporate managers and investors. High-quality ESG disclosures can signal superior management quality, effective risk management, and long-term strategic orientation, thereby influencing investors' valuation of the firm. While the sustainability reporting–market value relationship has been extensively examined in developed economies, empirical evidence from emerging markets remains fragmented and inconclusive. Emerging economies are characterized by weaker institutional frameworks, varying enforcement mechanisms, and lower levels of investor sophistication regarding ESG issues, all of which may influence how sustainability information is interpreted and priced by the market. As a result, findings from developed markets may not be directly generalizable to emerging contexts, underscoring the need for country and sector-specific investigations. Nigeria provides a particularly compelling setting for examining the value relevance of sustainability reporting. As Africa's largest economy and one of its most active capital markets, Nigeria has witnessed growing regulatory and institutional attention to sustainability and corporate governance practices. The introduction of sustainability disclosure guidelines by the Nigerian Exchange Group and subsequent efforts to promote ESG reporting among listed firms reflect a broader policy agenda aimed at improving market transparency, attracting sustainable investment, and enhancing corporate accountability. Despite these developments, empirical evidence on whether and how sustainability reporting affects firm market value in Nigeria remains limited. The industrial goods sector occupies a strategic position in Nigeria's economic structure, given its role in manufacturing, construction, and infrastructure development. Firms in this sector typically have substantial environmental footprints, significant labor forces, and complex governance structures, making their sustainability practices particularly salient to stakeholders. Environmental issues such as emissions, waste management, and resource consumption are especially relevant for industrial goods companies, as are social issues related to employee welfare and community engagement. Governance practices, including

board oversight and risk management, are equally critical in a context where concerns about corporate governance quality persist. These characteristics make the sector well suited for examining the differential effects of environmental, social, and governance sustainability reporting on market value. Despite the sector's importance, prior Nigerian studies have often examined sustainability reporting in aggregate or focused on specific industries such as banking or oil and gas. Moreover, many studies do not disaggregate ESG dimensions, thereby obscuring potential differences in their value relevance. This study addresses these gaps by focusing on quoted industrial goods companies in Nigeria and by examining the individual effects of environmental, social, and governance sustainability reporting on market value. By doing so, the study provides a more nuanced understanding of how different dimensions of sustainability reporting are perceived and priced by investors in an emerging market context.

The remainder of the paper is structured as follows. Section 2 reviews the relevant theoretical and empirical literature and develops the study's hypotheses. Section 3 describes the research methodology, including data sources, variable measurement, and model specification. Section 4 presents the empirical results, while Section 5 discusses the findings in light of existing literature and theoretical expectations. Section 6 concludes the study, highlighting its implications, limitations, and directions for future research.

Literature Review

Market Value

Market value represents the aggregate assessment by capital market participants of a firm's worth, incorporating both current performance and expectations about future growth and risk. In financial research, market value is often operationalized using measures such as market capitalization, market-to-book ratio, and Tobin's Q. Tobin's Q, defined as the ratio of the market value of a firm to the replacement cost of its assets, is widely regarded as a comprehensive proxy for firm value because it captures both tangible and intangible aspects of performance.

The use of Tobin's Q is particularly relevant in studies examining sustainability reporting, as ESG disclosures are expected to influence investors' expectations regarding future cash flows, risk exposure, and growth opportunities. A Tobin's Q greater than one suggests that the market values the firm more highly than the book value of its assets, potentially reflecting the perceived benefits of intangible assets such as reputation, brand equity, and effective governance. Conversely, a Tobin's Q below one may indicate market skepticism about the firm's prospects or concerns about risk and inefficiency. In emerging markets such as Nigeria, market value is influenced not only by firm-specific fundamentals but also by broader institutional and macroeconomic factors. Nevertheless, firm-level disclosures, including sustainability reporting, play an important role in shaping investor perceptions and valuation, particularly in sectors where environmental and governance risks are salient.

Sustainability Reporting

Sustainability reporting refers to the systematic disclosure of information on a firm's environmental, social, and governance performance. It provides stakeholders with insights into how firms manage sustainability-related risks and opportunities and how these considerations are integrated into corporate strategy. International frameworks such as the Global Reporting Initiative emphasize the role of sustainability reporting in promoting transparency, accountability, and comparability across firms. In the context of this study, sustainability reporting is conceptualized as a multidimensional construct comprising environmental, social,

and governance disclosures. Disaggregating sustainability reporting into these dimensions allows for a more refined analysis of their individual effects on market value.

Environmental Sustainability Reporting

Environmental sustainability reporting focuses on disclosures related to a firm's interaction with the natural environment, including energy use, emissions, waste management, and resource conservation. For industrial goods companies, environmental issues are particularly material due to the resource-intensive nature of their operations. Transparent environmental reporting can signal effective environmental risk management, regulatory compliance, and commitment to sustainable production practices. Empirical studies suggest that investors may reward firms with strong environmental disclosures by assigning higher valuations, particularly in contexts where environmental risks are financially material.

Social Sustainability Reporting

Social sustainability reporting addresses a firm's impact on employees, communities, and society at large. Typical disclosures include information on labor practices, employee welfare, health and safety, training and development, and community engagement initiatives. Social disclosures can enhance corporate reputation and stakeholder trust, potentially reducing operational and reputational risks. However, the extent to which investors incorporate social sustainability information into valuation decisions may depend on the perceived materiality of social issues and the credibility of disclosures.

Governance Sustainability Reporting

Governance sustainability reporting relates to disclosures on corporate governance structures and practices, such as board composition, executive compensation, risk management systems, and ethical standards. In emerging markets, governance quality is often a critical concern for investors due to weak enforcement mechanisms and agency problems. Robust governance disclosures can reassure investors about managerial accountability and oversight, thereby positively influencing market value.

2.2 Empirical Review

Empirical evidence on the relationship between sustainability reporting and market value is mixed, with studies reporting positive, negative, and insignificant associations. Many international studies find that environmental and governance disclosures are positively related to firm value, while evidence on social disclosures is less consistent. In Nigeria, existing studies are limited and often focus on aggregate sustainability measures or specific sectors, leaving gaps in understanding the differential effects of ESG dimensions.

Based on the theoretical arguments and prior empirical findings, this study posits that environmental and governance sustainability reporting are likely to have a positive effect on the market value of listed industrial goods companies in Nigeria, while the effect of social sustainability reporting may be weaker. Accordingly, the following hypotheses are formulated:

H01: Environmental sustainability reporting has a significant effect on the market value of listed industrial goods companies in Nigeria.

H02: Social sustainability reporting has a significant effect on the market value of listed industrial goods companies in Nigeria.

H03: Governance sustainability reporting has a significant effect on the market value of listed

industrial goods companies in Nigeria.

Theoretical Framework

The relationship between sustainability reporting and firm market value is grounded in several complementary theoretical perspectives, notably stakeholder theory, legitimacy theory, and signaling theory. These theories provide a conceptual basis for understanding why firms engage in sustainability reporting and how such disclosures may influence investor perceptions and market valuation. Stakeholder theory argues that firms are accountable not only to shareholders but also to a broad range of stakeholders whose interests can affect the firm's ability to create and sustain value. From this perspective, sustainability reporting represents a strategic response to stakeholder demands for greater transparency regarding environmental stewardship, social responsibility, and governance quality. By disclosing ESG information, firms can strengthen relationships with key stakeholders, reduce conflict, and enhance long-term performance, which may ultimately be reflected in higher market value. Legitimacy theory posits that firms seek to ensure that their operations are perceived as legitimate within the bounds of societal norms and expectations. Sustainability reporting can be viewed as a legitimizing mechanism, particularly for firms operating in environmentally sensitive or socially impactful industries. Through ESG disclosures, firms signal alignment with societal values and regulatory expectations, thereby reducing legitimacy threats and potential sanctions. Enhanced legitimacy can translate into improved investor confidence and more favorable market valuation.

Signaling theory focuses on information asymmetry between corporate managers and external stakeholders, especially investors. In capital markets, managers typically possess superior information about the firm's operations, risks, and future prospects. Sustainability reporting can function as a signal that conveys credible information about a firm's long-term strategy, risk management practices, and commitment to sustainable value creation. When such disclosures are perceived as credible and informative, they can reduce information asymmetry and influence investors' valuation decisions. Together, these theoretical perspectives suggest that sustainability reporting has the potential to affect market value by shaping stakeholder perceptions, enhancing legitimacy, and signaling firm quality. However, the extent and direction of this effect may vary across ESG dimensions and institutional contexts, highlighting the importance of empirical investigation.

Methodology

Research Design

This study adopts an ex-post facto research design, which is appropriate for examining relationships among variables using historical data over which the researcher has no control. The design is widely employed in accounting and finance research where firm-level financial and non-financial disclosures are analyzed to explain variations in market-based outcomes. Given the objective of examining the effect of environmental, social, and governance (ESG) sustainability reporting on firm market value, the ex-post facto design enables the use of observed sustainability disclosure practices and market valuation outcomes without manipulation of variables. The study further employs a longitudinal panel data approach, combining cross-sectional and time-series observations. Panel data analysis is particularly suitable for this study because it allows for the control of unobserved firm-specific heterogeneity, improves the efficiency of parameter estimates, and captures dynamic variations in sustainability reporting practices and market value over time.

Population and Sample Selection

The population of the study comprises all industrial goods companies listed on the Nigerian Exchange Group (NGX) as at 31 December 2024. The industrial goods sector includes firms engaged in manufacturing, construction, building materials, packaging, and related industrial activities. This sector is selected due to its strategic importance to Nigeria's economic diversification agenda and its significant environmental, social, and governance implications.

The sample consists of all listed industrial goods companies with complete and accessible annual reports, sustainability reports, and market data for the study period. Firms with missing data for key variables or those delisted during the period were excluded to ensure data consistency. The final sample yields a balanced panel covering the ten-year period from 2015 to 2024, providing sufficient observations for robust econometric analysis.

Method of Data Collection

The study relies exclusively on secondary data obtained from multiple credible sources. Sustainability disclosure data were extracted from firms' annual reports, standalone sustainability reports, and integrated reports published on company websites and the Nigerian Exchange Group portal. Market value data, including share prices and market capitalization, were obtained from the Nigerian Exchange Group and verified using firms published financial statements. Financial control variables were sourced from audited annual reports to ensure reliability and consistency.

Measurement of Variables

Dependent Variable: Market Value

Market value is the dependent variable in this study and is proxied using Tobin's Q, which is widely regarded as a comprehensive measure of firm value. Tobin's Q captures both the tangible and intangible value of a firm and reflects investors' expectations about future performance.

Tobin's Q is measured as:

TQ = (Market Value of Equity + Book Value of Total Debt) / Book Value of Total Assets

Where market value of equity is computed as the fiscal year-end share price multiplied by the number of outstanding shares, while total debt is measured as total assets minus book value of equity.

Independent Variables: Sustainability Reporting Dimensions

Sustainability reporting is operationalized through three distinct dimensions: environmental sustainability reporting, social sustainability reporting, and governance sustainability reporting. Each dimension is measured using a disclosure index constructed through systematic content analysis. Environmental Sustainability Reporting (ENV) captures disclosures related to energy usage, emissions, waste management, environmental policies, compliance with environmental regulations, and environmental initiatives. Social Sustainability Reporting (SOC) measures disclosures on employee welfare, health and safety, training and development, community engagement, and social investment programs. Governance Sustainability Reporting (GOV) reflects disclosures on board structure, board independence, executive compensation, risk management, ethical practices, and stakeholder engagement mechanisms.

For each dimension, a checklist based on the Global Reporting Initiative (GRI) standards and the Nigerian Exchange Group sustainability disclosure guidelines was developed. A dichotomous scoring approach was employed, whereby an item scores one (1) if disclosed and zero (0) if not

disclosed. The disclosure score for each firm-year observation is computed as the ratio of disclosed items to the total applicable items for that dimension.

Control Variables

To mitigate omitted variable bias, the study incorporates several firm-specific control variables commonly used in market value studies. Firm size (FSIZE) is measured as the natural logarithm of total assets, reflecting economies of scale and market visibility. Profitability (PROF) is proxied by return on assets, capturing operational efficiency. Leverage (LEV) is measured as the ratio of total debt to total assets, reflecting financial risk. Firm growth (GROWTH) is measured as the annual percentage change in sales revenue, capturing expansion opportunities.

Model Specification

To examine the effect of sustainability reporting on market value, the study specifies the following panel regression model:

$TQ_it = \beta0 + \beta1ENV_it + \beta2SOC_it + \beta3GOV_it + \beta4FSIZE_it + \beta5PROF_it + \beta6LEV_it + \beta7GROWTH_it + \varepsilon_it$

Where TQ represents Tobin's Q for firm i in year t; ENV, SOC, and GOV denote environmental, social, and governance sustainability reporting indices respectively; FSIZE, PROF, LEV, and GROWTH are control variables; β0 is the intercept; β1–β7 are slope coefficients; and ε is the error term.

Both fixed effects and random effects estimation techniques are considered. The Hausman specification test is employed to determine the most appropriate estimator.

Estimation Techniques

Panel regression analysis is conducted using fixed effects and random effects models to account for firm-specific heterogeneity. Fixed effects estimation controls for time-invariant firm characteristics, while random effects estimation assumes that firm-specific effects are uncorrelated with the explanatory variables. The Hausman test guides the selection between these estimators.

To ensure robustness, heteroskedasticity-robust standard errors are applied. Additional diagnostic tests are conducted to assess multicollinearity, serial correlation, and cross-sectional dependence, thereby enhancing the reliability of the estimated results.

Diagnostic Tests

Prior to regression estimation, descriptive statistics and correlation analysis are conducted to examine the distributional properties of the variables and potential multicollinearity. Variance Inflation Factor (VIF) analysis is employed to assess multicollinearity among explanatory variables. Serial correlation is tested using the Wooldridge test for autocorrelation in panel data, while heteroskedasticity is assessed using the modified Wald test. Where necessary, corrective measures such as robust standard errors are applied.

Results and Analysis

This section presents the empirical results of the study. It begins with descriptive statistics of the variables, followed by correlation analysis, panel regression results, and diagnostic tests. The analyses are conducted in line with the study's objectives and hypotheses.

Descriptive Statistics

Table 1 presents the descriptive statistics of the dependent and independent variables used in the study. The statistics provide insight into the distributional properties of the data and the extent of variation across firms and over time.

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Tobin's Q (TQ)	210	1.428	0.512	0.62	3.21
Environmental Reporting (ENV)	210	0.463	0.181	0.10	0.88
Social Reporting (SOC)	210	0.417	0.169	0.08	0.82
Governance Reporting (GOV)	210	0.552	0.194	0.15	0.93
Firm Size (FSIZE)	210	14.862	1.231	12.41	17.96
Profitability (PROF)	210	0.083	0.067	-0.12	0.31
Leverage (LEV)	210	0.476	0.214	0.09	0.89
Growth (GROWTH)	210	0.091	0.173	-0.34	0.62

The results indicate that the average Tobin's Q of listed industrial goods companies in Nigeria is greater than one, suggesting that the market generally values these firms above the book value of their assets. Governance sustainability reporting records the highest mean disclosure score, followed by environmental and social sustainability reporting. This suggests that governance-related disclosures are more emphasized by firms in the sector.

Correlation Matrix

Table 2 presents the Pearson correlation coefficients among the study variables. The correlation analysis provides preliminary evidence on the relationships between sustainability reporting dimensions and market value, as well as potential multicollinearity concerns.

Table 2: Correlation Matrix

Variable	TQ	ENV	SOC	GOV	FSIZE	PROF	LEV	GROWTH
TQ	1.000							
ENV	0.324	1.000						
SOC	0.118	0.421	1.000					
GOV	0.387	0.463	0.398	1.000				
FSIZE	0.291	0.352	0.278	0.419	1.000			
PROF	0.446	0.219	0.143	0.257	0.331	1.000		
LEV	-0.173	-0.098	-0.064	-0.121	0.214	-0.256	1.000	
GROWTH	0.205	0.187	0.132	0.169	0.144	0.298	-0.091	1.000

The correlation coefficients indicate positive associations between Tobin's Q and environmental,

social, and governance sustainability reporting, with governance reporting exhibiting the strongest correlation. None of the correlation coefficients exceed the conventional threshold of 0.80, suggesting the absence of serious multicollinearity.

Panel Regression Results

The panel regression analysis examines the effect of ESG sustainability reporting on market value. Fixed effects and random effects estimations were conducted, and the Hausman test was used to select the appropriate model.

Table 3: Panel Regression Results (Dependent Variable: Tobin's Q)

Variable	Fixed Effects Coefficient	Std. Error	t-Statistic	Prob.
ENV	0.482	0.176	2.74	0.007
SOC	0.119	0.141	0.84	0.401
GOV	0.536	0.162	3.31	0.001
FSIZE	0.214	0.093	2.30	0.022
PROF	0.917	0.284	3.23	0.002
LEV	-0.356	0.148	-2.41	0.017
GROWTH	0.189	0.082	2.30	0.022
Constant	-2.731	1.124	-2.43	0.016

Model Statistics: - R-squared: 0.612 - Adjusted R-squared: 0.587 - F-statistic: 24.31 ($p < 0.001$)

The Hausman test results ($\chi^2 = 18.47$; $p < 0.05$) indicate that the fixed effects model is more appropriate than the random effects model. The regression results reveal that environmental sustainability reporting has a positive and statistically significant effect on market value, supporting H1. Governance sustainability reporting also exerts a positive and significant effect on market value, supporting H3. However, social sustainability reporting shows a positive but statistically insignificant effect, leading to the rejection of H2.

Diagnostic Tests

To ensure the robustness of the regression results, several diagnostic tests were conducted.

Table 4: Diagnostic Test Results

Test	Statistic	Probability	Decision
Variance Inflation Factor (Mean VIF)	2.31	–	No multicollinearity
Wooldridge Test for Autocorrelation	1.84	0.176	No serial correlation
Modified Wald Test for Heteroskedasticity	32.47	0.000	Heteroskedasticity present

Given the presence of heteroskedasticity, heteroskedasticity-robust standard errors were applied to the fixed effects model. The use of robust estimators does not materially alter the significance or direction of the coefficients, indicating that the results are stable and reliable.

Discussion of Findings

This section discusses the empirical findings of the study in relation to the research objectives, hypotheses, and existing theoretical and empirical literature. The discussion focuses on the differential effects of environmental, social, and governance sustainability reporting on the market value of listed industrial goods companies in Nigeria.

Environmental Sustainability Reporting and Market Value

The results reveal that environmental sustainability reporting exerts a positive and statistically significant effect on the market value of listed industrial goods companies in Nigeria. This finding supports Hypothesis 1 and suggests that investors in the Nigerian capital market place value on firms' disclosures relating to environmental management and performance. Given the environmentally intensive nature of industrial goods production, disclosures on emissions control, energy efficiency, waste management, and environmental compliance appear to reduce perceived environmental risk and enhance investor confidence.

This result is consistent with the predictions of signaling theory, which posits that credible environmental disclosures serve as positive signals of effective risk management and long-term strategic orientation. Firms that provide comprehensive environmental information are likely perceived as better prepared to manage regulatory pressures, environmental liabilities, and transition risks associated with sustainability-related policies. Consequently, such firms are rewarded with higher market valuations. The finding also aligns with stakeholder theory, as transparent environmental reporting demonstrates responsiveness to the concerns of regulators, communities, and environmentally conscious investors.

Empirically, the result corroborates prior studies that document a positive association between environmental disclosures and firm value, particularly in environmentally sensitive industries. The finding suggests that, even in an emerging market context characterized by weaker institutional frameworks, environmental sustainability reporting can be value relevant when the disclosed information addresses material risks and opportunities. For Nigerian industrial goods firms, environmental reporting appears to function as a strategic tool for differentiating firms and enhancing market perception.

Social Sustainability Reporting and Market Value

Contrary to expectations, social sustainability reporting does not exhibit a statistically significant effect on market value. Although the coefficient is positive, its insignificance implies that investors do not strongly price social sustainability disclosures into their valuation decisions for industrial goods firms in Nigeria. This result leads to the rejection of Hypothesis 2.

Several explanations may account for this finding. First, investors in the Nigerian capital market may prioritize financial performance, environmental risk, and governance quality over social initiatives, particularly where social disclosures are perceived as philanthropic or symbolic rather than economically material. Second, the credibility and depth of social sustainability reporting may vary substantially across firms, limiting investors' ability to assess the true economic implications of such disclosures. Third, social sustainability benefits may accrue over a longer time horizon and may not be immediately reflected in market-based valuation measures such as

Tobin's Q. From a theoretical standpoint, the result suggests a weaker signaling effect of social disclosures relative to environmental and governance disclosures in the Nigerian context. While social reporting may enhance corporate reputation and stakeholder goodwill, these benefits may not translate directly into higher market valuations in the short to medium term. This finding is consistent with prior studies in emerging markets that report mixed or insignificant effects of social sustainability reporting on firm value.

Governance Sustainability Reporting and Market Value

The findings indicate that governance sustainability reporting has a positive and statistically significant effect on market value, providing strong support for Hypothesis 3. This result underscores the importance of governance quality and transparency in shaping investor perceptions in emerging markets. Disclosures relating to board composition, independence, risk management structures, and ethical practices appear to reassure investors about managerial accountability and oversight. The positive effect of governance sustainability reporting is consistent with agency theory and signaling theory. In contexts where agency problems and governance weaknesses are prevalent, transparent governance disclosures serve as credible signals that mitigate information asymmetry and reduce perceived investment risk. Investors are therefore more likely to assign higher valuations to firms with robust governance reporting practices. Empirical evidence from both developed and emerging markets supports the view that governance disclosures are particularly value relevant in environments characterized by institutional weaknesses. The Nigerian context, marked by historical concerns about corporate governance quality, amplifies the importance of governance transparency. For industrial goods firms, governance sustainability reporting appears to be a key mechanism for building investor trust and enhancing market value.

Synthesis of Findings

Taken together, the findings reveal that not all dimensions of sustainability reporting are equally valued by investors. Environmental and governance sustainability reporting emerge as significant drivers of market value, while social sustainability reporting plays a more limited role. This pattern highlights the importance of disaggregating sustainability reporting into its constituent dimensions, as aggregate measures may obscure important differences in value relevance. The results suggest that Nigerian investors prioritize disclosures that directly address risk management, regulatory compliance, and governance oversight. While social sustainability remains important from a broader stakeholder and societal perspective, its market value implications appear less pronounced in the industrial goods sector. These findings reinforce the context-dependent nature of the sustainability reporting–market value relationship and underscore the need for sector- and country-specific analyses.

6. Conclusion and Implications

Conclusion

This study examined the effect of environmental, social, and governance sustainability reporting on the market value of listed industrial goods companies in Nigeria over the period 2015–2024. Using panel regression analysis and Tobin's Q as a proxy for market value, the study provides empirical evidence on the differential value relevance of ESG sustainability disclosures in an emerging market context.

The findings indicate that environmental and governance sustainability reporting exert positive

and statistically significant effects on market value, while social sustainability reporting does not have a significant impact. These results suggest that investors in the Nigerian capital market place greater emphasis on disclosures that signal effective environmental risk management and strong governance structures. The study contributes to sustainability accounting literature by providing sector-specific evidence from Nigeria and by highlighting the importance of disaggregating ESG dimensions when assessing their market value implications.

Theoretical Implications

The study extends stakeholder theory, legitimacy theory, and signaling theory by demonstrating how these frameworks operate in an emerging market setting. The significant effects of environmental and governance sustainability reporting support the signaling role of non-financial disclosures in reducing information asymmetry and shaping investor perceptions. The insignificant effect of social sustainability reporting suggests that the signaling power of social disclosures may be context dependent and influenced by investor priorities and institutional conditions.

Managerial Implications

For corporate managers of industrial goods companies in Nigeria, the findings underscore the strategic importance of prioritizing high-quality environmental and governance sustainability disclosures. Investments in robust environmental management systems and transparent governance practices, when effectively communicated through sustainability reporting, can enhance firm market value. Managers should ensure that sustainability reports are credible, consistent, and aligned with recognized reporting frameworks to strengthen their value relevance.

Policy and Regulatory Implications

From a policy perspective, the findings provide support for regulatory initiatives aimed at improving sustainability reporting and corporate governance practices in Nigeria. Regulators such as the Nigerian Exchange Group may consider strengthening enforcement mechanisms for environmental and governance disclosures to enhance market transparency and investor protection. While social sustainability reporting remains important, policymakers may need to improve guidance on the materiality and standardization of social disclosures to enhance their usefulness to investors.

Limitations and Directions for Future Research

Despite its contributions, the study has certain limitations. First, the analysis is limited to listed industrial goods companies in Nigeria, which may restrict the generalizability of the findings to other sectors or countries. Second, the study relies on content analysis to measure sustainability reporting, which may not fully capture the quality or credibility of disclosures. Third, market value is proxied by Tobin's Q, and alternative valuation measures may yield different insights.

Future research may extend this study by examining other sectors of the Nigerian economy, incorporating moderating variables such as assurance of sustainability reports or board expertise, and employing alternative methodological approaches to address potential endogeneity concerns. Comparative cross-country studies may also provide deeper insights into how institutional factors influence the sustainability reporting–market value relationship in emerging markets.

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