

Influence of Environmental and Social Sustainability Disclosures on Financial Performance of Oil and Gas Firms in Nigeria

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ABSTRACT

Background: Environmental and social sustainability disclosures (ESD) are conceded as an action by a firm, which the firm chooses to take, that substantially affects identifiable social stakeholder welfare. A socially responsible corporation should take a step forward and adopt policies and business practices that go beyond the minimum legal requirements and contribution to the welfare of its key stakeholders.

Aim: This study empirically investigated the influence of environmental and social sustainability disclosures on financial performance of Oil and Gas Firms in Nigeria. The study is vital as it portrays the extent to which environmental and social sustainability influence firms' performance. In order to determine the relationship between environmental, social sustainability disclosures and financial performance, environmental and social sustainability disclosure was measured using the GRI G4 on content index while firms' performance on the other hand was represented by return on equity (ROE) and net assets per share (NAPS).

Materials and Methods: Four hypotheses were formulated to guide the investigation and the statistical test of parameter estimates was conducted using OLS regression model operated with STATA V.15. Ex Post Facto design was adopted and data for the study were obtained from the published annual financial reports of the entire oil and gas firms quoted on Nigerian Exchange Group (NGX) with data spanning from 2016-2020.

Results: The findings of the study generally indicate that environmental & social sustainability disclosures have significant and positive influence on firms' performance measured by return on equity (ROE) and net assets per share (NAPS) at 1-5% significant level respectively.

Conclusion: Thus, the study concludes that environmental & social sustainability disclosures positively improved firms' performance over the years.

Recommendation: The study however suggests the need for firms to have a positive disposition towards environmental friendly practices and also disclose more of this information in their annual reports on her commitment of business to contribute to sustainable economic development as the level of this information disclosure has influenced firms' performance over the years.

KEYWORDS: Environmental Sustainability Disclosures, Social Sustainability Disclosures, Financial Performance, Net Assets Per Share

1. INTRODUCTION

The increase in global environmental awareness and the campaign for sustainable economic development is redirecting the attention of corporate organizations towards environmental sensitivity. The need for sustainability has caused an emergence of many global institutions enunciating varying norms that

guide human interaction with the environment (Ngwakwe 2018)

The use of natural resources and continuous emissions of greenhouse gases by industries around the globe are on the increase. This is traceable to industrial revolution of late 18th century where

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economic activities in many areas migrated from agriculture to manufacturing. Production shifted from its traditional locations in the home and thatched workshops to factories. The industrial revolutions lead to economic improvement for most people in the industrialized society. These economic developments are not without costs. Industrialization which required the use of natural resources including energy brought about factory pollutant and greater land use, which harmed the natural environment (Dibua&Onwuchekwa, 2015). This is evidenced in environmental degradation and atmospheric pollution generally experienced in the world and particularly in Nigeria today. However, sustainable development as is generally known focuses on the creation of wealth and prosperity, whilst considering the true importance of social and environmental aspects, allowing business and public organizations to meet triple bottom line in sustainable management (Eze, Nweze&Enekwe, 2016).

Environmental and social responsibility (ESR) has become a global issue today and has been adopted by companies to help them face pressure from stakeholders and increase their competitive advantage and superior performance (Jenkins 2009, Torugsa, O'Donohue&Hecker, 2012). Several studies have shown different findings in analysing the relationship between ESR and firm performance. Maximization of environmental and social responsibility cannot be overemphasized in the operations of corporate organizations. Business exists within an environment in which they operate, therefore business organizations need to give back positively to the environment in order to participate in development of such society. Thus, environmental and social responsibility is the way business organization gives back to society where they are operating (Olowolaju&Adelola, 2020). The discourse of environmental and social responsibility (ESR) has presumed great importance globally and Nigeria with no exception. Support has increased in the mass media for corporate organization to take a greater responsibility for the development of society by adopting best practices in the CSR initiative.

In recent times, the expectation of social services from corporate firms has become very high in Nigeria, failure of which often results to severe destruction of companies' properties by aggrieved firms' stakeholders, civil unrest and disobedience to the law and order in Nigeria. Companies often implicated in pollution of the operational environment are manufacturing and mining companies. According to Osemene, Kolawole and Oleyakun (2016), pollution from such companies are in form of noise,

air, water and it so severe in Nigeria due to the inability of various government to fix the power problem. Aside the pollution from their business activities, fumes from generators contribute severe challenges to fresh air and arable land. Hence, the need for the present study to investigate on the need for corporate organizations to indulge in environmental and social practices and if such could influence their performance.

However, some corporations in the developing countries are becoming conscious of their international market and are creating appreciable effort as regards to environmental and social practices. The result of sampled industries in Nigeria shows that few companies are becoming environmental friendly (Okafor 2018). However a large number of firms are still apathetic about their environmental and social responsibility. Based on this observation, this study considered it imperative to examine the relationship between environmental and social sustainability disclosures and firms performance.

To achieve this purpose, this hypothesis was formulated:

- H₀₁:** Environmental Sustainability Disclosure has no significant effect on Return on Equity of Oil and Gas Firms in Nigeria
- H₀₂:** Social Sustainability Disclosure has no significant effect on Return on Equity of Oil and Gas Firms in Nigeria
- H₀₃:** Environmental Sustainability Disclosure has no significant effect on Net Assets Per Share of Oil and Gas Firms in Nigeria
- H₀₄:** Social Sustainability Disclosure has no significant effect on Net Assets Per Share of Oil and Gas Firms in Nigeria

2. Review of Related Literature

2.1. Conceptual Frame work

2.1.1. Social Sustainability Disclosure (SSD)

According to Odetayo, Sajuyigbe and Adeyemi(2014) corporate social sustainability means organisation responding positively to emerging societal imports and expectations. Conducting business in an ethical way and in the interests of external environment. Balancing the shareholders' interests with the interests of other stakeholders in the society. The idea of SSD implies how organization can manages its business activities to produce an overall positive impact on society. The study notes that SSD shows how organisation behaves ethically and contributes to economic development of society by improving the quality of life of the local community and society at large. Social sustainability is set of standards that

company subscribes to in order to make positive impact on society. From a priori expectations, social sustainability is referred to as corporate social responsibility (CSR).

The definition of CSR on the other hand is not abstruse. According to Business for Social Responsibility (BSR), corporate social responsibility is defined as achieving commercial success in ways that honour ethical values and respect people, communities and the natural environment. McWilliams and Siegel (2010) describe CSR as actions that appear to further some social good, beyond the interests of the firm that is required by law. A point worth noting is that CSR is more than just following the law.

Friedman (2017) views CSR as an action by a firm, which the firm chooses to take, that substantially affects identifiable social stakeholder welfare. A socially responsible corporation should take a step forward and adopt policies and business practices that go beyond the minimum legal requirements and contribution to the welfare of its key stakeholders. Corporate social responsibility is also called corporate conscience or corporate social performance and duties perform by organizations to the society in which they operate such as, protection of the environment, provision of social amenities, donations to health organizations, charitable contributions to approved organizations and so on (Odetayo, Sajuyigbe & Adeyemi 2014). Unugbro (2014) defined social responsibility as the obligation of corporate decision-makers to take actions, which protect and improve the welfare of the society which the organization does business. That is to say in addition to their economic and legal obligations, they also owe the society some responsibilities.

As cited in Omaliko, Nwadiolor and Nweze (2020), Nigerian Code of Corporate Governance (2018) reported that paying adequate attention to sustainability issues including environment, social, occupational and community health and safety ensures successful long term business performance and projects the Company as a responsible corporate citizen contributing to economic development.

The following policies are recommended by NCCG 2018 as regard to SSD;

- Report on the Company's business principles, practices and efforts towards achieving sustainability;
- Report on the most environmentally beneficial options particularly for companies operating in disadvantaged regions or in regions with delicate

ecology, in order to minimize environmental impact of the Company's operations;

- the nature and extent of employment equity and diversity (gender and other issues);
- opportunities created for physically challenged persons or disadvantaged individuals;
- the environmental, social and governance principles and practices of the Company; etc
- The position of Global Reporting Initiative (G4-LA1, LA9, G4-HR4, HR8 and G4-SO1) on social sustainability disclosure is as follows
- Report on the total number and rate of new employee hires during the reporting period, by age group, gender and region.
- Report on education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious disease
- Operations and suppliers in which employee rights to exercise freedom of association or collective bargaining may be violated or at significant risk
- The total number of identified incidents of violations involving the rights of indigenous peoples during the reporting period.
- Percentage of operations with implemented local community engagement, impact assessments, and development programs.

2.1.2. Environmental Sustainability Disclosure

Environmental Sustainability Disclosure is a disclosure on the control of emissions and effluents into environment. It constitutes the use of materials, processes, or practices to reduce, minimize, or eliminate the creation of pollutants or wastes. It includes practices that reduce the use of toxic or hazardous materials, energy, water, and other resources (Ijeoma, 2015).

Waste produced by a process often has to be processed before being released to the environment. Some of the waste can be handled by the company itself, other waste is better handled by external waste treating companies. Handling of the waste causes environmental costs either way. The cost of waste transportation is also considered an environmental cost to include depletion of natural resources, noise and aesthetic impacts, residual air and water emissions, long-term waste disposal (Ngwakwe, 2018). In Nigeria, National Environmental Standards and Regulations Enforcement Agency (Establishment) Act 2007 & 2008, Environmental

Impact Assessment Act 2004, Harmful Waste (Special Criminal Provision) Act 2004, Nuclear Safety and Radiation Protection Act 2007 etc explicitly stated the compliance laws to be strictly adhered to by firms whose activities are indulged on environmental practices.

Global Reporting Initiative (GRI) on the other hand succinctly gave a standard disclosure and reporting principles on waste management disclosures as follows (G4-EN2, EN27, EN1, EN4 and EN5).

2.1.3. Firms Performance

According to Erikie and Osagie (2017), financial Performance is the measuring of results of a firm's policies and operations in monetary terms. These results are reflected in the firm's return on investment, return on assets, value added, etc. Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Omaliko&Okpala, 2020).

Malik and Okere (2020) viewed financial performance as a measure that evaluate the financial position of a company over a specified time period to know how efficiently is using its resources to generate income. However, this definition prompted the consideration of alternative measures of performance so that the response on environmental and social sustainability to firms performance (FP) can be statistically established and generalized rather than relying on environmental and social behaviour to a particular performance measure.

Thus, the present study used both accounting based measure (Return on Equity) and market based measure (Net Assets Per Share) as a measurement for performance. This was captured as Net Profit After Tax divided by Total Equity i.e (ROE) and Net Assets divided by Paid up Capital i.e (NAPS).

2.2. Theoretical Framework

The theoretical framework which gives the meaning of a word in terms of the theory on environmental and social sustainability established in this study is Stakeholders Theory (ST). It assumes both knowledge and acceptance of this theory that this research work depends upon.

2.2.1. The Stakeholders' Theory

This theory was propounded by Freeman in the year 1983. The stakeholders' theory proposed an increased level of environmental awareness which creates the

need for companies to manage these interests (groups' interest) in order for them to become environmentally friendly towards the environment in which the business is domiciled. The main concern of the stakeholders' theory in environmental accounting is to address the environmental disclosure elements and valuation and its inclusion in the financial statements for external users consumption. The theory illustrates that the firm has one and only one goal – to satisfy the desires of shareholders by making profits. However, profit may not be attainable if the environment in which the business operates is neglected.

As pointed out in the study of Omaliko, Nweze and Nwadiolor (2020), stakeholders' theory proposed an increased level of environmental awareness which creates the need for companies to manage these interests (groups' interest) in order for them to become environmentally friendly towards the environment in which the business is domiciled. The main concern of the stakeholders' theory in environmental accounting is to address the environmental disclosure elements and valuation and its inclusion in the financial statements for external users consumption.

Thus, the study is anchored on stakeholders' theory, as its concern is to encourage business managers to carry out environmental practices which the non-financial stakeholders consider very important so as to maximize stakeholders' value as well as minimize environmental costs.

2.3. Empirical Review

2.3.1. Environmental Sustainability Disclosures and Firm Performance

Omaliko, Uzodimma and Ogbuagu (2018) examined the comparative analysis of environmental disclosure in oil and gas industries in Nigeria. The study compared the environmental disclosure requirements of Global Reporting Initiatives (GRI) with the environmental information disclosed in the annual report of five Listed Oil and Gas firms in Nigeria for the period of five years (2012-2016). The Content Analysis research design was adopted. Secondary data for the study were obtained from the published audited financial statements of the five Listed Oil and Gas firms in Nigerian for the period under review from which disclosure compliance index was developed. The statistical tools employed were the compliance index and the Friedman Analysis of Variance (ANOVA). The findings of the study indicate that there is a significant and positive relationship between the firms' compliance and Global Reporting Initiative (GRI) disclosure requirements among the sampled oil and gas firms in

Nigeria. The study however recommends among others that the accounting standard setters (IFRS) should draft a more comprehensive framework for reporting environmental concerns, specifically for the oil and gas industries because of their high propensity to environmental degradation and pollution, and also the high impact of their industrial activities on the environment.

Another study was also conducted by Obara, and Nangih, (2017) on the extent to which accounting practices affect the profitability of Oil and Gas companies in Nigeria, particularly those in the upstream sector. The specific objectives were: to determine the effect of accounting practices on Return on Assets (ROA) and Return on Capital Employed (ROCE) of Oil and Gas Companies in Nigeria. The Researchers used Stratified Sampling Design approach. The target population comprised of Oil and Gas Companies in Nigeria. A total of 84 respondents were drawn from the population. Both primary and secondary data were used in the study. Primary Data were collected using questionnaires drawn using the Likert's Scale with five points ranging from very great extent to no extent, while secondary data were sourced from already published materials. Hypotheses were analyzed using SPSS Software and other Descriptive statistical tools such as; percentages and tables. The result of the study showed that accounting practices had a significant relationship with performance of Oil and Gas Companies, particularly, the Return on Assets and Return on Capital Employed. It was recommended that proper and best accounting practices should be adopted by Oil and Gas companies to ensure better performance on one hand and fair, transparent and reliable financial reports on the other hand.

Omaliko, Nweze and Nwadiolor (2020) empirically investigated the effect of social and environmental disclosures on performance of non-financial firms in Nigeria. The study is vital as it portrays the extent to which social and environmental disclosures influence firms' performance. In order to determine the relationship between social and environmental disclosures and firms performance, some key proxy variables were used in the study, namely corporate social responsibility disclosure and environmental disclosure; firms' performance is however represented by NAPS. Two hypotheses were formulated to guide the investigation and the statistical test of parameter estimates was conducted using panel regression model. The research design used is Ex Post Facto design and data for the study were obtained from the NSE Factbook and published annual financial reports of the entire 112 non

financial firms quoted on NSE with data spanning from 2011-2018. The findings generally indicate that corporate social and environmental disclosures have significantly influenced firms' performance at 5% significant level. Based on this, the study concludes that social and environmental disclosures have positively improved firms performance over the years. The study however suggests that firms should have positive disposition towards social and environmental friendly practices and also disclose more of these information in their annual reports as the level of these information disclosures have exerted significant influence on firms' performance over the years.

Makori and Jagongo (2013) also examined the relationship between environmental accounting and profitability of selected firms listed in India. The data for the study were collected from annual reports and accounts of 14 randomly selected quoted companies in Bombay Stock Exchange in India. The data were analyzed using multiple regression models. The key findings of the study shows that there is significant and negative relationship between Environmental Accounting and Return on Capital Employed (ROCE) and Earnings per Share (EPS) and a significant positive relationship between Environmental Accounting and NetProfit Margin and Dividend per Share. Based on this it was recommended that government should give tax credit to organizations that comply with its environmental laws and that environmental reporting should be made compulsory in India so as to improve the performance of organizations and the nation as a whole.

Nwaiwuand Oluka, (2018) empirically examines the effect of environmental cost disclosure and financial performance measures of quoted oil and gas companies in Nigeria. Time series data were collected from annual financial reporting and economic review of Central Bank of Nigeria; Pearson product moment coefficient of correlation and multiple linear regression analysis with the aid of special package for social sciences (SPSS) version 22. The econometric results reviewed adequate disclosure on environmental cost, compliance to corporate environmental regulations have positive significant effect on financial performance measures. Thus the study recommended regulatory enforcement for adequate environmental cost disclosure and proper reporting. Management of oil and gas companies in Nigeria should develop a well articulated environmental costing system in order to guarantee a conflict free corporate atmosphere for improved corporate performance.

2.3.2. Social Sustainability Disclosures and Firm Performance

According to Uwaloma and Egbide (2016) examined corporate social responsibility disclosures in Nigeria using a sample of 41 listed companies in Nigerian Stock Exchange for the period of 2015. Multiple regression analysis was employed to analyze the data. The study revealed that there is a significant and negative relationship existed between firm's financial performance measured by RONW and the level of corporate social responsibility disclosures.

Akinleye and Adedayo (2017) observed from their study on corporate social responsibility practice in the Nigerian Banking Sector using descriptive method. The result therefore shows that social responsibility is a by-product of profitability. Thus, CSR is about the organisation striving towards profit maximization while still obeying the laws, being ethical, and being a socially responsible and a responsive corporate citizen. Banks must therefore get their priorities right by incorporating the normative pattern and values of society into their mission and operational objectives and should help to solve social problems such as unemployment, inadequate social amenities, inequality etc. These are what can dramatically change the general perception of the public about banks and stimulate growth in the industry and the economy and they are certainly not far-fetched.

Umoren, Ogbari and Atolagbe, (2016) study investigated the corporate social responsibility (CSR) disclosure practices of Nigerian quoted companies and their determinants. A checklist of 20 attributes was developed to capture the social and environmental disclosures from the annual reports of 45 companies from 8 sectors quoted on the Nigerian Stock Exchange over a two-year period (2013 to 2014). The determinants of disclosure were proxied by company size, profitability and auditor type. Company size was measured by total assets, profitability was measured by return on equity (ROE), and auditor type was measured by a dummy variable, '1' for Big 4 and '0' for otherwise. The data obtained were analysed using descriptive statistics, correlation and regression. The findings revealed that, the level of CSR was 44%, made up of social disclosure (68%) and environmental disclosure (6%). Findings also revealed that CSR was influenced by company size and auditor type; but not by profitability. This paper recommends a mandatory CSR reporting framework in line with international best practice for all listed companies in Nigeria.

Olowolaju and Adelola (2020) assessed the effect of corporate social responsibility on profitability of some selected banks in Nigeria. A sample of five (5)

banks out of 23 quoted money deposit banks was selected for the study that covered a period of six (6) years, from 2012 to 2017, Secondary data were used for this study. Data were collected from the published financial statements of the selected bank on the amount spent on corporate social responsibilities and profit after tax of the banks selected for the period under study. Both descriptive and inferential statistics were used to analyse the data. The findings of the study revealed that the major areas where Corporate Social Responsibilities (CSR) are being carried out by the selected commercial banks in the study area include health sector, education sector and provision of social amenities/community development... It was also concluded that CSR cost has positive effect on profitability of selected banks. The study recommends that commercial banks in Nigeria should be encouraged by relevant government agencies to extend their expenditure on CSR to other key sectors of the economy such as agriculture and that expenditure on CSR by commercial banks in Nigeria should be monitored to ensure that it is being channel to the appropriate use.

Guthrie, Cuganesan and Ward (2016) in their study on social and environmental reporting and its effect on performance of food and beverage firms in Australia note that quality social and environmental disclosure influences firms performance. The study explored the use of dummy variable and applied the test tool of OLS and recommended that shareholders should look beyond the quantitative information in the companies report and its footnote. Much emphasis should also be placed also on qualitative information provided in the companies report for investment decision making.

This is contrary to the studies of Amran and Siti-Nabiha (2017), in their study on corporate social reporting in Malaysia established simple regression model and found significant negative relationship between corporate social reporting and firms' performance. The study recommended on the relevance of quantitative information sufficed in the companies report. This is disagrees with the study of Wibowo (2015) on effect of non-financial disclosures on performance of Italian listed Firms explored simple regression model who measured non financial information using corporate social responsibility disclosure and found positive correlation between CSR disclosure towards financial performance. The study however concluded that CSR disclosure has improved firms performance.

3. Methodology

This study adopts ex-post facto design. This was adopted based on the fact that our data is secondary

data that exists already which cannot be manipulated or controlled. The population of the study consists of the entire 10 quoted Oil and Gas Firms on Nigerian Exchange Group (NGX) as at 2022 business list covering from 2016-2020. The use of quoted Oil and Gas Firms on Nigerian Exchange Group (NGX) could be justified based on the fact that there is no known study to the best of our knowledge which had centered on Oil and Gas sector in examining the relationship which exists between environmental and social sustainability disclosures and corporate performance.

The selected firms range from ArdovaPlc, Capital Oil Plc, ConoilPlc, EternaPlc, Japaul Gold and Ventures Plc, Mrs Oil Nigeria Plc, OandoPlc, Rak Unity Pet. Comp Plc, Seplet Energy Plc to Total Energies Marketing Nigeria Plc. Based on this, a total of 10 firms formed our sample size with 50 observations. The study used data from secondary source and was obtained from the NSE Factbook and annual reports

and accounts of the oil and gas firms in Nigeria. The technique of data analysis employed in this study is the OLS regression analysis. The study adopted this technique to ascertain the influence of environmental and social sustainability disclosures on firms' performance. The data was analyzed using STATA V15 statistical package, and the outcome was used to test the hypothesis formulated for the study after conducting necessary tests.

3.1. Operationalization and Measurement of Variables

3.1.1. Dependent Variable

The dependent variable in this study is Firms' Performance and it was proxy and measured using Return on Equity and Net Assets Per Share. This is in-line with the a priori expectations of Omaliko, Okeke and Obiora (2021), Omaliko and Okpala (2020), Wibowo (2015), Brockman (2015), Kanwal, Khanam, Nasreen and Hameed (2013), Nahiba (2017) etc. this is shown below on the table as thus:

Table 1: Measurement for Dependent Variables

Variable	Measurements	A priori expectation
Return on Equity	Net Profit After Tax/Equity	Omaliko, Okeke and Obiora (2021), Omaliko and Okpala (2020), Kanwal, Khanam, Nasreen and Hameed (2013)
Net Assets Per Share	NA/Paid up Capital	Nahiba (2017), Brockman (2015)etc

Source: Empirical Survey (2022)

3.1.2. Independent Variable

The independent variables used in the study include; environmental sustainability disclosure (ESD) and social sustainability disclosure (SSD). The measurements are as follows:

3.1.2.1. Environmental Sustainability Disclosure (ESD)

Environmental sustainability disclosure (ESD) was measured using disclosure index adopted from the Global Reporting Initiative as used in the study of Omaliko, Nweze and Nwadiolor (2020), Pratten and Mashak (2014), Kowalewski (2014), Adjaoud and Amar (2015), Lang (2016). A dichotomous procedure by (GRI) was applied in scoring the items whereby specifically, a "1-point" score was awarded for each item that is disclosed in the annual report and otherwise, a "0-point".

3.1.2.2. Social Sustainability Disclosure (SSD)

Social sustainability disclosure (SSD) is measured using disclosure index adopted from the Global Reporting Initiative as used in the study of Omaliko, Nweze and Nwadiolor (2020), Ramin, Klaus and Frank (2016), Wibowo (2015), Khavesh, Nikhashemi, Yousefi and Haque (2014). A dichotomous procedure by (GRI) was applied in scoring the items whereby specifically, a "1-point" score was awarded for each item that is disclosed in the annual report and otherwise, a "0-point".

3.2. Model Specification

In line with the previous researches, the researcher adapted and modified the Model of Omaliko, Nweze and Nwadiolor (2020) in determining the influence of environmental and social sustainability disclosures on firms' performance. This is shown below as thus:

$$\text{Omaliko et al (2020): } \text{NAPS}_{it} = \beta_0 + \beta_1 \text{CSR}_{Dit} + \beta_2 \text{ED}_{it} + \mu$$

The explicit form of the regression modified for the study is expressed as thus:

$$\text{Model 1: } \text{ROE}_{it} = \beta_0 + \beta_1 \text{ESD}_{it} + \beta_2 \text{SSD}_{it} + \mu$$

$$\text{Model 2: } \text{NAPS}_{it} = \beta_0 + \beta_1 \text{ESD}_{it} + \beta_2 \text{SSD}_{it} + \mu$$

Where:

ROE = Return on Equity

NAPS = Net Assets per Share

ESD = Environmental Sustainability Disclosure
 SSD = Social Sustainability Disclosure

Decision Rule: accept Ho if P-value > 5% significant level otherwise reject Ho

4. Data Analysis and Results

Table 2: Descriptive Statistics

STATS	ESD	SSD	ROE	NAPS
Mean	2.67	2.1664	1.9728	1.518
Std. Dev.	.6440465	.5452944	.4596318	.8178344
Maximum	1	1	3.1	3.1
Minimum	0	0	.9	0
Observations	50	50	50	50

Source: Researcher’s Computation (2022).

Table 2 shows that on the average, in a 5-year period (2016-2020), the listed oil and gas firms in Nigeria were characterized by positive return on equity (ROE) and net assets per share(NAPS) value of 1.9728 and 1.518 respectively. This is an indication that the entire oil and gas firms in Nigeria have positive return on equity (ROE) and net assets per share(NAPS) value with a standard deviation value of .4596318 and .8178344 respectively. The average environmental sustainability disclosure (ESD) value for the sampled firms was 2.67 with a standard deviation value of .6440465. This means that firms with ESD values of 2.67 and above are environmental friendly. There is also a high variation in maximum and minimum values of ESD which stood at 1 and 0 respectively. This wide variation in ESD values among the sampled firms justifies the need for this study as the researcher assumes that firms with higher ESD values are more environmental friendly than those firms with low ESD values.

On the other hand, the average social sustainability disclosure (SSD) value for the sampled firms was 2.1664 with a standard deviation value of .5452944. This means that firms with SSD values of 2.1664 and above are social responsible. There is also a high variation in maximum and minimum values of SSD which stood at 1 and 0 respectively. This wide variation in SSD values among the sampled firms justifies the need for this study as the researcher assumes that firms with higher SSD values are more environmental friendly than those firms with low SSD values.

4.1. Test of Hypothesis 1 and 2

Table 3: Result on Influence of Environmental and Social Sustainability Disclosure on Return on Equity (ROE) of Oil and Gas Firms in Nigeria.

Source	SS	df	MS	Number of obs = 50		
Model	3.21866398	2	1.60933199	F(2, 47) = 10.60		
Residual	7.13314404	47	.151768022	Prob> F = 0.0002		
Total	10.3518080	49	.2112613880	R-squared = 0.3109		
				Adj R-squared = 0.2816		
				Root MSE = 0.3895		
ROE Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]	
ESD .0788145	.1051326	0.75	0.045	.2903140	.1326850	
SSD .5167630	.1241720	4.16	0.000	.2669612	.7665647	
_cons 1.063719	.2611046	4.07	0.000	.5384446	1.588994	

Source: Result output from STATA 15.

4.2. Test of Hypothesis 3 and 4

Table 4: Result on Influence of Environmental and Social Sustainability Disclosure on Net Assets Per Share (NAPS) of Oil and Gas Firms in Nigeria.

Source	SS	df	MS	Number of obs = 50		
Model	.917370653	2	.458685326	F(2, 47) = 0.681		
Residual	31.8564282	47	.677796341	Prob> F = 0.0050		
				R-squared = 0.2821		
				Adj R-squared = 0.2453		
Total	32.7737988	49	.668853037	Root MSE = 0.8232		

NAPS	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
ESD	.2440995	.2221751	1.10	0.027	.6910582	.2028591
SSD	.2467274	.2624107	0.94	0.035	.2811749	.7746297
_cons	1.635236	.5517884	2.96	0.005	.5251805	2.745291

Source: Result output from STATA 15

4.3. Discussion of Findings

The result of the analysis of the study using OLS Model is expressed as follows:

H₀₁: Environmental Sustainability Disclosure has no significant effect on Return on Equity of Oil and Gas Firms in Nigeria

This hypothesis was tested and the result of the regression model as explicated on table 3 indicates that the relationship between environmental sustainability disclosure and return on equity (ROE) is positive and significant with a P-value (significance) of 0.045 for the model which is less than the 5% level of significance adopted. Likewise the result of the positive coefficient shows that an increase in firms' environmental practices while other variables are held constant increases firms return on equity (ROE) by 7.8%. We consequently rejected null hypothesis and accepted alternate hypothesis which contends that environmental sustainability disclosure has significant effect on return on equity of Oil and Gas firms in Nigeria. This agrees with our priori expectations of Omaliko, Uzodimma and Ogbuagu (2018), Obara and Nangih (2017), Nwaiwu and Oluka (2018), Omaliko, Nweze and Nwadiakor (2020) who found significant and positive association between environmental sustainability and corporate performance.

H₀₂: Social Sustainability Disclosure has significant effect on Return on Equity of Oil and Gas Firms in Nigeria

This hypothesis was tested and the result of the regression model as explicated on table 3 indicates

that the relationship between social sustainability disclosure and return on equity (ROE) is positive and significant with a P-value (significance) of 0.000 for the model which is less than the 1% level of significance adopted. Likewise the result of the positive coefficient shows that an increase in firms' corporate social responsibility cost while other variables are held constant increases firms return on equity (ROE) by 51.6%. We consequently rejected null hypothesis and accepted alternate hypothesis which contends that social sustainability disclosure has significant effect on return on equity of Oil and Gas firms in Nigeria. This agrees with our priori expectations and the studies of Uwaloma and Ogide (2016), Akinleye and Adedayo (2017), Wibiwo (2015), Olowolaju and Adelola (2020) who found that social sustainability ensures corporate performance. This disagrees with the status quo of Amram & Siti-Nabiha (2017), Uwaloma and Egbide (2016) who found significant but negative relationship between the variables.

H₀₃: Environmental Sustainability Disclosure has no significant effect on Net Assets Per Share of Oil and Gas Firms in Nigeria

This hypothesis was tested and the result of the regression model as explicated on table 4 indicates that the relationship between environmental sustainability disclosure and net assets per share (NAPS) is positive and significant with a P-value (significance) of 0.027 for the model which is less than the 5% level of significance adopted. Likewise the result of the positive coefficient shows that an increase in firms'

environmental practices while other variables are held constant increases firms net assets per share (NAPS) by 24.4%. We consequently rejected null hypothesis and accepted alternate hypothesis which contends that environmental sustainability disclosure has significant effect on net assets per share of Oil and Gas firms in Nigeria. This agrees with our priori expectations of Omaliko, Uzodimma and Ogbuagu (2018), Obara and Nangih (2017), Nwaiwu and Oluka (2018), Omaliko, Nweze and Nwadiolor (2020) who found significant and positive association between environmental sustainability and corporate performance.

H₀₄: Social Sustainability Disclosure has significant effect on Net Assets Per Share of Oil and Gas Firms in Nigeria

This hypothesis was tested and the result of the regression model as expounded on table 4 indicates that the relationship between social sustainability disclosure and net assets per share (NAPS) is positive and significant with a P-value (significance) of 0.035 for the model which is less than the 5% level of significance adopted. Likewise the result of the positive coefficient shows that an increase in firms' social responsibility while other variables are held constant increases firms net assets per share (NAPS) by 24.6%. We consequently rejected null hypothesis and accepted alternate hypothesis which contends that social sustainability disclosure has significant effect on net assets per share of Oil and Gas firms in Nigeria. This agrees with our priori expectations and the studies of Uwaloma and Ogide (2016), Akinleye and Adedayo (2017), Wibowo (2015), Olowolaju and Adelola (2020) who found that social sustainability ensures corporate performance. This disagrees with the status quo of Amram & Siti-Nabiha (2017), Uwaloma and Egbide (2016), who found significant but negative relationship between the variables.

5. Conclusion and Recommendation

Based on the findings of the study, it was concluded that environmental and social sustainability disclosures have significant and positive effect on financial performance of listed Oil and Gas firms in Nigeria. The implication of this is that environmental friendly and social responsible firms make higher profits. Based on this, the study suggest that firms should have a positive disposition towards environmental friendly practices and also disclose more of this information in their annual reports on her commitment of business to contribute to sustainable economic development as the level of this information disclosure has influenced firms' performance over the years. There should also be an increase in investment and spending on corporate

social responsibility so as to ensure that it's positive and significant influence on the financial performance of Oil and Gas firms is sustained over time.

5.1. Contribution to Knowledge

The present study adapted and modified the Model of Omaliko, Nweze and Nwadiolor (2020) in determining the influence of environmental and social sustainability disclosures on firms' performance. This is shown below as thus:

$$\text{Omaliko et al (2020): NAPS}_t = \beta_0 + \beta_1 \text{CSR}_t + \beta_2 \text{ED}_t + \mu$$

The above model is modified for the study as thus:

$$\text{Model 1: ROE}_t = \beta_0 + \beta_1 \text{ESD}_t + \beta_2 \text{SSD}_t + \mu$$

$$\text{Model 2: NAP}_t = \beta_0 + \beta_1 \text{ESD}_t + \beta_2 \text{SSD}_t + \mu$$

The study contributed to knowledge by revealing in model 1 that:

$$\text{ROE}_t = \beta_0 + \beta_1 \text{ESD}_t (0.078\{0.045\}) + \beta_2 \text{SSD}_t (0.516\{0.000\}) + \mu$$

The study contributed to knowledge by revealing in model 2 that:

$$\text{NAP}_t = \beta_0 + \beta_1 \text{ESD}_t (0.244\{0.027\}) + \beta_2 \text{SSD}_t (0.246\{0.0035\}) + \mu$$

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