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Environmental, Social and Governance Disclosure and Market Value of Listed Oil and Gas Companies in Nigeria

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Abstract
The study examined the effect of ESG disclosure on market value of listed oil and gas companies in Nigeria for a period of ten years from 2016-2025. The study used an ex-post facto research design where secondary data were collected from the annual reports and accounts of 8 listed oil and gas companies through content analysis. ESG as an independent variable was disaggregated into environmental, social and governance disclosure while market value was represented by Tobin'Q. Structural Equations Modelling (SEM) was used for data analysis to provide results from which inferences were drawn. The findings of this study showed that there is a negative and statistically insignificant effect of environmental disclosure on market value of listed oil and gas companies in Nigeria; Social and governance disclosures have positive and significant effect on market value of listed oil and gas companies in Nigeria. It was concluded that ESG has the potentials of influencing MV of listed oil and gas companies in Nigeria. It was recommended that management of listed oil and gas companies should focus on integrating ESG into core business operations rather than treating it merely as a marketing or compliance task.

Keywords: Environmental, Social, Governance, Tobin's Q, Oil and Gas, Nigeria

Introduction

The market value of companies has dwindled over the globally due to harsh economic and environmental conditions orchestrated by the effects of incessant economic recessions, economic meltdowns and the effect of COVID 19 on businesses. Most companies failed globally during these periods because the conditions presented stiff business environments that made it difficult for businesses to strive. This has compelled and propelled company managers, financial analysts and the academic community to continuously embark on search for a way out of this situation and the likely causes of market value failures. This is because market value is very important to diverse stakeholders to protect their interests. Firms that do business usually consider profit as the main goal and companies try to maximize profits thereby ignoring the factors of human relations among workers, environment and surrounding communities. Business operations run by the company will have an impact on the company's environment due to the profit maximisation objective that culminates into shareholders' wealth maximisation. Business activities that do not focus on company's sustainability will trade the environment and make it socially and economically worthless (Zhang & Jinbo, 2022).

Market value of companies may largely be affected by several factors including but not limited to Environmental, Social, and Governance (ESG) disclosure which has gained more popularity among organizations and socially responsible communities. It encompasses disclosing on the environmental impact of company activities that affect both the communities where they are located and the society at large. Companies' activities have led to a devastation of the

environment within which they principally operate to maximise shareholders' wealth. This implies that companies no longer thrive to achieve the financial objective of the firm alone but consider the non-financial aspects of their activities equally important (Ibrahim & Tahir, 2024). This helps managers to manage risk and competition that ensures management competences. Issues such as energy, water and climate constitute the environmental disclosure, gender balance and human rights make up social disclosure while ethics and investors protection constitute the governance aspect (Zhang & Jinbo, 2022). The relevance of ESG disclosure is increased if additional information is provided to investors for sound decision-making.

The literature and empirical studies on the relationship between ESG and market value (MV) have grown exponentially in the last three decades. But still, abundant inconclusive evidence attracts sustainability scholars to fill this void concerning ESG-MV relationship. ESG can be known as 'extra financial' information that helps investors make investment decision by better assessments of risks and opportunities (Bassen & Kovacs, 2008). According to Yuan and Xiaohan, (2021), market value and disclosure relationship is a social response so that the company can operate, meaning that the company will disclose more information if the ability is to generate high profits so that investors and creditors will believe the company is in a safe position and the company's activities operate efficiently. ESG in oil and gas is crucial for sustainability, risk management and attracting investment, pushing companies to cut emissions (methane, CO2) via technologies like Carbon Capture (CCS) and renewable energy (Yuan & Xiaohan, 2021), ensure community well-being (local jobs, safety) and improve transparency and ethics in governance (Zhang, 2025), helping them navigate the energy transition and meet stakeholder demands (Shen, 2023). ESG performance positively impacts oil and gas market value by attracting investors, lowering costs and boosting efficiency, especially through environmental innovation (like carbon capture) and strong governance (Tao et al., 2020), though managing high-emission costs can be challenging; high-quality ESG disclosure signals long-term viability, increases firm value and creates a competitive edge by meeting investor demands for sustainable development and ensures access to capital. This is why this study examined the effect of ESG disclosure on financial performance in the oil and gas industry in Nigeria.

Review of Related Literature

This section of the study reviews concepts, theories and review of prior studies.

Environmental, Social and Governance Disclosure (ESG)

Environmental, Social, and Governance is an investment concept and enterprise evaluation standard that focuses on corporate environmental, social and governance performance rather than traditional financial performance. The ESG framework aims to assess the sustainability of enterprises (Linnenluecke, 2022). It is discussed in three pillars viz:

Environmental Pillar of ESG is concerned with the positive and negative effects of companies' activities on the environment as a result of the usage of the natural resources. This includes aspects such as pollution, carbon emission, reduction of biodiversity impact, ozone-depleting materials, waste management and recycling, reduction of toxic gases and chemicals, use of sustainable energy, water pollution and how the company handles these issues and reports on them.

Social pillar of ESG involves approaches connected with values and rights including labour and fundamental human rights assurance of employee and customer health and safety, supplier ties and relations, management of diverse personnel needs and conflicts, community loyalty, product ownership and responsibility, and responsible marketing.

Governance pillar of ESG essentially captures the policies of the company, structure of the organisational hierarchy and CEO, constitution of corporate boards, rights of representatives of board members, board diversity, ethical, transparency and compensation issues, tax policies, shareholders' rights, stakeholder engagements, relationship between owners and other stakeholders and CSR strategies.

Market Value

Market value refers to the current worth of a company or asset in the financial markets, shaped by investors' perceptions and market dynamics. It indicates how much investors are willing to pay based on their evaluation of a firm's performance, growth potential, and associated risks. According to Emeka-Nwokeji and Osisioma (2019), investors' perceptions of management's capacity to adjust to shifts in the economy have an impact on a company's market value. Tobin's Q, a well-known forward-looking indicator that contrasts a company's market value with its book value, is used in this study to evaluate market value. According to Ameh and Obodo (2022), Tobin's Q is the ratio of the firm's total assets to the market value of equity, which is calculated as the share price multiplied by the number of outstanding shares, and the book value of debt, which is calculated as total assets less book equity. While a ratio below one may indicate undervaluation, a greater than one Tobin's Q indicates that the firm's market value exceeds its book value, showing strong investor confidence.

The formula for TQ is as follows:

TQ = [(Market Value of common stock + Book Value of preference stock + Book Value of borrowings + Book Value of Current liabilities) / (Book value of Fixed Assets + Investment + Current Assets)] at the year end.

Theoretical Framework

The theory that underpins this study is the signaling theory which is attributed to Spence (1973) in his seminal work on labour markets which demonstrated how a job applicant might engage in behaviors to reduce information asymmetry that hampers the selection ability of prospective employers. Spence illustrated how high-quality prospective employees distinguish themselves from low-quality prospects via the costly signal of rigorous higher education. Signaling theory is fundamentally concerned with reducing information asymmetry between two parties. Spence (2002) triggered an enormous volume of literature applying signaling theory to selection scenarios that occur in a range of disciplines from anthropology to zoology (Bird & Smith, 2005). Management scholars have also applied signaling theory to help explain the influence of information asymmetry in a wide range of research contexts. A study of corporate governance, for example, shows how CEOs signal the unobservable quality of their firms to potential investors via the observable quality of their financial statements (Zhang & Wiersema, 2009). Diverse researchers use signaling theory to explain how firms use heterogeneous boards to communicate adherence to social values to a range of organizational stakeholders (Miller &

Triana, 2009). Signaling theory is frequently used in the entrepreneurship literature, where scholars have examined the signaling value of board characteristics (Certo, 2003), top management team (TMT) characteristics (Lester et al., 2006), venture capitalist and angel investor presence (Elitzur & Gavius, 2003), and founder involvement (Busenitz et al., 2005). Signaling theory is also important to human resource management, where a number of studies have examined signaling that occurs during the recruitment process (Suazo et al., 2009).

Firms that choose to voluntarily apply ESG disclosure also send out a signal about their ambitions (Campbell, 2006) that would lead to more transparent financial reports and reduce the information asymmetry between informed and uninformed investors (Armstrong 2010). That's why signaling prospects can be considered as explaining the agency theory assumptions. Thus, ESG disclosure could be considered as positive signal to the stakeholders as information disclosed under such disclosure is expected to be of high value and should be capable of assisting institutional investors with a way of applying sustainability information on the market to yield high return to investors.

Empirical Studies

Ajape et al., (2025) evaluated the influence of environmental, social and governance (ESG) disclosures on the corporate value of listed firms in Nigeria. It used a sample of 27 listed firms on the Nigerian Exchange Group (NGX) cutting across several subsectors and with audited annual reports from 2018 to 2023 was selected. The findings from regression analysis demonstrated a strong negative influence of the three dimensions of ESG on the corporate value (TQ). The coefficients of each ESG dimension demonstrated a significant positive effect on the alternative measure of company value.

Omoregbe et al., (2025) explored the dynamic relationship between Environmental, Social, and Governance (ESG) disclosure and corporate value among 16 listed Oil and Gas and Industrial Goods firms in Nigeria, covering the period from 2011 to 2022. Employing a nonlinear fixed-effect panel threshold regression model, it found that high ESG disclosure regimes significantly enhance corporate value across both sectors, while low ESG regimes yielded mixed results, particularly in the Oil and Gas sector. These results underscored the pivotal role of ESG practices in fostering sustainable corporate performance and align with signaling theory.

Iftikhar (2025) examined the relationship between ESG disclosure and financial performance in European energy companies from 2014 to 2023, analysing 860 firms with 3,691 firm-year observations. Using regression method, the findings revealed that while ESG disclosure showed no significant relationship with accounting performance (ROA), it has a significant negative correlation with market valuation (Tobin's Q). Individual component analysis demonstrated that social disclosure positively affects operational efficiency but negatively impacts market value, while environmental and governance disclosures show consistently negative relationships.

Romoke and Adesanm (2025) investigated the effect of environmental, social and governance (ESG) disclosure on the market performance of listed firms operating in the oil and gas sector in Nigeria. An ex post facto research design was employed to select seven firms from the period of 2014 to 2023. Share price performance was used to measure market performance. The study conducted both descriptive statistics and inferential statistics to analyze the data

sourced. The model is analyzed using generalized method of moments (GMM). The results of this study disclosed that environmental disclosure ($p<0.01$) and social disclosure ($p<0.05$) have positive and significant impact on share price performance while governance disclosure showed no statistically significant effect on share price performance.

Osongbule et al., (2025) examined the effect of sustainability ESG disclosure on the firm value of listed service companies in Nigeria. Using a panel data approach, the study analyzed secondary data from the financial reports of selected listed service companies covering the period from 2014 to 2023. Firm value was proxied by Tobin's Q, while sustainability ESG disclosure was decomposed into four dimensions: environmental, social, economic, and governance disclosures. Multiple regression analysis was employed for the analysis. The findings revealed that environmental and governance disclosures have a statistically significant positive effect on firm value, while social and economic disclosures show no significant impact.

Ibrahim and Tahir (2024) examined the disaggregate influence of environmental, social and governance (ESG) sustainability disclosure of listed Nigerian oil marketing firms' market performance. The study adopted a census sampling method to evaluate all the eight oil marketing firms listed on the Nigerian Exchange Group (NGX) from 2011 to 2020. Data was obtained from financial statements, sustainability reports and NGX Fact book. Panel least square regression analysis was conducted to test the hypothesis formulated. The study revealed that social sustainability disclosure had an insignificant negative effect while environment sustainability disclosure had a significant negative effect on Tobin's Q. However, governance sustainability disclosure has an insignificant positive effect on TQ.

Li et al., (2024) investigated the effect of environmental, social, and governance (ESG) disclosure on the firm value of Chinese listed companies. The sample consisted of 6,575 firm-year observations from the years 2011 to 2021, representing 1,024 firms listed in China. Using a large panel dataset, this study revealed a positive effect of ESG disclosure on firm value (Tobin's Q), while no significant effect is observed on firm value (ROE). It highlighted the need for companies to embrace ESG trends, incorporate ESG concepts into strategic decision-making, practice sustainable development, and prioritize stakeholder interests, ultimately contributing to China's pursuit of high-quality and high-speed economic development.

Methodology

The study used an ex-post facto research design which is viewed as an inquiry to discover whether, and to what extent, a variable (event) which occurred in the past has impacted on the occurrence of the present event. This study used all the eight (8) oil and gas companies listed on the Nigeria Exchange Group, inferring that a census sampling technique (total population sampling) was used. ESG data was obtained from annual reports and accounts of the companies through content analysis while that of TQ was calculated from those financial statements as tabulated below:

Table 1: Summary of Variable Definition and Measurement

Variable	Type	Definition	Source
Tobin's Quotient (TQ)	Dependent	Market value of equity divided by book value of total assets	Kwanum, et. al, 2021; Garg (2007)
Environmental Ddisclosure	Independent	Environmental score or rating	Halid, et. al (2023); Shen (2023); Fu & Li (2023); Boulhaga, et. Al. (2022); Mahmut, et. Al. (2022); Al-Issa, et. Al. (2022);
Social Ddisclosure	Independent	Social score or rating	Halid, et. al (2023); Shen (2023); Fu & Li (2023); Boulhaga, et. Al. (2022); Mahmut, et. Al. (2022); Al-Issa, et. Al. (2022);
Governance Ddisclosure	Independent	Governance score or rating	Halid, et. al (2023); Shen (2023); Fu & Li (2023); Boulhaga, et. Al. (2022); Mahmut, et. Al. (2022); Al-Issa, et. Al. (2022);
Company Size (SIZE)	Control	Natural Logarithm of total assets	Kwanum, et. al, 2021; Uwuigbe (2012); Backstrom & Karlsson (2015); Najah & Jarboui (2013)
Company Leverage (LEV)	Control	Long term debts divided by equity	Kwanum, et. al, 2021; Dowel, Hart & Yeung (2000); Nugroho and Arjowo (2014)
Company Age (AGE)	Control	Length of time the company has been in operation	Kwanum, et. al, 2021; Dowel, Hart & Yeung (2000); Nugroho and Arjowo (2014)

Source: Researcher's compilation. 2026.

The data collected was analysed using descriptive statistics and panel regression analysis. Structural Equation Modelling (SEM) was used to analyse the data. Correlation Analysis shows the strength of the relationship between the independent variables under consideration. This was used to determine if the independent variables are correlated to the extent of affecting the validity of the results of this study. In order to test for the relevance of the hypotheses regarding the effects of ESG disclosure on market value of oil and gas companies listed on the Nigerian Exchange Group, the following model (Regression model) was used to examine the effects of the independent variables on the dependent variables of the study. The econometric model of the study was thus:

$TQ_{it} = \beta_{0it} + \beta_1 ENV_{it} + \beta_2 SOC_{it} + \beta_3 GOV_{it\ t} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \beta_6 AGE_{it} + e_{it}$

where;

TQ = Tobin's Quotient representing financial performance variable
ESG = Economic, Social and Governance Disclosure
ENV = Environmental Disclosure
SOC = Social Disclosure
GOV = Governance Disclosure
SIZE = company size
LEV = company leverage
AGE= company age
β_0= the regression constant
$\beta_1 - \beta_7$ = the regression coefficients
e = the error term in the regression model
it = company i at tme t

Data Analysis and Discussion of Findings

The data collected for this study was first presented as descriptive statistics as shown below:

Table 2: Result of the Descriptive Statistics

Variables	Mean	Std Dev	Min	Max
TQ	1.902	1.357	0.25	8.18
ENV	0.6501	0.4799	0	1
SOC	0.7403	0.4366	0	1
GOV	0.6181	0.4667	0	1
TA	8.60e+07	1.92e+08	941,609	1.14e+09
LEV	0.3853	0.2729	0.1	0.98
AGE	37	18	3	68

Source: Researcher's Compilation, 2026.

Table 2 shows the descriptive characteristics of the variables. It shows that Tobin's Q ratio has a mean of 1.90 and indicates the capacity of the sampled companies to undertake ESG investments and report on them. The maximum value of TQ stands at 8.18 and indicates the ability of the companies to adequately cater for the provision of nonfinancial needs of the various stakeholders of the company. The table also shows that environmental disclosure has a mean of 0.6501 and a standard deviation of 0.4799. This indicates that most of the sampled companies report their environmental issues culminating to 65.01%. The minimum and maximum values stood at 0 and 1 respectively. This suggests that while some companies report on their environmental concerns, other don't report at all. It can be deduced from the foregoing that environmental issues were moderately reported by the sampled companies within the study period.

Social disclosure shows a mean of 0.7403 and a variation of 0.4366. This implies that social disclosure had a 74.03% disclosure among the sampled companies. This means that social disclosure was highly reported by these companies. The minimum and maximum values were 0 and 1 respectively. This again suggests that some companies reported on the social interactions while others fail to do so. Generally, it can be said that there was a high rate of social disclosure among the sampled companies.

Governance disclosure has a mean of 0.6181 with a variation in standard deviation of 0.4667. This indicates that the sampled oil and gas companies report on their governance issues up to 61.81% showing moderate rate of disclosure, while the minimum and maximum values stood at 0 and 1 respectively. This implies that while some companies report on their governance issues, others don't report at all. Generally, with a standard deviation of 0.4667, it can be deduced that these companies' values in governance are more evenly spread around the mean.

On the characteristics of the control variables, SIZE (representing total assets) has a mean of N86bn with a variation of N192b in standard deviation. This shows that the sampled companies have huge amount of assets base capable of undertaking non-financial investments and is in conformity with the TQ value. On Leverage, the companies are lowly geared with a mean of 38.53% and a variation in standard deviation of 27.29%. However, some of the

companies are not geared at all (0%) while others are highly geared (98%) giving their minimum and maximum values. On age of the sampled oil and gas companies, the table shows that the mean age of the companies is about 37 years while its standard deviation is about 18 years. It also shows that the minimum and maximum ages of the companies vary between 3 and 68 years indicating that there is wide fluctuation in the ages around the mean age of the sampled oil and gas companies. This wide fluctuation implies that some of the companies are very young while others are very old resulting to difficulty in obtaining the mean value of age.

Correlation Matrix

The correlations statistics reveals the relationships existing among all the study variables. This is obtained from Pearson's correlation result.

Table 3: Correlations Statistics

	ENV	SOC	GOV	LEV	SIZE	AGE
ENV	1.0000					
SOC	-0.1326	1.0000				
GOV	0.2698	-0.0095	1.0000			
LEV	-0.1180	-0.0409	0.2368	1.0000		
SIZE	-0.0607	-0.1239	-0.3224	0.0497	1.0000	
AGE	0.1147	0.1122	-0.0438	-0.0074	0.0215	1.0000

Source: Results from STATA, 2026.

Table 3 presents the strength of the relationship existing between the variables under investigation. From the table, all the coefficients are low suggesting that there is the absence of collinearity problem where independent variables are highly correlated to cause spurious results. To test for normality of data, Shapiro-Wilk tests was used and gauged against p-value of 0.05. The result is presented as follows:

Table 4 Shapito-Wilk test for normal data

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
TQ	80	0.80221	13.577	5.715	0.00000
ENV	80	0.97694	1.583	1.006	0.15716
SOC	80	0.94859	3.528	2.763	0.00287
GOV	80	0.98873	0.773	-0.563	0.71341
LEV	80	0.91045	6.147	3.979	0.00003
SIZE	80	0.92147	5.390	3.691	0.00011
AGE	80	0.92758	4.971	3.514	0.00022

Source: STATA v 17 Output, 2026.

The Shapiro-Wilk test for normal data was also used against the raw data to check data normality. However, as all the p-values are below 0.05 (except environmental and governance disclosure), the raw data is said to be non-normal. This means that the raw data is not normally distributed using these tests. However, the study applied the central limit theorem which states that when observations of a data set are well above 30, the data assumes normal, implying that normality may not be an issue as observations are 80.

Multi-collinearity Test

Table 5 Variance Inflation Factor (VIF) Statistics

Variable	VIF	1/VIF
GOV	1.34	0.747057
ENV	1.20	0.832051
SIZE	1.18	0.850184
LEV	1.13	0.885634
OE	1.10	0.912266
SOC	1.08	0.924894
AGE	1.07	0.935719
Mean VIF	1.16	

Source: Results from STATA, 2026.

Table 5 presents the Variance Inflation Factor (VIF) results for the independent variables of the study to detect the presence or absence of multi-collinearity (correlation between predictors) among the variables employed in a regression model. It measures the degree to which the variance of an estimated regression coefficient is inflated as compared to when the predicted variables are not linearly related. A VIF greater than 10 suggests too much correlation between the independent variables which is usually considered problematic (Akpa, 2011; Gujarati & Sangeetha, 2007). Therefore, since the VIF of the independent variables presented in Table 5 above are consistently less than 2, there is absence of multi-collinearity among the variables.

Regression Result of the Study

The results here provide information as to the strength and direction of the relationship between the ESG variables and the market value (TQ) used in this study.

Table 7: ESG and Tobin's Q

Number of Obs	80			
Prob	0.0201			
TQ	**Coefficients**	**Std Error**	**Z**	**P>/z/**
ENV	-0.0802	0.0606	-1.32	0.186
SOC	0.4038	0.0753	5.36	0.000
GOV	0.1263	0.0612	2.06	0.039
LEV	-0.0348	0.0605	-0.57	0.566
SIZE	-0.1245	0.0823	-1.52	0.131
AGE	0.5873	0.0816	7.19	0.000
Constant	-0.3472	0.1371	-2.53	0.011

Source: Researcher's compilation, 2026.

Table 7 shows that an increase in environmental disclosure will reduce TQ by 0.0802 units. This implies that environmental disclosure has the ability to influence market value of the sampled firms negatively. As a major ESG variable, its negative effect shows that the sampled companies have not been carrying out possible environmental protection activities as they should and were not adequately disclosure on them. This has the potentials of not only making their environment unsafe but will go a long way in reducing the safety needs of both their employees and the society as a whole. The result also indicates that an improved environmental disclosure in areas such as water, materials, pollution, biodiversity, environmental management

systems and waste management can statistically reduce company's market value as measured by TQ.

Meanwhile, an increase in social disclosure will increase Tobin's Q by 0.4038 units. This implies that the level of disclosure on societal issues has been much popularised by companies to the extent that more disclosure may have positive effect on company market value. This disagrees with what Friedman (1974) claimed about CSR activities by stating that it will amount to mere waste of shareholders money in the short run but with the opportunity of having positive effects in the future. This also indicates that as companies report on their employment policies, cater about disclosure on occupational health and safety, customer health and safety, diversity and opportunity as well as community commitments, their performance will improve.

For governance disclosure, a unit increase will also increase TQ by 0.1263. This implies that the companies do not only see it good to safeguard their environment and social status, but they also go ahead to ensure that governance structures are sustained and respected. This will make the companies have legitimacy among the communities where they are located and this may directly or indirectly affect their market value in the desired direction. This may improve the organisational structure, respect for human rights, maintain a good mix of board members split into institutional, foreign, gender and concentration of ownership. These corporate governance structures are necessary to ensure that companies enjoy orderliness and friction-less operations.

For the control variables, a unit increase in LEV will decrease Tobin's Q by 0.0348. It is expected that, managers of highly levered companies may be financially disciplined by the contractual obligation of interest and principal repayments and may not be willing to invest outside those activities that may have direct and immediate benefit to them. Statistically, it is shown here that the more companies borrow the less they spend or engage in ESG practices and the lower their market values. More so, a unit increase in SIZE will reduce Tobin's Q by 0.1245. This means that bigger companies need not undertake further investments in ESG innovations as this will reduce their performance on the market. This result further shows that bigger companies might not need to behave socially good in the Nigerian environment as is supposed to be elsewhere. TQ has insignificantly increased with increase in age and implies that the older the company the more its engagement in ESG practices. This may make older companies who already have established themselves to accept new ways which are emphasised by modernisation and technological advancement.

Test of Hypotheses

This section tests the research hypotheses stated in their null forms in chapter one as follows.

HO_1: Environmental disclosure does not significantly affect Tobin's Quotient of listed oil and gas companies in Nigeria.

From table 7 the p-value of environmental disclosure and TQ is greater than 0.05 (0.186). This leads to the acceptance of the null hypothesis that environmental disclosure has no significant effect on TQ of listed oil and gas companies in Nigeria. This implies that these companies may opt not to embark on serious environmental disclosure as increased disclosure may jeopardise their efforts in enhancing their market values.

HO_2: Social disclosure does not have significant effect on Tobin's Quotient of listed oil and gas companies in Nigeria.

The same table 7 has the statistics for testing this hypothesis. From the table, the P-value of the effect of social disclosure on TQ of 0.000 is less than 0.05 so the null hypothesis is rejected. This means that there is significant effect of social disclosure on TQ value of listed oil and gas companies in Nigeria. This implies that corporate social responsibility activities such as donating to the needy, giving awards of scholarship and other related incentives that impact positively on the recipients.

HO_3: There is no significant effect of governance disclosure on Tobin's Quotient of listed oil and gas companies in Nigeria.

From tables 7 the p-value of effect of governance disclosure on TQ of 0.039 is less than 0.05. Therefore, the null hypothesis is rejected that governance disclosure has significant effect on the TQ of listed oil and gas companies in Nigeria. This even proves while researchers have given adequate attention to corporate governance issues as it is statistically found to have significant positive effect in determining changes in market performance thereby increasing market value.

Discussion of Findings

Environmental Disclosure and TQ

Findings of this study indicate that environmental disclosure has negative insignificant (coeff = -0.0802; p-value 0.186) effect on TQ of listed oil and gas companies in Nigeria. The negative and insignificant effect of environmental disclosure on Tobin's Q indicates that while increased disclosure of environmental activities, costs, or performance such as waste management or carbon emissions may slightly reduce a firm's market value, this effect is not statistically significant and is largely ignored by investors. This phenomenon often occurs in developing markets or industries where such disclosures are viewed as non-essential, cost-burdening, or window dressing rather than value-enhancing investments.

The study that agrees with this result is Ajape et al., (2025) which found a strong negative influence of the three dimensions of ESG on the corporate value (TQ. However, Iftikhar (2025) found that environmental disclosure consistently showed negative effects on market value (TQ). Li et al., (2025) found that environmental disclosure has positive effect on TQ. Romoke and Adesanm (2025) found that environmental disclosure had positive significant effect on share price and TQ. Abdulaziz (2025) found that Environmental Expenditure Disclosure and Stakeholder Engagement Disclosure have positive and statistically significant effects on market value, Osongbule et al., ((2025) found that environmental disclosures have a statistically significant positive effect on firm value. Li et al., (2024) found a positive effect of ESG disclosure on firm value (Tobin's Q), A mixed result was obtained by Ibrahim and Tahir (2024) that environment sustainability ESG disclosure has a significant but negative influence on market performance (TQ).

Social Disclosure and TQ

Social disclosure, a component of Environmental, Social, and Governance (ESG) disclosures, has a significant positive effect on Tobin's Q, which measures a company's market value relative to the replacement cost of its assets. This positive relationship indicates that shareholders and investors value the intangible assets such as reputation, brand and long-term sustainability that are highlighted in social reports. Companies that disclose social activities such as employee relations, community engagement and product safety enhance their corporate image, which directly boosts market confidence and increases the firm's valuation. Social disclosure acts as a signaling mechanism that provides investors with transparent, non-financial information, reducing uncertainty and lowering the perceived risk, which contributes to higher market value.

Studies have shown that social disclosure has a significant positive impact on firm value, as proxied by Tobin's Q. For instance, Omoregbe et al., (2025) found that high ESG disclosure regimes significantly enhance corporate value across both sectors, while low ESG regimes yield mixed results, particularly in the Oil and Gas sector. Yeap and Kok-Haur (2025) found that social disclosure has positive effect on TQ. Romoke and Adesanm (2025) found that social disclosure had positive significant effect on share price and TQ. Bai et al., (2025) revealed that a robust ESG performance significantly enhances corporate value by strengthening brand equity and optimizing resource allocation

Osongbule et al., ((2025) found that social disclosures have a statistically significant positive effect on firm value. Zheng et al., (2025) indicated that ESG performance had a significant positive impact on firm value. Li, Saat and Jiayi (2024) found a positive effect of ESG disclosure on firm value (Tobin's Q), However, Iftikhar (2025) found that social disclosure negatively impacts market value (TQ). Osongbule et al., 2025) found that social disclosures have a statistically in significant effect on firm value. Amadi (2025) found the social disclosure does not explain variations in firm market value. Ibrahim and Tahir (2024) found that social sustainability ESG disclosure has insignificant but negative influence on market performance (TQ).

Governance Disclosure and TQ

Governance disclosure which is the transparent disclosure of a company's internal control structures, board composition and ethical guidelines have significant positive effect on Tobin's Q. A higher Tobin's Q (>1) suggests that investors believe the company is efficiently utilizing its assets, with the market placing a premium on the firm's future growth potential due to superior management. Transparent governance disclosure acts as a signal of high quality, which reduces information asymmetry between managers and shareholders. When firms provide detailed disclosures regarding their governance, they reduce uncertainty, leading to lower risk perceptions by investors. Effective disclosure on governance structures, such as board independence, improves access to capital, allowing firms to grow, thus positively affecting market-based performance.

Agreeing with this result, Bai, et al (2025 revealed that a robust ESG performance significantly enhances corporate value by strengthening brand equity and optimizing resource

allocation. Osongbule et al., (2025) found that governance disclosures have a statistically significant positive effect on firm value. Li et al., (2024) found a positive effect of ESG disclosure on firm value (Tobin's Q), However, Iftikhar (2025) found that governance disclosure consistently showed negative effects on market value (TQ). Zheng et al., (2025) indicated that ESG performance had a significant positive impact on firm value Yeap and Kok-Haur (2025) found that governance disclosure has negative effect on TQ. Romoke and Adesanm (2025) found that governance disclosure showed no significant effect on share price and TQ. A mixed result was obtained by Ibrahim and Tahir (2024) who found that governance sustainability ESG disclosure has an insignificant but positive influence on market performance (TQ).

Conclusions and Recommendations

The study examined the effect of ESG on market value of listed oil and gas companies in Nigeria for a period of ten years from 2015-2024. The study used an ex-post facto research design where secondary data were collected from the annual reports and accounts of 8 listed oil and gas companies through content analysis. Structural Equations Modelling (SEM) was used for data analysis to provide results from which inferences were drawn. The findings of this study showed that there is a negative and statistically insignificant effect of environmental disclosure on market value of listed oil and gas companies in Nigeria. Social disclosure has positive and significant effect on market value of listed oil and gas companies in Nigeria. Governance disclosure has a positive significant effect on market value of listed oil and gas companies in Nigeria. There is positive significant effect of ESG on market value of listed oil and gas companies in Nigeria. It therefore concludes that sustainable practices through ESG enhance firm market valuation.

It was recommended that management should focus on transitioning environmental disclosure from a mere disclosure exercise to a strategic, performance-driven component of business operations. This can be achieved by shifting focus from just disclosure to actual performance improvement (reducing emissions, energy usage, and waste). Empirical evidence suggests that actual environmental performance, rather than just the disclosure of it, has a stronger chance of positively influencing market value. Managers of companies should provide comprehensive, detailed disclosures that directly map environmental efforts to cost savings, efficiency, or long-term risk reduction. Managers should focus on aligning disclosure with stakeholder expectations and adopting global standards. Rather than treating social disclosure as a compliance activity, treat it as a, strategic business model component that improves reputation and stakeholder trust. This could be achieved by clearly disclosure how social initiatives such as labour disputes and legal issues reduce risk, which lowers the cost of capital and enhances long-term value, thus increasing Tobin's Q. lastly, it was recommended that managers of oil and gas companies should focus on enhancing transparency, board independence and disclosure quality to solidify investor trust and increase valuation. The key is to signal to the market that the company acts in the best interests of shareholders. This could be achieved through an increase in the number of independent, non-executive directors, which is viewed positively by investors as a signal of reduced agency conflict and better decision-making, which can improve Tobin's Q. Thus, management should move beyond mandatory compliance to transparent disclosure that provides insight into boardroom decision-making. High-quality disclosures improve market trust, reducing uncertainty about future cash flows, which enhances firm market value.

References

Ajape, M. K., Adelowotan, M. O. & Adegbayibi, A. T. (2025). Environmental, social, and governance and corporate value of listed companies in Nigeria, *The Business and Management Review,* 16(1), 161-171.

Ameh, A., & Obodo, C. (2022). Corporate governance and environmental sustainability of oil and gas companies in Nigeria. *International Journal of Energy Economics and Policy*, 12(1), 251-258.

Amran, A. & Ooi, S. K. (2024). Sustainability Reporting: meeting stakeholders' demands, Strategic Direction, 30(7), 38-41.

Armstrong, M. (2010). *Essential Human Resource Management Practice, a Guide to People Management.* New Delhi: Kogan Page Ltd.

Bassen, A. & Kovács, A. M. (2008). Environmental, Social and Governance Key Performance - Indicators from a Capital Market Perspective, *Journal for Business, Economics and Ethics*, 9(2), 182-192.

Beurden, P. V. & Gossling, T. (2008). The Worth of Values – A Literature Review on the Relation Between Corporate Social and Financial Performance, *Journal of Business Ethics,* 82(2), 407–424.

Bird, R. B., & Smith, E. A. (2005). Signaling theory, strategic interaction, and symbolic capital. *Current Anthropology*, 46(2), 221–248.

Busenitz, L. W., Fiet, J. O. & Moesel, D. D..(2005). Signaling in Venture Capital-New Venture Team Funding Decisions: Does it indicate long term venture outcomes? *Entrepreneurship theory and Practice*, 29(1), 1-12.

Campbell, J. L. (2006), Institutional analysis and the paradox of Corporate Social Responsibility, *American Behavioural Scientist*, 49(7), 925-938.

Certo, S. T. (2003). Influencing initial public offering investors with prestige: Signaling with board structures. The Academy of Management Review, 28(3), 432–446.

Connelly, J. T. & Limpaphayom, P. (2004), Environmental Disclosure and Firm Performance: Evidence from Thailand, *The Journal of Corporate Citizenship,* 13(Spring), 137-150.

Elitzur, R., & Gavious, A. (2003). A multi-period game theoretic model of venture capitalists and entrepreneurs. *European Journal of Operational Research*, 144(2), 440–453.

Emeka-Nwokeji, N. A. & Osisioma, B. C. (2019). Sustainability disclosures and market value of firms in emerging economy: evidence from Nigeria, *European Journal of Accounting, Auditing and Finance Research,* 7(3), 1-19.

Fiet, J. O., Busenitz, L. W., Moesel, D. D. & Barney, J. B. (1997). Complementary theoretical perspectives on the dismissal of new venture team members. *Journal of Business Venturing*, 11, 347 – 366.

Ibrahim, M. & Tahir, F. (2024). ESG Sustainability and Firm Value: Evidence from Listed Oil Marketing Firms in Nigeria, *Technology-Driven Business Innovation: Unleashing the Digital Advantage*, 61-71.

Ibrahim, M. & Tahir, F. (2024). ESG Sustainability and Firm Value: Evidence from Listed Oil Marketing Firms in Nigeria, *Technology-Driven Business Innovation: Unleashing the Digital Advantage*, 61-71.

Iftikhar, A. (2025). Evaluating the Impact of ESG Performance on Corporate Financial Outcomes: An Empirical Analysis of the European Energy Sector. Unpublished [Master's thesis, University of Vaasa]. Osuva.

Junior, R. M., Best, P. J. & Cotter, J. (2024). Sustainability disclosure and assurance: A historical analysis on a world-wide phenomenon, *Journal of Business Ethics*, 120(1), 1-11.

Li, L, Saat, M. M. & Jiayi, W. (2024). The Effect of ESG Disclosure on Firm Value: An Empirical Evidence from Chinese Listed Companies, *International Journal of Academic Research in Business and Social Sciences*. 14(1), 1091-1101.

Linnenluecke, M. K. (2022). Environmental, social and governance (ESG) performance in the context of multinational business research. *Multinational Business Review*, 30(1), 1-16.

Miller, T. L., & Triana, M. d. C. (2009). Demographic diversity in the boardroom: Mediators of the board diversity–firm performance relationship. *Journal of Management Studies*, 46(5), 755–786.

Omoregbe, et al (2025). Exploring High and Low ESG Disclosure Thresholds: Impact on Corporate Value in Nigeria's Industrial and Oil & Gas Sectors, *International Journal of Research and Innovation in Social Science (IJRISS),* 9(1), 705-709.

Osongbule, J. M.,, Zubairu, A. D. & Naburgi, M. ((2025). Assessing the Impact of ESG Disclosures on the Market Valuation of Listed Service Companies in Nigeria *FAR Journal of Financial and Business Research (FARJFBR),* 1(5), 01-08.

Perez-Batres, L. A., Doh, J. P., Miller, V. V. & Pisani, M. J. (2012), Stakeholder pressures as determinants of CSR strategic choice: Why do firms choose symbolic versus substantive self- regulatory codes of conduct? *Journal Business Ethics,* 110(2), 157–172.

Romoke, R. B. & Adesanm, T. A. (2025). ESG Disclosure and Market Performance: Empirical Evidence from Listed Oil and Gas Firms in Nigeria. *Saudi Journal of Business and Management Studies,*10(8): 391-398.

Shen, Y. (2023). ESG and firm Performance: A literature review, *BCP Business and Management*, 46, 283-288.

Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics,* 87(3), 355–374.

Spence, M. (2002). Signaling in retrospect and the informational structure of markets. *American Economic Review,* 92(3), 434–459.

Suazo, M. M., Martínez, P. G., & Sandoval, R. (2009). Creating psychological and legal contracts through human resource practices: A signaling theory perspective. *Human Resource Management Review*, 19(2), 154–166.

Tao, L., Guo, J., & Sun, Y. (2020). Optimization of refracturing timing for horizontal wells intight oil reservoirs: A case study of Cretaceous Qingshankou Formation, Songliao Basin, NE China. *Petroleum Exploration and Development*, 47(4), 814–823.

Weber, O., Daz, M. & Schwegler, R. (2014). Corporate Social Responsibility of the financial sector- strengths weaknesses and the impact on sustainable development, *Sustainable Development*, 22(6), 321-335.

Yuan, Y. & Xiaohan, X. (2021). Research on the relationship between ESG performance and corporate performance of listed companies: the moderating effect of media attention. *Jiangxi Social Sciences*, 41(10), 68-77.

Yuan, Y. & Xiaohan, X. (2021). Research on the relationship between ESG performance and corporate performance of listed companies: the moderating effect of media attention. *Jiangxi Social Sciences*, 41(10), 68-77.

Zhang, F. & Jinbo, L. (2022). Ownership concentration and corporate performance of private listedcompanies: The mediating effect of capital structure. *Financial Theory and Teaching*, 02, 79-85.

Zhang, Y. (2025). How Far Is China From the Ideal Sustainable Development Pathway? *Sustainable Development*, 33(4), 5091-5109.

Zhang, Y., & Wiersema, M. F. (2009). Stock market reaction to CEO certification: The signaling role of CEO background. *Strategic Management Journal*, 30(7), 693–710.