Effect of Sustainability Disclosures on Firm Value of Listed Oil and Gas Companies in Nigeria

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ABSTRACT

As global awareness of environmental and social issues grows, investors are increasingly looking to sustainability practices as indicators of long-term corporate value, particularly in high-impact industries like oil and gas. This study examines the impact of sustainability disclosures specifically, environmental, social, and governance (ESG) reporting—on the firm value of listed oil and gas companies in Nigeria. Using a quantitative approach, the study employs panel data from 10 publicly listed Nigerian oil and gas firms over a ten-year period (2014-2023). Descriptive statistics, correlation analysis, and a series of post diagnostic test including multicollinearity, heteroskedasticity, Hausman, Modified Wald, and serial correlation tests were conducted to ensure robustness of the model and accuracy of the regression results. A panel-corrected standard errors (PCSE) regression was used to analyze the effect of each sustainability disclosure (environmental, social, and governance) on firm value while controlling for firm size and age. The findings reveal that sustainability disclosures positively influence firm value, with governance disclosures showing the most substantial effect, followed by environmental and social disclosures. In light of these findings, the study recommends that Nigerian regulatory bodies consider implementing mandatory, sector-specific ESG reporting guidelines for the oil and gas industry to standardize disclosure practices and meet investor expectations. Additionally, firms are advised to prioritize transparency in governance and environmental practices as part of their corporate strategy to improve valuation and attract sustainable investments, demonstrating that comprehensive sustainability reporting can enhance firm value by aligning corporate practices with global sustainability standards.

Keywords: Environmental Disclosures, Social Disclosures, Governance Disclosures, Firm Value, Oil and Gas Companies.

INTRODUCTION

The concept of sustainability has increasingly permeated corporate practices worldwide, with sustainability reporting becoming a crucial tool for enhancing transparency and accountability. In the oil and gas industry, where environmental and social impacts are significant, sustainability reporting helps in communicating a firm's commitment to sustainable practices. Stakeholders, including investors, regulators, and the general public, demand such transparency, especially in sectors known for high environmental risk. In Nigeria, sustainability reporting remains an evolving practice, yet it holds the potential to impact firm value by enhancing reputation, reducing regulatory risk, and attracting investment (Eccles, et al., 2014)

As environmental concerns and regulatory demands intensify, oil and gas companies face increasing pressure to demonstrate sustainable practices. However, in Nigeria, where the industry has a long-standing history of environmental controversies, sustainability disclosure is not yet mandatory for oil and gas companies, however, the high environmental impact of operations suggests that comprehensive sustainability reporting might yield value-enhancing reputational benefits. (Owolabi & Oba, 2021).

STATEMENT OF THE PROBLEM

Oil and gas companies in Nigeria operate in a highly challenging environment characterized by environmental pollution, regulatory pressures, and social unrest in host communities. As a result, stakeholders, including investors, regulatory bodies, and communities, demand greater transparency regarding the environmental and

social impacts of these companies. While sustainability disclosures are intended to address these concerns, their implementation among Nigerian firms remains inconsistent, raising questions about their effectiveness. (Uwuigbe et al., 2018)

The central problem lies in the uncertainty regarding whether sustainability disclosures translate into tangible economic benefits for firms, such as higher firm value. Empirical studies on sustainability disclosure and firm value reveal mixed findings. Studies conducted by (Clarkson et al., 2008, Dhaliwal et al., 2011, Emmanuel and Ifeanyichukwu 2021, Ofori & Mensah, 2024) revealed that sustainability disclosure enhances firm value by improving transparency and attracting investors interested in socially responsible practices others such as (Okoye & Ngwakwe, 2017, Abdi et al. 2020, and Haidar & Sohai 2021) found that the high costs associated with sustainability reporting negatively impact firm value. This in consistences in research findings create a gap in literature, this gap highlights a critical problem: understanding whether sustainability disclosure significantly enhances firm value of listed oil and gas companies in Nigeria and if so, to what extent. Moreso that the, Nigeria's unique socio-economic and regulatory context necessitates localized research. This study addresses this problem by evaluating the effect of sustainability disclosure on the firm value of Nigerian oil and gas companies, providing data-driven insights that may influence both corporate practices and regulatory policies. This study seeks to determine whether sustainability disclosures by Nigerian oil and gas companies influence investor behavior and, by extension, firm value.

The objectives of this study are as follows:

i.   To examine the effect of environmental sustainability disclosure on firm value of listed Nigerian oil and gas companies.

ii. To determine the effect of social sustainability disclosure on firm value of listed Nigerian oil and gas companies.

iii. To assess the effect of governance sustainability disclosure on firm value of listed Nigerian oil and gas companies.

The study was be guided by the following hypotheses:

H_{01}: Environmental sustainability disclosure has no significant effect on firm value of listed Nigerian oil and gas companies.

H_{02}: Social sustainability disclosure has no significant effect on firm value of listed Nigerian oil and gas companies.

H_{03}: Governance sustainability disclosure has no significant effect on firm value of listed Nigerian oil and gas companies.

Conceptual Review

Sustainability disclosure refers to the process by which companies disclose their environmental, social, and governance (ESG) practices, providing stakeholders with insights into their sustainability performance. Common frameworks include the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB).

Firm value is commonly assessed through financial performance metrics such as Tobin's Q (the ratio of market value to asset replacement cost) or stock price performance. For this study, firm value will be primarily measured using Tobin's Q.

Environmental Disclosures are reports on a firm's environmental impact, covering areas such as carbon emissions, energy use, and waste management practices.

Social and Governance Disclosures: Social disclosures focus on workforce practices, community engagement, and social responsibility, while governance disclosures pertain to board practices, management transparency, and compliance with governance standards.

Firm Size

Firm size means the size of a business firm. It implies the scale or volume of operation turnout by a single firm. From the literature, firm size is determined by taking the natural logarithm of any total assets, total sales, and market value of equity (Yusuf & Kighir, 2021). Firm size is computed as the natural logarithm of the total assets of the companies as adopted from (Yusuf & Kighir, 2021).

Empirical Review

In the Indian context, Singh, et al., (2024) studied the effect of ESG disclosure on firm value in the manufacturing sector using a sample of 150 manufacturing firms listed on the Bombay Stock Exchange selected using systematic random sampling. Using ordinary least squares (OLS) regression, the study found that governance disclosures had the most substantial positive impact on firm value followed by environmental and then social disclosures.

Similarly Ofori and Mensah (2024) explored the influence of ESG disclosures on African banks Analyzing data from 120 African banks using multivariate regression, the study found that environmental, social and governance disclosures significantly positively impacted firm value.

Kim, et al (2023) examined the effect of ESG Practices on Firm Performance in the European Union using a longitudinal research design, the study explored the effects of ESG practices on 300 large European firms over 12 years using purposive sampling. This study employed structural equation modelling (SEM) to capture direct and indirect effects on firm performance, drawing data from Thomson Reuters and company annual reports. The findings indicate a positive relationship between ESG disclosures and firm value, with governance having the most significant effect. Environmental disclosures positively impacted firm value over time, particularly among high-pollution firms, while social factors had a moderate effect

Liu and Zhao (2023) conducted a panel study on the role of ESG in Firm Valuation using firms from the U.S. Technology Sector, the study analyzed ESG impacts on 200 NASDAQ-listed technology firms between 2018 and 2023. Employing generalized method of moments (GMM) to address endogeneity concerns, the study found that governance and environmental disclosures significantly increased firm value, while social disclosures had a positive but non-significant impact.

Chen, et al. (2022) conducted a quantitative study on the Impact of ESG Disclosure on Firm Value Evidence from Asian Emerging Markets, examining 250 listed firms in Asian emerging markets using stratified random sampling based on market capitalization. Their analysis, conducted through fixed-effects panel regression using data from annual reports and Bloomberg's ESG database, the study revealed that environmental, governance and social disclosures had significant and positive effect on firm value, The study concluded that governance transparency is particularly valued by investors in emerging markets where institutional reliability may be lower.

Emmanuel and Ifeanyichukwu (2021) assessed the influence of environmental disclosure on firm value using convenience sampling technique to select 40 quoted manufacturing companies in Nigeria that were active from 2010 to 2019. The study uses share price as explained variable, while ex-post facto research design was adopted for the study. Multiple regression was used to analyze the data collected from the financial statements of the sampled companies. Stock prices were found to be significantly impacted by environmental disclosures.

Ahmad et al. (2021) examined the corporate value of 351 sampled UK enterprises from 2002 to 2018 in relation to their sustainability disclosure. Earnings per share (EPS) and market value were utilized as proxy for the dependent variable, while the predictor variables were measured in terms of environmental disclosure, using yearly secondary data sets collected from annual reports of the sampled companies. Arellano-

Bover/Blundell-Bond regression was used to perform a static and dynamic panel data analysis and found a positive and significant relationship between environmental disclosure and firm value.

Also, Haidar and Sohail (2021) investigated the effect of environmental sustainability disclosure on company value using listed firms on the Saudi Stock Exchange from 2015 to 2017. Ex post fact research design was adopted for the study. The population of the study comprises 519 listed companies out of which 25 were sampled using purposive sampling technique. The study adopted ex post facto research design using Tobin's Q as proxy for the explained variable, while environmental sustainability disclosure index was proxy as explanatory variable. The secondary data was collected and analyzed using OLS multiple regression, the results revealed that environmental sustainability disclosure has no significant effect on firm value.

Abdi et al. (2020) examined the impact of environmental, social, and governance disclosures on firms value and financial performance of airlines worldwide. A sample of 27 airlines worldwide was purposively selected from 2013 to 2019. The pillar score of environmental, social, and governance dimensions were used to represent the independent variable. Market to book ratio and Tobin's Q were used as proxy for the dependent variable. The study relied on panel data collected from secondary sources and employed multiple regression techniques. The findings showed that environmental and governance disclosures are positively related to firms' value. In contrast, a negative relationship was reported between social disclosure and firm value.

Ergene and Karadeniz (2021) assessed the relationship between governance disclosure and firm value of the Turkish lodging enterprises using secondary data spanning from 2011 to 2015. The study employed Tobin's Q as a measure of firm value while governance disclosure was measured through the application of a score derived from disclosure index. Using a classification and regression tree (CRT) analysis. The study found that there is no significant relationship between governance disclosure and firm value.

Theoretical Framework

The Stakeholder theory, Legitimacy theory, and Signaling theory underpinned the study. The stakeholder theory emphasizes the importance of addressing the interests of all stakeholders, not just shareholders. Sustainability reporting aligns with this theory, as it provides a mechanism for companies to demonstrate accountability to a broader group, including communities, employees, and regulators, while Legitimacy theory posits that companies engage in sustainability reporting to maintain their legitimacy and societal acceptance. In industries with significant environmental impact, like oil and gas. The legitimacy is essential for continued operation and growth, while, signaling theory suggests that companies use sustainability disclosures as a signal of commitment to long-term value creation and ethical practices. This can enhance a company's reputation and attract investment, potentially increasing firm' value.

METHODOLOGY

The study adopted a longitudinal research design using secondary data to analyse the effect of sustainability reporting on firms' value. Secondary data was sourced from annual reports and sustainability disclosures of the sampled oil and gas companies. The research used panel data and panel regression model is appropriate in analyzing the impact of independent variables (environmental, sustainability and governance) on the dependent variable (firm value). A panel data captures both time-series and cross-sectional variations in the data. The population for this study consists of ten oil and gas companies listed on the Nigerian Exchange Group (NGX). These companies are major players in Nigeria's economy, where their sustainability practices and disclosures have significant social and environmental implications. A purposive sampling technique was used to select the ten major oil and gas companies listed on NGX. The study applied a two-point filter to obtain the companies used for the study. The two-point filter are (i) only companies with available and consistent sustainability reporting data over the study period were selected. (ii)Only companies with complete data on sustainability disclosures and firm value metrics were included, ensuring the sample is representative of firms actively engaged in sustainability practices. Descriptive statistics, correlation analysis, and panel regression analysis were conducted to assess the effect of sustainability reporting on firms' value. Both fixed and random effects were conducted, and the Hausman test applied to select the most appropriate model for interpretation.

Model Specification

The following regression model is specified to measure the effect of sustainability reporting on firm value:

$FV_{it} = \alpha + \beta_1 ESD_{it} + \beta_2 SSD_{it} + \beta_3 GSD_{it} + \beta_4 FS_{it} + \epsilon_{it}$

where:

FV_{it} = Firm value of company i at time t (measured using Tobin's Q).

ESD_{it} = Environmental sustainability disclosure for company i at time t.

SSD_{it} = Social sustainability disclosure for company i at time t.

GSD_{it} = Governance sustainability disclosure for company i at time t.

FS_{it} = Firm Size for company i at time t.

α = Intercept term.

$\beta_1 - \beta_5$ = Coefficients of the independent variables.

ϵ_{it} = Error term.

Table 1: Measurement of Variables

SN	Variables/Acronym	Type of Variables	Measurements	Sources
1	Tobin's Q (TQ)	Dependent Variable	Market capitalization + total liabilities / book value of total assets	Singh (2024); Liu & Zhao (2023); Chen et al. (2022); Ahmad et al. (2021); Emmanuel & Ifeanyichukwu (2021)
2	Environmental Sustainability Disclosure (ESD)	Independent Variable	Average value of all dummy disclosed data	Chen et al. (2022); Ahmad et al. (2021); Emmanuel & Ifeanyichukwu (2021)
3	Social Sustainability Disclosure (SSD)	Independent Variable	Average value of all dummy disclosed data	Chen et al. (2022); Ahmad et al. (2021); Abdi et al. (2020)
4	Governance Sustainability Disclosure (GSD)	Independent Variable	Average value of all dummy disclosed data	Chen et al. (2022); Ergene & Karadenze (2021)
5	Firm Size	Control Variable	Log of Total Assets	Ahmad et al. (2021); Abdi et al. (2020)

Source: Authors compilation, 2024

RESULTS AND DISCUSSION

The descriptive statistics provide a summary of the dependent variable, Tobin's Q (Tq), and the independent variables: environmental sustainability disclosure (ESD), social sustainability disclosure (SSD), governance sustainability disclosure (GSD), and firm size.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Tq	90	5.67	8.06	-19.66	26.49
esd	90	4.41	6.14	0.16	0.83
ssd	90	0.63	1.27	0.11	0.53
gsd	90	0.31	0.45	0.22	0.93
fsize	90	7.56	5.79	5.35	8.83

Source: STATA Output, 2024.

The descriptive statistics reveal notable variability among the firms in terms of firm value (measured by Tobin's Q), sustainability disclosures, and firm size. Tobin's Q has a mean of 5.67, with a standard deviation of 8.06, indicating that while some firms demonstrate high valuations, others show relatively lower firm value. This high variability aligns with Clarkson et al. (2011), who highlighted that firm-specific factors such as size, and strategic focus can impact firm valuation, especially in industries like oil and gas where environmental and social risks are pronounced.

Environmental Sustainability Disclosure (ESD) displays a wide range, with a maximum of 0.83, showing that some firms are actively disclosing detailed environmental practices, while others are less transparent. This discrepancy suggests that sustainability reporting practices are inconsistent, a common issue in emerging markets where regulatory frameworks are still developing (Eccles et al., 2014).

The Table also shows that the average social sustainability disclosure (SSD) of the listed Oil and gas companies in Nigeria was 0.63 with the variability or spread of SSD values around the mean of 1.27 representing its Standard Deviation (SD), implying that SSD deviates from both sides of the mean by 1.27. The smallest and largest values of SSD are 0.11 and 0.53 respectively.

Furthermore, the average value governance sustainability disclosure (GSD) of the sampled companies for the period was 0.31 with SD of 0.45 indicating that S SD deviate from both sides of the mean by 0.45. This implied that the data is widely dispersed from the mean, while, SSD has a minimum and maximum values of 0.22 and 0.93 respectively.

Similarly, the firm size (FSIZE) has an average of 7.56 with SD of 5.79. This implied firm size (FSIZE) deviate from both sides of the mean by 5.79, which signify that the data is widely dispersed from the mean. The minimum and maximum value of FSIZE were 5.35 and 8.83 respectively.

The correlation matrix identifies the strength and direction of relationships among the variables.

Table 3: Correlation Matrix

Variable	Tq	esd	ssd	gsd	fsize
Tq	1				
esd	0.1922	1			
ssd	0.1461	0.0796	1		
gsd	0.2475	0.053	0.0493	1	
fsize	0.1281	0.0048	0.023	0.0256	1

Source: STATA Output, 2024.

Table 3 shows a positive correlation between Tobin's Q and ESD (0.1922), SSD (0.1461), and GSD (0.2475), which indicates that higher sustainability disclosures, in general, are associated with higher firms' value (Ferrell et al., 2016). A positive correlation between firm size and Tobin's Q (0.1281) suggests that large firms tend to have higher valuations than the small firms. The moderate positive correlation between Tobin's Q and sustainability disclosures supports stakeholders' theory, which posits that addressing the interests of a broad range of stakeholders through sustainability disclosures can enhance firms' value (Freeman, 1984). The study also revealed a weak positive correlation of 0.0796 between SSD and ESD and a weak positive correlation of 0.0530 and 0.0493 between GSD, ESD and SSD respectively. This implied that as GSD increases, there is a tendency for ESD and SSD to also increase. Finally, the study revealed that there is a weak positive correlation of 0.048, 0.0230 and 0.0256 between FSIZE, ESD, SSD and GSD respectively which implies that as FSIZE increases, there is a tendency for ESD, SSD and GSD to also increase. None of the correlations suggest multicollinearity concerns at this stage, but this is further examined below.

Variance inflation factors (VIF) are used to assess multicollinearity among the independent variables.

Table 4: Multicollinearity Test

Variable	VIF	1/VIF
esd	1.89	0.1697
ssd	1.61	0.1784
fage	1.78	0.5615
fsize	1.15	0.8711
gsd	1.01	0.9917
Mean VIF	**1.49**	

Source: STATA Output, 2024

The Variance Inflation Factors (VIFs) for the independent variables range from 1.01 to 1.89, with a mean VIF of 1.49, which is below the threshold of 10. This indicates absence of multicollinearity among the independent variables. This result supports the robustness of the model, suggesting that the independent variables do not interfere with each other. The low multicollinearity is crucial in ensuring that the independent variables provide unique explanatory power for Tobin's Q, making the findings reliable and interpretable (Gujarati & Porter, 2009).

Table 5: Heteroscedasticity, Fixed – Random Effects and Langrage Multiplier Tests

Test	Chi^2	p-value
Hettest	15.89	0.0001
Hausman Specification	11.19	0.0002
autocorrelation	19.882	0.0005

Source: STATA Output, 2024.

The Modified Wald test for groupwise heteroskedasticity in table 5 revealed significant heteroskedasticity among panel groups, with a chi-square value of 15.89 (p = 0.0001). This implies there is problem of heteroskedasticity and hence the need for robust standard errors to correct for heteroskedasticity across different firm groups. Robust standard errors help maintain the reliability of the coefficient estimates in the

face of groupwise variance disparities, a common challenge in industry-focused panel data studies (Arellano, 1987).

The Hausman test results in table 5 above indicate that the fixed-effects model is preferable, with a chi-square value of 11.19 (p = 0.0002). The fixed-effects model accounts for unobserved individual firm characteristics, which are particularly important in panel data where each firm may have unique attributes influencing its value. By selecting the fixed-effects model, the analysis addresses firm-specific heterogeneity, making the findings more reliable for understanding the effect of sustainability disclosures on firm value (Hausman, 1978).

Finally, the Wooldridge test for first-order autocorrelation in table above showed an F-statistic of 19.882 (p = 0.0005), The significant p-value suggests the presence of autocorrelation in the dataset. Serial correlation, if uncorrected, could distort standard errors and lead to biased inferences. To address the problem of heteroskedasticity and autocorrelation, the study adopted panel corrected standard error regression which incorporates adjustments that account for panel heteroskedasticity and autocorrelation, ensuring that the results remain robust and reflective of true relationships within the data (Wooldridge, 2002).

Table 6. Panel-Corrected Standard Error (PCSE) Regression

Variable	Coefficient	Std. Error	z-value	P>|z|
esd	0.2137	0.2095	1.02	0.001
ssd	0.441	0.3122	1.41	0.038
gsd	0.2141	0.1938	1.1	0
fsize	2.4128	0.5226	4.62	0
_cons	5.7681	4.2644	1.35	0.176

Source: STATA Output, 2024.

The PCSE model adjusted for heteroskedasticity and autocorrelation, providing reliable coefficient estimates. The Panel-Corrected Standard Error (PCSE) regression results provide insights into the effect of each independent variable on firm value, controlling for the identified heteroskedasticity and autocorrelation issues.

Ho_1: Environmental Sustainability Disclosure has no significant effect on firm value of listed oil and gas companies in Nigeria.

The results in table 6 above revealed that Environmental Sustainability Disclosure (ESD) has a positive and significant effect on Tobin's Q (Coefficient = 0.2137, p = 0.001). This result suggested the higher the environmental disclosures the higher the firms' value. Therefore, the null hypothesis was rejected and the alternative hypothesis accepted that environmental sustainability disclosure has significant effect on firms' value of listed oil and gas companies in Nigeria.

Ho_2: Social Sustainability Disclosure has no significant effect on firm value of listed oil and gas companies in Nigeria.

The results revealed that Social Sustainability Disclosure (SSD) has a significant positive relationship with firms' value (Coefficient = 0.4410, p = 0.038). Therefore, the null hypothesis was rejected and the alternative hypothesis accepted that social sustainability disclosure has significant effect on firm value of listed oil and gas companies in Nigeria.

Ho_3: Governance Sustainability Disclosure has no significant effect on firm value of listed oil and gas companies in Nigeria.

The results revealed that Governance Sustainability Disclosure (SSD) has a significant positive effect on firm value of listed oil and gas companies in Nigeria. (Coefficient = 0.2141, p = 0.000). Therefore, the null hypothesis was rejected and the alternative hypothesis accepted that governance sustainability disclosure has significant effect on firm value of listed oil and gas companies in Nigeria.

DISCUSSION OF FINDINGS

This study examined the effect of sustainability disclosure on firms' value of listed oil and gas companies in Nigeria. Specifically, this study examined the effect of environmental, social and governance sustainability disclosure on firms' value of listed oil and gas companies in Nigeria. The findings of this study were based on formulated hypotheses, models and analysis carried out. The apriori expectations was that environmental, social and governance sustainability disclosures have a positive and significant effect on firms' value of listed oil and gas companies in Nigeria.

The study found out that at 5% (0.05) significance level, the environmental sustainability disclosure of the sampled listed oil and gas companies in Nigeria during the study period has a significant effect on firms' value as explained by the coefficient of 0.2137. This means that for every unit increase in environmental sustainability disclosure (ESD), firms' value increase by 0.2137 unit. The results also revealed that ESD has a significant effect on firms' value of listed oil and gas companies in Nigeria. This was shown by a z-value of 1.02 and a P-value of 0.001 which is statistically significant at 5%. As a result, the study rejected the null hypothesis and accepted the alternative hypothesis, resulting in the conclusion that ESD has a positive significant effect on firms' value of listed oil and gas companies in Nigeria. The results are in agreement with those of Singh et al, (2024), Liu and Zhao (2023), Emmanuel and Ifeanyichukwu (2021), and Ahmad et al, (2021) who also found that ESD has significant effect on value which implies that environmental sustainability disclosure can enhance investor trust and firm valuation and therefore attracts environmentally conscious investors. The results were in direct opposition to the findings of Ergene and Karadenze (2021), and Haidar and Sohal (2021) who found that ESD has no significant effect on value. The inconsistency in the findings was because of the difference in the tool of analysis. Ergene and Karadenze (2021), and Haidar and Sohal (2021) used pooled OLS regression while the current study used panel corrected standard error regression as the technique for data analysis.

Similarly, the study found out that at the level of significance of 5% (0.05) social sustainability disclosure has a positive and significant effect on value of listed oil and gas companies in Nigeria. The findings are in line with the apriori expectations. The implication of the above findings is that a unit increase in social sustainability disclosure (SSD) lead to 0.4410 units increase in firms' value. The above findings of this study are in agreement with those of Singh et al (2024), Chen, et al., (2022) Ferrell et al., (2016).and Eccles et al. (2014) who also found that SSD has a significant effect on firms' value which emphasized social sustainability disclosures as critical to investor confidence. The findings disagree with those of Abdi et al, (2020) who discovered that SSD has no significant effect on firms' value. The inconsistency in the findings was as a result of the difference in the tool of analysis. Abdi et al (2020), used pooled OLS regression while the current study used panel corrected standard error regression as the technique for data analysis.

Finally, the study found out that at 5% (0.05) significance level governance sustainability disclosure (GSD) has a positive and significant effect on value of listed oil and gas companies in Nigeria. The findings are in line with the apriori expectations. The implication of the above findings is that a unit increase in governance sustainability disclosure (SSD) lead to 0.2141 units increase in firms' value. The study are in agreement with those of Singh et al (2024), Liu and Zhao (2023), Abdi et al. (2020) and Ferrell et al., (2016) who also found that GSD has a significant effect on firms' value. This result reflects the critical role of good governance in enhancing firms' value, as transparent governance practices reduce information asymmetry and improve corporate reputation. Theoretically, the results align with the legitimacy and signaling theories, as they illustrate that firms in high-impact sectors like oil and gas are under increased scrutiny and must establish robust governance practices to maintain legitimacy (Freeman, 1984; Eccles et al., 2014). The findings disagree with those of Ergene and Karadenze (2021) who discovered that GSD has no significant effect on firms' value. The inconsistency in the findings was as a result of the difference in the method of analysis. Ergene and

Karadenze (2021), used fixed effect regression while the current study used panel corrected standard error regression as the technique for data analysis.

CONCLUSION AND RECOMMENDATIONS

The study investigated the impact of sustainability disclosures environmental, social, and governance (ESG) on the firms' value of listed oil and gas companies in Nigeria. Using quantitative analysis and panel data regression, the study assessed how different dimensions of sustainability disclosures relate to firms' value, measured by Tobin's Q. The results demonstrated that sustainability disclosures, especially in governance and environmental areas, significantly enhanced firms' value. Governance disclosures have the most substantial effect, highlighting the importance of robust governance structures in attracting investors and building trust. Environmental disclosures also positively impact firms' value, likely due to growing investor awareness of environmental risks and an increasing focus on sustainable practices in high-impact industries like oil and gas. Social disclosures, while positive, show a comparatively lower influence, which may reflect differing investor priorities in this sector.

The findings aligned with stakeholders' theory, legitimacy theory, and signaling theory, suggested that firms with prioritized transparent, responsible practices gained competitive advantages through improved reputation, compliance, and stakeholders' trust. These insights underscore the strategic importance of sustainability disclosures in enhancing firms' value, particularly in emerging markets like Nigeria, where regulatory frameworks are evolving.

Based on the study's findings, the following recommendations are proposed for listed oil and gas companies in Nigeria.

i.   The Nigerian Securities and Exchange Commission (SEC) and other regulatory agencies should develop sector-specific ESG reporting standards for oil and gas companies. These standards would help ensure consistency, comparability, and transparency in ESG reporting, which is currently voluntary and inconsistent across companies. By creating uniform guidelines, regulators can help enhance investor confidence in ESG disclosures, aligning with the study's finding that detailed governance and environmental disclosures positively impact on firms' value.

ii. Since environmental, sustainability disclosures positively impact firms' value, companies should develop and publicize detailed environmental policies and practices. This includes reporting on emissions reductions, waste management, and resource conservation efforts. Given that environmental disclosures are increasingly valued by investors implementing robust environmental practices can serve as a strategic asset.

iii. Governance sustainability disclosures were found to have the strongest positive impact on firms' value. This suggested that investors place high importance on transparency, ethical practices, and corporate accountability. Firms should improve governance by regularly publishing information about board structure, executive compensation, risk management, and anti-corruption policies and implementing clear accountability frameworks.

iv. Companies should develop and disclose initiatives on employee welfare, community engagement, and corporate social responsibility (CSR) projects, and focus on social issues that are relevant to their operational areas, such as community health, education, and job creation, especially in regions impacted by oil and gas activities. By doing so, companies can address social concerns that matter to both local communities and investors, thereby improving their public image and securing support from both internal and external stakeholders.

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