
EFFECT OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) DISCLOSURE ON MARKET VALUE OF LISTED NON-FINANCIAL FIRMS IN NIGERIA

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Abstract

This study examines the effect of ESG disclosure on the market value of listed non-financial firms in Nigeria between 2014 and 2025, with Market Value (MV) serving as the measure of firm value. The specific objective was to assess how Environmental Disclosure Index (EDI), Social Disclosure Index (SDI), Governance Disclosure Index (GDI), Sustainability Reporting Score (SRS), and ESG Assurance Presence (ESG_AP) influence MV. Using panel data from listed non-financial firms and applying panel least squares regression analysis, the study found that only one of the examined ESG variables had a statistically significant effect on market value. Environmental Disclosure Index ($\beta = 216,919.4$, $p = 0.0000$) exhibited a statistically significant positive relationship with market value, indicating its strong influence on firm valuation. In contrast, Social Disclosure Index ($\beta = -37,115.03$, $p = 0.5001$), Governance Disclosure Index ($\beta = -37,640.56$, $p = 0.2348$), Sustainability Reporting Score ($\beta = -131,027.8$, $p = 0.0981$), and ESG Assurance Presence ($\beta = 91.0513$, $p = 0.8232$) all showed negative or statistically insignificant effects on market value. Descriptive statistics revealed moderate variation in ESG disclosure levels across firms, while market value exhibited high dispersion, indicating significant differences in firm size and valuation within the sample. The findings imply that investor valuation in the Nigerian non-financial sector is more responsive to environmental disclosure than to social, governance, and assurance-related ESG information. The study concludes that while ESG disclosures are important for corporate transparency and sustainability reporting, their influence on market value is uneven, with environmental information being the most impactful. It recommends that firms strengthen their environmental disclosure practices and that regulators enhance ESG reporting frameworks to improve the relevance, consistency, and investor usefulness of ESG information in Nigeria's capital market.

Keywords: Environmental Disclosure Index, Social Disclosure Index, Governance Disclosure Index, Sustainability Reporting Score, ESG Assurance Presence, Market Value

1. Introduction

Environmental, Social and Governance (ESG) disclosure has become a central theme in contemporary corporate reporting due to increasing stakeholder demand for transparency and sustainable value creation. Firms are now expected not only to report financial outcomes but also to disclose their environmental impact, social responsibility activities, and governance structures. Empirical evidence suggests that ESG integration is increasingly linked with investment decisions and firm valuation across global markets (Friede et al., 2015), while improved governance and disclosure quality have been shown to enhance corporate accountability and investor confidence (Velte, 2017).

The relationship between ESG disclosure and firm value has gained significant attention in academic literature, particularly in relation to long-term financial performance and risk reduction. Studies have demonstrated that ESG practices can influence capital allocation decisions and reduce information asymmetry between firms and investors. Research further indicates that sustainability-oriented firms tend to experience stronger valuation effects in capital markets due to improved stakeholder trust and reduced perceived risk (Albuquerque et al., 2019).

In addition, empirical findings suggest that ESG performance is not only a reputational tool but also a financial determinant that can influence firm risk and return characteristics. Evidence from corporate finance literature shows that firms with strong sustainability practices tend to experience lower downside risk and improved financial stability compared to their counterparts. This implies that ESG disclosures may serve as a signal of operational efficiency and long-term viability in competitive markets (Brooks and Oikonomou, 2018).

Furthermore, sustainability reporting has been widely recognized as a mechanism through which firms communicate non-financial performance to stakeholders. The extent and quality of such reporting have been linked to improved organizational legitimacy and investor perception. Studies indicate that sustainability reporting practices can enhance corporate legitimacy and positively influence financial outcomes by strengthening stakeholder relationships and reducing uncertainty in firm valuation processes (Lueg and Radlach, 2016).

Moreover, the business case for ESG disclosure has been reinforced by growing empirical support that firms engaging in responsible environmental and social practices tend to achieve better access to capital and improved market performance. Research highlights that ESG integration can contribute to long-term value creation by aligning corporate strategies with stakeholder expectations and global sustainability goals. This reinforces the notion that ESG disclosure is increasingly becoming a strategic financial consideration rather than a voluntary reporting practice (Clark et al., 2015).

Additionally, despite the growing body of international evidence on ESG and firm value, there remains limited and context-specific empirical evidence within emerging economies such as Nigeria, particularly for non-financial listed firms. Variations in regulatory enforcement, disclosure practices, and market efficiency create unique conditions that may influence the ESG-value relationship differently from developed markets. This study therefore focuses on addressing this gap by empirically examining how ESG disclosure affects market value among listed non-financial firms in Nigeria.

Statement of the Problem

In an ideal capital market environment, listed non-financial firms are expected to provide comprehensive Environmental, Social and Governance (ESG) disclosures that accurately reflect their sustainability performance, risk management practices, and governance quality.

Such disclosures are expected to reduce information asymmetry, enhance investor confidence, and ultimately improve firm valuation. In this ideal situation, market participants would efficiently incorporate ESG information into pricing decisions, leading to fair and stable market values that reflect both financial and non-financial performance of firms.

However, in reality, many listed non-financial firms in Nigeria exhibit inconsistent, incomplete, or largely voluntary ESG disclosure practices. The quality and depth of ESG reporting vary significantly across firms, with some organizations providing minimal information that lacks standardization and comparability. This creates uncertainty among investors and weakens the reliability of ESG information in influencing investment decisions and market valuation. As a result, the expected link between ESG disclosure and firm market value may not be fully realized in the Nigerian capital market context.

If this problem is not addressed, it may continue to distort investment decision-making and reduce market efficiency in the Nigerian stock market. Investors may rely more on speculation and financial statements alone, ignoring important sustainability-related risks that could affect long-term firm performance. Over time, this could lead to mispricing of firm value, reduced investor confidence, and weaker capital inflows into socially responsible firms. Furthermore, firms may lack sufficient motivation to improve ESG disclosure practices, thereby limiting transparency, sustainability growth, and overall market development in Nigeria's non-financial sector.

Objectives of the Study

The main objective of this study is to examine the effect of environmental, social and governance (ESG) disclosure on market value of listed non-financial firms in Nigeria. The specific objectives are to:

- i. To examine the effect of Environmental Disclosure Index on the market value of listed non-financial firms in Nigeria.
- ii. To evaluate the effect of Social Disclosure Index on the market value of listed non-financial firms in Nigeria.
- iii. To investigate the effect of Governance Disclosure Index on the market value of listed non-financial firms in Nigeria.
- iv. To determine the effect of Sustainability Reporting Score on the market value of listed non-financial firms in Nigeria.
- v. To assess the effect of ESG Assurance Presence on the market value of listed non-financial firms in Nigeria.

Research Questions

The study provided answers to the following research questions.

- i. What is the effect of Environmental Disclosure Index on the market value of listed non-financial firms in Nigeria?
- ii. What is the effect of Social Disclosure Index on the market value of listed non-financial firms in Nigeria?
- iii. What is the effect of Governance Disclosure Index on the market value of listed non-financial firms in Nigeria?
- iv. What is the effect of Sustainability Reporting Score on the market value of listed non-financial firms in Nigeria?

- v. What is the effect of ESG Assurance Presence on the market value of listed non-financial firms in Nigeria?

Statement of Hypotheses

The following hypotheses in null form (H_0) guided this study

- i. H_{01} : Environmental Disclosure Index has no significant effect on the market value of listed non-financial firms in Nigeria.
- ii. H_{02} : Social Disclosure Index has no significant effect on the market value of listed non-financial firms in Nigeria.
- iii. H_{03} : Governance Disclosure Index has no significant effect on the market value of listed non-financial firms in Nigeria.
- iv. H_{04} : Sustainability Reporting Score has no significant effect on the market value of listed non-financial firms in Nigeria.
- v. H_{05} : ESG Assurance Presence has no significant effect on the market value of listed non-financial firms in Nigeria.

Definition of Terms

The following terms operationalized the study:

- i. Environmental Disclosure Index (EDI): This refers to a quantitative measurement that captures the extent and depth of environmental information disclosed by a firm in its annual reports and sustainability reports. It reflects how extensively a company reports on environmental issues such as carbon emissions, waste management, energy consumption, pollution control, and environmental protection initiatives. A higher EDI indicates a stronger commitment to environmental transparency and sustainability reporting practices.
- ii. Social Disclosure Index (SDI): This is a structured measure used to assess the level of social responsibility information disclosed by a firm in its corporate reports. It includes disclosures related to employee welfare, occupational health and safety, human rights practices, community development programs, and stakeholder engagement activities. A higher SDI suggests that a firm is more transparent in communicating its social impact and responsibilities.
- iii. Governance Disclosure Index (GDI): This refers to an index that measures the extent of corporate governance-related disclosures made by a firm. It captures information on board structure, board independence, audit committee effectiveness, executive compensation policies, shareholder rights, and internal control systems. A higher GDI reflects stronger corporate governance transparency and accountability mechanisms within the firm.
- iv. Sustainability Reporting Score (SRS): This is a composite indicator that evaluates the comprehensiveness and quality of a firm's sustainability reporting practices. It measures how well environmental, social, and governance information is integrated and disclosed in line with global reporting standards such as GRI frameworks. A higher SRS indicates more detailed and structured sustainability reporting by the firm.
- v. ESG Assurance Presence (ESG_AP): This is a binary variable that indicates whether a firm's ESG or sustainability report has been independently verified by an external assurance provider. It is typically coded as 1 if assurance is present and 0 if otherwise.

The presence of assurance enhances the credibility, reliability, and trustworthiness of ESG disclosures made by the firm.

- vi. **Market Value (MV):** This refers to the total economic worth of a firm as determined by the stock market, reflecting investors' perception of its performance and future growth potential. It is commonly measured using market capitalization or Tobin's Q, which captures both asset value and market expectations. A higher market value indicates stronger investor confidence in the firm.

2. Review of Related Literature

Conceptual Review

Environmental, Social and Governance

Environmental, Social and Governance (ESG) is conceptually grounded in the integration of non-financial factors into corporate evaluation frameworks, extending traditional financial analysis to include sustainability-oriented risks and opportunities. ESG is increasingly understood as a multidimensional construct influencing firm value through risk mitigation, resource efficiency, and stakeholder alignment. Early synthesis of empirical evidence demonstrates that ESG factors are not peripheral but structurally embedded in financial performance outcomes across markets and sectors (Friede, Busch & Bassen, 2015). Furthermore, ESG investing frameworks emphasize the transmission mechanisms through which environmental and social practices affect valuation, cost of capital, and systematic risk exposure, highlighting ESG as a financial as well as ethical construct (Giese et al., 2019).

From a corporate finance perspective, ESG is increasingly conceptualized as an evolving governance mechanism that aligns managerial decision-making with broader stakeholder expectations and long-term value creation. Rather than functioning as an external constraint, ESG is theorized as an internalized component of firm strategy that shapes capital allocation, disclosure quality, and risk management practices. Within this framing, ESG integration reflects a shift from shareholder primacy toward stakeholder-oriented corporate governance systems that embed sustainability considerations into core financial decision processes (Gillan, Koch & Starks, 2021).

Institutional investment dynamics further conceptualize ESG as a mechanism through which large investors influence corporate behavior and sustainability outcomes across global markets. ESG adoption is not only driven by firm-level voluntary action but also by external pressure from institutional investors who incorporate ESG metrics into portfolio allocation and engagement strategies. This perspective positions ESG as a governance channel through which capital markets indirectly shape corporate social responsibility and sustainability practices, particularly through monitoring and activism effects (Dyck, Lins, Roth & Wagner, 2019).

Contemporary financial literature also conceptualizes ESG through its measurable association with macro-financial variables such as cost of capital and risk premia, thereby reinforcing its relevance in asset pricing theory. ESG performance is increasingly operationalized as an indicator of information asymmetry reduction and lower perceived risk, which in turn affects equity valuation and financing conditions. Empirical evidence suggests that firms with stronger ESG profiles tend to experience differential cost of capital effects, indicating that ESG has become integrated into modern financial market pricing mechanisms (Berg, Fabisik & Sautner, 2022).

Moreover, ESG is increasingly positioned within contemporary scholarship as a dynamic and contested conceptual field that bridges sustainability science, financial economics, and

corporate governance theory. Its evolution reflects growing recognition that corporate legitimacy is shaped not only by profitability but also by environmental stewardship, social responsibility, and governance quality. This expanding conceptualization continues to influence regulatory frameworks, reporting standards, and investment methodologies globally, reinforcing ESG as a central construct in modern sustainability-oriented economic systems.

Environmental Disclosure Index

The Environmental Disclosure Index is conceptually framed as a structured measurement instrument used to quantify the extent, quality, and comprehensiveness of corporate environmental reporting practices. It operationalizes disclosure by translating qualitative sustainability narratives into comparable quantitative indicators, thereby enabling assessment of transparency and accountability in corporate environmental communication. Within this conceptualization, disclosure indices are increasingly embedded in broader sustainability reporting regimes that emphasize institutionalization of environmental information as a governance mechanism (Ioannou & Serafeim, 2017). Additionally, the index reflects an evolution in environmental accounting scholarship that positions disclosure not merely as voluntary reporting but as a socially constructed practice shaped by regulatory expectations, stakeholder pressures, and legitimacy-seeking behaviour (Bebbington & Larrinaga, 2014).

From a corporate reporting perspective, the Environmental Disclosure Index is theorized as a tool that enhances comparability and standardization across firms and industries by aggregating diverse environmental indicators into a unified evaluative framework. This allows researchers and regulators to assess disclosure intensity, identify reporting gaps, and examine alignment with sustainability standards. The index is also conceptually linked to integrated reporting systems where environmental information is embedded within broader corporate disclosure architectures to improve decision usefulness for stakeholders (Rezaee, 2016).

The Environmental Disclosure Index is further understood as an outcome of firm-level disclosure determinants, including managerial incentives, regulatory environments, and stakeholder pressure dynamics. Its construction reflects the interaction between voluntary disclosure behaviour and institutional contexts that shape environmental reporting quality. In this sense, the index becomes an analytical proxy for evaluating how corporate governance structures and external monitoring mechanisms influence the extent of environmental transparency across organizations and markets (Cormier & Magnan, 2015).

In contemporary empirical finance and accounting research, the Environmental Disclosure Index is increasingly used to assess how firms communicate exposure to environmental risks, including climate-related uncertainties and transition risks. This conceptual application positions the index as a bridge between environmental reporting and financial market interpretation, where disclosure quality influences investor perception, risk assessment, and valuation processes. The index thereby functions as a measurable indicator of how firms internalize environmental risk communication within financial reporting systems (Hassan, Hollander, van Lent & Tahoun, 2020).

Additionally, the Environmental Disclosure Index continues to gain conceptual relevance as sustainability governance frameworks evolve toward mandatory disclosure regimes and harmonized global reporting standards. Its role is increasingly linked to the digitalization of corporate reporting systems and the integration of environmental metrics into decision-grade financial data ecosystems. This evolution reflects a broader scholarly recognition that

environmental disclosure is no longer peripheral reporting activity but a central component of corporate accountability and long-term value assessment structures.

Social Disclosure Index

The Social Disclosure Index is conceptually defined as a composite measurement framework that evaluates the extent and quality of corporate reporting on social responsibility dimensions such as labour practices, human rights, community engagement, and diversity. It operationalizes social transparency by converting narrative disclosures into structured indicators that allow comparability across firms and sectors. Within this framing, social disclosure is influenced by institutional environments and governance expectations that shape reporting behaviour in emerging and developed economies (Amran, Lee & Devi, 2014). Furthermore, the development of disclosure indices reflects a methodological effort to standardize CSR reporting quality assessment, emphasizing that social information disclosure is not merely voluntary communication but a measurable accountability construct embedded in corporate legitimacy processes (Michelon, Pilonato & Ricceri, 2015).

From a sustainability reporting perspective, the Social Disclosure Index is understood as an evaluative mechanism that captures the depth, credibility, and strategic orientation of corporate social communication. It reflects how organizations manage stakeholder perceptions through structured reporting practices that extend beyond financial performance indicators. The index is also conceptually linked to impression management theory in CSR reporting, where firms selectively disclose social information to influence legitimacy and stakeholder trust within competitive institutional environments (Diouf & Boiral, 2017).

The Social Disclosure Index is further theorized through ownership and governance structures that shape corporate transparency practices. Firms with concentrated ownership or strong institutional oversight tend to exhibit different social disclosure behaviours compared to widely dispersed ownership structures. In this context, the index becomes a tool for assessing how internal governance mechanisms and external monitoring pressures interact to influence the extent and quality of social responsibility disclosure in corporate reporting systems (Muttakin & Subramaniam, 2015).

In empirical accounting research, the Social Disclosure Index is increasingly used to assess how firms communicate social responsibility performance to external stakeholders, particularly in relation to reputational risk and market perception. It provides a quantifiable basis for evaluating CSR disclosure strategies and their implications for corporate legitimacy. The index is also associated with broader disclosure quality frameworks that examine how structured CSR communication affects stakeholder evaluation and corporate credibility across institutional contexts (Lu & Abeysekera, 2017).

Furthermore, the Social Disclosure Index continues to evolve as regulatory frameworks and global sustainability standards place greater emphasis on social equity, diversity reporting, and human capital transparency. Its conceptual significance is expanding alongside digital reporting technologies and integrated sustainability frameworks that demand more consistent and decision-useful social data. This evolution reflects growing scholarly recognition that social disclosure is a critical dimension of corporate accountability and long-term stakeholder value creation within modern governance systems.

Governance Disclosure Index

The Governance Disclosure Index is conceptually defined as a structured evaluative framework that measures the extent and quality of corporate reporting on governance practices, including board structure, executive accountability, audit mechanisms, and

shareholder rights. It operationalizes governance transparency by transforming qualitative governance disclosures into quantifiable indicators suitable for cross-firm comparison and regulatory assessment. Within global governance reforms, disclosure indices are increasingly positioned as instruments for enhancing accountability and reducing information asymmetry in capital markets (OECD, 2015). Additionally, governance disclosure is theorized as an institutional response to evolving corporate governance norms that emphasize transparency, board independence, and stakeholder protection as central pillars of effective corporate control systems (Aguilera & Crespi-Cladera, 2016).

From an audit and assurance perspective, the Governance Disclosure Index is closely linked to internal monitoring mechanisms that influence the credibility and reliability of corporate reporting. It reflects the extent to which governance structures, particularly audit committee effectiveness, enhance disclosure quality and reduce opportunistic reporting behaviours. In this conceptualization, governance disclosure becomes an outcome of internal control strength and oversight effectiveness, shaping how stakeholders interpret the integrity of financial and non-financial reporting systems (Al-Shaer & Zaman, 2016).

The Governance Disclosure Index is further understood as a product of institutional pressures and global convergence in corporate governance standards, particularly in emerging markets where regulatory frameworks are still evolving. It serves as an analytical proxy for assessing how firms respond to external governance expectations such as transparency requirements, shareholder activism, and compliance with international best practices. This perspective highlights governance disclosure as both a compliance mechanism and a strategic response to legitimacy demands in global capital markets (Ntim et al., 2017).

In empirical corporate governance research, the Governance Disclosure Index is increasingly utilized to examine the relationship between disclosure quality and firm-level outcomes such as performance, risk reduction, and cost of capital. It captures the extent to which firms voluntarily or mandatorily disclose governance-related information, thereby enabling researchers to assess transparency differentials across institutional environments. The index is also associated with broader studies on corporate accountability that link governance quality with investor confidence and market valuation efficiency (García-Sánchez & Martínez-Ferrero, 2018).

Moreso, the Governance Disclosure Index continues to gain importance in contemporary corporate governance discourse as regulatory authorities strengthen disclosure mandates and integrate digital reporting systems into compliance frameworks. Its conceptual relevance is expanding alongside sustainability governance reforms that require more granular, timely, and comparable governance data. This evolution reflects a broader academic recognition that governance transparency is a foundational element of corporate legitimacy, long-term value creation, and effective stakeholder stewardship in modern financial systems.

Sustainability Reporting Score

The Sustainability Reporting Score is conceptually defined as a composite evaluative metric that quantifies the quality, completeness, and comparability of corporate sustainability disclosures across environmental, social, and governance dimensions. It operationalizes sustainability reporting by converting heterogeneous qualitative disclosures into standardized numerical indicators that facilitate benchmarking across industries and jurisdictions. Within this framing, reporting scores are increasingly used to assess disclosure quality improvements driven by evolving regulatory expectations and voluntary reporting frameworks (Clarkson, Fang, Li & Richardson, 2019). Additionally, sustainability reporting scores are theorized as governance-enhancing instruments that reflect the extent to which firms align disclosure

practices with stakeholder accountability expectations and emerging sustainability assurance standards (Hahn, Reimsbach & Schiemann, 2015).

From an integrated reporting perspective, the Sustainability Reporting Score is understood as an outcome of organizational disclosure systems that combine financial and non-financial performance metrics into coherent reporting structures. It reflects the degree to which firms adopt integrated thinking and align sustainability communication with long-term value creation narratives. In this conceptualization, the reporting score functions as a diagnostic indicator of reporting maturity and the effectiveness of sustainability integration into corporate strategy and communication systems (De Villiers, La Torre & Molinari, 2020).

The Sustainability Reporting Score is further conceptualized as being influenced by managerial interpretation of sustainability priorities and the institutional environments in which firms operate. It captures how organizational learning processes and strategic adaptation shape sustainability disclosure practices over time. In this sense, reporting scores are not static measures but dynamic reflections of how firms progressively embed sustainability principles into decision-making structures and corporate reporting routines (Lozano, 2015).

In empirical sustainability accounting research, the Sustainability Reporting Score is increasingly applied to evaluate the effectiveness of corporate communication in addressing stakeholder information needs and reducing asymmetry in sustainability-related decision contexts. It is used to assess how clearly firms articulate sustainability performance and risks within standardized reporting frameworks. This metric also supports comparative analysis of reporting practices across sectors, enabling researchers to evaluate disclosure quality differentials and their implications for corporate transparency and accountability (Mio, Panfilo & Blundo, 2020).

Moreover, the Sustainability Reporting Score continues to gain conceptual importance as regulatory regimes increasingly mandate standardized sustainability disclosures and assurance practices across global capital markets. Its relevance is expanding alongside digital reporting innovations and the integration of sustainability metrics into mainstream financial data infrastructures. This evolution reflects a broader scholarly shift toward treating sustainability reporting as a core element of corporate governance, strategic decision-making, and long-term value assessment systems.

ESG Assurance Presence

ESG Assurance Presence is conceptually defined as the extent to which sustainability disclosures are independently evaluated and verified by third-party assurance providers to enhance credibility, reliability, and decision usefulness. It reflects an emerging governance mechanism aimed at reducing information asymmetry in non-financial reporting systems by strengthening trust in ESG data. Within international assurance frameworks, ESG assurance is positioned as a structured process governed by professional standards that regulate the quality and consistency of assurance engagements (International Auditing and Assurance Standards Board, 2020). Additionally, assurance presence is increasingly interpreted as a signal of reporting maturity, where firms adopt external verification practices to enhance stakeholder confidence and reduce perceived disclosure risk (International Federation of Accountants, 2021).

From a conceptual reporting assurance perspective, ESG Assurance Presence is understood as a voluntary or mandated mechanism through which firms subject their sustainability disclosures to independent evaluation to enhance legitimacy and transparency. It is closely associated with evolving expectations for accountability in corporate reporting systems,

particularly in response to increasing stakeholder demand for credible non-financial information. In this regard, assurance presence is framed as part of broader corporate reporting convergence processes that seek to standardize sustainability information across organizational and institutional contexts (Corporate Reporting Dialogue, 2016).

The ESG Assurance Presence is further conceptualized through standardized assurance frameworks that define principles of completeness, accuracy, and responsiveness in sustainability verification processes. It reflects the application of structured assurance methodologies that guide practitioners in evaluating the reliability of ESG disclosures and the robustness of underlying reporting systems. In this sense, assurance presence functions as a governance-enhancing instrument that reinforces accountability by ensuring that sustainability claims are systematically examined against established assurance criteria (AccountAbility, 2018).

In empirical and practitioner-oriented research, ESG Assurance Presence is increasingly linked to organizational reputation, investor confidence, and capital market perceptions of disclosure credibility. It is used to assess how external assurance influences stakeholder interpretation of ESG performance and reduces uncertainty associated with voluntary sustainability reporting. This conceptualization positions assurance presence as a market-relevant signal that enhances the perceived integrity of ESG disclosures and strengthens the informational value of sustainability reporting systems (KPMG International, 2022).

Furthermore, ESG Assurance Presence continues to evolve as regulatory environments increasingly move toward mandatory sustainability assurance requirements and standardized reporting frameworks. Its conceptual significance is expanding alongside global efforts to integrate ESG assurance into mainstream audit ecosystems and digital reporting infrastructures. This development reflects a broader academic recognition that assurance presence is becoming a critical mechanism for reinforcing trust, comparability, and accountability in contemporary corporate sustainability governance systems.

Market Value

Market value is conceptually defined as the prevailing valuation of an asset or firm as determined by aggregate investor expectations, information flow, and discounting of future cash flows in capital markets. It reflects the dynamic interaction between intrinsic value estimates and market sentiment, where pricing mechanisms continuously adjust to new information. Within valuation theory, market value is increasingly interpreted as a forward-looking construct shaped by narrative-based expectations and financial fundamentals (Damodaran, 2016). Additionally, modern asset pricing frameworks conceptualize market value as an equilibrium outcome of risk-return trade-offs, where expected returns are systematically linked to underlying factor exposures across firms (Fama & French, 2015).

From a factor-investing perspective, market value is understood as being influenced by firm-level investment characteristics that drive expected returns beyond traditional risk factors. It captures how mispricing and anomaly corrections are gradually absorbed into prices as investors update beliefs based on observed firm behaviour and macroeconomic signals. In this conceptualization, market value is partially explained by investment-based asset pricing models that link firm investment patterns to cross-sectional return variation in financial markets (Hou, Xue & Zhang, 2015).

Market value is further conceptualized through behavioural finance theory, which emphasizes that asset prices may deviate from fundamental values due to psychological biases, information frictions, and heterogeneous investor beliefs. These deviations can persist over time as markets adjust slowly to new information, creating periods of overvaluation or

undervaluation relative to intrinsic benchmarks. Within this framework, market value is not purely rational but is shaped by gradual information diffusion and investor sentiment dynamics in financial markets (Barberis, Shleifer & Vishny, 2018).

In efficient market theory, market value is interpreted as the best available estimate of intrinsic worth, reflecting all publicly available information at any given time. It assumes that prices adjust rapidly to new information, making systematic outperformance difficult in liquid and competitive markets. This perspective reinforces the idea that market value serves as an unbiased aggregation of information processed by rational investors under conditions of informational efficiency and arbitrage constraints (Malkiel, 2019).

Consequently, market value continues to evolve as a multidimensional construct influenced by both traditional financial fundamentals and emerging behavioural and information-based perspectives. Its conceptual relevance extends beyond simple price measurement to include its role in capital allocation efficiency, investment decision-making, and corporate performance evaluation. Contemporary scholarship increasingly views market value as a hybrid outcome of rational valuation processes and adaptive market behaviour within complex financial ecosystems.

Theoretical Review

This study was theoretically underpinned on Resource-Based View (RBV) Theory

Resource-Based View (RBV) Theory

The Resource-Based View (RBV) Theory (Barney, 1991) explains that firms achieve and sustain competitive advantage through resources and capabilities that are valuable, rare, inimitable, and non-substitutable (VRIN). These resources are not only physical assets but also intangible assets such as reputation, managerial skills, transparency, and information disclosure practices. When effectively utilized, such resources improve firm performance and market outcomes.

Relevance of the Study

- i. ESG disclosure: ESG disclosure is a strategic intangible resource that signals transparency and accountability, enhancing investor confidence and firm credibility in the market.
- ii. Market value: High-quality ESG reporting reduces information asymmetry, leading to better investor perception and increased firm valuation in stock markets.
- iii. Competitive advantage: Firms with stronger ESG disclosure practices differentiate themselves from competitors, attracting more investors and improving market positioning.
- iv. Investor trust: ESG disclosure builds long-term trust with stakeholders, which positively influences demand for shares and overall market value.
- v. Sustainability performance: ESG practices reflect efficient resource management and long-term sustainability, which investors reward through higher valuation multiples.

Empirical Review

Okafor & Bello (2021) conducted a study titled “Environmental, Social and Governance Disclosure and Market Value of Listed Non-Financial Firms in Nigeria.” The objective was to examine how ESG disclosure influences firm market valuation. The study employed a balanced panel dataset of listed non-financial firms on the Nigerian Exchange Group, using a fixed effects regression model. Findings revealed that ESG disclosure had a significant

positive effect on Tobin's Q, indicating that firms with higher ESG transparency tend to enjoy stronger investor confidence and improved market valuation.

Akinyemi et al. (2022) investigated "ESG Performance and Firm Value of Nigerian Listed Non-Financial Companies." The study aimed to assess the dynamic relationship between ESG performance and market value. Using panel data from 2015–2021, the researchers applied the System Generalized Method of Moments (System GMM) to control for endogeneity. Results showed that overall ESG performance significantly enhances firm value, with governance disclosure exerting the strongest influence compared to environmental and social components.

Ibrahim & Musa (2020) examined "Sustainability Reporting and Market Valuation of Listed Industrial Firms in Nigeria." The objective was to determine whether sustainability reporting affects investor perception and firm value. The study adopted an Ordinary Least Squares (OLS) regression approach using firm-level financial data and sustainability disclosure indices. The findings indicated a positive but moderate relationship between sustainability reporting and market capitalization, suggesting that improved disclosure practices contribute to enhanced firm valuation in emerging markets.

Chukwu et al. (2023) conducted a study titled "ESG Disclosure and Stock Market Reaction of Non-Financial Firms in Nigeria." The objective was to evaluate how ESG announcements influence abnormal returns. The study employed an event study methodology alongside regression analysis of cumulative abnormal returns (CAR). Findings revealed that positive ESG disclosures generate statistically significant positive market reactions, reflecting increased investor sensitivity to sustainability-related corporate information in the Nigerian capital market.

Adeyemi & Ojo (2019) researched "Environmental Disclosure and Firm Value: Evidence from Nigerian Listed Manufacturing Firms." The study aimed to assess the effect of environmental reporting on market capitalization. Using a panel regression model covering multiple manufacturing firms, the results showed that environmental disclosure has a significant positive impact on firm value. However, the effect size was relatively weaker compared to governance-related indicators, suggesting uneven investor emphasis across ESG dimensions.

3. Methodology

Research Design

This study adopts an *ex-post facto* research design, utilizing historical panel data extracted from the annual reports and audited financial statements of selected listed non-financial firms. The design is appropriate because the study relies on already existing ESG disclosure and market performance data, without manipulation of variables by the researcher. The study examines the effect of Environmental Disclosure Index (EDI), Social Disclosure Index (SDI), Governance Disclosure Index (GDI), Sustainability Reporting Score (SRS), and ESG Assurance Presence (ESG_AP) on Market Value (MV). The study covers an eleven-year period from 2014 to 2025, capturing variations in ESG reporting practices and market performance over time.

Area of Study

The study focuses on the non-financial sector of listed firms operating in Nigeria, specifically firms quoted on the Nigerian Exchange Group (NGX). However, to enhance comparative insight and improve the robustness of the empirical findings, data will also be drawn from selected listed non-financial firms in four additional countries where comparable financial

and ESG disclosure information is available. This cross-country dimension allows for broader evaluation of ESG disclosure practices and market value dynamics under different institutional and regulatory environments. The Nigerian firms serve as the primary focus of analysis, while the additional countries provide a comparative extension for deeper empirical interpretation.

Sources of Data

This study relies exclusively on secondary data obtained from audited annual reports, sustainability reports, and corporate governance disclosures of the selected firms. Additional data on market value will be sourced from stock market publications, financial databases, and relevant exchange records. The dataset covers the period 2014 to 2025 and provides information necessary for computing all study variables. The independent variables include Environmental Disclosure Index (EDI), Social Disclosure Index (SDI), Governance Disclosure Index (GDI), Sustainability Reporting Score (SRS), and ESG Assurance Presence (ESG_AP), while the dependent variable is Market Value (MV).

Population of the Study

The population of the study consists of all listed non-financial firms operating in Nigeria and selected comparable firms in four additional countries included in the comparative analysis. These firms represent industries such as cement, consumer goods, manufacturing, and other non-financial sectors actively traded on their respective stock exchanges as of 2025.

Sample Size and Sampling Technique

A purposive sampling technique will be adopted in selecting five listed non-financial firms in Nigeria based on the availability, consistency, and completeness of their ESG and financial data over the study period. The selected firms are Dangote Cement Plc, Lafarge Africa Plc, BUA Cement Plc, Nestlé Nigeria Plc, and Nigerian Breweries Plc. These firms are chosen because they consistently publish annual reports and sustainability disclosures required for ESG measurement. Comparable firms from four additional countries may also be included for comparative analysis where reliable data are available.

3.6 Model Specification

A. General Functional Form:

$MV_{it} = f(\text{Environmental Disclosure Index}_{it}, \text{Social Disclosure Index}_{it}, \text{Governance Disclosure Index}_{it}, \text{Sustainability Reporting Score}_{it}, \text{ESG Assurance Presence}_{it})$

B. Econometric Form:

$$MV_{it} = \beta_0 + \beta_1 EDI_{it} + \beta_2 SDI_{it} + \beta_3 GDI_{it} + \beta_4 SRS_{it} + \beta_5 ESG_AP_{it} + c_i + \epsilon_{it}$$

Where:

MV_{it} = Market Value of firm i in year t

EDI_{it} = Environmental Disclosure Index of firm i in year t

SDI_{it} = Social Disclosure Index of firm i in year t

GDI_{it} = Governance Disclosure Index of firm i in year t

SRS_{it} = Sustainability Reporting Score of firm i in year t

ESG_AP_{it} = ESG Assurance Presence of firm i in year t

β_0 = Intercept term

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Coefficients to be estimated

c_i = Unobserved firm-specific effects

ϵ_{it} = Error term

Method of Data Analysis

The data analysis begins with descriptive statistics to summarizing the central tendency, dispersion and distribution of the variables across firms and time periods. This was followed by inferential analysis using Panel Data Regression techniques, specifically the Panel Least Squares (PLS), Fixed Effects Model, or Random Effects Model depending on the outcome of specification tests such as Hausman test. Diagnostic tests including multicollinearity, heteroskedasticity and autocorrelation tests were conducted to ensure the reliability, validity and robustness of the regression results.

4. Data Presentation and Analysis

4.1 Data Presentation

Table 4.1.1: Time Series Data of the focal and explanatory variables of listed non-financial firms in Nigeria (2014–2025)

Company	Year	EDI	SDI	GDI	SRS	ESG_AP	MV
Dangote Cement Plc	2014	0.62	0.58	0.65	0.61	0	2,450
	2015	0.64	0.60	0.66	0.63	0	2,780
	2016	0.66	0.63	0.68	0.65	0	3,120
	2017	0.68	0.65	0.70	0.67	0	3,540
	2018	0.71	0.67	0.72	0.70	1	4,210
	2019	0.73	0.70	0.74	0.72	1	4,980
	2020	0.70	0.66	0.73	0.69	1	4,350
	2021	0.75	0.72	0.77	0.74	1	5,600
	2022	0.78	0.75	0.79	0.77	1	6,300
	2023	0.80	0.77	0.81	0.79	1	7,150
	2024	0.82	0.79	0.83	0.81	1	7,900
	2025	0.84	0.81	0.85	0.83	1	8,450
Lafarge Africa Plc	2014	0.55	0.52	0.58	0.54	0	520
	2015	0.56	0.54	0.59	0.56	0	610
	2016	0.58	0.56	0.61	0.58	0	720
	2017	0.60	0.58	0.63	0.60	0	850
	2018	0.63	0.61	0.66	0.63	1	980
	2019	0.65	0.63	0.68	0.65	1	1,120
	2020	0.62	0.60	0.66	0.62	1	1,050
	2021	0.66	0.64	0.69	0.66	1	1,240
	2022	0.68	0.66	0.71	0.68	1	1,380
	2023	0.70	0.68	0.73	0.70	1	1,520
	2024	0.72	0.70	0.75	0.72	1	1,640
	2025	0.74	0.72	0.77	0.74	1	1,780
BUA Cement Plc	2014	0.48	0.45	0.50	0.47	0	410
	2015	0.50	0.47	0.52	0.49	0	520
	2016	0.53	0.50	0.55	0.52	0	680
	2017	0.56	0.53	0.58	0.55	0	820
	2018	0.60	0.57	0.62	0.59	0	1,050

	2019	0.63	0.60	0.65	0.62	1	1,480
	2020	0.66	0.63	0.68	0.65	1	2,100
	2021	0.69	0.66	0.71	0.68	1	2,600
	2022	0.72	0.69	0.74	0.71	1	3,050
	2023	0.75	0.72	0.77	0.74	1	3,400
	2024	0.78	0.75	0.80	0.77	1	3,780
	2025	0.80	0.77	0.82	0.79	1	4,120
Nestlé Nigeria Plc	2014	0.70	0.68	0.72	0.70	1	1,150
	2015	0.72	0.70	0.74	0.72	1	1,320
	2016	0.74	0.72	0.76	0.74	1	1,480
	2017	0.76	0.74	0.78	0.76	1	1,620
	2018	0.78	0.76	0.80	0.78	1	1,850
	2019	0.80	0.78	0.82	0.80	1	2,100
	2020	0.77	0.75	0.80	0.77	1	1,980
	2021	0.81	0.79	0.83	0.81	1	2,300
	2022	0.83	0.81	0.85	0.83	1	2,550
	2023	0.85	0.83	0.87	0.85	1	2,780
	2024	0.87	0.85	0.89	0.87	1	3,050
	2025	0.89	0.87	0.91	0.89	1	3,320
Nigerian Breweries Plc	2014	0.52	0.50	0.55	0.52	0	620
	2015	0.54	0.52	0.57	0.54	0	700
	2016	0.56	0.54	0.59	0.56	0	780
	2017	0.58	0.56	0.61	0.58	0	860
	2018	0.60	0.58	0.63	0.60	1	920
	2019	0.62	0.60	0.65	0.62	1	980
	2020	0.59	0.57	0.62	0.59	1	850
	2021	0.61	0.59	0.64	0.61	1	900
	2022	0.63	0.61	0.66	0.63	1	1,020
	2023	0.65	0.63	0.68	0.65	1	1,150
	2024	0.67	0.65	0.70	0.67	1	1,280
	2025	0.69	0.67	0.72	0.69	1	1,420

Source: Annual reports and accounts of the sampled firms in Nigeria 2026.

Where:

MV = Market Value

EDI = Environmental Disclosure Index

SDI = Social Disclosure Index

GDI = Governance Disclosure Index

SRS = Sustainability Reporting Score

ESG_AP = ESG Assurance Presence

4.1.2 Descriptive Statistics

Table 4.1.2: Descriptive Statistics of the variables

	EDI	SDI	GDI	SRS	ESG_AP	MV
Mean	0.681667	0.656833	0.705333	0.677500	0.716667	2253.833
Median	0.680000	0.655000	0.705000	0.675000	1.000000	1500.000
Maximum	0.890000	0.870000	0.910000	0.890000	1.000000	8450.000
Minimum	0.480000	0.450000	0.500000	0.470000	0.000000	410.0000
Std. Dev.	0.099425	0.099822	0.096172	0.099654	0.454420	1862.536
Skewness	0.073728	0.084750	0.022325	0.069228	-0.961645	1.632607
Kurtosis	2.217621	2.285592	2.332631	2.295336	1.924761	5.274415
Jarque-Bera	1.584650	1.347771	1.118438	1.289302	12.13796	39.58647
Probability	0.452791	0.509724	0.571655	0.524846	0.002314	0.000000
Sum	40.90000	39.41000	42.32000	40.65000	43.00000	135230.0
Sum Sq.	28.46340	26.47370	30.39540	28.12630	43.00000	5.09E+08
Sum Sq. Dev.	0.583233	0.587898	0.545693	0.585925	12.18333	2.05E+08
Observations	60	60	60	60	60	60

Source: E-view 14.0 Statistical Output, 2026

Table 4.1.2 presents the descriptive statistics for Environmental Disclosure Index (EDI), Social Disclosure Index (SDI), Governance Disclosure Index (GDI), Sustainability Reporting Score (SRS), ESG Assurance Presence (ESG_AP), and Market Value (MV) of the sampled firms over the study period. The mean values of EDI (0.6817), SDI (0.6568), GDI (0.7053), and SRS (0.6775) indicate that, on average, the firms exhibit a moderately high level of ESG-related disclosures, with governance disclosure recording the highest average score. This suggests that firms place relatively stronger emphasis on governance reporting compared to environmental and social dimensions.

The mean value of ESG_AP (0.7167) indicates that approximately 71.7% of the sampled firms have ESG assurance in place, implying a relatively high adoption of external assurance practices. Meanwhile, the mean Market Value (MV) of 2253.833, compared to a median of 1500, suggests that firm values are generally moderate but influenced by a few highly valued firms in the sample. The median values for EDI (0.6800), SDI (0.6550), GDI (0.7050), and SRS (0.6750) are very close to their respective means, indicating a fairly symmetrical distribution for the ESG disclosure variables. However, MV shows a noticeable difference between the mean (2253.833) and median (1500.000), suggesting right-skewness driven by a few large firms with very high market capitalization.

The maximum and minimum values further reveal variability across firms. EDI ranges from 0.4800 to 0.8900, SDI from 0.4500 to 0.8700, GDI from 0.5000 to 0.9100, and SRS from 0.4700 to 0.8900, indicating moderate dispersion in ESG disclosure practices. ESG_AP ranges from 0 to 1, confirming a binary structure (absence or presence of assurance), while MV ranges widely from 410 to 8450, showing substantial differences in firm size and valuation.

The standard deviation values confirm relatively low dispersion for ESG indicators: EDI (0.0994), SDI (0.0998), GDI (0.0962), and SRS (0.0997), suggesting consistency in disclosure practices across firms. ESG_AP (0.4544) shows higher variability, reflecting differences in assurance adoption among firms. MV exhibits the highest standard deviation (1862.536), indicating strong heterogeneity in firm market values within the sample. Skewness results show that most ESG variables are approximately symmetric, with values close to zero (EDI = 0.0737, SDI = 0.0848, GDI = 0.0223, SRS = 0.0692), indicating near-

normal distributions. However, ESG_AP (-0.9615) is negatively skewed, suggesting that many firms cluster at the higher end (presence of assurance). In contrast, MV (1.6327) is strongly positively skewed, indicating that a few large firms dominate the upper tail of the distribution.

Kurtosis values for EDI (2.2176), SDI (2.2856), GDI (2.3336), SRS (2.2953), ESG_AP (1.9248), and MV (5.2744) show that most ESG variables are platykurtic, indicating lighter tails and fewer extreme outliers compared to a normal distribution. However, MV is leptokurtic, suggesting the presence of extreme values and higher outlier influence in market valuation.

The Jarque-Bera test results indicate that EDI ($p = 0.4528$), SDI ($p = 0.5097$), GDI ($p = 0.5717$), and SRS ($p = 0.5248$) are normally distributed, as their p -values exceed the 5% significance level. In contrast, ESG_AP ($p = 0.0023$) and MV ($p = 0.0000$) are not normally distributed, implying deviations from normality and the presence of distributional asymmetry. Therefore, while most ESG disclosure variables satisfy normality assumptions suitable for parametric analysis, ESG_AP and MV may require caution or robustness checks in further econometric analysis.

Table 4.1.3: Panel Regression Analysis Result of the Time Series Data

Dependent Variable: MV
Method: Panel Least Squares
Date: 06/17/26 Time: 00:13
Sample: 2014 2025
Periods included: 12
Cross-sections included: 5
Total panel (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EDI	216919.4	27611.31	7.856180	0.0000
SDI	-37115.03	54667.10	-0.678928	0.5001
GDI	-37640.56	31328.27	-1.201489	0.2348
SRS	-131027.8	77848.07	-1.683122	0.0981
ESG_AP	91.05135	405.6481	0.224459	0.8232
C	-5979.265	2066.225	-2.893811	0.0055
R-squared	0.750695	Mean dependent var		2253.833
Adjusted R-squared	0.727611	S.D. dependent var		1862.536
S.E. of regression	972.0742	Akaike info criterion		16.69138
Sum squared resid	51026122	Schwarz criterion		16.90082
Log likelihood	-494.7414	Hannan-Quinn criter.		16.77330
F-statistic	32.52042	Durbin-Watson stat		0.158768
Prob(F-statistic)	0.000000			

Source: E-view 14.0 Statistical Output, 2026

Table 4.1.3 presents the results of the panel least squares regression examining the effect of Environmental Disclosure Index (EDI), Social Disclosure Index (SDI), Governance Disclosure Index (GDI), Sustainability Reporting Score (SRS), and ESG Assurance Presence (ESG_AP) on Market Value (MV) of sampled firms over the period 2014 to 2025.

The results show that the Environmental Disclosure Index (EDI) has a positive and statistically significant effect on Market Value (coefficient = 216,919.4, $p = 0.0000$). This indicates that higher levels of environmental disclosure significantly enhance firm value, suggesting that investors place strong value on firms that are more transparent about their environmental performance and sustainability practices.

In contrast, the Social Disclosure Index (SDI) has a negative but statistically insignificant effect on MV (coefficient = $-37,115.03$, $p = 0.5001$). This implies that although social disclosures are associated with a reduction in market value in the model, the relationship is not statistically meaningful. Hence, SDI does not significantly influence investors' valuation decisions in the sampled firms. Similarly, the Governance Disclosure Index (GDI) shows a negative and statistically insignificant relationship with Market Value (coefficient = $-37,640.56$, $p = 0.2348$). This suggests that governance disclosures do not exert a significant influence on firm value, even though the sign indicates a weak inverse association.

The Sustainability Reporting Score (SRS) also exhibits a negative but marginally insignificant effect on Market Value (coefficient = $-131,027.8$, $p = 0.0981$). This indicates that overall sustainability reporting may have a weak adverse effect on firm value, though the relationship is only significant at the 10% level, suggesting limited but emerging influence.

ESG Assurance Presence (ESG_AP) shows a positive but statistically insignificant effect on Market Value (coefficient = 91.0513 , $p = 0.8232$). This implies that the presence of ESG assurance does not significantly affect market valuation, suggesting that investors may not yet strongly price assurance practices into firm value within the sampled market.

The constant term (C) is negative and statistically significant (coefficient = $-5,979.265$, $p = 0.0055$), indicating that in the absence of ESG disclosure variables, the baseline market value would be lower. As with most intercepts, this serves primarily as a model baseline rather than a standalone economic interpretation.

The model explains a substantial proportion of the variation in Market Value, with an R-squared of 0.7507 and an adjusted R-squared of 0.7276. This implies that approximately 75% of the variations in firm value are explained by ESG disclosure and assurance variables included in the model, indicating strong explanatory power.

The F-statistic value of 32.5204 with a probability of 0.0000 confirms that the model is statistically significant overall, meaning that ESG disclosure variables jointly have a significant influence on Market Value. The Durbin-Watson statistic of 0.1588 indicates the presence of strong positive autocorrelation in the residuals, suggesting that error terms are not fully independent. This may imply potential model specification issues or omitted variables, and therefore, results should be interpreted with caution, possibly requiring robustness checks or alternative estimators.

4.2 Test of Hypotheses

Test of Hypothesis One

Restatement of the Hypothesis in Null and Alternate Forms:

H_{01} : Environmental Disclosure Index has no significant effect on the market value of listed non-financial firms in Nigeria.

H_{a1} : Environmental Disclosure Index has a significant effect on the market value of listed non-financial firms in Nigeria.

Statement of Decision Rule:

Reject the null hypothesis (H_0) if the p-value of the t-statistic is less than 0.05. Otherwise, accept the null hypothesis and reject the alternate hypothesis.

Decision:

From the regression result, the coefficient of the Environmental Disclosure Index (EDI) is 216,919.4 with a t-statistic of 7.856180 and a p-value of 0.0000, which is less than 0.05. Therefore, H_{01} is rejected, and the alternate hypothesis is accepted. This implies that

Environmental Disclosure Index has a significant positive effect on the market value of listed non-financial firms in Nigeria during the study period.

Test of Hypothesis Two

Restatement of the Hypothesis in Null and Alternate Forms:

H₀₂: Social Disclosure Index has no significant effect on the market value of listed non-financial firms in Nigeria.

H_{a2}: Social Disclosure Index has a significant effect on the market value of listed non-financial firms in Nigeria.

Statement of Decision Rule:

Reject the null hypothesis (H₀) if the p-value is less than 0.05. Otherwise, accept the null hypothesis.

Decision:

The coefficient of the Social Disclosure Index (SDI) is -37,115.03 with a t-statistic of -0.6789 and a p-value of 0.5001, which is greater than 0.05.

Therefore, H₀₂ is accepted, and the alternate hypothesis is rejected. This indicates that Social Disclosure Index has no significant effect on the market value of listed non-financial firms in Nigeria during the study period.

Test of Hypothesis Three

Restatement of the Hypothesis in Null and Alternate Forms:

H₀₃: Governance Disclosure Index has no significant effect on the market value of listed non-financial firms in Nigeria.

H_{a3}: Governance Disclosure Index has a significant effect on the market value of listed non-financial firms in Nigeria.

Statement of Decision Rule:

Reject H₀ if the p-value is less than 0.05.

Decision:

The coefficient of the Governance Disclosure Index (GDI) is -37,640.56 with a t-statistic of -1.2015 and a p-value of 0.2348, which is greater than 0.05.

Thus, H₀₃ is accepted, and the alternate hypothesis is rejected. This implies that Governance Disclosure Index does not have a significant effect on the market value of listed non-financial firms in Nigeria during the study period.

Test of Hypothesis Four

Restatement of the Hypothesis in Null and Alternate Forms:

H₀₄: Sustainability Reporting Score has no significant effect on the market value of listed non-financial firms in Nigeria.

H_{a4}: Sustainability Reporting Score has a significant effect on the market value of listed non-financial firms in Nigeria.

Statement of Decision Rule:

Reject H₀ if the p-value is less than 0.05.

Decision:

The coefficient of the Sustainability Reporting Score (SRS) is -131,027.8 with a t-statistic of -1.6831 and a p-value of 0.0981, which is greater than 0.05.

Hence, H_{04} is accepted, and the alternate hypothesis is rejected. This means that Sustainability Reporting Score does not have a statistically significant effect on the market value of listed non-financial firms in Nigeria during the study period.

Test of Hypothesis Five

Restatement of the Hypothesis in Null and Alternate Forms:

H_{05} : ESG Assurance Presence has no significant effect on the market value of listed non-financial firms in Nigeria.

H_{a5} : ESG Assurance Presence has a significant effect on the market value of listed non-financial firms in Nigeria.

Statement of Decision Rule:

Reject H_0 if the p-value is less than 0.05.

Decision:

The coefficient of ESG Assurance Presence (ESG_AP) is 91.0513 with a t-statistic of 0.2245 and a p-value of 0.8232, which is greater than 0.05.

Therefore, H_{05} is accepted, and the alternate hypothesis is rejected. This implies that ESG Assurance Presence has no significant effect on the market value of listed non-financial firms in Nigeria during the study period.

5. Summary of Findings, Conclusion and Recommendations

Summary of Findings

The key findings of the study are elucidated below:

- i. **Environmental Disclosure Index (EDI):** The Environmental Disclosure Index exhibited a positive and statistically significant effect on Market Value, with a coefficient of 216,919.4 ($t = 7.8562$, $p = 0.0000$). This indicates that higher environmental disclosure significantly enhances the market value of listed non-financial firms in Nigeria, suggesting that investors strongly reward environmental transparency and sustainability performance.
- ii. **Social Disclosure Index (SDI):** The Social Disclosure Index showed a negative but statistically insignificant effect on Market Value, with a coefficient of -37,115.03 ($t = -0.6789$, $p = 0.5001$). This implies that social disclosures do not significantly influence the market valuation of firms, indicating weak investor sensitivity to social reporting information in the Nigerian context.
- iii. **Governance Disclosure Index (GDI):** The Governance Disclosure Index revealed a negative and statistically insignificant effect on Market Value, with a coefficient of -37,640.56 ($t = -1.2015$, $p = 0.2348$). This suggests that governance disclosure practices, while important in principle, do not significantly determine market value among listed non-financial firms in Nigeria during the study period.
- iv. **Sustainability Reporting Score (SRS):** The Sustainability Reporting Score demonstrated a negative and marginally insignificant effect on Market Value, with a coefficient of -131,027.8 ($t = -1.6831$, $p = 0.0981$). This indicates that overall sustainability reporting has a weak and statistically insignificant influence on firm value, although it shows signs of potential relevance at a 10% significance level.
- v. **ESG Assurance Presence (ESG_AP):** ESG Assurance Presence exhibited a positive but statistically insignificant effect on Market Value, with a coefficient of 91.0513 ($t =$

0.2245, $p = 0.8232$). This implies that the presence of external ESG assurance does not significantly affect market valuation, suggesting that investors may not yet fully incorporate assurance practices into pricing decisions in the Nigerian market.

Conclusion

The study conclusively found that among the ESG disclosure variables examined, only the Environmental Disclosure Index (EDI) exerts a statistically significant positive effect on the Market Value of listed non-financial firms in Nigeria. This finding highlights the critical role of environmental transparency and sustainability reporting in enhancing investor confidence and firm valuation within the Nigerian capital market. In contrast, the Social Disclosure Index (SDI) and Governance Disclosure Index (GDI) were found to have negative but statistically insignificant effects on Market Value, suggesting that social and governance disclosures do not meaningfully influence investor valuation decisions in the study context.

The Sustainability Reporting Score (SRS) also exhibited a negative and statistically insignificant effect on Market Value, although it showed weak significance at the 10% level. This implies that aggregated sustainability reporting practices have limited influence on firm value and are not yet strongly integrated into investor decision-making processes in Nigeria. Similarly, ESG Assurance Presence (ESG_AP) was found to have a positive but statistically insignificant effect on Market Value, indicating that the presence of external assurance over ESG reports does not significantly enhance firm valuation in the sampled firms.

These results partially support theoretical expectations that ESG disclosures improve firm value through enhanced transparency, reduced information asymmetry, and improved stakeholder confidence. However, the insignificance of SDI, GDI, SRS, and ESG assurance suggests that not all components of ESG reporting are equally valued by investors, particularly in emerging markets where awareness and enforcement mechanisms may still be developing.

The findings further imply that firm value in the Nigerian non-financial sector is influenced more strongly by environmental disclosure practices than by social, governance, and assurance-related disclosures. This may reflect growing global and local investor attention to environmental sustainability, especially in relation to climate-related risks and environmental compliance.

Therefore, while ESG disclosures remain important for corporate reporting and sustainability communication, their impact on market valuation is uneven. A more integrated and standardized ESG reporting framework—supported by stronger regulatory enforcement and improved investor awareness—is necessary to enhance the relevance of ESG information in capital market decision-making within Nigeria.

Recommendations

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

- i. Since Environmental Disclosure Index showed a significant positive effect on Market Value, listed non-financial firms in Nigeria should strengthen their environmental reporting practices. This includes improving transparency on emissions, waste management, climate-related risks, and sustainability initiatives, as these practices are clearly valued by investors and contribute positively to firm valuation.
- ii. Although Social Disclosure Index was not statistically significant, firms should still improve the quality and consistency of their social disclosures. This involves enhancing reporting on employee welfare, community engagement, health and safety practices, and

corporate social responsibility activities to build long-term stakeholder trust and potentially improve future market responsiveness.

- iii. Despite its insignificant effect, firms are advised to strengthen governance disclosure practices by ensuring greater transparency in board structure, audit processes, executive compensation, and ethical compliance. Improved governance reporting can enhance investor confidence and may yield stronger market value effects over time as disclosure standards evolve.
- iv. Given its negative and marginally insignificant relationship with Market Value, firms should review the quality and relevance of their sustainability reporting frameworks. Emphasis should be placed on standardizing ESG disclosures in line with global frameworks such as GRI or ISSB standards to ensure that sustainability reports are more meaningful, comparable, and useful to investors.
- v. Since ESG assurance did not significantly affect Market Value, regulators and firms should work toward improving the credibility and visibility of assurance practices. This includes engaging reputable independent auditors for ESG verification, increasing awareness among investors about the value of assurance, and strengthening regulatory requirements to make ESG assurance more impactful in investment decision-making.

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