Innovations

Sustainability Reporting and the Market Value of Listed Firms in Nigeria

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Abstract: Despite the increasing global emphasis on sustainability reporting, its impact on market value remains inconclusive, particularly in emerging economies such as Nigeria, where regulatory frameworks are still evolving. This study examines the relationship between sustainability reporting and market value among listed firms in Nigeria, considering economic, social, environmental, and governance sustainability disclosures. Using an ex-post facto research design, secondary data from 57 purposively sampled firms across multiple sectors of the Nigerian Exchange Group (NGX) from 2012 to 2023 were analyzed. Market capitalization served as the dependent variable, while sustainability reporting dimensions were the independent variables. Panel Corrected Standard Errors (PCSEs) regression was employed to address heteroscedasticity and autocorrelation concerns. The findings reveal a significant positive relationship between all four dimensions of sustainability reporting and market value. Economic sustainability reporting enhances investor confidence, social sustainability disclosures improve brand perception, environmental sustainability reporting signals long-term risk mitigation, and governance sustainability reporting fosters transparency and accountability, collectively contributing to higher market valuation. These results suggest that firms engaging in comprehensive sustainability reporting gain competitive advantages in capital markets, reinforcing the relevance of stakeholder, legitimacy, and signaling theories. The study underscores the need for corporate executives to integrate sustainability initiatives strategically, while regulators should strengthen sustainability disclosure frameworks to enhance transparency and investor protection. Investors, both potential and existing, are encouraged to incorporate sustainability metrics into their valuation models, as firms with strong ESG disclosures demonstrate superior financial resilience. Policymakers must consider mandatory sustainability disclosure requirements to align Nigerian corporate practices with global standards. Future research should explore industry-specific variations in sustainability reporting effects and investigate the role of institutional investors in shaping ESG-driven market valuation, offering deeper insights into sustainable finance in emerging markets.

Keywords: Sustainability Reporting, Market Value, Economic Sustainability, Social Sustainability, Environmental Sustainability, Governance Disclosure

Introduction 1

Corporate sustainability has emerged as a central theme in modern business practices, as firms across the globe strive to integrate environmental, social, and governance (ESG) considerations into their financial strategies. Sustainability reporting, which involves the disclosure of non-financial information regarding a firm's environmental and social impact, has become a crucial determinant of corporate legitimacy and market valuation (Jørgensen, Mjøs, & Pedersen, 2022). As investors, regulators, and consumers increasingly prioritize sustainable business practices, firms that demonstrate transparency in their sustainability performance are often perceived as lower-risk and better positioned for long-term financial growth. This has led to the widespread adoption of sustainability reporting frameworks such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB) (Luque-Vilchez et al., 2023). However, the extent to which sustainability reporting influences market value remains a subject of debate, with empirical findings varying across different economic, regulatory, and industry contexts.

Globally, the relationship between sustainability reporting and firm market value has been widely studied, with mixed empirical results. Some studies suggest that firms with robust sustainability disclosures experience enhanced investor confidence, reduced capital costs, and higher market capitalization (Wong et al., 2021). For example, European firms that adhere to stringent ESG reporting guidelines have been found to exhibit superior stock performance compared to their less transparent counterparts (Gonçalves, Louro, & Barros, 2023). In the United States, sustainability reporting has been linked to improved access to capital and a favorable cost of equity, as investors increasingly integrate ESG considerations into their valuation models (Wilberforce et al., 2024). However, some studies caution that excessive sustainability disclosures may lead to information overload or greenwashing concerns, thereby diluting their intended positive impact on firm value (Pucker, 2021).

In Africa, sustainability reporting is gaining traction, albeit at a slower pace compared to developed economies. The adoption of sustainability disclosure guidelines in South Africa, Kenya, and Ghana has been driven by regulatory pressures and growing awareness of corporate social responsibility (Beyne, Visser, & Allam, 2021). In South Africa, for instance, firms listed on the Johannesburg Stock

Exchange (ISE) are mandated to include sustainability disclosures in their annual reports, leading to increased investor engagement and enhanced firm valuation (Khunkaew, Wichianrak, &Suttipun, 2023). Similarly, research on the Nairobi Securities Exchange (NSE) has found that firms with comprehensive sustainability disclosures tend to attract institutional investors who prioritize ESG considerations (Wilberforce et al., 2024). Nevertheless, challenges such as weak enforcement mechanisms, inconsistent reporting standards, and limited stakeholder awareness continue to hinder the effectiveness of sustainability reporting in driving firm market value across the continent.

The Nigerian context presents a particularly compelling case for investigating the link between sustainability reporting and market value. Despite being Africa's largest economy and home to a vibrant financial market, Nigeria lags behind in the adoption of sustainability disclosure practices (Taiwo et al., 2022). While the Nigerian Exchange Group (NGX) has introduced sustainability disclosure guidelines to encourage corporate transparency, compliance remains largely voluntary, resulting in significant variations in reporting quality across firms (Onoh, Biradawa, & Ndubuisi, 2022). Additionally, factors such as weak regulatory enforcement, investor skepticism, and economic instability pose challenges to the effective implementation of sustainability reporting frameworks (Emeka-Nwokeji &Osisioma, 2019). The lack of a standardized approach to ESG disclosures further complicates the ability of investors to assess the long-term value implications of sustainability initiatives. As a result, it remains unclear whether sustainability reporting contributes to firm valuation in Nigeria or whether it is merely a compliance exercise with minimal financial benefits. The motivation for this study stems from the growing yet inconclusive discourse on the impact of sustainability reporting on market value within the Nigerian corporate landscape. While some scholars argue that sustainability disclosures enhance firm reputation, investor confidence, and stock performance (Atanda, Osemene, &Ogundana, 2021), others contend that the costs associated with ESG compliance may outweigh the financial benefits, particularly in emerging economies with underdeveloped regulatory frameworks (Mohammadi et al., 2018). Moreover, existing studies on sustainability reporting in Nigeria have predominantly focused on specific industries such as oil and gas or banking, leaving a gap in understanding its broader implications across various sectors (Onoh et al., 2022). This study seeks to address this gap by examining the relationship between sustainability reporting and market value among listed firms in Nigeria, providing empirical insights into whether firms that engage in extensive sustainability disclosures experience superior market performance.

The findings of this study have important theoretical and practical implications. From a theoretical standpoint, the research contributes to the ongoing debate on the relevance of sustainability reporting in enhancing firm value, drawing insights from stakeholder theory, legitimacy theory, and signaling theory (Jørgensen et al., 2022). It provides empirical validation for the argument that firms that engage in sustainability disclosures signal their long-term viability and risk management capabilities, thereby enhancing investor confidence and market valuation (Ballina, Valdes, & Del Valle, 2020). Practically, the study offers valuable insights for corporate executives, policymakers, and investors regarding the financial benefits of sustainability reporting. For Nigerian firms, it underscores the importance of ESG integration as a strategic tool for enhancing competitiveness in the capital market. For regulators, it provides empirical evidence on the need for more structured and enforceable sustainability disclosure frameworks to improve corporate transparency and investor protection.

The remainder of this paper is structured as follows. Section 2 presents a review of relevant literature and conceptual clarifications, outlining key theoretical perspectives and empirical findings on sustainability reporting and market value. Section 3 details the research methodology, including data sources, sample selection, and analytical techniques. Section 4 discusses the empirical results, highlighting the relationship between sustainability reporting dimensions and market value. Section 5 concludes with a summary of findings, policy recommendations, and suggestions for future research.

2 Literature and Conceptual Clarification

2.1 Market Value

Market value is a fundamental concept in finance and accounting, representing the total value at which an asset, security, or company can be bought or sold in an open market. It is often used as a key indicator of a firm's financial health, investor perception, and overall economic performance. Market value is commonly assessed through stock prices, enterprise value, and market capitalization (Azaro, Djajanto, & Sari, 2020). According to Aras and Yilmaz (2008), market value is determined by various financial metrics, including the price-to-earnings ratio (P/E), price-to-book ratio (P/B), and market-to-book ratio, all of which offer insight into investors' expectations regarding a firm's profitability and growth potential. Several scholars have defined market capitalization as an essential determinant of firm valuation and investment attractiveness. According to Ibrahim and Falkenbach (2023), market capitalization reflects the collective perception of investors regarding a company's future earnings potential and risk profile. Similarly, El-Deeb, Ismail, and El Banna (2023) emphasize that market capitalization is influenced by financial performance, corporate governance structures, and external economic conditions.

In contrast, Momoh-Musa and Nwaiwu (2021) argue that fluctuations in market capitalization are largely driven by stock market sentiment, macroeconomic stability, and firm-specific attributes such as profitability and leverage. Various studies have

explored the factors influencing market capitalization. Setianto (2020) suggests that earnings per share (EPS), dividend policy, and price-to-earnings ratio (P/E) significantly affect market capitalization, as they serve as indicators of a firm's profitability and growth prospects. Additionally, Azmi et al. (2021) highlight that institutional ownership plays a critical role in determining market capitalization, as institutional investors provide stability to stock prices through long-term investments. Furthermore, Wilberforce et al. (2024) assert that sustainability disclosures and environmental, social, and governance (ESG) performance positively impact market capitalization, as investors increasingly consider non-financial factors in their valuation models. Overall, market capitalization remains a fundamental measure of corporate valuation, serving as a benchmark for financial analysts, investors, and policymakers. Its significance extends beyond mere stock price movements, as it encapsulates firm stability, investor sentiment, and broader economic trends.

2.2 Sustainability Reporting

Sustainability reporting has emerged as a vital aspect of corporate disclosure, reflecting a company's commitment to environmental, social, and governance (ESG) responsibilities. It involves the systematic presentation of information regarding a firm's sustainability practices, including its impact on society, the environment, and economic performance (Adegbie, Akintoye, & Taiwo, 2020). According to Atanda, Osemene, and Ogundana (2021), sustainability reporting enhances corporate transparency and accountability, enabling stakeholders to assess a firm's long-term sustainability strategies. The concept of sustainability reporting has been widely studied in the literature, with scholars proposing various definitions and frameworks. For instance, Jørgensen, Mjøs, and Pedersen (2022) define sustainability reporting as a structured approach to disclosing non-financial information, ensuring that companies align with global sustainability standards such as the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB). Similarly, Beyne, Visser, and Allam (2021) emphasize that sustainability reporting serves as a strategic tool for risk management, corporate reputation enhancement, and regulatory compliance.

Different measurement approaches have been adopted to assess the effectiveness of sustainability reporting. One common method is the disclosure index, which evaluates the extent of a firm's sustainability disclosures based on predefined indicators such as carbon emissions, social investments, and governance structures (Anumaka, 2023). Another approach involves content analysis, which examines sustainability reports to determine the level of transparency and depth of information provided (Buallay, 2020). Furthermore, Van Linh, Hung, and Binh (2022) argue that sustainability reporting quality can be measured through the integration of ESG scores, which assess a company's environmental policies, social initiatives, and governance frameworks. Scholars have also examined the role of sustainability reporting in shaping corporate strategies and investor decisions. For instance, Tumwebaze et al. (2022) found that companies with robust sustainability reporting practices tend to attract more socially responsible investors, leading to improved market performance. Additionally, Khunkaew, Wichianrak, and Suttipun (2023) highlight that gender diversity in board composition positively influences sustainability disclosure quality, as diverse boards are more likely to promote ethical and sustainable business practices. The evolution of sustainability reporting has been driven by increasing regulatory requirements and stakeholder expectations.

2.3 Theory and Hypotheses Development

2.3.1 Economic Sustainability Reporting and Market Value

The relationship between economic sustainability reporting and market value is well-grounded in the stakeholder theory, which posits that firms that disclose their economic sustainability practices tend to build trust and attract investors, ultimately enhancing their market value (Beyne, Visser, & Allam, 2021). Investors and other stakeholders increasingly demand transparency in corporate financial performance, risk management, and long-term value creation, making economic sustainability reporting a vital tool for firm valuation (Luque-Vilchez et al., 2023). The signaling theory further supports this relationship by suggesting that firms engaging in detailed economic sustainability disclosures signal financial strength and competitive advantage, which positively influences their market value (Ballina, Valdes, & Del Valle, 2020). Studies abound in terms of the relation between economic sustainability reporting and market value. In terms of those that found positive linkage, we review the studies of Anumaka (2023) in Nigeria, who examined the financial performance of industrial goods firms and found that firms engaging in robust economic sustainability reporting exhibited higher market value. The study, employing a panel regression model, indicated that consistent reporting on economic sustainability metrics, such as revenue growth, cost efficiency, and investment in long-term assets, significantly enhanced market capitalization. Similarly, Atanda, Osemene, and Ogundana (2021) examined deposit money banks in Nigeria and found a strong positive association between sustainability reporting and firm value, with market capitalization serving as a proxy for valuation. Their findings suggest that investors reward transparency and strategic disclosure of economic performance.

In the Asian context, Mihai et al. (2019) studied listed firms in Romania and established that economic sustainability disclosures related to financial stability, shareholder wealth creation, and long-term investment strategies positively impacted market value. Their findings align with those of Hardiningsih et al. (2020), who conducted an analysis of firms in Indonesia and Malaysia. Their research emphasized that consistent sustainability reporting led to higher stock prices and improved investor confidence. This positive impact was attributed to increased financial transparency and a reduction in information asymmetry, aligning with the predictions of signaling theory. However, some studies reported mixed or negative findings. Ahmed and Ahmed (2018) examined firms in Egypt and found that while economic sustainability reporting was positively associated with profitability, its impact on market value was less pronounced in firms with weak corporate governance structures. The study suggested that weak enforcement mechanisms and lack of standardization in reporting practices reduced investor reliance on sustainability disclosures. Similarly, Buallay (2020) investigated the moderating role of sustainability reporting laws on firm performance in Saudi Arabia, finding that while disclosures improved financial performance, the effect on market value was inconsistent across industries.

Contrarily, some scholars argue that economic sustainability reporting may not always translate into higher market value. For instance, Taiwo et al. (2022) studied Nigerian firms and found that while sustainability reporting increased transparency, it did not necessarily lead to a significant rise in market capitalization. The authors attributed this to investor skepticism, as some firms engaged in sustainability disclosures merely as a compliance mechanism rather than as a genuine strategy to enhance financial performance. Similarly, Emeka-Nwokeji and Osisioma (2019) found that firms with poor financial health engaged in sustainability reporting as a reputational strategy without tangible impact on market value. A critical review of these findings suggests that the effectiveness of economic sustainability reporting in enhancing market value depends on factors such as regulatory frameworks, industry characteristics, and investor perception. For instance, Wilberforce et al. (2024) argue that sustainability reporting enhances firm value in jurisdictions with strong corporate governance and investor protection mechanisms. This is consistent with the argument of Delfy and Bimo (2021), who found that firms with institutional investors tend to benefit more from sustainability disclosures due to increased monitoring and accountability.

Economic sustainability reporting has a significant positive impact on the Hl: market value of firms.

2.3.2 Social Sustainability Reporting and Market Value

The relationship between social sustainability reporting and market value can be explained through the legitimacy theory, which suggests that firms must align their activities with societal expectations to gain legitimacy and stakeholder trust (Kordsachia, Focke, & Velte, 2022). Investors and consumers are increasingly prioritizing corporate social responsibility (CSR) and ethical business practices, making social sustainability disclosures a crucial determinant of firm valuation (Khunkaew, Wichianrak, &Suttipun, 2023). Furthermore, the stakeholder theory emphasizes that firms engaging in social sustainability reporting enhance their reputation and brand equity, which, in turn, boosts investor confidence and market capitalization (Luque-Vílchez et al., 2023). Studies abound in terms of the relation between social sustainability reporting and market value. In terms of those that found positive linkage, we review the studies of Ayeni-Agbaje, Olaniyan, and Adebayo (2022), who examined Nigerian firms and found that companies that actively engaged in social sustainability reporting experienced higher stock returns and improved market valuation. The study, which employed a panel data regression analysis, indicated that disclosures related to community development, employee welfare, and consumer protection positively influenced investor perception. Similarly, Atanda, Osemene, and Ogundana (2021) analyzed selected deposit money banks in Nigeria and found that social sustainability reporting led to increased investor confidence and, consequently, a higher market value.

Loh and Tan (2020) conducted a study on Singaporean firms and discovered that companies that incorporated CSR activities into their sustainability reports observed significant improvements in market capitalization. Their study further highlighted that transparency in social sustainability reporting attracted institutional investors, who valued ethical business practices. This aligns with the findings of Kuzey and Uyar (2017), who examined firms in Turkey and found that social sustainability initiatives, particularly those related to labor rights and employee well-being, had a direct positive impact on firm value. However, some studies reported neutral or mixed findings. For instance, Wong et al. (2021) analyzed firms in Malaysia and found that while social sustainability reporting had a positive impact on corporate reputation, its influence on market value was only marginal. They argued that investors prioritized financial sustainability over social sustainability, making the effect of social disclosures less pronounced in capital markets. Similarly, Bukari, Agyemang, and Bawuah (2024) found that while firms with strong social responsibility programs experienced improved brand recognition, the impact on share prices remained inconsistent across industries.

Conversely, some scholars argue that social sustainability reporting may have a negative or negligible effect on market value. For instance, Ahmed and Ahmed (2018) examined firms in Egypt and found that excessive focus on social sustainability disclosures without clear financial benefits led to investor skepticism. Their findings suggested that some firms engaged in CSR initiatives for public relations purposes rather than as part of a sustainable business strategy. Similarly, Erhinyoja and Marcella (2019) investigated the financial performance of oil and gas firms in Nigeria and found that firms investing heavily in social sustainability faced high costs with little impact on market capitalization. A critical assessment of these studies indicates

that while social sustainability reporting is generally perceived positively, its impact on market value is contingent on various factors such as investor preferences, industry norms, and the regulatory environment. According to Tumwebaze et al. (2022), firms in industries with high social visibility, such as consumer goods and financial services, tend to benefit more from social sustainability disclosures than firms in industries with low public scrutiny.

Social sustainability reporting has a significant positive impact on the market value of firms.

2.3.3 Environmental Sustainability Reporting and Market Value

The link between environmental sustainability reporting and market value is wellgrounded in both stakeholder theory and legitimacy theory. Stakeholder theory suggests that firms that engage in environmental sustainability reporting build investor trust, enhance reputational capital, and attract responsible investors, thereby increasing their market value (Kordsachia, Focke, & Velte, 2022). Legitimacy theory, on the other hand, posits that firms engage in environmental disclosures to conform to societal expectations and regulatory requirements, which can influence their financial standing and market valuation (Jørgensen, Mjøs, & Pedersen, 2022). Empirical studies have examined this relationship, with mixed findings across different regions, industries, and methodological approaches. Studies abound in terms of the relationship between environmental sustainability reporting and market value. In terms of those that found a positive linkage, we review the studies of Ammer, Aliedan, and Alyahya (2020) in Saudi Arabia, who examined the impact of corporate environmental sustainability practices on firm value. Using a panel dataset of listed firms, they found that firms with higher environmental sustainability disclosures experienced improved stock performance and increased investor confidence. Similarly, Taiwo et al. (2022) in Nigeria examined the market value growth of firms that engaged in environmental reporting and found that firms with detailed environmental disclosures outperformed their counterparts in terms of market capitalization growth.

However, some studies have found weak or neutral effects of environmental sustainability reporting on market value. Ahmed and Ahmed (2018) examined firms in Egypt and found that while environmental disclosures improved corporate reputation, their effect on stock price and market valuation was marginal. They attributed this to the relatively weak enforcement of environmental regulations in emerging markets, where investors prioritize financial metrics over sustainability considerations. Similarly, Emeka-Nwokeji and Osisioma (2019)analyzed sustainability disclosures in Nigeria and found that while environmental reporting enhanced firm reputation, its direct impact on market value remained inconclusive. On the contrary, some scholars argue that environmental sustainability reporting can negatively impact market value. For instance, Oyedokun, Egberioyinemi, and Tonademukaila (2019) studied Nigerian industrial firms and found that high compliance costs associated with environmental disclosures could erode profitability, leading to lower investor confidence. Their findings align with those of Mohammadi et al. (2018), who examined listed firms in Iran and found that excessive environmental sustainability reporting without clear financial benefits led to market skepticism and reduced stock performance. A critical review of these studies suggests that the impact of environmental sustainability reporting on market value is contingent on industry characteristics, investor sentiment, and regulatory environments. According to Wilberforce et al. (2024), firms operating in environmentally sensitive industries such as oil and gas, manufacturing, and mining tend to experience stronger market responses to environmental disclosures compared to firms in low-impact sectors. Similarly, Delfy and Bimo (2021) argue that the presence of institutional investors moderates the effect of environmental sustainability reporting on market value, as they tend to reward transparency and long-term environmental stewardship.

Environmental sustainability reporting has a significant positive impact on the market value of firms.

2.3.4 Governance Sustainability Reporting and Market Value

The relationship between governance sustainability reporting and market value is well established in agency theory and signaling theory. Agency theory suggests that effective corporate governance mitigates conflicts of interest between managers and shareholders, thereby improving investor confidence and firm valuation (Bebchuk, Cohen, & Hirst, 2017). Signaling theory posits that firms engaging in governance disclosures send positive signals to investors regarding their commitment to transparency, ethical leadership, and risk management, which can enhance market value (Connelly et al., 2011). Given the increasing importance of environmental, social, and governance (ESG) factors in investment decisions, governance sustainability reporting has become a crucial determinant of firm value. In terms of those that found a positive linkage, we review the studies of Azmi et al. (2021) in Malaysia, who examined institutional ownership and firm value. Their findings revealed that firms with strong governance sustainability reporting practices experienced higher stock valuations, particularly in industries with high regulatory oversight. Similarly, Gerged and Agwili (2020) investigated governance disclosures in Saudi Arabia and found that firms with independent boards, clear shareholder rights policies, and robust risk management frameworks outperformed their peers in terms of market value.

In Africa, Atanda, Osemene, and Ogundana (2021) studied Nigerian deposit money banks and found a strong positive correlation between governance sustainability reporting and firm value. They argued that firms with high levels of governance transparency attracted institutional investors, thereby enhancing their market capitalization. Their findings are supported by those of James, Egbunike, and Adeniyi (2021), who analyzed consumer manufacturing firms in Nigeria and found that firms with strong board structures and corporate governance disclosures had higher price-to-earnings (P/E) ratios and improved market performance. However, some studies have reported weak or neutral effects of governance sustainability reporting on market value. For instance, Bukari, Agyemang, and Bawuah (2024) found that while governance disclosures enhanced investor perception, their direct impact on stock prices was minimal in markets with weak corporate governance enforcement. Similarly, El-Deeb, Ismail, and El Banna (2023) analyzed Egyptian firms and found that governance sustainability reporting had a significant impact on firm performance but a less pronounced effect on market value due to inconsistent regulatory enforcement.

Conversely, some scholars argue that excessive governance sustainability reporting can negatively impact market value. For instance, Ferriswara, Sayidah, and Agus Buniarto (2022) studied firms in Indonesia and found that excessive disclosure requirements led to increased compliance costs, reducing profitability and shareholder returns. Their findings align with those of Iswajuni, Manasikana, and Soetedjo (2018), who found that overly complex governance structures could create bureaucratic inefficiencies, leading to lower investor confidence and reduced stock performance. A critical analysis of these findings suggests that the effectiveness of governance sustainability reporting in enhancing market value depends on industry characteristics, regulatory environments, and investor expectations. According to Wong et al. (2021), firms in markets with strong regulatory oversight and investor protection mechanisms tend to benefit more from governance disclosures compared to those in less regulated environments. Similarly, Delfy and Bimo (2021) argue that the presence of institutional investors enhances the positive effects of governance sustainability reporting on firm value, as they demand higher levels of corporate transparency and accountability.

H4: Governance sustainability reporting has a significant positive impact on the market value of firms.

3 **Data and Methods**

We adopt ex-post facto research design to examine the economic trade-off of sustainability reporting among listed Nigerian firms. This study is based on a population of 148 listed firms on Nigerian Exchange as at 31st July 2024, these companies are categorized into 11 sectors of oil and gas, conglomerates, financial services, information and communication technology, services, natural resources, construction/real estate, industrial goods, consumer goods, health care and agriculture. Purposive sampling technique is used as the sampling technique for this study to select the sampled firms based on the following criteria: the Annual reports of the firm must be accessible from 2012 to 2023, and Firm's sustainability report must be accessible either separately or a section of annual reports for the period of study. The same size of 57 companies (financial and non-financial) were chosen from the population of 148 firms based on purposive sampling technique. The sample size is 39% of the population as shown in Table 1 below.

Table 1: Number of Sampled Firms Selected from each Sector Quoted in NGX

S/n	Sectors	Listed	Sampled	Percentage of sampled firms per
		Companies	Firms	sector
1.	Oil and gas	8	2	25
2.	Conglomerates	6	1	16
3.	Financial services	45	20	44
4.	ICT	8	2	25
5.	Services	22	7	31
6.	Natural resources	4	2	5
7.	Construction/real	9	3	33
	Estate			
8.	Industrial goods	13	5	38
9.	Consumer goods	21	9	42
10.	Health care	7	3	43
11.	Agriculture	5	3	60
	Total	148	57	39

Source: Adapted from Nigerian Exchange Group, www.nse.com.ng and Researcher's Computation (2024)

We utilize secondary data sources to assess the examine the economic trade-off of sustainability reporting among listed Nigerian firms. The secondary data sources encompass annual reports of selected companies, separate sustainability reports of the sampled firms, and the GRI sustainability framework. For the sustainability reporting, the approach of Ching et al. (2017) and Taiwo et al. (2022) would be employed to develop sustainability disclosure index of which a score of 1 would be given when complete compliance with the GRI sustainability framework exist, a score of 0.75 would be given when the firm almost completely comply with the requirements, 0.5 would be scored when the firm averagely comply with the requirements, 0.25 would be scored when the compliance level is below average, and 0 would be scored when there is no compliance with the GRI sustainability

requirement at all. Using this classification, the final score for each sampled company is calculated by taking the arithmetic means of the aggregated indicators for each sub-category and category. This approach is effective because it ensures that each piece of disclosed information carries equal weight, regardless of the number of indicators in each aspect and category. This method has been employed in previous research (Adegbie et al., 2017; Mihai, Leontina, Mihai-Bogdan & Iuliana, 2019). Based on the foregoing, we state the following econometric models:

 $MCAP_{it} = \beta_0 + \beta_1 ECSR_{it} + \beta_2 SOSR_{it} + \beta_3 EVSR_{it} + \beta_4 GOSR_{it} + \epsilon_{it}$

Where: MCAPis Market Capitalization; ECSR is Economic Sustainability Reporting; SOSR is Social Sustainability Reporting; EVSR is Environmental Sustainability Reporting; GOSR is Governance Sustainability Reporting; εit it is Error Term; β0 = intercept which is constant; $\beta 1$ - $\beta 4$ represent the coefficient of explanatory variables.

Table 2 shows how the variables were measured:

Table 2: Measurement of Variables

Variable	Measurement	Sources	
Independent			
Economic	The arithmetic mean of the scores	Ching et al. (2017); Taiwo	
Sustainability	for each indicator under economic	et al. (2022), Ucheagwu	
Reporting	category.	(2019).	
Social Sustainability	The arithmetic mean of the scores	Ching et al. (2017); Taiwo	
Reporting	for each indicator under social	et al. (2022), Ucheagwu	
	category.	(2019).	
Environmental	The arithmetic mean of the scores	Ching et al. (2017); Taiwo	
Sustainability	for each indicator under	et al. (2022), Ucheagwu	
Reporting	environmental category.	(2019).	
Governance	The arithmetic mean of the scores	Ching et al. (2017); Taiwo	
Sustainability	for each indicator under	et al. (2022), Ucheagwu	
Reporting	governance category.	(2019).	
Dependent			
Market Value	Market capitalization	Shuaibu, Ali and Amin	
		(2019); Kwarbai (2019);	
		Mittal and Sandhu (2018).	

Source: Researcher's study, 2025.

Results and Discussion 4

4.1 **Descriptive Statistics**

The descriptive analysis for the variables used in this study is presented in Table 4.1

Table 3: Descriptive Analysis

	MCAP	ECSR	SOSR	EVSR	GOSR
Mean	2.31E+11	0.387588	0.642926	0.392379	0.449518
Median	8.50E+10	0.400000	0.670000	0.430000	0.300000
Maximum	2.36E+12	0.800000	1.000000	0.860000	1.000000
Minimum	1.25E+09	0.100000	0.000000	0.000000	0.040000
Std. Dev.	3.35E+11	0.156138	0.221454	0.292240	0.294362
Skewness	2.301212	0.139214	-0.413819	0.090691	0.272173
Kurtosis	9.389754	3.121403	2.838299	1.668984	1.728973
Jarque-Bera	803.5626	1.195550	9.215078	23.38334	24.77402
Probability	0.000000	0.550034	0.009976	0.000008	0.00004
Observations	311	311	311	311	311

Source: Author's Computation using Stata 15 (2025)

Table 3 provides key insights into the variables representing firm value (MV) and sustainability reporting (ECSR, SOSR, EVSR, GOSR). The mean values suggest that, on average, firms in the sample have significant market value (MCAP). However, the large difference between the mean and mediansuggests the presence of extreme values or outliers. The standard deviations further highlight the high variability in firm performance and size. For example, the standard deviation of market value (MCAP) is substantial, indicating that some firms are significantly larger than others. The sustainability reporting variables (ECSR, SOSR, EVSR, and GOSR) have relatively lower standard deviations, suggesting less variation among firms in their reporting practices. The skewness and kurtosis statistics confirm that many of the variables are not normally distributed. MCAPexhibits high positive skewness and kurtosis, meaning their distributions are heavily right tailed with extreme outliers. In contrast, the sustainability reporting variables are closer to normality, with lower skewness and kurtosis. The Jarque-Bera test results further reinforce this non-normality, as the probability values are mostly significant (p < 0.05), rejecting the null hypothesis of normality for most variables. This indicates that statistical methods assuming normality may not be appropriate, and alternative robust estimation techniques may be necessary. The results suggest that firm value indicators (MCAP) are highly dispersed, which may indicate differing firm growth trajectories and financial strategies. The significant variation in sustainability reporting suggests that while some firms adopt comprehensive sustainability practices, others lag.

4.2 **Correlation Analysis**

The results from the correlation matrix presented in Table 4show there is no evidence of severe multicollinearity in this correlation matrix, as none of the correlation coefficients exceed 0.8. The highest observed correlation is between GOSR and EVSR (0.7308), followed by SOSR and GOSR (0.6437), and SOSR and EVSR (0.6339). While these values indicate moderate to strong relationships, they do not cross the multicollinearity threshold. Therefore, while some degree of correlation exists among the sustainability reporting variables, it is not severe enough to cause major estimation issues in a regression model.

Table 4: Correlation Analysis

	MV	ECSR	SOSR	EVSR	GOSR	
MV	1.000000					
ECSR	0.294881	1.000000				
SOSR	0.478732	0.442243	1.000000			
EVSR	0.449841	0.412521	0.633866	1.000000		
GOSR	0.448908	0.506771	0.643685	0.730767	1.000000	

Source: Author's Computation using Stata 15 (2025)

4.3 **Regression Results**

The use of Linear regression with Panel Corrected Standard Errors (PCSEs) is welljustified due to several statistical considerations. The Modified Wald test revealed significant heteroscedasticity in the model specifications, while the Wooldridge test showed significant autocorrelation. PCSEs are particularly appropriate in this context as they simultaneously address both heteroscedasticity and autocorrelation issues, while being specifically designed for panel data where errors exhibit contemporaneous correlation across panels, panel-level heteroscedasticity, and temporal autocorrelation.

Table 5: Sustainability Reporting and Economic Value Added Nexus

Variable	Coefficient	Std. Err.	z-value	P>z
ECSR	1.042438	0.411775	2.53	0.011
SOSR	0.98687	0.319901	3.08	0.002
EVSR	1.47722	0.491544	3.01	0.003
GOSR	0.980673	0.199418	4.92	0.000
Constant	23.03343	0.230057	100.12	0.000
Observations	312			
Number of cid	26			
Wald (chi2)	260.49***			

Note: "***" p<0.01, "**" p<0.05, "*" p<0.1

Source: Author's computation using Stata 15 (2025)

Table 5 presents the result of the effect of sustainability reporting on market value of listed firms in Nigeria. The coefficient of Economic Sustainability Reporting (ECSR) is 1.0424, indicating that a 1% increase in ECSR leads to a 1.04% increase in market value (MCAP). This positive relationship aligns with the a priori expectation that firms engaging in strong economic sustainability reporting benefit from improved investor confidence, enhanced financial stability, and long-term profitability. Firms that disclose robust economic sustainability measures—such as responsible investment, financial resilience, and sustainable business models-tend to be perceived as more valuable in the market, leading to an increase in their market valuation. The effect is statistically significant at the 5% level, with a z-statistic of 2.53 and a p-value of 0.011, indicating strong evidence that economic sustainability reporting positively influences market value. This suggests that investors place a premium on firms that demonstrate long-term economic sustainability strategies.

The coefficient of Social Sustainability Reporting (SOSR) is 0.9869, meaning that a 1% increase in SOSR results in a 0.99% increase in MCAP. This positive effect is consistent with expectations, as firms that prioritize social sustainability enhance their reputation and attract socially responsible investors. The significant increase in market value suggests that socially responsible firms experience higher investor demand and a stronger market presence. The relationship is highly statistically significant at the 1% level, with a z-statistic of 3.08 and a p-value of 0.002, implying that social sustainability reporting plays an essential role in determining firm market value. This reinforces the idea that firms that invest in social responsibility initiatives tend to have a competitive advantage in capital markets.

The coefficient of Environmental Sustainability Reporting (EVSR) is 1.4772, suggesting that a 1% increase in EVSR leads to a 1.48% increase in MCAP. This strong positive relationship supports the hypothesis that environmentally responsible firms are viewed favorably by investors, regulators, and other stakeholders. Companies with strong environmental sustainability practices—such as carbon reduction initiatives, green energy adoption, and sustainable resource management—are often associated with lower regulatory risks, better operational efficiency, and long-term financial gains. The effect is statistically significant at the 1% level, with a z-statistic of 3.01 and a p-value of 0.003, providing robust evidence that environmental sustainability reporting enhances market value. This finding suggests that firms that prioritize environmental sustainability enjoy greater investor confidence, leading to higher valuations.

The coefficient of Governance Sustainability Reporting (GOSR) is 0.9807, meaning that a 1% increase in GOSR results in a 0.98% increase in MCAP. This finding is consistent with expectations, as strong governance practices—including transparency, ethical leadership, and regulatory compliance—enhance investor trust and reduce the risk of financial mismanagement. Firms with robust governance structures are often seen as more stable and less prone to corporate scandals, making them more attractive to investors. The impact of GOSR on market value is highly statistically significant at the 1% level, with a z-statistic of 4.92 and a p-value of 0.000, confirming that governance sustainability reporting is a critical determinant of firm valuation.

The findings indicate that all dimensions of sustainability reporting—economic, social, environmental, and governance—positively and significantly influence market value (MCAP) are well-supported by the existing literature. Studies such as Bajic and Yurtoglu (2018) demonstrate that overall corporate social responsibility (CSR), which encompasses these sustainability dimensions, significantly affects market value across various countries. This aligns with the current findings that suggest firms with robust sustainability practices are likely to be valued higher by investors due to enhanced corporate reputation, reduced risk exposure, and a signal of long-term viability. Economic sustainability reporting's positive impact reflects the insights from Ayeni et al. (2022), which found that economic disclosures contribute positively to market share, indicating that firms focusing on long-term financial resilience and responsible investments can effectively attract investor confidence.

Moreover, the positive contributions of social and environmental sustainability reporting to market value reinforce the idea that firms engaging in community initiatives and environmental responsibility gain competitive advantages. This is consistent with Emeka-Nwokeji and Osisioma (2019), who found significant enhancements in market value returns linked to environmental disclosures. Furthermore, the strong relationship observed with governance sustainability reporting underscores its critical role in fostering investor confidence through financial transparency and ethical decision-making. This finding resonates with Bukari et al. (2020), which highlighted how ESG disclosures significantly moderate the relationship between corporate governance and firm value in developing nations. Collectively, these studies support the conclusion that sustainability-oriented firms are perceived as lower-risk and future-oriented, enhancing their market valuation. However, it is important to note contrasting findings from Taiwo et al. (2022) and Mohammadi et al. (2018), which suggest minimal or insignificant effects of sustainability reporting on market value in certain contexts, indicating that the impact of sustainability practices may vary based on industry sensitivity and regional factors.

5 Conclusion and Recommendations

The findings of this study provide critical insights into the relationship between sustainability reporting and the market value of listed firms in Nigeria. In an era where corporate transparency and sustainable business practices are becoming indispensable, understanding the economic implications of sustainability disclosures is essential for firms, investors, regulators, and other market participants. This study empirically establishes that sustainability reporting—comprising economic, social, environmental, and governance disclosures—significantly influences market value. As global capital markets increasingly prioritize firms with strong sustainability practices, these findings highlight the relevance of corporate sustainability in shaping financial outcomes in Nigeria's emerging economy. A key finding of this study is the positive and significant impact of economic sustainability reporting on market value, suggesting that firms that disclose financial resilience, responsible investment strategies, and long-term economic sustainability are more likely to attract investors and enhance their market valuation. This aligns with stakeholder and signaling theories, which posit that transparency in financial sustainability signals long-term profitability and stability, thereby improving investor confidence. Similarly, social sustainability reporting has a significant effect on market value, reinforcing the argument that firms that engage in corporate social responsibility (CSR), employee welfare, and community development initiatives enjoy stronger market perception and investor loyalty.

Another notable finding is the substantial influence of environmental sustainability reporting on market value. Firms with strong environmental sustainability practices—such as carbon reduction initiatives, resource efficiency, and compliance with environmental standards—demonstrate lower risk exposure, making them more attractive to investors. This supports legitimacy theory, which suggests that firms gain legitimacy by conforming to societal expectations, thereby improving their financial standing. Governance sustainability reporting also exhibits a strong and significant relationship with market value, confirming that firms with robust governance structures, ethical leadership, and effective risk management frameworks are viewed favorably in the capital market. This finding underscores the importance of corporate governance in enhancing firm reputation and reducing financial risks. The key takeaways from this study highlight the growing importance of sustainability reporting as a strategic driver of firm valuation. First, firms that proactively engage in sustainability disclosures are more likely to experience improved stock performance and market capitalization. Second, the capital market in Nigeria is increasingly responding to ESG-related disclosures, indicating a shift towards more responsible investment decisions. Third, while sustainability reporting positively affects firm value, the degree of impact may vary based on firm characteristics, industry-specific factors, and investor sentiment. These findings contribute to the ongoing discourse

on corporate sustainability, reinforcing its role in fostering financial stability and long-term value creation.

Corporate managers and board members should recognize sustainability reporting as a strategic tool for enhancing market value rather than merely a compliance exercise. Firms should integrate sustainability considerations into their corporate strategies, ensuring that ESG disclosures align with long-term business objectives. Economic sustainability disclosures should emphasize financial resilience and value creation, while social disclosures should highlight meaningful CSR initiatives that resonate with stakeholders. Environmental sustainability should be a core aspect of corporate risk management, ensuring that firms comply with global environmental standards and communicate their sustainability efforts effectively to investors. Governance disclosures should reinforce ethical leadership, transparency, and risk management frameworks, thereby fostering investor confidence and corporate credibility. Regulators should strengthen sustainability reporting frameworks to enhance transparency and comparability across firms. While Nigeria's sustainability disclosure guidelines are commendable, they should be reinforced with standardized reporting requirements to ensure consistency in ESG disclosures. Regulatory bodies should also encourage the adoption of globally recognized sustainability reporting standards, such as the Global Reporting Initiative (GRI) and the International Sustainability Standards Board (ISSB). Additionally, policies that incentivize sustainability reporting—such as tax benefits for firms that adopt responsible environmental practices—can further drive corporate sustainability adoption.

While this study provides significant insights into the relationship between sustainability reporting and market value, further research is needed to explore additional dimensions of corporate sustainability. Future studies could examine the moderating effects of firm-specific characteristics, such as size, industry type, and ownership structure, on the sustainability-market value nexus. Additionally, longitudinal studies could assess the long-term impact of sustainability reporting on firm performance, capturing the evolving nature of corporate sustainability practices. Comparative studies between Nigeria and other emerging economies could also provide deeper insights into how regional factors influence sustainability reporting outcomes. Furthermore, qualitative research could explore stakeholder perceptions of sustainability disclosures, providing a nuanced understanding of investor behavior and market reactions to ESG commitments. This study reinforces the growing significance of sustainability reporting in modern corporate finance, highlighting its potential to drive firm valuation and investor confidence. As the global business landscape continues to evolve, sustainability reporting will remain a critical determinant of corporate success, shaping the future of responsible business practices and market performance.

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