

EXPLORING THE RELATIONSHIP BETWEEN SUSTAINABILITY DISCLOSURE AND FINANCIAL PERFORMANCE IN NIGERIA'S OIL AND GAS SECTOR

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Abstract:

The continuous involvement of companies in non-sustainable practices and lack of responsibility toward the environment and society have brought economic crises and untold hardship on almost all the stakeholders. The main aim of this study was to ascertain the effect of sustainability disclosure on financial performance of oil and gas companies listed on the floor of the Nigeria Exchange Group for the period 2012-2021. The dependent variable of the study being financial performance was proxied by return on capital employed (ROCE) while the independent variable of the study being sustainability disclosure was proxied by social, economic, environmental and governance practices disclosure. The research design adopted for the study was ex post facto, secondary data were used, four hypotheses were tested using pool ordinary least square regression analysis and the statistical software employed was STATA 14. The findings of the analysis revealed that social sustainability disclosure, economic sustainability disclosure, environmental sustainability and governance disclosure have significant positive effect on return on capital employed of oil and gas companies in Nigeria. Thus, it was concluded that sustainability disclosure has significant effect on financial performance of oil and gas companies in Nigeria. Based on these findings, it was recommended among others that Oil and gas companies should carry out and disclose corporate sustainability practices that are commensurate with the negative impact of the economic activities on the host communities. This is because though these activities involve a huge capital out lay; this study revealed that in the long run, this investment would generate significant returns for the company.

Keywords: Sustainability disclosure, Financial Performance, Oil and Gas Companies, Nigeria

1.0 Introduction

In recent past, the demand for non-financial reports like company's sustainability disclosures by companies' investors has been on the increase. Little wonder why Ballou, *et al.*, (2019) submits that the growing importance of corporate sustainability disclosure in recent times is a subject keenly discussed among scholars who attempt to empirically draw a link between sustainability disclosure and firm performance. As reported by KPMG (2020), organizations have over the years noted that meeting stakeholders' expectations could be a necessary condition

for corporate sustainability hence it has become the key towards achieving the general strategic objective of the business. In the light of the foregoing, Branco and Rodriguez (2016) provides equilibrium into corporate sustainability matters of a company as one key consideration of sustainability reporting and this consideration have been linked with company stakeholders' interest. Sustainability disclosure is seen as a measurement, analysis and communication of interactions and connections between social, environmental, and economic issues that make up the three dimensions of sustainability.

The oil and gas industry has achieved many notable successes in the field of sustainability, and it is becoming increasingly important for individual companies to tell their own stories in a clear, transparent, and straightforward manner. For oil and gas companies, reporting sustainability issues can provide a robust platform for describing how strategic issues are being addressed through long-term plans and current initiatives. Stakeholders can find details of a company's high-level vision and strategy for dealing with sustainability-related impacts, implementing action plans and assessing outcomes. The sustainability reporting landscape is continuously evolving as companies find new ways to report on the ways in which they conduct their operations. An understanding of the basis of this reporting system, which covers social, economic, environmental and governance disclosures, and how it affects corporate financial performance, is very crucial in determining the essence of its application

Social sustainability disclosure has to do with the disclosure of organizational impact or footprint on the society. Social performance indicators focus attention on the impact's organizations have on the local communities in which they operate and disclosing how the risks that may arise from interactions with other social institutions are managed and mediated. Corporate social responsibility has become a noticeable issue in management literature, Dobers 2019; Nejati & Ghasemi 2022). Attempts to identify the relationship between corporate social sustainability and the performance of firms have been made by many scholars (Aupperle *et al.* 2020; Crissostom *et al.*, 2019). Meanwhile, several studies tested the existence of a relationship between a firm's corporate social sustainability and performance. However, these findings are rather inconclusive in answering the question as to whether a firm's performance in terms of its corporate social responsibility can be translated into positive corporate performance. While such a relationship sounds appealing, this finding is still fragile, since a range of other studies have reported either negative or mixed results (Schreck 2011). Most of those prior studies relied heavily on the dataset provided by different data set providers. Due to this shortfall, Margolis *et al.*, (1994) suggested the need to consider alternative measures of corporate social sustainability performance. Furthermore, those studies only test for a linear relationship between a firm's corporate social sustainability and its financial performance. However, recent developments in microeconomic theory suggested that a non-linear set-up should be considered (Manasakis, 2018, García-Gallego & Georgantzis, 2019). Similarly, Branco and Rodrigues (2008) argue that corporate socially responsible activities play an important mechanism in enhancing profitability as well

as it represents a signal of improved social and environmental conduct. Hence, this study expects a positive effect of social sustainability disclosure on financial performance.

The economic sustainability has to do with the disclosures of organization's impacts on the economic conditions of its stakeholders and economic systems at local, national, and global levels. The economic indicators illustrate the flow of capital among different stakeholders and main economic impacts of the organization throughout society. Economic sustainability is the economic aspect of sustainable development: the practice of maintaining the profitability of an organization by considering its environment, social and financial impact over time. It means the business must be able to pave their way in society and make profit while ensuring they don't negatively impact the environment or surrounding communities.

Economic sustainability also means the practice of conserving natural and financial resources to create long term financial stability. Sustainability strategies can improve financial performance by boosting innovation, operational efficiency, sales and marketing, customer loyalty, risk management, employee relations, media coverage and stakeholder engagement. Economic sustainability disclosure can also affect performance through cost and savings optimization, decision-making facilitation and improved corporate confidence and reputation. The economic sustainability disclosure shows the impact of the companies' operation on the macro and microeconomic environment. Companies that have a major influence on improving macro and micro economy will attract investors and customers to join as fund advocates and users of company's products. By disclosing the company's economic sustainability performance, the company's financial performance can improve significantly. According to Hill (2020) environmental sustainability reporting refers to the way and manner by which a company communicates the environmental effects of its activities to particular interest groups within society and to the society at large. Companies, through the process of environmental communication, may seek to influence the public's perception of their operations. As noted by several authors, understanding the relationship between environmental sustainability and financial performance has been the focus of considerable research since the 1970s Dixon-Fowler, *et al.*, 2019; Endrikat, 2015. Many scholars have investigated whether firms are financially rewarded for improving environmental performance. One plausible argument is that any investment in the natural environment comes at a cost to firms and detracts from profit maximization (Friedman 1970). Without clearly defined ownership rights to public goods such as air or water quality, society incurs the cost of a firm's pollution (Figge & Hahn, 2020). A firm that voluntarily internalizes these externalities incurs cost and is not maximizing profit.

On the other hand, proponents of a "win-win" argument like Porter and van der Linde, (1995) claims that environmental performance often constitutes latent profit maximization opportunities into which Ambec and Lanoie (2008) present arguments supporting several opportunities for firms to increase revenue or reduce costs

by reducing their environmental impact. It is expected that environmental sustainability disclosure to have a positive effect on financial performance.

Also, the governance pillar of sustainability disclosure is concerned with the corporation's managerial duties. More precisely, it refers to concerns such as shareholder rights protection, managerial compensation structures, and the quality of information disclosed, among others (Yoon *et al.*, 2018). Corporate governance combines complex interaction that involves legal systems, financial and economic development, politics, history, and culture. The relationship between corporate governance and firm performance depends on country-level and firm-specific factors. The most noticeable difference in governance systems across countries is in the ownership structure of individual firms. In countries such as the United States and the United Kingdom, many firms are widely held by a large number of small shareholders. Elsewhere in Europe and in the developing world, including Nigeria and South Africa, ownership tends to be more concentrated, with large shareholdings by family members or by other individuals

However, corporate financial performance is one of the most important variables in management research and arguably the most important indicator of firms' growth. Hansen and Kouhy (2014) stated that firm performance is very essential to management as it is an outcome which has been achieved by an individual or a group of individuals in an organization related to its authority and responsibility in achieving the goal legally. Performance is the function of the ability of an organization to gain and manage its resources in several different ways towards developing competitive advantage. Furthermore, performance refers to the accomplishment of a given task measured against preset known standards of accuracy, completeness, cost, and speed. It is the fulfillment of an obligation in a manner that releases the performer from all liabilities under a contract. Hence, the objective of any organization including oil and gas firms is to consistently grow and survive on a long-term basis through increase in their financial performance.

Sustainability reporting tends to affect financial performance in a number. When the organization makes voluntary disclosures about their environmental and social footprints, the society where they operate and other stakeholders seem to be at peace with company and there will be no disruption in form of destruction of oil pipe lines, kidnapping of expatriates, theft and other social unrest by the host community. Particularly, Ezejiofor, Racheal and Chigbo, (2016) argued that any investment in the natural environment and the reporting of such investment comes at a cost to firms and detracts from profit maximization. Hence, a firm that voluntarily internalizes these externalities incurs cost and is not maximizing profit. However, proponents of a "win-win" argument claims that sustainability disclosures on social, environmental, health and safety, local community relation, as well as governance activities often constitutes latent profit maximization opportunities into which firms including oil and gas companies can take advantage of. Hence, the present study argues that companies that make voluntary

disclosures of their sustainability strides have advantage over others as it constitutes one of the criteria used in assessing and rating sustainable companies.

Three key theories helped to explain and analyze the impact of corporate sustainability disclosure on firm performance. These theories include Legitimacy, Stakeholder and Resource Dependency theories. Legitimacy theory is derived from the concept of organizational legitimacy. It posits that organizations continually seek to ensure that they operate within the bounds and norms of their respective societies. Legitimacy theory has often been invoked to explain corporate reporting practices. In accordance with this theory, external stakeholders require the enterprise to take such actions that will make its operations transparent, in line with the law and the principles of economics.

The general idea of the stakeholder concept is a redefinition of the organization. In general, the concept is about what the organization should be and how it should be conceptualized. Friedman (2006) states that the organization itself should be thought of as grouping of stakeholders and the purpose of the organization should be to manage their interests, needs and viewpoints. This stakeholder management is thought to be fulfilled by the managers of a firm. The managers should on the one hand manage the corporation for the benefit of its stakeholders in order to ensure their rights and the participation in decision making and on the other hand the management must act as the stakeholder's agent to ensure the survival of the firm so as to safeguard the long-term stakes of each group.

The Resource dependency theory was propounded by Pfeffer and Salancik in 1978. According to this theory, "the board of directors is a strategic resource, which provides a linkage to various external resources in a business organization". The resource dependence theory emphasizes that organizations exert positive control over their operating environment by gathering resources needed for the survival of the organization".

However, some empirical works has been reported, Umoren & Ukpong (2022) examined the corporate factors influencing sustainability reporting of listed companies in Nigeria. Four dimensions of the corporate attributes were investigated, namely: firm size, profitability, and board size and board diversity. The methodology adopted was *ex post facto* and content analysis. The results revealed that firm size, board size, board diversity and sector have positive and significant relationship with sustainability reporting, whereas profitability has negative and insignificant relationship.

Akpan and Simeon (2021) examined the effect of sustainability disclosures on cash flow return on investment of shareholders of oil and gas companies in Nigeria. Secondary source of data was used and the research design adopted was *ex post facto*. The study adopted time series and cross-sectional analysis of selected oil and gas firms quoted on the Nigeria Stock Exchange as at 31st December 2020 for a period of seven years spanning 2014-2020. Content analysis methodologies were employed to get data for the sustainability parameters. To test the hypotheses the researcher adopted the robust panel least square regression technique. The results from the study

revealed that social sustainability disclosure have a positive significant effect on cash flow return on investment of listed oil and gas firms in Nigeria.

Therefore, sustainability disclosures enhance company value and image as well as improves the firm's brand positions, reputation, and image, which in turn improves financial performance in the long run. Hence the study aimed at achieving the following objectives: (i) examine the effect of social sustainability disclosure on return on capital employed of oil and gas firms in Nigeria. (ii) Investigate the effect of economic sustainability disclosure on return on capital employed of listed oil and gas firms in Nigeria. (iii) Ascertain the effect of environmental sustainability disclosure on return on capital employed of listed oil and gas firms in Nigeria. (iv) Evaluate the effect of governance sustainability disclosure on return on capital employed of listed oil and gas firms in Nigeria. The null hypotheses tested in this study were:

H₀₁: Social sustainability disclosure has no significant effect on return on capital employed of listed oil and gas firms in Nigeria.

H₀₂: Economic sustainability disclosure has no significant effect on return on capital employed of listed oil and gas firms in Nigeria.

H₀₃: Environmental sustainability disclosure has no significant effect on return on capital employed of listed oil and gas firms in Nigeria.

H₀₄: Governance sustainability disclosure has no significant effect on return on capital employed of listed oil and gas firms in Nigeria.

3.0 METHODOLOGY

3.1 Research design

In this research, *ex post facto* research design was adopted. This research design measures the impact of events after the events have occurred. This method was suitable for this study because the data was mainly historical.

3.2 Population of the study

The population of this study was made up of all oil and gas firms that were listed on the floor of the Nigerian Exchange Group for the period between 2012 and 2021. The oil and gas companies in Nigeria are divided into two subsectors – the upstream and the downstream sectors. This study focused on both sectors and oil and gas companies were chosen because their economic activities have high environmental and social footprint or impact and as such sustainability disclosures are expected to be high. As at the of 2021 the total number of listed oil and gas firms were 13.

3.3 Sample Size and Sampling Technique

Out of these thirteen oil and gas firms, only twelve were active and consistently submitted their annual report to the stock exchange at the end of the studied period. Also, in order to arrive at a near accurate generalizable

conclusion, the study used purposive sampling to select these 12 oil and gas firms that were listed on the Nigerian Exchange Group market. These companies were Oando, Rak Unity, Mrs. oil, II plc (mobile), Japaul oil and gas, Beco petroleum, Fort oil, Eterna oil, Conoil, Capital oil and Total Nigeria and Seplat petroleum development company.

3.4 Source of data and method of data collection

This research made use of secondary data. These data were obtained from the annual reports of the sample companies and the Nigeria Exchange Group Fact book. The data for sustainability disclosures were obtained from the annual report using content analysis. Specifically, data from director's report, sustainability reports, statement of financial positions, statement of cash flows, statements of profit or loss and other comprehensive income, notes to the financial statements and NSE compliance reports were used.

3.4.1 Content analysis

Content analysis methodology was used in deriving data for sustainability. Content analysis is a research technique for the objective, systematic and quantitative description of manifest content of communication (Onwumere, 2009). It is a tool that focuses on the actual content and features of a report. The data for the sustainability disclosure variable were obtained from the annual report of the studied oil companies using this technique.

3.4.2 The disclosure checklist

The instrument employed for collection of the data for sustainability disclosure was the researcher designed checklist. This checklist was developed based on Global Reporting Initiatives disclosure guidelines. Each reporting item on the checklist was assigned a value of '1' if disclosed and '0' if the item was assumed relevant but not disclosed. The score index for sustainability performance disclosure is the ratio of actual disclosure to the expected disclosure. This is given thus;

The disclosure index = $\frac{\text{Actual disclosure}}{\text{Expected disclosure}} \times 100$

3.5 Method of data analysis

Pool Ordinary Least Square Regression Analyses technique was employed in analyzing the data set. However, some critical diagnostic tests were carried out on the Pool Least Square regression result so as to validate the least square regression estimates as prescribed by Gujarati (2003). First, was the assumption of normality of residua which required that the samples must be drawn from a normally distributed population if we must rely on the t-statistics. The study examined this assumption using Shapiro Wiki test. Second, was the assumption of linearity of the model parameters (model specification error). Third, was the assumption of homoscedasticity which required the variance of the error term within the group to be equal and fourth is the test for multicollinearity. To

carry out the test for multicollinearity, this study employed variance inflation factors (VIF) technique as recommended by Gujarati (2003). The study also carried out a test for fixed and random effects.

Decision Rule: The generally expected criterion for decisions is that H_0 (null hypothesis) would be accepted if the P-value is greater than the 5% significant level and to be rejected where the Pvalue is less than the 5% significant level. i.e., where $P > 5\%$ we accept null hypothesis and where $P < 5\%$, we reject null hypothesis.

3.6 Model specification

The model for this study was adopted from the studies of Amahalu (2020) but modified to suit the hypotheses of this study. Hence, the author specifies the econometric function as;

$$ROCE = f(\text{sustainability disclosure}) \quad (1)$$

$$\beta_0 + \beta_1 \text{SOSU}_{it} + \mu_{it} \quad ROCE =$$

$$\beta_0 + \beta_2 \text{ECSU}_{it} + \mu_{it}$$

$$\beta_0 + \beta_3 \text{ENSU}_{it} + \mu_{it} \quad (2)$$

$$\beta_0 + \beta_4 \text{GOSU}_{it} + \mu_{it} \quad ROCE =$$

$$ROCE_{it} = \beta_0 + \beta_1 \text{SOSU}_{it} + \beta_2 \text{ECSU}_{it} + \beta_3 \text{ENSU}_{it} + \beta_4 \text{GOSU}_{it} + \beta_5 \text{FSIZ}_{it} + \mu_{it} \quad (3)$$

$$ROCE = \quad (4)$$

$$ROCE = \quad (5)$$

... (6)

Where:

ROCE = Return on capital employed (Profitability performance measure)

SOSU = Social sustainability disclosure

ECSU = Economic sustainability disclosure

ENSU = Environmental sustainability disclosure

GOSU = Governance sustainability disclosure FSIZ = Firm size (control variable)

β_0 = Constant

$\beta_1 - \beta_5$ = Slope coefficient
 μ = Stochastic disturbance i = i^{th} firm t = time period

4.0 Results of findings

4.1 Descriptive statistics analysis

The descriptive statistics of the study is presented in the table 4.1. Each variable was described based on the mean, standard deviation, maximum and minimum.

Table 4.1: Descriptive statistics of the effect of sustainability disclosure on financial performance

Variable	Obs	Mean	Std. Dev	Min.	Max.
ROCE	120	0.384329	0.69488	10.3	19.88 22.19
SOSU	120	0.490023	0.67651	3.9	54.22 89.62
ECSU	120	0.267223	0.72365	20.9 25	46.13
ENSU	120	0.458721	0.55463	1	
Source: Author's computation (2023)	120	0.069213	0.82226		
GOSU					
FIMS	120	2.67324	18.6735	137.9	187.63

4.2 Correlation analysis of the association between sustainability reporting and financial performance

Table 4.2 Correlation analysis of the association between sustainability reporting and financial performance

	ROCE	SOSU	ECSU	ENSU	GOSU	FRMS
ROCE	1.000					
SOSU	0.1289	1.000				
ECSU	0.4210	0.0262	1.000			
ENSU	0.3219	0.0872	0.3827	1.000		
GOSU	-0.2231	Source: Researcher's	-0.0987	0.2980	1.000	

	computation (2023)^{0.0876}					
FIMS	0.3730	0.0289	0.0292	-0.2010	0.2332	1.000

4.3 Regression analysis

In order to examine the effect of sustainability disclosure on financial performance as well as test the formulated hypotheses, the panel fixed and random effect regression analyses were employed since the results revealed the presence of heteroskedasticity. The results from panel the fixed and random regression and those from the pool OLS regression analysis are presented and discussed below.

Table 4:3 Regression Results of the effect of sustainability reporting of financial performance

	ROCE Model (Pool OLS)		ROCE Model (Fixed Effect)		ROCE Model (Random Effect)	
CONS.	0.913		0.853		0.910	
	{0.002} **		{0.000} ***		{0.000} ***	
SOSU	0.246	{0.100}	0.022		0.221	
			{0.000} ***		{0.130}	
ECSU	0.076	{0.317}	0.312		0.156	
			{0.000} ***		{0.276}	
ENSU	0.128	{0.326}	0.271		0.034	
			{0.000} ***		{0.239}	
GOSU	0.139	{0.219}	0.094		0.135	
			{0.003} **		{0.239}	
FIMS	0.007	0.007	-0.005	{0.095}	{0.004} **	{0.003} **
			146.22 {0.0000}	195.36 (0.0000)	1364.20(0.0000)	F-Stat/W-
Stat						
R- Squared	0.4239		0.3892		0.2975	
VIF Test	1.09					
Hettero. Test	24.75	{0.0000}				
FE/RE (0.0000)}			YES	{17.25 YES	{856.94	
		(0.0000)}				

Hausman	954.61 {0.0000}
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Note: (1) bracket {} are p-values; (2) **, *, implies statistical significance at 5% and 1% levels respectively**

4.4 Discussion of findings

The Descriptive statistics of the effect of sustainability disclosure on financial performance as presented in Table 4.1 shows that the mean of financial performance when proxied by return on capital employed (ROCE) was 0.38 with a standard deviation of 0.69 it also shows that the minimum and maximum values of return on capital employed were 10.3 and 19.88 and a maximum 8.41. This indicates that on the average, oil and gas companies under our study had a return on capital employed (ROCE) of about 38%. In the case of the independent variables, table 4.1 shows that the mean of social sustainability disclosure (SOSU) was 0.49 with a standard deviation of 0.67. It also shows the minimum and maximum value of social sustainability disclosure of 3.9 and 22.19. This implies that that on the average, about 67% of the firms in our sample disclosed information about their social sustainability performance.

Also, economic sustainability disclosure (ECSU) has a mean value of 0.26 and standard deviation of 0.72. Economic sustainability disclosure also has minimum and maximum values of 20.9 and 54.22. This implies that on the average 26% of the firms in our sample disclosed information about their economic sustainability performances. Environmental sustainability disclosure (ENSU) has a mean value of 0.46 and standard deviation of 0.55. Environmental sustainability disclosure also has minimum and maximum values of 25 and 89.62. This implies that on the average 46% of the firms in our sample disclosed information about environmental sustainability performances. From table 4.1 governance sustainability disclosures (GOSU) has a mean value of 0.06, standard deviation of 0.82, minimum and maximum values of 1 and 46.13 respectively. This implies that on the average 6% of the firms in our sample disclosed information about the governance sustainability practices. Finally, the control variable has a mean and standard deviation of 2.67 and 18.67 respectively.

Also, table 4.2 presents the correlation analysis results between the variables. It reveals that some of the independent variables are positively correlated to the dependent variable and some are negatively correlated with the dependent variable. From table 4.2 it is observed that social sustainability disclosure (0.1289), economic sustainability disclosure (0.4210), environmental sustainability disclosure (0.3219), and the control variable of firm size (0.3730) are positively associated with the dependent variable of return on capital employed during the period under study. However, table 4.2 shows that governance sustainability disclosure (-0.2231) is negatively associated with the dependent variable of return on capital employed during the period under study. However, all association between the explanatory variables and the dependent variable are relatively weak and so there is no need to suspect of the presence of the multicollinearity.

The Regression results of the effect of sustainability reporting of financial performance are presented in Table 4.3. The results indicate that the pool OLS regression had an R-squared value of 0.4239. This implies that the independent and control variables of the study could explain about 42% of the systematic changes in the dependent variable of financial performance when proxy using return on capital employed during the period under study. The result of the F-statistics (146.22) of the pool OLS regression model for the sample firms with an associated p-value of 0.0000 indicates that the pool OLS regression model on the overall is statistically fit at 1% level of significance and can be employed for statistical inferences.

The result from the panel fixed effect as presented in table 4.3 shows an F-statistics value of 195.36 and a probability value of 0.0000 indicating that on the overall the fixed effect regression model is fit for statistical inference. The result also indicates that the fixed effect regression had an Rsquared value of 0.3892. This implies that the independent and control variables of the study could explain about 39% of the systematic changes in the dependent variable of financial performance when proxied using return on capital employed during the period under study.

Social sustainability disclosure and financial performance

The results obtained from the fixed effect regression model in table 4.3 revealed that social sustainability disclosure [coef. = 0.235 (0.000)] has a significant positive effect on financial performance of quoted oil and gas companies in Nigeria when measured using return on capital employed during the period under study. This is contrary to the null hypotheses which states that social sustainability disclosure has no significant effect on the financial performance of oil and gas companies in Nigeria was rejected. Therefore, social sustainability disclosure significantly improves the financial performance of oil and gas companies during the period of the study.

The result implies that a percentage increase in the social sustainability disclosure of the oil and gas companies under study would significantly increase the financial performance of oil and gas companies in Nigeria. This is so because when the oil and gas companies disclose their social footprint and impact on the society, it reflects their responsibility to the society at large, and the host communities and other stakeholders would not disrupt the companies' economic activities like breaking of oil pipe lines and other hostilities. Social sustainability disclosure has to do with the disclosure of organizational impact or foot print on the society.

Social performance indicators focus attention on the impacts organizations have on the local communities in which they operate, and also involves the disclosure of how the risks that may arise from interactions with other social institutions are managed and mediated. The findings of this study are supported by the work of Minguel (2017). According to Minguel (2017), there is positive correlation between corporate philanthropic activities and good financial results, which could be due to reverse casualty, in which companies with a track record of strong financial performance are better able to contribute to society. He noted that charitable contributions are strongly linked to future revenue, while reverse casualty is only marginally so. Consumers consistently express a

willingness to favor socially responsible companies and tend to pay more for products associated with charitable activities. In the long run, good corporate social performance, such as corporate charitable giving, will benefit financial performance. Also, the findings of this study are in line these findings are in line with other studies like Effiong, Oti & Akpan (2019); Akpan & Simeon, (2021); Asuquo *et al.*, (2018).

Economic sustainability disclosure and financial performance

The results obtained from the fixed effect regression model in table 4.3 revealed that economic sustainability disclosure [coef. = 0.312 (0.000)] has a significant positive effect on financial performance of quoted oil and gas companies in Nigeria when measured using return on capital employed during the period under study. Hence, the null hypothesis which states that economic sustainability disclosure has no significant effect on the financial performance of oil and gas companies in Nigeria was rejected. Therefore, economic sustainability disclosure significantly improves the financial performance of oil and gas companies during the period of the study.

The result implies that a percentage increase in the economic sustainability disclosure of the oil and gas companies under study would significantly improve the financial performance of oil and gas companies in Nigeria. The economic dimension of TBL reporting has to do with the disclosures of organization's impacts on the economic conditions of its stakeholders and economic systems at local, national, and global levels. In the original concept, within a sustainability framework, the "profit" aspect needs to be seen as the real economic benefit enjoyed by the host society (Elkington, 2004). It is the real economic impact the organization has on its economic environment. This is often confused to be limited to the internal profit made by a company or organization (which nevertheless remains an essential starting point for this performance dimension).

However, economic sustainability in this study focused on the venture support provided by the oil and gas companies to the small and medium sized enterprise (SMEs). This also boosts the local economies of the host communities in addition to the employment of indigenes. This venture support could be in form of provision of capital to support SMEs, training of local entrepreneurs, giving out contract to indigenous contractors as well as attracting the economic supports of supra- organizations such International Monetary Fund (IMF), World bank, World trade organization (WTO) to the host community. The findings of this study is supported by the study of Effiong, Oti and Akpan (2019), who noted that economic dimension of triple bottom line reporting has significant impact of the firms performance as well as shareholders' value.

Environmental sustainability disclosure and financial performance

The results obtained from the fixed effect regression model in table 4.3 revealed that environmental sustainability disclosure [coef. = 0.271 (0.000)] has a significant positive effect on financial performance of quoted oil and gas companies in Nigeria when measured using return on capital employed during the period under study. Hence, the

null hypotheses which states that environmental sustainability disclosure has no significant effect on the financial performance of oil and gas companies in Nigeria was rejected. Therefore, environmental sustainability disclosure significantly improves the financial performance of oil and gas companies during the period of the study.

The result implies that a percentage increase in the environmental sustainability disclosure of the oil and gas companies under study would significantly improve the financial performance of oil and gas companies in Nigeria. This could be as a result of the fact that sustainable companies would always enjoy the cooperation of the host communities and other stakeholders as these stakeholders are aware that their environment is safe for future generation because of the companies' sustainable efforts to preserve it. According to Effiong, Oti & Akpan (2021), environmental sustainability disclosure involves the disclosure of organizations impacts on the living and non-living natural systems. It is also concerned with the input output mode of organizational impacts on the environment. Input has to do with the material consumption and output has to do with the end product and waste emissions. Companies, through the process of environmental communication may seek to influence the public's perception of their operations. According to the European Environmental Agency (EEA 2008), environmental reports are "the principal vehicles for company communication on the environment and a fair and credible reflection of the company's environmental activities".

The findings of this study align with the work of Oti, Effiong & Akpan (2017) who not that disclosure of environmental responsibility can engender stakeholders support and improve firms credit rating. Also this study noted that the reputational benefits of environmental preparedness primarily increase market value, while environmental performance can also improve financial performance operationally. This study discovered that a company's environmental performance has a positive impact on its financial performance and vice versa in their research. Similarly, Akpan & Simeon (2021) also found a positive relationship between environmental disclosure and firms' performance which was measured using cash flows return on investment as a performance measurement.

Governance sustainability disclosure and financial performance

The results obtained from the fixed effect regression model in table 4.3 revealed that governance sustainability disclosure [coef. = 0.094 (0.003)] has a significant positive effect on financial performance of quoted oil and gas companies in Nigeria when measured using return on capital employed during the period under study. Hence, the null hypothesis which states that governance sustainability disclosure has no significant effect on the financial performance of oil and gas companies in Nigeria was rejected. Therefore, governance sustainability disclosure significantly improves the financial performance of oil and gas companies during the period of the study.

The result implies that a percentage increase in the governance sustainability disclosure of the oil and gas companies under study would significantly improve the financial performance of oil and gas companies in

Nigeria. The procedures and processes by which an organization is directed and controlled are referred to as corporate governance. It establishes the framework within which the company's goals are set, as well as the methods for achieving those goals and measuring performance (Raar, 2018). However, governance sustainability this study focused on the appointment of indigenous staff into the management team as well as among the members of board of directors. This has a sustained impact on the governance practices as there will be sense of belonging to the host community rather than only employing the local indigenes as casual or junior staff members.

CONCLUSION AND RECOMMENDATION

Based on the findings from this study, the social, economic, environmental and governance sustainability disclosure have significant positive effects on financial performance of quoted oil and gas companies in Nigeria when measured using return on capital employed during the period under study it is thus concluded that sustainability reporting has significant effect on financial performance as well as long term value of quoted oil and gas companies in Nigeria. Based on the findings and the conclusion drawn from this study it is also recommended that:

- i. Oil and gas companies should carry out and disclose corporate social responsibilities that are commensurate with the negative impact of the economic activities on the host communities. This is because though these activities involve a huge capital outlay, this study reveals that in the long run, this investment would generate significant returns for the company.
- ii. Oil and gas companies should render enormous economic support to the host community especially venture supports to the small and medium scale enterprises operating around them as improvement in the local economies would also boost their operating and financial performance
- iii. The management of oil and gas companies should enshrine environmental remediation policies that would ensure that the environments are restored to its original state so as not to cause hardship for the host community
- iv. Adequate disclosure of governance practices should be carried out and secondly the firms should ensure the presence of indigenous staff in the management team as this would give the host community the sense of belonging rather than only reserving the position of causal and clerical staff to indigenes.

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