

Governance and Social Sustainability Reporting and Financial Performance of Listed Oil and Gas Firms in Nigeria

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ABSTRACT

The realization that being socially and environmentally responsible can facilitate long-term growth goals, raise productivity and optimize shareholder value has made sustainability issue a major concern for businesses of all sizes to preserve capital for future generations. This study examines the effect of governance sustainability reporting and social sustainability reporting on financial performance of listed oil and gas firms in Nigeria. The ex-po facto research design was adopted with reliance on secondary data from annual report of listed oil and gas firms. The Judgemental sampling technique was employed in selecting the 9 firms out of 10 oil and gas firms in Nigeria for 2011-2022 financial year. Panel regression estimation was used which is random effect by Hausman test which was analyzed using E-views 10. The findings show that governance sustainability reporting and social sustainability reporting has positive significant effect on return on equity of oil and gas firms in Nigeria. The study concludes that that governance sustainability reporting and social sustainability reporting has a positive significant effect on financial performance of listed oil and gas firms in Nigeria. The recommendation is based on the findings of this study that management of listed oil and gas firms in Nigeria should compliance with governance sustainability reporting and social sustainability reporting and be made mandatory for firms and the guidelines for sustainability reporting assessment should be established to compel companies to accommodate sustainability reporting disclosure because of the multiplier effect on financial performance of the firm.

Keywords: Governance Sustainability Reporting, Social Sustainability Reporting, Return on Equity, Investor, Oil and Gas Firms

INTRODUCTION

The financial performance of many organizations has been largely linked to their sustainability accounting over time as it provides funding through owner's equity. Normally, every business organization is saddled with the responsibility of making returns. This responsibility is important since the ability of a firm to make returns in the competitive market determines to a large extent its ability to survive in the future. Jensen and Meckling (1976) defined financial performance as a tool that measures how well a company uses its resources in generating profit thus make it a vital tool to several stakeholders in a company. Financial performance therefore is crucial to any business organization's survival and continuous patronage by investors, potential investors, creditors, and other stakeholders in the business world. It is commonly believed that profit maximization is one of the main objectives of a firm, thus profitability of a firm has become the major decisive factor in determining its financial performance. Particularly, investors are concerned with the profitability of the company; hence they try to involve themselves in the affairs of the firm by various ways. However, in modern turbulent or unstable business environment, investors (owners) have to recruit managers as their agents to play essential roles on their behalf (Chinwe, 2013).

The increasingly numerous and varied human activities have impact on the natural environment. People in meeting their daily needs can have impact on the environment (Olatunde *et al*, 2021). Environmental impacts occur because humans tend to exploit natural resources from the environment in an excessive



manner, for maintaining the necessities of life. As a result of these human activities, the environment is business susceptible to damage and environmental damage is getting worse. The development of technology companies brings with it environmental degradation and the attendant negative effects on human life. Environmental management efforts aim to estimate the impact that will arise from operations, evaluate, and find appropriate solutions to overcome them.

Sustainability reporting is a type of reporting that attempts to factor environmental costs into the financial results of operations. It has been argued by Emmanuel (2021), that gross domestic product ignores the environment and therefore decision makers need a revised model that incorporates green accounting. Environmental pollution is one of the problems facing the world today, due to its impact on society, nature and performance (Khan & Ghouri, 2011). The phenomenon of environmental pollution has received increasing attention in recent times, especially in light of the industrial progress in the contemporary world and the diversity of sources of pollution, and the attempt of industrial companies, particularly oil and gas firms to get rid of its waste is harmful to the environment and people (Chinwe, 2013).

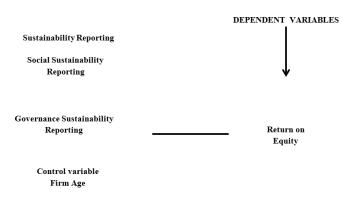
People all over the world express considerable concern about the damage to the environment by 00companies and its effects on their lives. The realization that being socially and environmentally responsible can facilitate long-term growth goals, raise productivity and optimize shareholder value has made sustainability issue a major concern for businesses of all sizes to preserve capital for future generations (Oprean-Stanet *et al*, 2020). This consciousness has led increasing number of firms to provide sustainability reports in addition to the traditional reporting framework. For this reason, the following null hypotheses were formulated:

 H_{o1} : Governance sustainability reporting has a negative effect on return on capital employed of listed oil and gas firms in Nigeria

 H_{o2} : There is no significant relationship between social sustainability reporting and return on capital employed of listed oil and gas firms in Nigeria

LITERATURE REVIEW

Conceptual Framework



Source: Researcher Compilation (2023)

Sustainability Reporting

According to Cohen and Robbins (2011), sustainability reporting is defined as a type of accounting that includes the indirect costs and benefits of economic activity, such as environmental effects and health consequences of business decisions and plans. Sustainability reporting is a concept in which companies in their production processes prioritize efficiency and effectiveness in using resources in a sustainable manner,



so that they are able to align company development with environmental functions and can provide benefits to society. In this case, the implementation of green accounting pays full attention to the concept of savings, namely, saving land, saving materials, and saving energy; it is based on the ecosystem concept. The aim of implementing sustainability reporting is to increase the efficiency of environmental management by assessing environmental activities from the perspective of costs (environmental costs) and benefits or effects (economic benefits), as well as producing environmental protection effects. In short, the implementation of green accounting can provide information about the extent to which an organization or company makes a positive or negative contribution to the quality of human life and the environment. Sustainability reporting measures and recognizes environmental costs, other social costs, and presents information in the financial statements. In the last two decades, green accountants have approached one aspect of material cost accounting (Nakajima *et al.*, 2015).

Governance Sustainability Reporting

Governance sustainability reporting refers to the governance factors of decision-making, from sovereigns' policymaking to the distribution of rights and responsibilities among different participants in corporations, including the board of directors, managers, shareholders, and stakeholders (Baba, 2020). The purpose of the corporation, the role and makeup of boards of directors, and the compensation and oversight of top executives have emerged as core issues in companies' corporate governance structures. When analyzing environmental, social, and governance factors, the element is often forgotten amid considerations over climate risk, societal implications and other risks and opportunities. However, understanding governance risks and opportunities in decision-making is critical, as poor corporate governance practices have stood at the core of some of the biggest corporate scandals (Oti *et al*, 2012). In the face of companies' missteps and expanding awareness of global diversity and income inequality, corporate governance is a core component of environmental sustainability governance (ESG).

Social Sustainability Reporting

Social sustainability includes improving human resource related practices for instance employees' training and development, employees' health and safety, diversity, equal opportunity and wage discrimination issues), addressing consumers' issues such as customers' health & safety, product labelling, communication practices, customers' complaints and compliance with product laws), protecting human rights such as freedom of association, removing child labour issues, nondiscrimination and other safety measures, etc.), and addressing other issues of broader stakeholders and community concerns such as involving the local community, reducing corruption, showing public policy concerns, discouraging anti-competitive behaviour, and complying with the law (GRI 3.1 2011). The concept gained prominence as a result of the ethical perspective of the organizations which recognized the value of social responsibilities in addition to their prime objective of wealth maximization.

Social sustainability can be described as a company's commitment to behave socially and environmentally responsibly while striving for its economic goals. It includes the company's relationship with all its stakeholders, from market-related stakeholders (customers, share owners, suppliers) to internal (employees, board of directors) or societal stakeholders (government, Non-Governmental Organizations).

Financial Performance

Financial performance is a measure of how well a firm can use assets from its primary mode of business and generate revenues. It shows the general well-being of a firm and its true financial position (Emmanuel, 2021). Financial performance can be looked at, as the level of performance of an organization at a point in time. This could be measured in terms of overall profits and losses or asset utilization. According to Iliemena and Okolocha (2019) the measures of financial performance of an organization are as varied as the



motive for the measurement. Organisational financial performance is measured to give the account of stewardship by the management team to the shareholders. The key aspect of this involves measuring the profitability, return on investment, return on asset and growth prospect of a company. The measurement of the effect of environmental accounting on performance examines the nature of the relationship between some indicator of environmental reporting or performance with the company's financial performance obtained from the accounting information such as the historical audited financial statements of the respective companies

Return on Equity

This ratio measures the overall performance of an entity; it shows the earning power of investors' book value, often used in comparing two or more entities in an industry. A high return on equity is an indication that an entity accepts a strong investment opportunity and employs effective expense management. Return on equity is net profit after tax and preference dividend scaled by the number of shares. Studies have shown that green accounting practices increased earnings of firms. Almalik (2020) in their study revealed that corporate social spending improves the return on equity of firms.

Firm Age

Firm age is defined as the number of years of incorporation of the company (Lawrence, 2022). In line with legitimacy theory, for a company to carry out business activities in a community depends on the acceptance of the society where they operate. As is obvious, businesses can be impacted by society and also have an impact on society. Hence, legitimacy theory is deemed to be an important resource determining organizational survival (Emmanuel, 2021). Based on this, aged firms with longer societal existence may have taken relatively more legitimacy and may have gained more goodwill and involvement of societal responsibility than newly incorporated firms. Generally, aged firms disclose more information than new ones. In other words, companies quoted on the stock exchange have enough experiences to disclose vital information considering the reaction of market for appropriate disclosure. Some studies have reported that level of disclosure of quoted companies significantly influence their capital market listing status.

Empirical Review

Lawrence (2022), examined the impact of sustainability reporting compliance on the financial performance of listed firms in Nigeria. Secondary data was collected from annual reports of a sample of fifty seven companies listed on the Nigerian Exchange Group. Simple disclosure index was used to score sustainability reporting Compliance using Economic (ECM), Environmental (EVM) Social (SOC) and Governance (GOV) disclosures in the annual reports of the sampled firms. The firms' financial performance was evaluated based on Net Profit Margin (NPM) and Return on Capital Employed (ROCE). Using least square panel data analysis, the results show that listed companies in Nigeria have significantly complied with the sustainability disclosure guideline. The aggregate average sustainability Reporting Compliance (SRC) by all the firms examined was 75%. It was also found that there is a significant association between sustainability Reporting Compliance and Net Profit Margin (NPM) as well as Return on Capital Employed (ROCE). It was recommended that companies, both local and international should adopt sustainability in their day-to-day policies to be legitimate in their daily activities on the planet and also enjoy better financial performance. The researcher believe that if a robust data analysis was used the finding could have given a good result and conclusion.

Faith and Grace (2022), examined the effect of environmental sustainability disclosure on financial performance of listed oil and gas companies in three countries within sub-Sahara Africa: Nigeria, Namibia, and Kenya. Ex-post facto research design and panel data was collected from fifteen (15) oil and gas listed firms in all three countries of interest within a nine (9) year time frame (2011 to 2019) were utilized. The



study employed Robust Least Square Regression analyses technique to test the stated hypotheses. Finding showed that biodiversity and water disclosure significantly affect performance measures of return on equity (positively) and gross profit after tax margin (negatively). The study recommended that environmental sustainability disclosure compliance should be made mandatory for listed oil and gas companies and the guidelines for environmental assessment should be established to compel companies to accommodate environmental disclosure. The study result cannot be generalize for green accounting of oil and gas in Nigeria because it scope is limited by 9 years

Ezejiofor and Emeneka (2022), examined the effect of Leverage on Social Sustainability Reporting of listed Oil and Gas firms in Nigeria. Based on the nature of the study, Ex-Post facto research design and content analysis method were adopted. Seven (7) listed Oil and Gas firms in Nigeria constituted the sample size of this study for the years 2010 and 2020. Secondary data were extracted from the annual reports and accounts of the sampled firms and extracts from the annual reports were analyzed using descriptive statistics and inferential statistics such as Pearson Correlation, Panel Least Square (PLS) regression analysis and Hausman test through E-Views 10.0 statistical software. Findings from the empirical analysis showed that Leverage had significant effect on Social Sustainability Reporting in Nigeria. The study recommended that firms should intensify efforts to understand the role of sound environmental practices and disclosures in reducing the cost of debt and enhancing financial performance. If the study used better proxies than leverage it could result in a better conclusion and recommendation.

Emmanuel (2021), examined green accounting disclosure and its effect on financial performance of listed manufacturing firms in Nigeria. Particularly, the study examined the effect of green accounting disclosure on ROA, ROE and share price of manufacturing firms in Nigeria. The ex-post facto research design was employed. Data from the annual reports of forty out of the sixty-six manufacturing companies listed in the Nigerian Stock Exchange as at 31st December 2019 for the period spanning 2010 – 2019 were used. The descriptive statistics and the panel regression methods were employed for the data analysis. The Arellano and Bond (1991) GMM estimator which controls for potential endogeneity problem was employed to ensure robustness of the parameter. The study findings revealed that green accounting disclosure had a positive significant effect each on ROA and ROE. However, a negative effect subsists between green accounting disclosure and share price of manufacturing firms in Nigeria. The study recommends that manufacturing firms are encouraged to increase the extent of their green accounting activities for ease of assessment by stakeholders for investment decision making. The result cannot generalize for oil and gas because it focuses on manufacturing firm in Nigeria.

Nkwoji (2021) investigated the relationship between environmental accounting and profitability of selected quoted oil and gas companies in Nigeria in years 2012-2017. Specifically, it examined the relationship between environmental expenditure and the Net profit of quoted oil and gas companies in Nigeria. Correlational designs were adopted while secondary data were utilized for the study. The data were gathered from annual reports and accounts of the companies available on their websites and from the Nigerian Stock Exchange for various years. The data collected were from the period 2012 - 2017. The annual reports includes annual financial statements, annual sustainability reports and annual reports of global tax payment to nations by the quoted oil firms and annual returns submitted on the Nigerian Stock Exchange for the study. Regression was used for the data analysis and testing of the hypothesis. The result of the study showed that there was no significant relationship between environmental expenditure and net profit of the oil and gas companies in Nigeria under study. The study therefore recommended that among other things the managements of the oil and gas companies should channel efforts towards engaging in adequate environmental spending and its disclosure as a way of increasing stakeholders trust and showing more transparency in their operations. The scope and methodology are limited to 5 years and the data are obtained were too old to have meaningful bearing to current reality



Olatunde *et al* (2021) focused on the effect of Environmental accounting and the corporate performance of selected quoted companies in Nigeria. Ten (10) quoted oil companies were randomly selected from the Nigerian Stock Exchange. The secondary data used were from the audited financial statements of the oil companies. Environmental accounting reporting was measured by environmental cost and disclosure. The corporate performance of the oil companies was measured using return on capital employed (ROCE); net profit margin (NPM), return on equity (ROE) and return on assets (ROA). The data were analysed using multiple regression analysis. The findings of the result showed that there was a significant positive relationship between environmental accounting and return on capital employed (ROCE) and net profit margin (NPM) return on equity (ROE) and return on assets (ROA). Based on the findings, it was therefore, recommended that government should make environmental disclosure compulsory and also impose sanctions on the violation by any oil company in Nigeria and compliance by the oil companies should be taken seriously so that the environment would be safe for economic growth and development. The researcher observe that if a better methodology was used it could have given a good result

Fakoya and Fakoya (2021) examined the effect of environmental accounting on the quality of accounting disclosure of shipping firms in Nigeria. They administered questionnaires to the staff of registered shipping firms in Nigeria and analysed the data using multiple regression. The findings showed that environmental accounting influenced the quality of accounting disclosure of shipping firms in Nigeria. They found a significant positive association between environmental accounting and the quality of accounting disclosure of shipping firms in Nigeria. The study concluded that firms need to recognize a liability in the statement of assets and liabilities once it was feasible that the economic benefit of an outflow of resources would offset a present obligation. They recommended that firms should decide, by discretion, which expenditure or cost should be included as environmental expenses or costs. The researcher observe that primary data are subjected to manipulation

Onaja *et al* (2021), evaluates how the Determinants of GRI affect Sustainability Reporting of listed Oil and Gas Firms in Nigeria and South Africa. The researchers used an ex-post facto study approach and a content analysis method. The sample size for this study was fourteen (14) listed oil and gas enterprises, with seven (7) listed oil and gas firms in Nigeria and seven (7) listed oil and gas firms in South Africa. Secondary data was retrieved from the sampled firms' annual reports and accounts, and extracts from the annual reports were examined with Panel Least Square (PLS) regression analysis via E-Views 10.0 statistical software. The results of the tested hypotheses revealed that there is a significant positive relationship between Stand-Alone Report, and Social Sustainability Reporting at 5% level of significance respectively in Nigeria. For South Africa, this study found that there is a significant positive relationship between Stand-Alone Report, and Social Sustainability Reporting. The study recommended that given the positive relationship between Stand-Alone Report, and Social Sustainability Reporting. Oil and Gas companies in both countries should continue to publish stand-alone sustainability reports, which can boost public confidence and improve the public image of oil companies both locally and globally. The result would have been more robust if more years are considered and a better sampling technique is applied.

Indriastuti and Chariri (2021) explained the effect of carbon and environmental performances on a sustainability report with financial performance as an intervening variable. The population of the study comprised mining companies listed on the Indonesia Stock Exchange in 2015-2019. The total samples obtained were 80 companies for five years. All the data related to the research variables were processed using the structural equation modelling method. The results of the study indicated that carbon performance had a positive effect on financial performance. Mean while, the environmental performance had a negative effect on the financial performance. On the other hand, carbon and environmental performances did not affect the sustainability report. Financial performance variables could not mediate the variables of carbon



and environmental performances on the sustainability report. It is however notable that beside the fact the study was conducted in an Indonesia country; the finding might not be applicable in Nigeria context

Oraka (2021) ascertained the effect of environmental costs on the financial performance of oil and gas companies on the Nigerian Stock Exchange. The specific objectives were to: ascertain the effect of environmental remediation cost on Tobin's Q of oil and gas companies listed on the Nigeria Stock Exchange and evaluate the effect of compliance cost on Tobin's Q of oil and gas companies on the Nigerian Stock Exchange. The ex post facto research design was adopted for the study. The data were gathered from the published financial statements of the eleven (11) oil and gas companies for eleven (12) years period. The study found that compliance cost and environmental remediation cost had a significant effect on Tobin's Q of oil and gas companies listed on the Nigeria Stock Exchange. The study recommended that since environmental remediation cost and financial performance were positively related, then oil and gas firms should be environmental cost in the long run. The researcher believe that if a robust data analysis was used the finding could have given a good result and recommendation

Theoretical Framework

Political Economy Theory

The political economy was developed by Gray *et al* (1996) as the social, political, and economic framework within which human life take place. Political economy theory explicitly recognizes the power conflict that exists within society and the various struggles that occur between various groups within society. The perspective embraced in political economy theory is that society, politics, and economics are inseparable, and economic issues cannot meaningfully be investigated in the absence of considerations about the political economy, a researcher is better able to consider broader (society) issues which impact on how an organization operates, and what information it selects to disclose. Following from the above point, Guthrie and Parker (1990) explained the relevance of accounting from a political economy perspective. They stated that the political economy perspective perceived accounting report as social, political and economic documents which served as a tool for constructing, sustaining and legitimizing economic and political arrangements, institutions and ideological themes which contributed towards the corporation's private interests.

Signalling Theory

Signalling theory was developed by Williamson (1975). The theory can be employed in a variety of economic transactions to describe corporate behaviour in the presence of asymmetric information or what is calls 'information impactedness'. To be sure, asymmetric information or information failure is a derivative condition that arises mainly because of uncertainty and opportunism when two parties (individuals or organizations) to an economic transaction possess information disparity or have access to different information. In a multi-stakeholder setting, the joint presence of uncertainty, opportunism and bounded rationality is both inevitable and bound to lead to information impactedness condition in which information is asymmetrically distributed between the parties (managers of the firms as providers of corporate reports) and various stakeholder groups (as consumers and users of corporate reports).

The effects of information asymmetries have important implications for the decision makers. The main concept of the information asymmetry theory goes back to 1970 that was introduced by (Akerlof) in a paper with a title: "The Market for "Lemons": Quality Uncertainty and the Market Mechanism "that develops asymmetric information with the example case of automobile market the basic argument is that in many markets the buyer uses certain statistics to measure the value of the goods. Thus the buyer sees the average



of the whole market while the seller has more intimate knowledge and information. Akerlof argues that this information asymmetry gives the seller an incentive to sell goods of less than the average market quality and so this creates the information asymmetry problem. Based on this example, Information asymmetry theory can be referred to as the disproportionate amount of information that two different parties have during the transaction, and the theory is based on the fact that the party that has more information might behave opportunistically and choose what kind information to provide to a second party and what information to hide (Kirmani & Rao; 2000).

METHODOLOGY

The study adopted ex-post facto research designs to evaluate the effect of sustainability reporting on financial performance of oil and gas firms in Nigeria. The design is considered appropriate for the study since it is an after the fact design that explains the relationship between the variables after their occurrence. The population of the study consists of all the 10 firms listed on the Nigerian Exchange Group from 2011 to 2022, while the sample size is 9 firms. Panel regression technique was used to establish the relationship between sustainability reporting and financial performance. The model used to empirically test the hypotheses is adopted from Emmanuel (2021) and the functional relationship between the variables is represented below:

 $ROE = \beta_0 + \beta_1 GSR + \beta_2 SSR + \beta_3 FA + \beta_{it}$ (i)

Where:

= The autonomous parameter estimate (Intercept or constant term) β $\beta_1 - \beta_3 =$ Parameter coefficient of Sustainability Reporting ROE = Return on Equity= Governance Sustainability Reporting GSR SSR = Social Sustainability Reporting FA = Firm Age = Stochastic Error term β_{it} β = Intercept β_1 to β_3 = Regression Coefficients

 Table 3.1 Variable Definition and Measurement

Variable Name	Variable types	Measurement	Source	Apriori Expectation
Return on Equity	Dependent	Divided profit after tax by the total equity	Faith & Grace (2022)	



Social Sustainability Reporting	Independent	Int U it otherwise. Therefore, the average of the	Wilson <i>et al</i> (2020)	Positive (+)
Governance Sustainability Reporting	Independent	GRI G4 Index Actual governance environmental disclosure/Expected governance environmental disclosure	Lawrence (2022),	Positive (+)
Firm Age	Control	Company listing age at the Nigerian Exchange Group (NGX)	Emmanuel (2021),	Positive (+)

Source: Author's Compilation (2023)

RESULT AND DISCUSSION

Descriptive Statistics

Descriptive statistics gives a presentation of the mean, maximum and minimum values of variables applied together with their standard deviations obtainable.

	ROE	GSR	SSR	FA
Mean	13.03509	0.449379	0.251694	22.06481
Median	13.65000	0.466667	0.235000	22.00000
Maximum	27.54000	0.866667	0.588000	37.00000
Minimum	-1.870000	0.133333	0.035000	8.000000
Std. Dev.	6.296985	0.170609	0.153757	7.143749
Skewness	-0.719575	-0.072291	0.367828	-0.024076
Kurtosis	3.248768	1.958946	1.908626	2.186073
Jarque-Bera	9.598670	4.971134	7.795290	2.991582
Probability	0.008235	0.083278	0.020290	0.224071
Sum	1407.790	48.53297	27.18290	2383.000
Sum Sq. Dev.	4242.766	3.114489	2.529601	5460.546
Observations	108	108	108	108

Table 4.1: Descriptive Statistics Result

Source: E-View 10 Output (2023)

Table 4.1 presents the descriptive statistics of the governance sustainability reporting, social sustainability reporting, return on equity and firm age as a control variable of listed oil and gas firms in Nigeria during the period of 2011 to 2022. The table shows that return on equity (ROE) as a measure of financial performance has a mean of 13.03509, with a standard deviation of 6.2969 as well as a minimum value of -1.870000 and maximum value of 27.5400 respectively. Given that the range between the minimum and maximum is quite wide, it implies unstable financial performance as the standard deviation indicated that there is no much slightly wide dispersion of the data from the mean value.



For the other measure of governance sustainability reporting and social sustainability reporting shows a mean of value of 0.4493 and 0.2516 with standard deviation of 0.1706 and 0.1537 with a minimum and maximum value of 0.13333, 0.0350, 0.8666 and 0.5880 respectively. This implies governance sustainability reporting and social sustainability reporting witnessed a marginal increase during the study period, as the standard deviation is so large compared to the mean, together with the high range between the minimum and maximum values. Similarly firm age as control variable has mean of 22.0648 with the minimum and maximum value of 8.00000 and 37.00000 respectively.

Correlation Analysis

Correlation analysis measure relationship values between dependent and independent variables and the correlation among the independent variables themselves.

Table 4.2:	Correlation	Matrix
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Covariance	Analysis:	Ordinary		
Date: 10/26	5/23 Time:	: 18:07		
Sample: 20	11 2022			
Included of	oservation	s: 108		
Correlation				
Probability	ROE	GSR	SSR	FA
ROE	1.000000			
GSR	0.046836	1.000000		
	0.6303			
SSR	0.002801	0.630624	1.000000	
	0.9770	0.0000		
FA	0.054942	0.143561	0.300721	1.000000
	0.5722	0.1383	0.0016	

Source: E-View 10 Output (2023)

In table 4.2 correlation analysis, which is used to quantify the association between two continuous variables. In correlation analysis, the study estimate a sample correlation coefficient, more specifically the Pearson Product Moment correlation coefficient. The sign of the correlation coefficient indicates the direction of the association. The analysis continues in this section in determining the degree of linear association between the sustainability reporting variables in pairs employing E-views 10 Statistical package. The result presented above confirms that governance sustainability reporting 0.6303 and social sustainability reporting 0.9770, and firm age 0.5722 have a strong positive correlation with return on equity.

Multicollinearity Test (VIF)

The Multicollinearity test was carried out to check if there is strong correlation among the independent variables that may produce misleading result. The low magnitude of the correlations among the independent variables is an indication that multicollinearity may not be a problem for the sampled dataset. The result of collinearity diagnostics test is presented in table 4.3 below:



Table 4.3: Multicollinearity Test (VIF)

Variance Inflation Factors						
Date: 10	/26/23 Time	e: 18:08				
Sample:	2011 2022					
Included	observation	ns: 108				
	Coefficient	Coefficient Uncentered Centered				
Variable	Variance	VIF	VIF			
С	6.091050	16.23927	NA			
GSR	21.67838	13.33824	1.666726			
SSR	28.73973	6.648688	1.794673			
FA	0.008188	11.73142	1.103702			

Source: E-View 10 Output (2023)

***Decision rule**: Centred VIF of less than 10 is an indication of absence of multi-collinearity, while the centred VIF of more than 10 is an indication of presence of multi-collinearity.

As encapsulated above, the decision rule for the multicollinearity test using the variance inflation factor is that Centred VIF of less than 10 shows the absence of multi-collinearity, while the centred VIF of more than 10 is an indication of presence of multi-collinearity. Table 4.3 above clearly shows that there is absence of multicollinearity among the independent variables, given that all the independent variable (GSR, SSR and FA) have a center VIF that is less than 10.

Heteroskedasticity Test

In order to validate the robustness of the estimates, the Heteroskedasticity test was conducted as a diagnostic check. Heteroskedasticity happens when the standard errors of a variable, monitored over a specific amount of time, are non-constant

Table 4.4: Heteroskedasticity Test

Panel Cross-section Heteroskedasticity LR Test						
Null hypothesis: R	esiduals are	homoskedas	tic			
Equation: UNTITI	LED					
Specification: ROI	E C GSR SS	R FA				
	Value df Probability					
Likelihood ratio	106.9443	9	0.0000			
LR test summary:						
Value df						
Restricted LogL -351.0894 104						
Unrestricted LogL	-297.6173	104				

Source: E-View 10 Output (2023)



Table 4.4 shows the results of the panel cross-section Heteroskedasticity regression test. The decision rule for the panel cross-section Heteroskedasticity test is stated thus:

*Decision Rule: At 5% level of Significance

H₀: No conditional Heteroskedasticity (Residuals are homoskedastic)

H₁: There is conditional Heteroskedasticity

The null hypothesis of the test states that there is no Heteroskedasticity, while the alternate hypothesis states that there is Heteroskedasticity. The null hypothesis is to be rejected if the P value is greater than 5% level of significance. From the result in table 4.4 above with a ratio value of 106.9443 and a corresponding probability value of 0.0000 which is less than 5%, the study therefore posits that, there is reason to accept the null hypothesis, while the alternative hypothesis that states there is conditional Heteroscedasticity problem is not accepted. Consequently, based on the diagnostic probability 0.0000 the null hypothesis is rejected, thus there is conditional heteroskedasticity, indicating that residuals are homoskedastic and as such the samples does not give a true reflection of the population. This is corrected by logging dependent variable as independent variable to correct the present of heteroscedasticity.

Hausman Test

The Hausman test is a test for model specification in panel data analysis and this test is employed to choose between fixed effects model and the random effects model. Due to the panel nature of the data set utilized in this study, both fixed effect and random effect regressions were run. Hausman specification test was then conducted to choose the preferred model between the fixed effect and the random effect regression models. Thus, the decision rule for the Hausman specification test is stated thus; at 5% Level of significance:

Table 4.5: Hausman Test

Correlated Random Effects – Hausman Test						
Equation: Untitled						
Test cross-section random effects						
Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.				
Cross-section random 2.644986 3 0.4497						
	dom effects Chi-Sq. Statistic	dom effects Chi-Sq. Statistic Chi-Sq. d.f.				

Source: E-View 10 Output (2023)

The Result of Hausman test shows that chi-square statistics value is 2.64498 while the probability values of it is 0.4497. This implies that there is enough evidence to accept the null hypothesis which states that random effect is most appropriate for the Panel Regression analysis. It thus stands that error component model (fixed effect) estimator is not the most appropriate because the random effects are well correlated with the regressors. Thus, the most consistent and efficient estimation for the study is the random effect cross-sectional model. Consequently, the result suggests that the random effect regression model is most appropriate for the sampled data because the Hausman test statistics as represented by corresponding probability value is greater than 5%.

Langranger Multiplier Test

The langranger multiplier test is a test for model specification in panel data analysis and this test is



employed to choose between pooled effect model and the random effects model.

Table 4.6: Breusch-Pagan Langranger Multiplier Test

Residual Cross-Section Dependence Test						
Null hypothesis: No	o cross-section dep	pendence (correlat	ion) in residuals			
Equation: Untitled						
Periods included: 12	2					
Cross-sections inclu	ided: 9					
Total panel observa	Total panel observations: 108					
Note: non-zero cros	Note: non-zero cross-section means detected in data					
Cross-section means were removed during computation of correlations						
Test Statistic d.f. Prob.						
Breusch-Pagan LM	68.58115	36	0.0009			

Source: E-View 10 Output (2023)

*Decision Rule: At 5% level of Significance

H₀: Pooled Effect is more appropriate

H₁: Random Effect is more appropriate

Based on the probability value of the Breusch-Pagan Langranger Multiplier Test at 0.0009, the null hypothesis is rejected, thus random effect is most appropriate when compared to pooled effect.

Table 4.7: Panel Regression Result (Random Effect)

Dependent Variable: ROE					
Method: Panel EGL	S (Cross-se	ction rando	m effects)		
Date: 10/26/23 Tim	ne: 18:24				
Sample: 2011 2022					
Periods included: 12	2				
Cross-sections inclu	ded: 9				
Total panel (balance	ed) observat	ions: 108			
Swamy and Arora e	stimator of	component	variances		
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
С	-0.783518	1.475470	-0.531030	0.5966	
GSR	-4.026646	1.476635	-2.726907	0.0076	
SSR	3.795618	1.699918	2.232825	0.0278	
FA	-0.077416	0.043474	-1.780767	0.0780	
LOGROE	7.032509	0.386957	18.17389	0.0000	
	Effects Specification				
			S.D.	Rho	



Cross-section rando	1.370119	0.3663		
Idiosyncratic randor	1.802182	0.6337		
	Weighted Statistics			
R-squared	0.777782	Mean dependent var		4.869262
Adjusted R-squared	Adjusted R-squared 0.768804 S.D. dep		endent var	3.660310
S.E. of regression	E. of regression 1.777004 Sum squa		ared resid	312.6167
F-statistic	86.62731	Durbin-Watson stat		1.521013
Prob(F-statistic)	0.000000			

Source: E-View 10 Output (2023)

From table 4.7 above, the coefficient of multiple determinations (\mathbb{R}^2) is 0.7777 and in line with the panel nature of the data used in this study, the regression model shows that the range of values between adjusted \mathbb{R}^2 and \mathbb{R}^2 falls between 77%, and 76% respectively. This indicates that about 77% of the total variations in return on equity (ROE) is explained by the variations in the independent variables (GSR and SSR), while the remaining 23% of the variation in the model is captured by the error term, which further indicates that the line of best fit is highly fitted. The panel regression result for the sampled oil and gas firms as presented in table 4.7 above showed that there is a positive relationship between governance sustainability reporting, social sustainability reporting, and return on equity with a corresponding P-Value of 0.0076 and 0.0278. However, respective probability values, the parameter estimate for governance sustainability reporting and social sustainability reporting is statistically significant, given that the individual probability is 0.0076 and 0.0278 which is less than 5%. However, when taken collectively, the regressors (GSR and SSR) against the regressed return on equity (ROE), the value of F-statistic is 86.6273 and the value of the probability of Fstatistic is 0.0000. This result implies that the overall regression is both positive and statistically significant at 5%.

Discussion of Findings

This study examined effect of governance sustainability reporting and social sustainability reporting on financial performance of listed oil and gas firms in Nigeria. Therefore, the findings of this study is on the basis of formulated hypotheses, models and analysis carried out.

Firstly assessment of governance sustainability reporting and financial performance (proxy with return on equity) of listed oil and gas firms in Nigeria revealed that a positive significant effect on listed oil and gas firm in Nigeria. The findings of this study agree with the findings of Emmanuel (2021), who documented evidence of a positive between environmental reporting and financial performance of a firm. But the finding of Nkwoji (2021) do not agree with study because a negative result was discovered by its study.

Secondly, investigation on effect of social sustainability reporting and financial performance have a positive effect on listed oil and gas firms in Nigeria. The result agrees with the findings of Ejejiofor & Emeneka (2022), who found a positive association between social sustainability reporting and performance of the firms. But the finding of Onaja *et al* (2021) contradict with the study because a negative result was discovered by its study. The implication is that sustainability reporting as positively improve the financial performance of listed oil and gas firms in Nigeria while social sustainability reporting does not improve the financial performance of listed oil and gas firms in Nigeria because of its negative effect. Apriori expectation of independent variable are met because it show positive with return on equity of listed oil and gas firm in Nigeria.



CONCLUSION AND RECOMMENDATIONS

The study examine the governance sustainability reporting and social sustainability reporting on financial performance of listed oil and gas firms in Nigeria from 2011-2022 in Nigeria. The overall result has significant effect on the return on equity of listed oil and gas firms in Nigeria Therefore, study conclude that governance sustainability reporting and social sustainability reporting has a positive significant effect on financial performance of listed oil and gas firms in Nigeria.

Based on the findings of this study and the conclusion made, the recommendations made to management of listed oil and gas firms in Nigeria is to comply with governance sustainability reporting and social sustainability reporting and be made mandatory for firms and the guidelines for sustainability reporting assessment should be established to compel companies to accommodate sustainability reporting disclosure because of the multiplier effect on financial performance of the firm.

REFERENCES

- Adegboyegun A.E, Alade, M.E. Ben-Caleb, E. Ademola, A.O Eluyela, D.F & Oladipo, O.A (2020). Intergrated reporting and corporate performance in Nigeria. Evidence from the Banking Industry. *Cogent Business & Management* 7 (1), 20-35
- Aluwong D.B & Fodio M.I (2019). Effect of corporate attribute on environmental disclosure of listed oil and gas companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*. 7(10), 32-47
- 3. Baba S (2020). Determinants of environmental accounting disclosure of listed oil and gas firm in Nigeria. *International Journal of Academic, Accounting, Finance and Management Research*. 4(11), 104-115
- 4. Choi, S. & Lee, S. (2018), "Revisiting the financial performance–corporate social performance link", *International Journal of Contemporary Hospitality Management*, 30(7) 2586-2602.
- 5. Cortez, M.A., & Cudia, C.P. (2011). Sustainability and firm performance: A case study of Japanese electronics companies. *Ritsumeikan International Affairs, 10*, 321-340
- 6. Dalal K. & Thaker, (2019). Analysis of corporate sustainability, performance, and corporate financial performance casual linkage in the India context. *Asian Journal of Sustainability and Social Responsibility* 5(1) 45-55
- 7. Dermawan, E.S. & Indrajathi, M.D. (2017) The quality of operating profit and other comprehensive income; Evidence from Indonesia stock exchange. *International Journal of Economic Perspectives*, 11, 1545-1557.
- 8. Emeka-Nwokeji, N.A, Osisioma BC, & Benjamin C. (2019) Sustainability disclosures and market value of firms in emerging economy. *European Journal of Accounting, Auditing and Finance Research*.
- 9. Emmanuel, E. (2021). Green accounting reporting and financial performance of manufacturing firms in Nigeria. *American Journal of Humanities and Social Sciences Research*, 5(7), 179-187.
- 10. Eze, J. C., Nweze, A. U. & Enekwe, C. I. (2016). The effects of environmental accounting on a Developing nation: Nigerian experience. *European Journal of Accounting, Auditing and Finance Research, 4* (1), 17-27.
- 11. Ezejiofor R.A & Emeneka O.L (2022). Effect of leverage on social sustainability reporting on listed oil and gas firm in Nigeria. *International Journal of Advanced Academic Research*. 8(3), 1-14
- 12. Faith E.O & Grace N.O (2022). Effect of environmental sustainability disclosure on financial performance of listed oil and gas companies in Sub-Saraha African. *Academy of Accounting and Financial Studies Journal*. 26(1), 1-18.
- 13. Iliemena, R. O. (2020). Environmental accounting practices and corporate performance: Study of



listed oil and gas companies in Nigeria. European Journal of Business and Management, 12(22), 58-70.

- 14. Iliemena, R. O. C. & Okolocha, C. B. (2019). Effect of audit quality on financial performance: evidence from a developing capital market. *International Journal of Recent Research in Commerce Economics and Management (IJRRCEM)*, 6(3), 191-198
- 15. Jensen, M.C.; & Meckling, W.H. (1976) Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Finance and. Economics* 3, 305–360.
- 16. Johnson-Rokosu, S.F & Olanrewaju, R.A (2016). Corporate sustainability reporting practice in an emerging market: A case of listed companies in Nigeria. "Dimitrie Cantemir" Christian University Knowledge Horizons Economics 8(2), 148–156.
- 17. Lawrence T.M (2022). Impact of sustainability reporting compliance on financial performance of listed firm in Nigeria. *European Journal of Accounting, Auditing and Finance Research*. 10(5), 25-73
- 18. Lewis, A., & Chopparapu, B. (2017). Corporate environmental reporting and the financial Profitability of listed manufacturing firms in Nigeria. *International Journal of Advanced Academic Research Social & Management Sciences*, 3(8), 15-25
- 19. Malik, P., & Mittal, A. (2015). A study of green accounting practices in India. Disclosure, 4(6), 45-67
- Menike L. (2020). Impact of Environmental Disclosure on Firm Performance: An Empirical Analysis of Food, Beverage and Tobacco Sector Companies Listed in Colombo Stock Exchange, Sri Lanka, L. (2020). International Journal of Academic Research in Business and Social Sciences, 10(10), 518-536
- 21. Minimol, M. C., & Makesh, K. G. (2014). Green accounting and reporting practices among Indian corporates. *Asia Pacific Journal of Research*, *I* (14), 143-165.
- 22. Ngozi G.T & Charles U.O (2019). Effect of sustainable reporting on profitability indicator of Nigeria quoted firm. *Australian Finance and Banking Review*. 3(1), 1-10
- 23. Nkwoji, N. (2021). Environmental accounting and profitability of selected quoted oil and gas companies in Nigeria. *Journal of Accounting and Financial Management*, 7(3), 22-39.
- 24. Nwafor C.B; Asuquo A.I & Inyang E.O (2021). Effect of green accounting on financial performance of oil and gas companies in Nigeria. *Journal of University of Shanghai for Science and Technology*, 23(12), 166-190.
- 25. Nwaiwu, N. J. & Oluka, N. O. (2018). Environmental cost disclosure and financial performance of oil and gas in Nigeria. *International Journal of Advanced Academic Research*, *4* (2), 1 23.
- 26. Ogoun1 S. Ekpulu G. A. (2020). Environmental Reporting and Operational Performance: A Study of Listed Manufacturing Firms in Nigeria. *International Journal of Intellectual Discourse*, *3*(1), 381-396
- 27. Okafor, G. O. (2018). Environmental Costs Accounting and Reporting on Firm Financial Performance: A Survey of Quoted Nigerian Oil Companies. *International Journal of Finance and Accounting*, 7(1), 1-6.
- 28. Onoja A.A; Okoye E.I & Nwoye U.J (2021). Determinant of GRI affect sustainability reporting of listed oil and gas firm in Nigeria and South African. *International Journal of Advance Academic Research*. 7(12), 1-27
- 29. Oprean-Stan, C., Oncioiu, I., Iuga, I. C., & Stan, S. (2020). Impact of sustainability reporting and inadequate management of ESG Factors on corporate performance and sustainable growth. *Sustainability*, *12*(20), 8-16..
- 30. Orazalin, N., & Mahmood, M. (2019). Determinants of GRI-based sustainability reporting: evidence from an emerging economy. *Journal of Accounting in Emerging Economies*, 10(1), 140-164.
- Osemene O.F; Kolawole K.D & Oluwagbenga O (2016). Effect of environmental accounting practices and sustainable development on performance of Nigerian listed manufacturing companies. *Journal of Sustainable Development in African*, 18(2), 127-143
- 32. Oti, P. A. & Mbu-Ogar, G. B. (2018). Analysis of environmental and social disclosure and financial performance of selected quoted Oil and Gas Companies in Nigeria. *Journal of Accounting and Financial Management*, 4(2), 1 12.
- 33. Ozordi E; Uwalonwa U; Obarakpo T; Ikumapayi T & Gbenedio A.E (2018). Impact of corporate



diversity on corporate social environmental disclosure. *Problem and Perspective in Management*, 16(3), 229-243

- 34. Rogosic, A. & Caljkusic, A. (2015) Disclosure of the socially responsible activities of the banks in Croatia and Slovenia. 3rd International Conference on governance, Management and Entrepreneurship.
- 35. Saman, U. P. (2019). Environmental Accounting and Financial Performance of Oil and Gas Companies in Nigeria. *Research Journal of Finance and Accounting*, *10*(10), 192-201
- Sanusi K.A & Sanusi O.O (2019). Environmental sustainability reporting practices among quoted manufacturing firms in Nigeria. *International Journal of Social Science and Humanity Studies*. 11(2), 39-60
- 37. Thomas M.A; Oliver I.I; Nwabuchi A.O (2022). Effect of environmental information on financial performance of oil and gas firm in Nigeria. *Journal of Economic and Finance*. 13(6), 66-73
- 38. Uwuigbe, U., & Jimoh, J. (2012). Corporate environmental disclosures in the Nigerian manufacturing industry: A study of selected firms. *African Research Review- An International Multidisciplinary Journal, Ethiopia* 6 (3), 71-83.
- 39. Wilson E.H; Innocent A.N; Francis O & Jacob A.I (2020). Sustainability reporting and performance of listed upstream oil and gas firms in Nigeria. *International Journal of Applied Economic, Finance and Accounting.* 8(1), 46-61
- 40. Yazid K.I; Ahmed N.M; Samuel E.A; Nasiru A.K & Umar F.A (2021). Sustainability reporting and financial performance of listed oil and gas firms in Nigeria. *Gusau Journal of Accounting and Finance*, 2(3), 1-17

company	Code	Year	ROE	GSR	SSR	FA
Ardova Oil Plc	1	2011	21.64	0.133	0.117	16
Ardova Oil Plc	1	2012	13.90	0.467	0.294	17
Ardova Oil Plc	1	2013	14.86	0.467	0.294	18
Ardova Oil Plc	1	2014	16.08	0.467	0.294	19
Ardova Oil Plc	1	2015	18.56	0.467	0.294	20
Ardova Oil Plc	1	2016	19.65	0.467	0.294	21
Ardova Oil Plc	1	2017	20.40	0.533	0.235	22
Ardova Oil Plc	1	2018	21.70	0.600	0.235	23
Ardova Oil Plc	1	2019	22.86	0.600	0.233	24
Ardova Oil Plc	1	2020	23.87	0.600	0.176	25
Ardova Oil Plc	1	2021	14.97	0.600	0.174	26
Ardova Oil Plc	1	2022	14.98	0.333	0.117	27
Capital Oil Plc	2	2011	15.75	0.333	0.117	16
Capital Oil Plc	2	2012	15.87	0.333	0.117	17
Capital Oil Plc	2	2013	16.34	0.400	0.117	18
Capital Oil Plc	2	2014	16.34	0.333	0.294	19
Capital Oil Plc	2	2015	17.98	0.333	0.294	20
Capital Oil Plc	2	2016	16.94	0.200	0.117	21
Capital Oil Plc	2	2017	18.45	0.200	0.117	22
Capital Oil Plc	2	2018	19.47	0.467	0.116	23
Capital Oil Plc	2	2019	12.89	0.200	0.117	24



Capital Oil Plc	2	2020 13.86 0.533 0.352 25
Capital Oil Plc	2	2020 15.86 0.533 0.552 25
Capital Oil Plc	2	2021 15.86 0.555 0.411 20
Conoil Plc	3	2011 17.97 0.600 0.411 21
Conoil Plc	3	2011 17.57 0.000 0.411 21 2012 18.90 0.600 0.411 22
Conoil Plc	3	2012 18.90 0.000 0.411 22 2013 20.76 0.267 0.588 23
Conoil Plc	3	2013 20.76 0.267 0.388 23
Conoil Plc	3	2014 23.97 0.207 0.117 24 2015 24.97 0.333 0.588 25
Conoil Plc	3	2016 27.54 0.267 0.117 26
Conoil Plc	3	2010 27.34 0.207 0.117 20
Conoil Plc	3	2017 10.80 0.535 0.117 27
Conoil Plc	3	2019 12.54 0.667 0.235 29
Conoil Plc	3	2019 12.34 0.607 0.233 29 2020 13.54 0.600 0.294 30
	3	2020 13.34 0.600 0.294 30
Conoil Plc Conoil Plc	3	2021 12.34 0.600 0.352 31 2022 13.54 0.533 0.294 32
Eterna Plc	4	2011 14.64 0.533 0.294 19
Eterna Plc	4	2012 15.65 0.533 0.291 20
Eterna Plc	4	2013 16.09 0.200 0.117 21
Eterna Plc	4	2014 17.85 0.133 0.112 22
Eterna Plc	4	2015 10.98 0.333 0.058 23
Eterna Plc	4	2016 10.86 0.333 0.058 24
Eterna Plc	4	2017 11.76 0.333 0.058 25
Eterna Plc	4	2018 12.65 0.600 0.470 26
Eterna Plc	4	2019 12.43 0.533 0.176 27
Eterna Plc	4	2020 12.54 0.533 0.176 28
Eterna Plc	4	2021 13.65 0.467 0.176 29
Eterna Plc	4	2022 15.75 0.467 0.176 30
Japaul Gold and Nature Plc	5	2011 16.78 0.200 0.117 11
Japaul Gold and Nature Plc	5	2012 18.98 0.200 0.116 12
Japaul Gold and Nature Plc	5	2013 12.98 0.200 0.058 13
Japaul Gold and Nature Plc	5	2014 13.65 0.533 0.352 14
Japaul Gold and Nature Plc	5	2015 14.65 0.533 0.235 15
Japaul Gold and Nature Plc	5	2016 14.89 0.533 0.352 16
Japaul Gold and Nature Plc	5	2017 15.76 0.600 0.291 17
Japaul Gold and Nature Plc	5	2018 16.54 0.267 0.058 18
Japaul Gold and Nature Plc	5	2019 17.54 0.267 0.117 19
Japaul Gold and Nature Plc	5	2020 18.65 0.267 0.117 20
Japaul Gold and Nature Plc	5	2021 19.65 0.200 0.058 21
Japaul Gold and Nature Plc	5	2022 11.90 0.200 0.058 22
MRS Oil Nigeria Plc	6	2011 11.00 0.200 0.058 26
MRS Oil Nigeria Plc	6	2012 12.00 0.667 0.294 27
MRS Oil Nigeria Plc	6	2013 12.60 0.600 0.352 28



MRS Oil Nigeria Plc	6	2014	12.76	0.533	0.352	29
MRS Oil Nigeria Plc	6	2015	13.65	0.600	0.353	30
MRS Oil Nigeria Plc	6	2016	13.98	0.600	0.411	31
MRS Oil Nigeria Plc	6	2017	12.65	0.400	0.352	32
MRS Oil Nigeria Plc	6	2018	13.54	0.400	0.411	33
MRS Oil Nigeria Plc	6	2019	12.65	0.267	0.176	34
MRS Oil Nigeria Plc	6	2020	14.90	0.267	0.117	35
MRS Oil Nigeria Plc	6			0.267		
MRS Oil Nigeria Plc	6	2022	12.00	0.600	0.117	37
Oando Plc	7	2011	13.00	0.667	0.117	8
Oando Plc	7	2012	13.56	0.667	0.176	9
Oando Plc	7	2013	12.65	0.667	0.114	10
Oando Plc	7	2014	12.90	0.600	0.235	11
Oando Plc	7	2015	13.87	0.667	0.352	12
Oando Plc	7	2016	14.76	0.600	0.353	13
Oando Plc	7	2017	15.76	0.667	0.352	14
Oando Plc	7	2018	16.45	0.600	0.411	15
Oando Plc	7	2019	10.10	0.667	0.411	16
Oando Plc	7	2020	11.98	0.267	0.176	17
Oando Plc	7	2021	11.45	0.667	0.413	18
Oando Plc	7	2022	12.65	0.733	0.470	19
Rak Unity Petroleum company Plc	8	2011	12.76	0.667	0.471	24
Rak Unity Petroleum company Plc	8	2012	13.65	0.867	0.529	25
Rak Unity Petroleum company Plc	8	2013	14.87	0.800	0.524	26
Rak Unity Petroleum company Plc	8	2014	15.86	0.600	0.411	27
Rak Unity Petroleum company Plc				0.667		
Rak Unity Petroleum company Plc	8	2016	17.76	0.533	0.471	29
Rak Unity Petroleum company Plc	8	2017	-1.20	0.533	0.470	30
Rak Unity Petroleum company Plc	8	2018	1.15	0.533	0.478	31
Rak Unity Petroleum company Plc	8	2019	2.17	0.467	0.472	32
Rak Unity Petroleum company Plc	8	2020	1.90	0.467	0.529	33
Rak Unity Petroleum company Plc	8	2021	-1.87	0.533	0.411	34
Rak Unity Petroleum company Plc	8	2022	-0.76	0.467	0.529	35
Total Energies plc	9	2011	0.66	0.600	0.529	8
Total Energies plc	9	2012	1.45	0.200	0.117	9
Total Energies plc	9	2013	1.80	0.200	0.058	10
Total Energies plc	9	2014	1.54	0.200	0.058	11
Total Energies plc	9	2015	1.56	0.333	0.052	12
Total Energies plc	9	2016	-1.55	0.333	0.058	13
Total Energies plc	9	2017	0.75	0.333	0.058	14
Total Energies plc	9	2018	1.60	0.200	0.035	15
Total Energies plc	9	2019	1.56	0.333	0.113	16



Total Energies plc	9	2020	2.34	0.333	0.117	17
Total Energies plc	9	2021	2.65	0.333	0.053	18
Total Energies plc	9	2022	2.80	0.333	0.352	20

Source: computation from financial statement firm (2022)