CORPORATE SUSTAINABILITY REPORTING AND FINANCIAL PERFORMANCE OF OIL AND GAS INDUSTRY IN NIGERIA

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Abstract

This study examined corporate sustainability reporting and financial performance of oil and gas companies in Nigeria. The main objective of this study was to determine the effect of corporate sustainability reporting and environmental sustainability reporting on Return on Assets of oil and gas companies in Nigeria. Ex Post Facto research design was adopted. The population of the study consisted of the entire fifteen oil and gas companies listed in the Nigeria Stock Exchange (NSE) as at 31st December, 2020. The sample was made up of ten out of the fifteen oil and gas companies quoted on the Nigerian Stock Exchange between years 2010–2020. The study utilized secondary data collected via financial ratios and accounts of the individual companies and content analysis. Regression analysis was applied in testing the hypotheses. The findings showed that social sustainability reporting exerts negative and significant effect on return on assets. Also, environmental sustainability showed negative and insignificant effect on return on assets. The study recommends, among others, that The relevant regulatory authorities ought to encourage companies in Nigeria to use sustainability reporting practices by adjusting the existing global sustainability standards to take into account the unique social and environmental issues that arise in the context of Nigeria.

Keywords: Social sustainability, Environmental sustainability and Return on assets

1.0 Introduction

Companies whose operations have an impact on the environment, the government, eco-friendly citizens, and civil society organizations that have taken on the altruistic responsibility of raising global consciousness about the need to protect the ecosystem face an incremental challenge from sustainability reporting. According to a recent global survey (Bernow, Godsall, Klempner, & Merten, 2019), some of the largest businesses in the world do not have the systems in place to collect high-quality data for sustainability reporting. According to Ijaiya and Joseph (2014), developing nations with weak regulatory architectures and "low-level constitutional provision for environmental protection, roles and conflicts in environmental management, undue adherence to legalism by the courts and absence of mandatory disclosure of information" are even more susceptible to this problem.

With the global spread of the COVID-19 pandemic, issues of corporate sustainability have gained prominence in recent years. Due to restrictions on human movement and business operations, the pandemic has presented a significant challenge to corporate business owners and managers (Ismail, Saad, Lode, & Kustiningsih, 2022). In recent years, research on the impact of corporate sustainability on listed companies' overall performance has grown in popularity. Given the state of the world's environment and the negative impact of most organizations' activities on the ecology of host communities, which has led to increased public concern and criticism from some socially irresponsible businesses, the reasons are understandable. According to Ejoh, Orok, and Sackey (2014), it was pointless to have enormous corporate profits and material prosperity if they came at

the expense of a vast ecosystem that had a negative impact on both humans and the environment. As a result, the principles of corporate sustainability demand that businesses bear responsibility for the long-term losses likely to be borne by stakeholders in the immediate environment in which they operate as a result of the environmental and social impact that their activities have on the host communities and other stakeholders. "Business is central to the (environmental) problem and must be central to the solution," according to Kwaghfan (2015).

The oil and gas industry, for instance, is one part of the economy in Nigeria that has sparked a lot of public outrage over environmental issues. The Nigerian State gets a lot of money from this industry. According to Uwaoma and Ordu (2016), their activities frequently result in severe health consequences as well as environmental degradation, which has in the recent past led to persistent social disputes and disrupted the economic operations of some multinational corporations.

However, environmental sustainability reporting requirements for public companies in most developing nations, including Nigeria, are still largely voluntary (Owolabi, Akinwumi, Adetula, & Uwuigbe, 2016;Contrary to Germany, the United States, Japan, France, and South Africa (Bassey, Oba, & Onyah, 2013), the majority of multinational corporations simply engage in corporate social responsibility (CSR), which is merely a subset of corporate sustainability and is frequently equated with philanthropy (Kwaghfan, 2015).Owolabi et al. (2016) and other recent studies suggest that despite the adoption of International Financial Reporting Standards (IFRS) in 2012 with the hope of increasing accounting information disclosure among adopting nations, the level of corporate sustainability reporting in Nigeria still remains relatively low, in accordance with the GRI guideline.

There is still evidence of a lack of convergence among the outcomes of the majority of previous studies, despite the numerous empirical examinations in this regard, which span the past five decades internationally (Margolis & Walsh, 2003) and approximately ten (10) years in Nigeria (Nwobu, 2015). This includes works by Nigerian authors and authors from other countries. Concerning the first, recent studies such as Amacha & Dastane (2017) [Malaysia], Albatayneh (2014) [Malaysia], Maletic, Maletic, Dahlgaard, Dahlgaard-Park, & Gomiscek (2015) [Europe], Eccles, Ioannou, & Serafeim, (2012) [US], Ameer & Othman (2012) [Cross-country] suggest that greater involvement in corporate sustainability practices results in improved. Other foreign researchers, on the other hand, include Karlsson (2015) from Sweden, Kusuma and Koesrindartoto (2014) from Indonesia, Aggarwal (2013) from India, and Lourenco, Branco. Corporate sustainability practices and financial performance were either negative or neutral or non-significant, according to Curto and Eugenio (2012)

Concerning the most recent research conducted by Nigerian authors, such as Dembo (2017);Sustainability reporting has a positive and significant impact on listed companies' financial performance, according to Nnamani et al. (2017), Okoye and Ezejiofor (2013), Owolabi et al. (2016), Kwaghfan (2015), Ekwueme, Egbunike & Onyali (2013), and Okoye and Ezejiofor (2013).While others, such as Ezejiofor, John-Akamelu, and Chigbo (2016), Nwobu (2015), and Ogundare (2013), discovered that companies' corporate sustainable development practices rarely correlate with profitability (a non-significant effect).It seems clear from these contradictory empirical results that the question of whether or not corporate sustainability practices affect firm performance remains open. These observed inconsistencies in previous studies could also be attributed to a number of other factors. Excluding the fact that studies conducted in both developed and developing nations may be affected by country-specifics and other peculiarities due to the various ways in which corporations respond to environmental and social concerns in different environments. The broad objective of the study is to assess the effect of corporate sustainability reporting on financial performance of oil and gas companies quoted on the Nigerian Stock Exchange. Specifically, the study has the following as its objectives:

1. To examine the effect of Corporate Social Sustainability Reporting on Return on Assets of Oil and Gas companies in Nigeria.
2. To establish the effect of Corporate Environmental Sustainability Reporting on Return on Assets of Oil and Gas companies in Nigeria.

2.0 Conceptual Review

2.1 Corporate Sustainability

Conceptually, sustainability reporting is the process of summarizing, analyzing, and communicating an organization's economic, environmental, social, and governance performance in a systematic and transparent manner. A sustainability report allows an organization to evaluate the impact of its activities on and commitment to a sustainable global economy as part of an elaborate or comprehensive corporate governance architecture (Wilson, Nwaorgu, Onyilo, & Iormbagah, 2020). A sustainable global economy means meeting the needs of the present without compromising the needs of future generations or their ability to meet their own needs. In point of fact, sustainability reporting serves as an essential medium for conveying an organization's dedication to sustainability performance and its effects. The sustainability report of a company is merely a means of demonstrating that the company's operations do not harm the environment or the long-term balance of the environment. To put it another way, the company is merely demonstrating to the people who are interested in it that it conducts business in an environmentally conscious manner (Wilson, et al, 2020). Organizations have adopted a universal framework known as the Global Reporting Initiative (GRI) Sustainability Reporting Framework in order to make sustainability reporting easy to evaluate and comparable to all stakeholders, including corporate insiders (employees, managers, executives, and shareholders) and external parties.

Managers are encouraged to reorient their company in the direction of a new strategy and expansion into new markets by sustainability as an integrated framework. It makes it easier to connect the capabilities of business leadership and employees' capabilities and skills to the resources of the organization. Sustainability has been used to attract new employees who care about the environment and their future lifestyles as well as to motivate existing employees. While other concepts, such as corporate social responsibility (CSR), have been proposed over time to conceptualize relationships between businesses and society, CS has emerged as the most widely used one. Despite the fact that some authors make distinctions between corporate sustainability and CSR (Cheung, 2011; According to Lo and Sheu (2007), CSR is associated with sustainable development in widely accepted definitions. Holme and Watts (2000) defined corporate social responsibility (CSR) as a company's commitment to working with employees, their families, local communities, and society as a whole to improve quality of life. The European Commission (2002) asserts that these two ideas are "intrinsically linked," and corporate social responsibility (CSR) can be understood as a company's contribution to sustainable development. By "managing their operations in such a way as to enhance economic growth and increase competitiveness while ensuring environmental protection and promoting social responsibility, including consumer interests," businesses are seen as contributing to sustainable development.

The need for interdisciplinary reporting led to the development of sustainability reporting. Nigeria is not alone in introducing sustainability reporting to the business community, with a focus on quoted companies in particular. However, in Nigeria, sustainability reporting is largely based on the voluntary efforts of company managers and is not mandated by listing

requirements (Owolabi, 2010). According to Uwuigbe (2011), the manufacturing sector accounts for the majority of businesses that are subject to the social and environmental reporting system. This is the case with the exception of nations like South Africa, which include sustainability reporting in their annual reports.

According to a 2011 KPMG Nigeria survey, 68% of Nigeria's top 100 companies use sustainability reporting. Since 2011, the highest growth rates of corporate responsibility reporting have been observed in India, Chile, Singapore, Australia, Taiwan, Romania, and China (including China), according to KPMG (2013). Nigeria and Hong Kong. The reported reporting rate in Nigeria increased to 82% in 2013, up from 68% in the previous year. These figures have been updated since the 2017 KPMG sustainability reporting survey found that top-rated Nigerian businesses had a sustainability reporting rate that was higher than the global average—85% in 2015 and 88% in 2016 (KPMG, 2017). However, Nigeria is still labeled "starting behind" in the corporate sustainability reporting quadrant because public companies do not have to report on environmental or social issues, and there are no significant efforts to encourage such disclosure. It is important to note that the KPMG evaluation and reports are more heavily influenced by Corporate Responsibility Reporting than by the recently popularized GRI. This is supported by a previous report from British American Tobacco Nigeria (2010), which notes that social reporting is uncommon in Nigeria and that philanthropy and corporate social responsibility are frequently equated. Environmental and social reporting requirements are not included in the financial statements that public companies are required to publish under the Companies and Allied Matters Act. According to the KPMG sustainability report from 2013, less than half of Nigerian businesses' corporate reporting makes reference to the GRI Guidelines.

2.2 Sustainability and Environmental Issues

The impact that an organization has on living and non-living natural systems, such as ecosystems, land, water, and air, is the environmental aspect of sustainability. Performance related to inputs (such as material, energy, and water) and outputs (such as emissions, effluents, and waste) are covered by environmental indicators. Additionally, they include biodiversity-related performances, environmental compliances, and other pertinent data like environmental expenditures and the effects of precuts and services (GRI, 2013).

Accounting firms typically base their reports on a company's financial performance. However, there have been advancements into the role of accountants in environmental and social accounting for a considerable amount of time, arguing that accountants can enhance social justice (Tilt, 2009). Social justice issues focus on how a company contributes to society's social and environmental benefits. Owolabi (2010) asserts that accountants perceive environmental responsibility as significant when tracing the connection between environmental issues and the accounting profession.

Water and process treatment, pollution prevention and control, phasing out the use of ozone depleting substances, and compliance with authority in buildings regulations and requirements have all been used in previous studies to measure environmental performance in terms of preservation and conservation of natural resources. It also includes working with suppliers to develop environmental best practices for the supply chain and encouraging employees to support initiatives that are positive for the environment at the local, national, or global level by increasing and maintaining employee awareness of environmental issues. Organizations can improve environmental performance by implementing Environmental Management Systems

(EMS). According to the United States Environmental Protection Agency (U.S. EPA), the system enables an organization to improve both its operational efficiency and its impact on the environment.

According to Marsat and Williams (2011), a business organization's ethical actions will undoubtedly result in increased costs, which may prevent it from maximizing shareholder value in a competitive environment. Investors may accept more unethical conduct as a result of this. Additionally, investing in ethical behavior may yield financial rewards. Avoiding environmental disasters, reducing waste, and avoiding financial lawsuits, for instance, may cut costs in the future. According to Khaveh, Nikhashemi, Yousefi, and Haque (2012), companies that disclose more sustainability information have higher share prices and net profits. This last argument has been supported.

According to Rennings, Ziegler, and Zwick (2002), there are two indicators of sustainability performance. The first measure looks at a company's industry's environmental and/or social risks (in comparison to those of other industries). The second measure compares a company's environmental, social, or social activities to the industry average. In order to lessen the negative effects on the environment, such as emissions or other harmful substances that could lead to lawsuits or regulatory penalties for noncompliance, these social activities become sources of social awareness. Companies with "higher environmental sector performance (i.e. a lower degree of environmental risks) have a significantly positive effect on the average monthly stock returns," they discovered. This finding indicates that when compared to businesses with high social performance, the stock market accords a premium to investments in stock corporations of clean sectors (with otherwise similar economic characteristics, such as financial variables).According to Jeucken (2001), numerous businesses have carried out an environmental business strategy successfully, and academic surveys have shown that environmental performance is positively correlated with financial performance (King & Lenox, 2001).

2.3 Sustainability and Social Issues

The effects that an organization has on social systems like labor practices, human rights, and its relationship with the communities in which it operates are all part of the social dimension of sustainability. Human rights, society, and product responsibility are the primary focus of the indicators (GRI, 2013).

Profit-oriented businesses, especially those in the private sector, are thought to be driven primarily by profit. When achieving this goal, businesses typically aim to maximize profits while simultaneously cutting costs. Even though businesses use limited resources for production, "sustainability" encourages production activities to take social good into account. The capacity of a company to take action and bear responsibility for the social and environmental effects it has on society is called responsibility for social justice issues. Sustainability reporting is one method by which this accountability is communicated. A corporation's multifaceted responsibilities to shareholders (providing a reasonable return on investment), the state (paying taxes), people (being socially responsible), and the environment (reducing daily operations' impact on the environment) It also refers to community development, which is the company's efforts to improve its immediate environment through community development policies and involvement in sports, education, social amenities, infrastructure, and community health issues. Companies make disclosures about these roles in

the media used for their corporate communications. A business will continue to operate within the boundaries of society and the planet for as long as it exists.

"Firms should pursue green management practices only when it is in their self-interest to do so," assert McWilliams, Siegel, and Wright (2006). From this point of view, CS decisions are seen as a kind of strategic investment (McWilliams et al., 2006). Preston and O'Bannon (1997) attempt to determine whether there is a positive, negative, or no correlation between social and financial performance. They also want to find out if there is a casual relationship behind these things. This indicates that either social performance drives financial performance, financial performance influences social performance, or the two may work together in a synergistic way. According to the stakeholder theory, they found that there was no negative correlation between social and financial performance in large U.S. companies.

2.4 Financial Performance

There are numerous facets of performance, each of which contributes to an organization's overall performance. According to Amalendu (2010), the primary goal of measuring financial performance is to ascertain the operating and financial characteristics, as well as the effectiveness and performance of economic unit management, as reflected in the financial records and reports. According to Akinsulire (2008), no performance review is without controversy; for instance, opinions vary regarding reported profit. Evidently, some definitions of that stock of wealth are required if income is to be measured in terms of an enterprise's increase or decrease in wealth. According to Akinsulire (2008) and Pandy (2003), wealth is measured in three ways:as financial capital – the monetary equity stake in an organization; real financial capital, or the actual equity stake in an organization (the proprietary idea); capital for operating capacity refers to an organization's capacity to continue providing goods and services (the entity concept).

The profitability of a company's assets after taking into account all costs and taxes is referred to as return on assets (ROA). According to Horne & Wachowicz (2005), it measures the company's post-tax profit for each dollar invested in assets. It shows how well managers are doing. It is essential to know how well a company is able to turn what it already has into additional profits for shareholders and owners when evaluating its financial health. Increasing asset turnover or the profit margin are two ways to boost ROA. One of the proxies used in this thesis to gauge financial performance is the return on assets (ROA). Within the literature on corporate sustainability, ROA is not only a standard measure of corporate performance; According to Barnett & Salomon (2012), it is also frequently utilized in the majority of strategy research. The ratio of net profit to total assets is called ROA. This result shows how much the company can do with what it has, or how much more money they can make from each asset they control. It provides an indication of the company's capital intensity, which will vary by industry; The return on assets of businesses will typically be lower if they require substantial initial investments. ROAs of more than 5% are generally regarded as favorable.

2.5 Empirical Review

Ismail, Saad, Lode, and Kustiningsih (2022) investigated the connection between high firm performance in emerging markets and corporate sustainability reporting. Corporate sustainability reporting is associated with high firm performance, according to a sample of 24,029 firm-year observations from 14 emerging markets, including China, Egypt, Greece, Hungary, India, Pakistan, the Philippines, Poland, Russia, South Africa, Thailand, Turkey, and

the United Arab Emirates.Even after taking into account firm-level restrictions on size, leverage, litigation risk, market-to-book ratio, firm age, industry-level restrictions on market competition, and country-level restrictions on the gross domestic product, the outcomes remain robust. The regulators' efforts to encourage sustainability reporting and assist investors in making better decisions are significantly impacted by the cross-country study's findings. According to Ionica, Anca-Gabriela, Florentina-Raluca, Marius, Delia-Mioara, and Elena (2020), corporate sustainability reporting instruments are accessible to Romanian managers and play a role in improving organizations' financial performance. The study came to the conclusion that indicators of corporate social responsibility can be incorporated into a company's financial performance reporting and turn sustainability into measurable value for all parties involved. Additionally, the empirical findings aid in comprehending practices of corporate social responsibility; Despite being non-financial, these appear to have some level of financial significance once other financial factors are taken into account. Okafor (2018) determining how environmental costs affect company performance. The study used financial reports from Oil and Gas Companies that were listed on the Nigerian Stock Exchange Market from 2006 to 2015 to accomplish this goal. Statistical Package for the Social Sciences (SPSS) was used to perform regression analysis. Better environmental performance positively impacts an organization's business value, according to the statistical analysis. Between 2011 and 2013, the Malaysian Oil and Gas sector was the subject of an investigation by Amacha and Dastane (2017) into the connection between sustainability practices and company performance. The results of a SPSS 21-based multiple regression model indicate that the majority of oil and gas companies in Malaysia performed poorly when it came to sustainability disclosure. As a result, they come to the conclusion that sustainable practices and improved financial performance are strongly and significantly linked. The connection between Sweden's financial performance and corporate sustainability performance was examined by Karlsson (2015). It also looked at how board diversity acts as a mediator between sustainability and company performance. The study used a multivariate regression analysis with a deductive approach. Over the course of five years, from 2009 to 2013, 1,015 observations were used to compile the sample. Because there are indications that the positive relationship is only true for low and moderate sustainability performers and not for high sustainability performers, his findings revealed an incomplete positive relationship between corporate sustainability and financial performance. He discovered that only educational board diversity influences the relationship between firm profitability and sustainability in terms of the mediating effect of board diversity. In Jordan, Albatayneh (2014) investigated how corporate sustainability performance affected the connection between corporate efficiency strategy and financial performance. Linear and multiple regression analyses of the obtained data were utilized in the study. According to his findings, sustainability practices can be used to gauge and predict performance because corporate sustainability performance was found to partially mediate the relationship between the efficiency strategy and the financial performance model. Using multiple-linear regression analysis, Yahya and Ghodratollah (2014) investigated the effect of corporate social responsibility disclosure (CSRD) on the financial performance of companies listed on the Tehran stock exchange. Return on Assets, Return on Equity, and Price Earnings Ratio were utilized for financial performance, with the CSRD serving as the independent variable as measured by economic, social, and environmental factors. The results of the analysis are not consistent. Kipruto (2014) investigated how Kenyan commercial banks' financial performance was affected by corporate social responsibility. Using audited statements of comprehensive income, net profits before taxes were used to measure financial performance. The audited financial statements, websites, publications, and annual reports of commercial banks served as sources of the data. Excluded from the study were businesses that did not participate in CSR activities or that did not keep CSR-related data. From 2009 to 2013, secondary data were used

for the analysis. The study looked at how corporate social responsibility affects financial performance using multiple regression analysis and five-year secondary data. During the corporate period, financial performance was the dependent variable. The study found that social course expenses have an impact on the financial performance of Kenyan commercial banks. Dibia and Onwuchekwa (2015) empirically examined the factors that influence environmental disclosures in Nigeria by utilizing oil and gas companies. The study used a sample of 15 companies from the oil and gas sectors of the Nigerian stock exchange for the financial years 2008-2013.The annual reports of the sampled businesses served as the source of secondary data, and the Binary regression method was utilized for data analysis. The study found that there is no significant correlation between the type of audit firm and disclosures regarding corporate social responsibility. The significance of environmental cost accounting for Nigeria's environmental sustainability was determined by Ijeoma (2015). The primary source of data for this study is the questionnaire-based data collection.200 respondents from Nigerian organizations received the research instrument at random: Breweries, chemical and paint manufacturers, pharmaceutical and health care companies, and oil marketing businesses. The majority of respondents to the study concurred that business organizations in Nigeria were unaware of environmental policies.

3.0 Methodology

3.1 Research Design

The research design to be adopted for this study is an *ex-post facto*. The choice of this design is based on the nature of the study in which the researcher examined the effects of corporate sustainability reporting on firm performance.

3.2 Population and Sample Size

The population of this study consisted of the entire oil and gas firms listed on the Nigerian Stock Exchange (NSE) as at 31st December, 2020. As at year ended 31st December 2020, there are a total of fifteen (15) oil and gas firms quoted on the Nigeria Stock Exchange (NSE). Consequently, the "non-random sample" used the "purposive sampling technique." The researcher selects the sample in this method based on what they believe is appropriate for the study. During the process of collecting the data, a total of five (5) of the fifteen (15) companies had to be excluded as a result of inaccurate data. As a consequence of this, ten (10) companies made up the study's sample size.

The study used secondary sources of data collection to obtain trustworthy data that helped the researcher guarantee the effectiveness of the research. The individual companies' annual financial reports and accounts, which can be downloaded from their websites, served as the source of the historical data. In accordance with previous studies (e.g., Nwobu, 2015;) the qualitative data for the independent variable (corporate sustainability) will be sourced through a content analysis procedure using the Sustainable Practices Checklist of the Global Reporting Initiative.2015, Kwaghfan)

3.3 Model Specification

In order to test for the relevance of the hypotheses regarding the impact of corporate sustainability on corporate firm performance of oil and gas companies listed on the Nigerian

Stock Exchange, a multiple regression model was used as adopted from previous studies (Kwaghfan, 2015). The original model of Kwaghfan (2015) goes thus:

$Y_1 = f$ (Corporate Sustainability) …………………………………………… (i)

Where Y_1 is the Corporate Firm performance (proxied using ROA); while Corporate Sustainability was classified into two of its three main components which include: Environmental and Social sustainability performance. Thus, the two proxies of firm financial performance culminated to three (3) multiple regression models as shown below:

$ROA_{it} = \beta_0 + \beta_1 ENVP_{it} + \beta_2 SOCP_{it} + e_{it}$.. (ii)

Where:

β_0 = represents the constant or intercept

β_1 to… β_2= represents estimated parameters

e_{it}= represents the error term

ROA_{it} = Return on Asset of company *i* in year *t*

$CESR_{it}$ = Corporate Environmental Sustainability Reporting of company *i* in year *t*

$CSSR_{it}$ = Corporate Social Sustainability Reporting of company *i* in year *t*

Our *apriori* expectations were projected as follows: $\beta_1>0$, $\beta_2>0$ (i.e. in each of the model), which means that:

$\beta_1>0$: implies that increase in the environmental performance is expected to lead to an increase in ROA (and same with the other two financial performance proxies).

3.4 Data Analyses Techniques

The study used descriptive statistics and the regression analysis method for the empirical analysis. The characteristics of the sample and the degree of sustainability disclosure among the businesses will be observed through a descriptive analysis of the data. The independent variables (corporate sustainability components) and corporate performance indicators were put to the test using multiple regression analysis.

4.1 Data Analysis

Table1: Descriptive Statistics

	ROA	CSSR	CESR
Mean	-0.110664	0.167000	0.090727
Median	-0.032200	0.167000	0.104000
Maximum	0.018300	0.251000	0.140000
Minimum	-0.483200	0.125000	0.000000
Std. Dev.	0.155864	0.033861	0.048576
Skewness	-1.446329	1.200819	-1.102006
Kurtosis	3.877980	4.718935	2.929766
Jarque-Bera	4.188395	3.997859	2.228692
Probability	0.123169	0.135480	0.328130
Sum	-1.217300	1.837000	0.998000
Sum Sq. Dev.	0.242936	0.011466	0.023596
Observations	11	11	11

Source: E-views 9 output (2022)

From the descriptive statistics of financial performance (ROA) and the mean value is -0.111, also indicate that the minimum and maximum values of -0.483 and 0.018 respectively. The standard deviation stood at 0.156. The mean value of corporate social responsibility reporting (CSSR) is 0.167, and has minimum and maximum values of 0.125 and 0.251 respectively with the standard deviation of 0.034. The mean value of corporate environmental responsibility reporting (CESR) is 0.091, and has minimum and maximum values of 0.000 and 0.140 respectively with the standard deviation of 0.049.

4.2 Test of Hypotheses

Hypothesis one

Ho: Corporate social sustainability reporting does not significantly affect return on assets of oil and gas companies in Nigeria.

Table 2:

Dependent Variable: ROA
Method: Least Squares
Date: 10/02/22 Time: 22:51
Sample: 2010 2020
Included observations: 11

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.411747	0.191448	2.150700	0.0600
CSSR	-3.128205	1.125552	-2.779262	0.0214

R-squared	0.461861	Mean dependent var	-0.110664
Adjusted R-squared	0.402068	S.D. dependent var	0.155864
S.E. of regression	0.120523	Akaike info criterion	-1.230979
Sum squared resid	0.130733	Schwarz criterion	-1.158634
Log likelihood	8.770383	Hannan-Quinn criter.	-1.276582
F-statistic	7.724299	Durbin-Watson stat	0.889665
Prob(F-statistic)	0.021427		

The Adjusted R-squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. The value of Adjusted R-squared was 0.402, an indication that there was variation of 40% on return on assets due to changes in corporate social sustainability reporting while 60% was explained by unknown variables that were not included in the model.

The above test result shows that the effect of corporate social sustainability reporting on return on assets (ROA) is significant. The p-value of 0.021 is less than 0.05. The co-efficient value of; β_1= -3.128205 and t-statistics value = -0.779262 implies that corporate social sustainability reporting has a negative significant effect on return on assets of Nigerian oil and gas companies. This led to the acceptance of the alternative hypotheses (H_1). Thus, the study concludes that "corporate social sustainability reporting has significantly affect return on assets (ROA) of oil and gas companies in Nigeria.

Hypothesis two

Ho: Corporate environmental sustainability reporting does not significantly affect return on assets (ROA) of Oil and Gas companies in Nigeria.

Dependent Variable: ROA
Method: Least Squares
Date: 10/02/22 Time: 22:53
Sample: 2010 2020
Included observations: 11

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.039725	0.105666	-0.375944	0.7157
ENVP	-0.781893	1.037314	-0.753767	0.4702

R-squared	0.059381	Mean dependent var	-0.110664
Adjusted R-squared	-0.045133	S.D. dependent var	0.155864
S.E. of regression	0.159342	Akaike info criterion	-0.672557
Sum squared resid	0.228510	Schwarz criterion	-0.600213
Log likelihood	5.699065	Hannan-Quinn criter.	-0.718160
F-statistic	0.568164	Durbin-Watson stat	0.891210
Prob(F-statistic)	0.470249		

Source: E-views 9 output (2022)

The Adjusted R-squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. The value of Adjusted R-squared was 0.045, an indication that there was variation of 5% on return on assets due to changes in corporate environmental sustainability reporting while 95% was explained by unknown variables that were not included in the model.

The above test result shows that the effect of corporate environmental sustainability reporting on return on assets (ROA) is not significant. The p-value of 0.470 is less than 0.05. The co-efficient value of; β_1= -0.781893 and t-statistics value = -0.753767, implies that corporate environmental sustainability reporting has a negative insignificant effect on return on assets of Nigerian oil and gas companies. This led to the acceptance of the alternative hypotheses (H_1).

Thus, the study concludes that "corporate environmental sustainability reporting has not significantly affect return on assets (ROA) of oil and gas companies in Nigeria.

5.0 Conclusion and Recommendations

5.1 Conclusion

In line with the outcome of model one, the result showed that the effect of social sustainability reporting on return on assets was significant, while and environmental sustainability reporting was not significant. The result of the CSSR (that is) the first hypothesis, tends to support most existing school of thoughts (such as Ezejiofor et al, 2016) who argue that engaging in sustainability practices goes with a high negative fiscal effect on the organization's resources, while that of ENVP (environmental sustainability) supports some existing group of studies (such as Kasum et al, 2011; and Ogundare, 2013) that projected a positive effect but could not establish its statistical significance at any level. Also, our result on both variables (SOCP and ENVP) in respect to return on assets (ROA) contradicts the findings of most foreign authors such as Amacha & Dastane (2017) and Maletic et al (2015) which found that both social and environmental sustainability have strong positive effect on firm financial performance.

Findings from the descriptive analysis showed that the sampled companies scored 18% on the extent of social sustainability disclosure and about 8% on the environmental components of the sustainability index. Thus, it can be deduced that oil and gas sustainable companies place more emphasis on the social sustainability issues compared to environmental issues.

On the whole, considering the poor level of sustainability disclosures observed, it can be concluded that the oil and gas companies in Nigeria are low sustainability companies. It can be concluded, therefore, that in terms of the effects of corporate social and environmental sustainability on the financial performance-indicators of the oil and gas companies in Nigeria, the only variable of interest is return on assets which was significantly affected by social sustainability performance.

5.2 Recommendations

The following recommendations for policy are made in light of the findings of this study:

i. The relevant regulatory authorities ought to encourage companies in Nigeria to use sustainability reporting practices by adjusting the existing global sustainability standards to take into account the unique social and environmental issues that arise in the context of Nigeria.

ii. In spite of the fact that sustainability reporting is still a new idea in Nigeria, companies are more likely to comply with it if it is made mandatory to a certain extent rather than voluntary.

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