

Corporate Social Responsibility and Financial Performance of Oil and Gas Firms in Nigeria

Muhammad Isa Dattijo*, Dr. Josephine Ene, Dr. Saheed A. Lateef

Accounting and Finance Department, Faculty of Management and Social Sciences, Baze University
Abuja, Nigeria

*Corresponding Author

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Abstract: This study examined the effect of corporate social responsibility on financial performance of oil and gas firms in Nigeria from 2018 to 2023. The study was anchored on Stakeholder theory. The population of the study consisted of ten oil and gas firms in Nigeria that are listed on Nigeria Exchange Group as at December, 2023 while the sample size consisted of five (5) oil and gas firms in Nigeria. The study made use of secondary data which were sourced from Nigerian Exchange Group. Ordinary Least Square regression technique was the method of data analysis adopted. The results of the study revealed that: corporate social responsibility expenditure and corporate social responsibility disclosure have a positive and significant effect on net profit margin and return on asset of oil and gas firms in Nigeria. The study concluded that corporate social responsibility plays a significant positive role in improving the financial performance of oil and gas firms in Nigeria. The study recommended that management of oil and gas firms should ensure that social responsibility is inbuilt into their policy statements and back up with effective budget.

Keywords: Corporate Social Responsibility, Financial Performance, Corporate Social Responsibility Expenditure, Net Profit Margin, Return on Asset

I. Introduction

The survival of every business depends on the accomplishment of its objectives. The two broad categories of business objectives expected to be accomplished include economic objectives and social objectives. While economic objectives are the targets to be accomplished in the marketing efforts of an organization, social objectives are associated with the aims of an organization towards satisfying the interest of its shareholders, employees, and the general public. Thus, corporate social responsibility is a concept whereby organizations consider the interest of society by taking responsibility for the impact of their activities on customers, employees, shareholders, communities as well as the environment. Corporate social responsibility goes beyond statutory obligation to comply with legislation but voluntarily taking further steps to improve the quality of life for employees, the local communities, and society at large (Pearce & Robinson, 2015). Kpolovie and Sado (2016) defined corporate social responsibility as a persistent commitment by a business organization to ethically behave to contribute maximally to the economic and environmental advancement of the quality of life of its workforce and the society particularly the host communities. The main aim of corporate social responsibility is that corporations who want to be successful in the long run must adjust their value systems so that they are in line with what society wishes for in the long run. Corporate social responsibility is now seen as an integral part of corporate strategy. However, the need for companies (especially oil and gas companies) to act socially and environmentally responsibly as well as to assist in community development has been a source of debate among scholars and stakeholders like host communities, governments, etc. Corporate social responsibility is therefore the obligation to which a company has to satisfy the financial interest of its stakeholders as well as to meet the needs of the society/host community which will in turn improve their performance (Eweje, 2018). Performance of a company in general is the ability of the company to efficiently utilize its resources to generate profit within a reporting period. Financial performance is however commonly used as an indicator of a firm's financial health over a given period of time, and this is communicated to users or stakeholder via the annual financial statements. Financial performance plays an important role because it is used as an indicator of good or bad financial health of a company within a certain time period. Good financial performance will attract the attention of investors to invest because investors would not want to bear a high element of risk in investing (Lyndon, Ikechukwu & Ayaundu, 2019). In Nigeria however, Ilomaand Chukwu (2023) observed that financial performance of companies is influenced by corporate social responsibility accounting. Specifically, the issue of corporate social responsibility accounting is deepening among companies and societies and it is regarded as the companies' activity to make sustainable impact in society, which in turn has the potential to create positive effect on their overall level of performance. Consequently, modern business managers are focusing on the fact that their organizations should extend its activities to the community and not limited only to goods or service. This is because corporations who want to be successful in the long run must adjust their value systems so that they are in line with what society wishes for in the long run through corporate social responsibility accounting.

Empirically, Bariweni (2024) prior empirical studies on corporate social responsibility and performance exists. For instance, corporate social responsibility indicators such costs associated with employees training and environmental compliance activities contribute meaningfully to return equity however, none of the variable are significantly enhance return on assets. Also, Ohaka and Ogaluzor (2018) carried out a study on corporate social responsibility accounting and the effect of donations on profitability of oil and gas companies in Nigeria and found that there is a strong positive relationship between corporate social responsibility accounting and profitability. Specifically, they established that donation as a proxy of corporate social responsibility accounting significantly affects the net profit margins and return on equity of the oil and gas companies in Nigeria. Furthermore, Ehioghiren and Eneh (2019) established that corporate social responsibility accounting has significant relationship with return on capital employed and net profit

margin. In addition, Daferighe, Akpanuko and Offiong (2019) found that investments in social activities have positive relationship with the return on equity of Nigerian companies. Lastly, Oboreh and Arukaroha (2021) found that corporate social responsibility expenditure of the companies studied has significant effect on net profit margin and therefore concluded that corporate social responsibility has significant effect on organizational performance in Nigeria. In line with the above submission, the thrust of this study is to examine the effect of corporate social responsibility on financial performance of oil and gas firms in Nigeria.

Over the decades however, corporate firms have ignored and disregarded corporate social responsibility, arguing that there are no laid down principles for allocating its cost whether as an investment or welfare to the society. Also, in a developing nation like ours, there are no organized pressure group and consumer awareness to influence corporate behaviour. Most corporate organizations including oil and gas firms demonstrate biased attitude on corporate social responsibility to their host communities. Furthermore, most managers of oil and gas firms in Nigeria lack favorable attitude of corporate social responsibility. A lot of these corporate firms exist without much impact on the society on the ground that does not have a positive impact on their financial performance. This has become a worrisome aspect that needs urgent attention. Also, most of the inhabitants of the region where oil and gas firms are located are heavily dependent on the environment for livelihood through fishing and farming. However, oil exploration by oil and gas firms has had a lot of negative environmental, political and socio-economic influences on the host communities. The dynamite (explosives) for example used by these firms destroys aquatic life, cracks the communities' buildings (houses) and result in spillages which flow into lands, rivers, swamps and creeks to destroy crops and make the soil sterile and unproductive. Environmental degradation is very obvious especially in the destruction of farm land and fishing which constitute the main occupation of the oil producing communities in Nigeria. However, some studies have been carried out on effect of corporate social responsibility on financial performance of corporate organizations in Nigeria but it appears that only very few of those related studies were carried out on effect of corporate social responsibility on financial performance of oil and gas firms in Nigeria. It also appeared that none of the previous studies used combination of corporate social responsibility expenditure and corporate social responsibility disclosure as dimensions of corporate social responsibility accounting in their studies. This creates a gap that this study aims to bridge in knowledge. It is in line with identified problems and gap in knowledge that this study was set out to investigate the effect of corporate social responsibility on financial performance of oil and gas firms in Nigeria. Also in this study, both corporate social responsibility expenditure and corporate social responsibility disclosure were used as the dimensions of corporate social responsibility accounting.

Objectives of the Study

The broad objective of this study is to examine the effect of corporate social responsibility on financial performance of oil and gas firms in Nigeria. Specifically, the study will seek to:

- a. Find out the relationship between corporate social responsibility expenditure and net profit margin of oil and gas firms in Nigeria.
- b. Determine the relationship between corporate social responsibility expenditure and return on asset of oil and gas firms in Nigeria.
- c. Ascertain the relationship between corporate social responsibility disclosure and net profit margin of oil and gas firms in Nigeria.
- d. Examine the relationship between corporate social responsibility disclosure and return on asset of oil and gas firms in Nigeria.

II. Literature Review

Theoretical Review

This study is anchored on Stakeholder theory. This formed the foundation for this study. The Stakeholder theory was propounded by F. Edward Freeman in 1984 and popularized in his book "Strategic Management: A Stakeholder Approach. Freeman argues in his book that managers are not just answerable to shareholders but also need to consider any group or individual who can affect or is affected by the achievement of the firm's objectives. Stakeholder theory is based on the axiom that it is in the best long-term interest of a business to care for its stakeholders on whom the firm depends for its inputs and outputs. This perspective is a paradigm shift from the Neoclassical theory that focuses only on the business owners. older and Gawler (2005) defined "stakeholder" as "any individual, group, or institution who has a vested interest in the natural resources of the project area and/or who potentially will be affected by project activities and have something to gain or lose if conditions change or stay the same". Stakeholder theory, referred to as good management theory, is about doing good to those that the firm interacts with in order to create the enabling environment for the business firm to gain competitive advantage and grow. Stakeholder theory maintains that there is need for an organization to engage in active social role in the society where it is operating since it depends on the society for sustenance. Investors, shareholders, employees, customers, suppliers, government and the communities are the stakeholders capable of influencing organizational performance of which managers must ensure that their demands are satisfied and one way by which their demands are satisfied according to this theory is through corporate social responsibility.

Stakeholder is a broad concept; its scope encompasses the internal stakeholders like managers and employees, the external stakeholders like investors who commit resources based on their perception of the information available to them, the future generations who are affected by the corporation's past, present and future activities, and the broad society together with the societal issues that conditions human values (Orlitzky, 2013). This populist characteristic of the Stakeholder theory is instrumental to the development of the strategic case for the corporate social responsibility. This is done by integrating the social dimension into all the facets of business process to gain competitive advantage, leading to the achievement of organizational goals of profitability, stability, and growth (Chen & Wang, 2011). Conceptualized this way, it is possible to clearly identify the organizational goals and its stakeholders, develop strategies to manage the stakeholders through the manipulation of attitudes, structures, and practices, and

finally assess the relationship between stakeholder management and the consequences for the results. The stakeholder theory therefore takes into consideration the need to satisfy those interested parties capable of influencing organizational performance if an organization is to survive in its environment. Corporate social responsibility has become a necessity in this present time due to the goodwill it generates and for the fact that interdependence exist between the corporate firms and the environment where they are operating. The purpose of establishing an enterprise is value creation that involves producing goods and services that will satisfy the demands of the society which maximizes profit for the owner and contribute in solving societal needs (Kasim, 2022).

Stakeholder theory provides a valuable framework for providing theoretical explanation for the relationship between corporate social responsibility (CSR) and financial performance. According to stakeholder theory, organizations are accountable not only to shareholders but also to a broader set of stakeholders, including employees, customers, suppliers, communities, and the environment. In the context of oil and gas firms in Nigeria, by engaging in corporate social responsibility activities, oil and gas firms can enhance their reputation and brand image among stakeholders, including customers, investors, and the broader community. Positive perceptions of the company as a responsible corporate citizen can lead to increased customer loyalty, investor confidence, and brand loyalty, which can ultimately translate into higher sales, market share, and profitability.

III. Conceptual Review

Corporate Social Responsibility

There are several definitions of corporate social responsibility (CSR), however, a few of them are discussed here. Corporate social responsibility simply means the relationship of an organization or company and the environment or the society where it operates. According to Crowder and Aras (2018) corporate social responsibility is the relationship between a corporation and its stakeholders. Stakeholders here include every other individual, groups and that have anything to do with the corporation. According to Ehioghien and Eneh (2019) corporate social responsibility is a strategy for demonstrating good faith, social legitimacy, and a commitment that goes beyond the financial bottom line. Moreover, corporate social responsibility is about how companies manage the business processes to produce an overall positive impact on society, in accordance with the World Business Council for Sustainable Development (WBCSD) that states, "Corporate Social Responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large. Corporate social responsibility is viewed as a comprehensive set of policies, practices, and programs that are integrated into business operations, supply chains, and decision-making processes throughout the company and usually include issues related to business ethics, community investment, environmental concerns, governance, human rights, the marketplace as well as the workplace. Corporate social responsibility is "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (Daferighe, Akpanuko & Offiong (2019).

Dimensions of Corporate Social Responsibility Accounting

The dimensions of corporate social responsibility adopted in this study includes:

1. Corporate Social Responsibility Expenditure

Corporate social responsibility expenditure on education is expenditure made by deposit money banks on free education, quiz, debates, essay, competitions, public lectures, symposia, conferences and sponsored academic scholarship awards in managing an organization that is economically viable, legal, ethical, and supportive of the community. Banks are some of the major contributors to social investment and educational initiatives are a critical part of their investment. The bank's educational initiatives entail assisting host communities to provide sustainable and qualitative education that ultimately reaches all the people. It is the bank's belief that education is a long-term investment with an equally long gestation period, and should be one of the best legacies to bequeath to individuals, groups and society (Umoren, Isiavwe-Ogbari & Atolagbe, 2016).

2. Corporate Social Responsibility Disclosure

Social responsibility disclosure is the process of communicating the social and environmental impacts of the economic activities of the company on society. Furthermore, social responsibility disclosure is becoming more prevalent, driven by a growing recognition that sustainability related issues can materially affect a company's performance, demands from various stakeholder groups for increased levels of transparency and disclosure and the need for companies (and the business community more generally) to appropriately respond to issues of sustainable development. According to Global Reporting Initiative (2016) "A social responsibility disclosure is a report published by a company or organization about the economic, environmental and social impacts caused by its everyday activities.

IV. Financial Performance

Financial Performance in broader sense refers to the degree to which financial objectives being or has been accomplished and is an important aspect of finance risk management. It is the process of measuring the results of a firm's policies and operations in monetary terms. It is used to measure firm's overall financial health over a given period of time and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. According to Kaplan (2015) the term financial performance is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. Financial performance refers to the act of performing financial activity. In broader sense, financial performance refers to the degree to which financial objectives are being or have been accomplished. It is the process of measuring the results of a firm's policies and operations in monetary terms. There are many different ways to measure financial performance, but all measures should be taken in aggregation. All organizations have financial performance measures as part of their performance management, although there is debate as to the relative importance

of financial and non-financial indicators. Proponents of financial performance measures argue that they are necessary because of the primary objectives of firms (Kaplan, 2015).

Measures of Financial Performance

The measures of financial performance adopted in this study include:

1. Net Profit Margin (NPM)

Profit usually acts as the entrepreneur's reward for his/her investment. As a matter of fact, profit is the main motivator of an entrepreneur for doing business. Profit is also used as an index for performance measuring of a business (Ogbadu, 2019). Net profit, also referred to as the bottom line, net income, or net earnings is a measure of the profitability of a venture after accounting for all costs and taxes. It is the actual profit, and includes the operating expenses that are excluded from gross profit. A common synonym for net profit when discussing financial statements (which include a balance sheet and an income statement) is the bottom line. This term results from the traditional appearance of an income statement which shows all allocated revenues and expenses over a specified time period with the resulting summation on the bottom line of the report. In simplistic terms, net profit is the money left over after paying all the expenses of an endeavour. In practice this can get very complex in large organizations or endeavors (Mills, 2018). The formula to calculate net profit margin is as:

$$\text{NPM} = \frac{\text{Net Profit}}{\text{Revenues}}$$

2. Return on Assets (ROA)

According to Emekekwe (2018) return on assets (ROA) is a ratio which seeks to measure the amount of profit generated from the entire assets of the firm. It is expressed as Profit before tax Total Assets. Ekwe and Duru (2012) opines that return on assets (ROA) was used as dependent variables, because it is an indicator of managerial efficacy. Return on asset is an indicator of how profitable a company is relative to its total assets. It gives an idea as to how efficient management is at using its assets to generate earnings, that is, it measures efficiency of the business in using its assets to generate net income. It is a profitability ratio. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. Sometimes this is referred to as "return on investment". Return on assets is the ratio of annual net income to average total assets of a business during a financial year. It can be found on income statement. Average total assets are calculated by dividing the sum of total assets at the beginning and at the end of the financial year by 2. Total assets at the beginning and at the end of the year can be obtained from year ending balance sheets of two consecutive financial years (Adekunle & Aghedo, 2014). The formula to calculate return on assets is:

$$\text{ROA} = \frac{\text{Annual net income}}{\text{Average Total Asset}}$$

V. Empirical Review

Bariweni (2024) investigated the relationship between corporate social responsibility and financial performance of quoted oil and gas companies in Nigeria. The research adopted the ex post facto research design and data was collected from a sample of nine (9) listed oil and gas companies for a period of eleven (11) years from 2010 to 2020. The corporate social responsibility activities of the oil and gas companies in Nigeria were measured against financial performance. The panel least square (PLS) regression estimation technique was used for data analysis. Findings of the research revealed: a non-significant negative relationship between employees' training activities and return on assets; employees' training activities and return on equity had a negative and significant relationship; there was a non-significant negative relationship between environmental compliance activities and return on assets; a significant positive relationship between environmental compliance activities and return on equity; a non-significant positive relationship between community development activities and return on assets; a non-significant negative relationship between community development activities and the return on equity. The research thus concluded that costs associated with employees training and environmental compliance activities contribute meaningfully to return equity however, none of the variable are significantly enhance return on assets.

Iloma and Chukwu (2023) investigated the effect of corporate social responsibility (CSR) activities on the profitability of oil firms listed in Nigeria by ascertaining how community development costs (CDC) and employee benefits are associated with the financial performance of the firms. Data on the study variables from thirteen oil and gas firms were collected over a period of twenty-one years (1998 to 2018), and analysed using a heteroscedasticity and autocorrelation-consistent regression technique to determine the effect of CSR activities on the financial performance of the sampled firms. The results showed that community development cost (CDC) had a significant positive effect on profitability. Employee benefits also have similar effect on financial performance. These findings indicate that investing in CSR activities ultimately has a favourable impact on corporate financial performance.

Solanke, Olugbamiye, Olasehinde, Efuntade, Olaniyi and Kolawole (2022) investigated the effects of corporate social responsibility on financial performance of listed oil and gas sector in Nigeria and necessary information was obtained from secondary data. The sample size selected was five quoted oil and gas sectors with the financial statements run from 2011-2020. The regression analysis was employed for the running of the data collected from Nigerian exchange group. The result showed that economic, donation and legal responsibilities had non-significant influence on return on assets (ROA) and return on equity (ROE) of the oil and gas firms in

Nigeria. The study concluded that corporate social responsibility had non-significant relationship with financial performance of listed oil and gas industry in Nigeria.

Etale, Ochuba and Sawyerr (2021) examined the effect of social cost accounting on profitability with a focus on GlaxoSmithKline Consumer Nigeria PLC in a case study. The study adopted employee benefits, incentives welfare and healthcare cost (EBI) and contribution to government revenue (CGR) as proxy for social cost accounting (the independent variables), while profit after tax (PAT) representing profitability was adopted as the dependent variable. Secondary data for the selected study variables were obtained through content analysis of the annual reports of GlaxoSmithKline for the period 2011 to 2018. The study employed descriptive statistics and multiple regression analysis based on the E-view 10 software as techniques for data analysis. The results revealed that all the independent variables had positive relationship with profit after tax, but only contribution to government revenue was significant at 5% level. The regression results also showed that the coefficient of determination (R-squared) value of approximately 0.94 indicating that 94% of changes in the dependent variable are accounted for by the combined effect of changes in the independent variables. The combined effect of variations of the explanatory variables significantly explained changes in the dependent variable with probability of F-statistic value of 0.000007 (at 5% level of significance).

Kornom-Gbaraba and Aernan (2021) ascertained the impact of corporate social responsibility cost on the financial performance of international oil companies in rivers state, Nigeria. Analytic descriptive survey design was used for the study, with a population consisting of six hundred and four (604) personnel drawn from two international oil companies (IOCs), Shell Petroleum Development Company (SPDC) and Nigerian Agip Oil Company (NAOC) operating in Rivers state. The sample size consisted of six hundred and four (604) personnel; 315 for SPDC and 289 for NAOC, a purposive sampling technique was adopted. The research instrument is a self-structured questionnaire titled; "Environmental Cost Financial Performance Questionnaire (ECFPQ) with 10 questionnaire items on a modified validated four point rating scales response. Findings revealed that both staff of from Shell and Agip agreed that environmental cost (Corporate Social Responsibility Cost) impact on the financial performance of their organisations (IOCs) in Rivers State, Nigeria. It was therefore concluded that despite the impact, corporate social responsibility is a way of giving back to the society which the IOCs should not shy away from.

Ugwu (2020) examined the issues in corporate social responsibility practices in oil-producing communities through a descriptive survey of oil-producing communities in three Local Government Areas in Rivers State. Corporate social responsibilities of companies to their host communities were identified, the extent to which communities benefitted from the social responsibility were ascertained and the issues arising in the implementation of the social responsibility examined. The findings showed that community's representatives mismanaged funds meant for community projects, the youths vandalized oil pipelines and indulged in crimes among others.

Ehioghiren and Eneh (2019) determined corporate social responsibility accounting and financial performance of insurance companies in Nigeria. The research design adopted for the study is expo facto research design. The population of the study consists of all the 40 companies quoted in the Nigeria Stock Exchange as at December 2016. A sample of 25 insurance companies was selected base on their size from the population of the insurance companies. Data for the study were obtained from annual reports for the period of ten (10) years ranging from 2007 to 2016. Multiple regression analysis was carried out to determine the desire relationship. Findings showed a significant relationship between corporate social responsibility accounting and return on capital employed and net profit margin, but a negative relationship with earnings per share.

Ekwok and Ugor (2019) investigated the role of corporate social responsibility in promoting sustainable community development, using the community development initiatives of Shell Oil Company in some communities in Rivers State. The survey research design was used to gather data for the study; whereby the questionnaire and interview instruments were used to collect the data. A total of 200 respondents were selected for the study using random probability sampling techniques. Results of the investigation revealed that Shell has a well-defined CSR programmes that are capable of advancing the development of their host communities in Rivers State. Findings also revealed that the methods employed by the company in tackling environmental issues in the Niger Delta were grossly inadequate.

Daferighe, Akpanuko and Offiong (2019) studied social accounting practices and how they affect the profitability of the companies participating in Nigeria. Using secondary data from the financial statements of the companies studied, the study investigated the relationship between health-related costs (HRC) and return on capital (ROE) of Nigerian companies. The descriptive design of the research was adopted for the study. From 2009 to 2015, samples were taken from fifteen companies from a population of the oil and gas, manufacturing and construction sectors and the construction of the Nigerian economy. The data were analyzed using descriptive statistics and multiple regression. The variable Social Accounting Practices: HRC has been found to have an insignificant positive relationship with the ROE of companies in Nigeria.

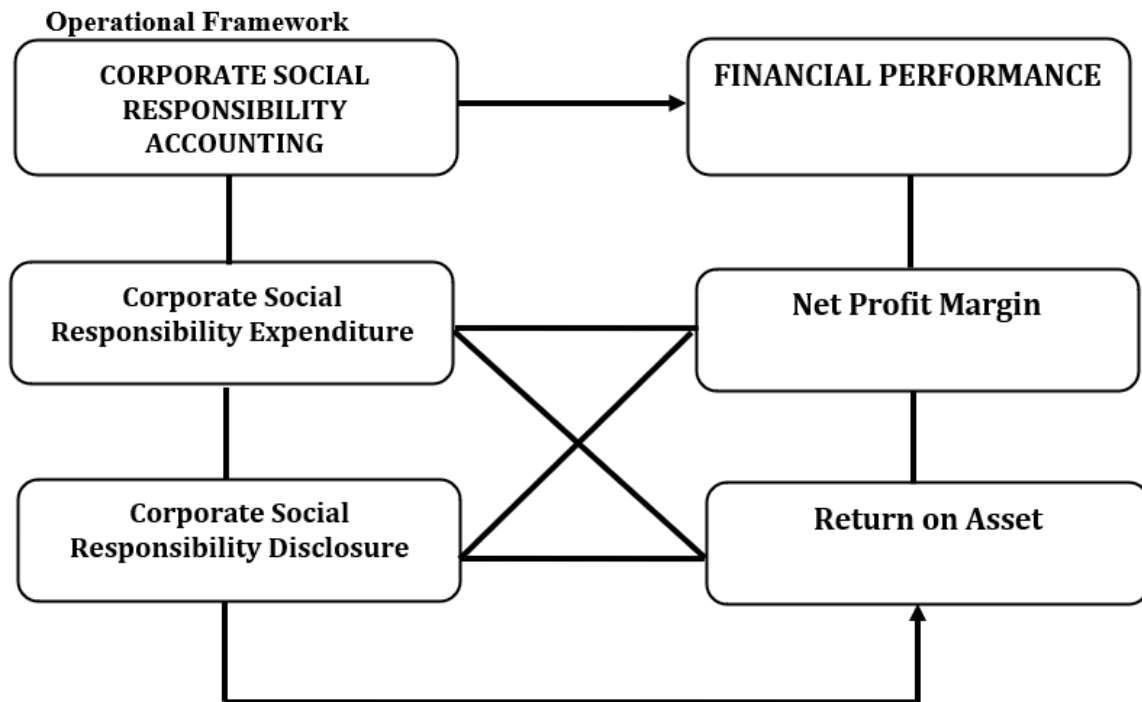
Ohaka and Ogaluzor (2018) carried out this study on corporate social responsibility accounting and the effect of donations on profitability of oil and gas companies in Nigeria. The study used a cross sectional survey design to carry out the research. The population of the study was all the oil and gas companies in Nigeria. Data collected were analyzed through the Simple Regression Analysis and Partial Correlation. Results of the study revealed that: Donation significantly affects return on equity and donation significantly affects net profit of the oil and gas companies in Nigeria, Hence, from the findings, the study concluded that there is a strong positive relationship between corporate social responsibility accounting and profitability.

VI. Summary and Gap in Literature

This study has empirically reviewed some empirical studies. Based on the empirical studies reviewed, it was observationally discovered that many studies (Bariweni, 2024; Iloma& Chukwu, 2023; Solanke, Olugbamiye, Olasehinde, Efuntade, Olaniyi & Kolawole, 2022; Etale, Ochuba& Sawyerr, 2021; Kornom-Gbaraba &Aernan, 2021; Ugwu, 2020; Ehioghiren & Eneh, 2019; Ekwok & Ugor, 2019; Daferighe, Akpanuko & Offiong, 2019; Ohaka & Ogaluzor, 2018) have been carried out on effect of corporate social

responsibility on financial performance of corporate organizations in Nigeria but only very few of those related studies were carried out on effect of corporate social responsibility on financial performance of oil and gas firms in Nigeria. Also, none of the previous studies used combination of corporate social responsibility expenditure and corporate social responsibility disclosure as dimensions of corporate social responsibility accounting in their studies. This created a gap that this study aims to bridge in knowledge. Hence, effort were devoted in this study examine the effect of corporate social responsibility on financial performance of oil and gas firms in Nigeria. Also in this study, both corporate social responsibility expenditure and corporate social responsibility disclosure were used as the dimensions of corporate social responsibility accounting.

Figure 2.1: Operational Framework of Corporate Social Responsibility and Financial Performance of Oil and Gas Firms in Nigeria



Source: Researcher's Operationalization (2024) with the Dimensions of Corporate Social Responsibility adapted from the Work of Umobong and Agburuga (2018) while the Measures of Financial Performance was adapted from the Work of Ohaka and Ogaluzor (2018)

VII. Research Methodology

Research Design

This study is quantitative in nature and as a result adopted ex post facto research design. An ex post facto investigation seeks to reveal possible relationships by observing an existing condition or state of affairs and searching back in time for plausible contributing factors. Ex post facto design is deemed appropriate for the study because the study is non-experimental, and seeks to investigate causal relationship between the dependent (financial performance) and independent variable (corporate social responsibility) of the study, making use of already existing data

Population of the Study

The population of the study comprised of ten oil and gas firms in Nigeria that are listed on Nigeria Exchange Group as at December, 2023.

Sampling Procedure and Sample Size

In this study, the researcher adopted convenience sampling technique is applied. This implies that the sample is chosen purely on the basis of convenience. Furthermore, the study sampled five (5) oil and gas firms in Nigeria that were in operation as at 31st December, 2023. The decision is based on the fact that they fully satisfied the listing requirement of Nigerian Exchange Group (NGX) and have available data required for the study.

Data Collection Method and Sources

Secondary data were used for this study and these data were sourced from the annual reports of oil and gas firms in Nigeria listed on Nigerian Exchange Group (NGX). These data covered the period from 2018 to 2023.

Operational Definitions of Research Variables

Operationally, the variables of this study are classified as dependent variable and independent variable. Financial performance is the dependent variable and it is measured by net profit margin and return on asset while corporate social responsibility is the independent variable and is proxied by corporate social responsibility expenditure and social responsibility disclosure:

Net Profit Margin (Dependent Variable): This is the percentage of revenue remaining after all operating expenses, interest, taxes and preferred stock dividends (but not common stock dividends) have been deducted from a bank's total revenue.

Return on Asset (Dependent Variable): This shows the extent to which the asset or resources of an organization has yielded the desired returns. It evaluates the performance of management in the utilization of the company's assets.

Corporate Social Responsibility Expenditure (Independent Variable): This refers to the expenditure on corporate initiative to assess and take responsibility for the company's effects on the environment and impact on social welfare.

Social Responsibility Disclosure (Independent Variable): This is the process of communicating the social and environmental impacts of the economic activities of the company on society. This is measured by a checklist or ratio of financial to non-financial items in the annual financial report.

Model Specification

Multiple regression model is employed in this study to establish the effect of independent variable on the dependent variable. Multiple regression is statistical method that allows us to summarize the study relationship among more than two continuous (quantitative) variables. Specifically, two different sets of multiple regression model will be specified:

The functional specifications of the models are given as follow:

$$NPM = f(CSRE, CSRD) \quad (3.1)$$

$$ROA = f(CSRE, CSRD) \quad (3.2)$$

The mathematical specifications of the models are given as follows:

$$NPM = \alpha_0 + \alpha_1 CSRE + \alpha_2 CSRD \quad (3.3)$$

$$ROA = \alpha_0 + \alpha_1 CSRE + \alpha_2 CSRD \quad (3.4)$$

The econometrical specifications of the models are given as follows:

$$NPM = \alpha_0 + \alpha_1 CSRE + \alpha_2 CSRD + \mu_t \quad (3.5)$$

$$ROA = \alpha_0 + \alpha_1 CSRE + \alpha_2 CSRD + \mu_t \quad (3.6)$$

Where:

NPM = net profit margin

ROA = return on asset

CSRE = corporate social responsibility expenditure

CSRD = corporate social responsibility disclosure

α_0 = Constant variable

α_1 = Parameter of corporate social responsibility expenditure

α_2 = Parameter of corporate social responsibility disclosure

μ_t = Disturbance or error term

Data Analysis Technique

This study adopted econometric method. Econometric method is statistical method specifically adopted to the peculiarities of economic phenomena. It is adopted because of its ability to provide a precise prediction of economic magnitude. To achieve this, method of Ordinary Least Square (OLS) estimation was employed for the econometric analysis. This is because Ordinary Least Square technique has some very attractive statistical properties that have made it one of the most powerful and popular method of regression analysis. The Ordinary Least Square technique, under certain assumptions has desirable statistical properties (efficiency, consistency and unbiasedness). Data analysis will be facilitated by E-Views 12 statistical package.

VIII. Data Analysis and Discussion of Findings

Descriptive Statistics

The descriptive statistics for the study variables are summarized in Table 1:

Table 1: Descriptive Statistics of Net Profit Margin (NPM), Return on Asset (ROA), Corporate Social Responsibility Expenditure (CSRE), Corporate social Responsibility Disclosure (CSRD)

	NPM	ROA	CSRE	CSRD
Mean	0.933333	2.427167	93.48200	40.28467
Median	0.795000	2.330500	62.17000	41.83500
Maximum	2.460000	4.382000	262.3100	85.64000

Minimum	0.120000	1.010000	16.79000	3.600000
Std. Dev.	0.703216	0.929359	64.88141	23.69649
Skewness	0.963034	0.282381	0.961404	0.079758
Kurtosis	2.935952	2.115985	2.783922	2.272076
Jarque-Bera	4.642304	1.375549	4.679847	0.694149
Probability	0.098160	0.502694	0.096335	0.706753
Sum	28.00000	72.81500	2804.460	1208.540
Sum Sq. Dev.	14.34087	25.04753	122078.3	16284.18
Observations	30	30	30	30

Source: Author's Computation, 2024 (EViews, 12.0 Output).

Table 1 above presents the descriptive statistics (net profit margin, return on asset, corporate social responsibility expenditure, and corporate social responsibility disclosure) from 2018 to 2023. As shown in the table, net profit margin (NPM) recorded over the period a mean value of 0.93% with a maximum of 2.46% and minimum of 0.12% per annum. The standard deviation of net profit margin (NPM) is 57.70% and this indicates that net profit margin (NPM) has low deviation or dispersion from the mean. In addition, return on asset (ROA) recorded over the period a mean value of 2.42% with a maximum of 4.38% and minimum of 1.01% per annum. The standard deviation of return on asset (ROA) is 0.93% and this indicates that return on asset (ROA) has low deviation or dispersion from the mean. In furtherance, corporate social responsibility expenditure (CSRE) recorded over the period a mean value of ₦93.48 billion with a maximum of ₦262.31 billion and minimum of ₦16.79 billion per annum. The standard deviation of corporate social responsibility expenditure (CSRE) is ₦64.88 and this indicates that corporate social responsibility expenditure (CSRE) has low deviation or dispersion from the mean. Lastly, corporate social responsibility disclosure (CSRSD) recorded over the period a mean value of 40.28 with a maximum of 85.64 and minimum of 3.6 per annum. The standard deviation of corporate social responsibility disclosure (CSRSD) is 23.69 and this indicates that corporate social responsibility disclosure (CSRSD) has low deviation or dispersion from the mean.

Estimation of Regression Model One

The results obtained of the estimation of linear regression model one are hereby presented in Table 2:

Table 2: Results of Regression Analysis of Model 1

Dependent Variable: NPM				
Method: Least Squares				
Date: 31/03/24 Time: 14:52				
Sample: 130				
Included observations: 30				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
	t			
C	4.342004	1.942330	2.235462	0.0327
CSRE	0.491795	0.194638	2.526716	0.0127
CSRSD	0.767056	0.212695	3.606373	0.0011
R-squared	0.935675	Mean dependent var		3.465429
Adjusted R-squared	0.911385	S.D. dependent var		1.653612
S.E. of regression	1.411506	Akaike info criterion		3.634401
Sum squared resid	61.76278	Schwarz criterion		3.812155
Log likelihood	-59.60202	Hannan-Quinn criter.		3.695762
F-statistic	15.22129	Durbin-Watson stat		2.332308
Prob(F-statistic)	0.000000			

Source: Regression Results (E-views 12 Output)

Interpretation of Results

The results obtained are interpreted in this section as appropriate:

$$\text{NPM} = 4.342004 + 0.491795\text{CSRE} + 0.767056\text{CSR D}$$

a. Corporate Social Responsibility Expenditure (CSRE) and Net Profit Margin (NPM)

From the regression results in Table 2, corporate social responsibility expenditure has a positive value of 0.491795. This implies that there is a positive relationship between corporate social responsibility expenditure and net profit margin. The implication of this is that net profit margin will increase by 0.491795 when corporate social responsibility expenditure increases by one unit while net profit margin will decrease by 0.491795 when corporate social responsibility expenditure decreases by one unit.

b. Corporate Social Responsibility Disclosure (CSR D) and Net Profit Margin (NPM)

From the regression results in Table 2 also, corporate social responsibility disclosure has a positive value of 0.767056. This implies that there is a positive relationship between corporate social responsibility disclosure and net profit margin. The implication of this is that net profit margin will increase by 0.767056 when corporate social responsibility disclosure increases by one unit while net profit margin will decrease by 0.767056 when corporate social responsibility disclosure decreases by one unit.

2. Interpretation of R-Squared and Adjusted R-Squared

The R-squared (R^2) value obtained from the regression analysis as shown in Table 2 is 0.935675. This means that the regression line has goodness of fit. This also implies that about 94% of changes in net profit margin are explained by corporate social responsibility expenditure and corporate social responsibility disclosure while the remaining 6% is explained by other factors outside the model. The Adjusted R-squared value from the regression result in Table 2 is 0.911385. This shows that the coefficient of determination obtained is very reliable. The result also implies that, if the coefficient of determination is adjusted, about 91% of the total variations in net profit margin are explained by corporate social responsibility expenditure and corporate social responsibility disclosure while the remaining 9% is explained by other factors outside the model.

3. Significance of Individual Parameters (Independent Variables): To determine the significance of individual parameter, we compare the P-value of each parameter with the alpha value of 0.05. From the regression result, the P-value for corporate social responsibility expenditure is 0.0127 while the alpha value is 0.05. However, since the P-value is less than the alpha value (i.e. $0.0127 < 0.05$), we therefore conclude that corporate social responsibility expenditure is statistically significant. Lastly from the regression result, the P-value for corporate social responsibility disclosure is 0.0011 while the alpha value is 0.05. However, since the P-value is less than the alpha value (i.e. $0.0011 < 0.05$), we therefore conclude that corporate social responsibility disclosure is statistically significant.

4. Significance of Overall Parameters (Estimated Model): To determine the overall significance of the model, we compare the prob (F-statistic value) with the alpha value of 0.05. From the regression result, prob(F-statistic value) is 0.00000 while the alpha value is 0.05. However, since the prob(F-statistic) value is less than the alpha value (i.e. $0.00000 < 0.05$), we therefore conclude that the regression model estimated is statistically significant. This also means that corporate social responsibility expenditure and corporate social responsibility disclosure have joint significant effect on net profit margin.

Estimation of Regression Model Two

The results obtained of the estimation of linear regression model one are hereby presented in Table 3:

Table 3: Results of Regression Analysis of Model 2

Dependent Variable: ROA				
Method: Least Squares				
Date: 31/03/24 Time: 14:54				
Sample: 130				
Included observations: 30				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
	t			
C	4.931135	3.080279	1.600873	0.1195
CSRE	0.242858	0.108670	2.234821	0.0474
CSR D	0.382103	0.137306	2.782837	0.0220
R-squared	0.891689	Mean dependent var		13.10104
Adjusted R-squared	0.833038	S.D. dependent var		1.075984
S.E. of regression	0.810182	Akaike info criterion		2.540450
Sum squared resid	17.06626	Schwarz criterion		2.727276

Log likelihood	-34.10675	Hannan-Quinn criter.	2.600217
F-statistic	8.383279	Durbin-Watson stat	2.176742
Prob(F-statistic)	0.000460		

Source: Regression Results (E-views 12 Output)

Interpretation of Results

The results obtained are interpreted in this section as appropriate:

$$ROA = 4.931135 + 0.242858CSRE + 0.382103CSR$$

a. Corporate Social Responsibility Expenditure(CSRE) and Return on Asset (ROA)

From the regression results in Table 3, corporate social responsibility expenditure has a positive value of 0.242858. This implies that there is a positive relationship between corporate social responsibility expenditure and return on asset. The implication of this is that return on asset will increase by 0.242858 when corporate social responsibility expenditure increases by one unit while return on asset will decrease by 0.242858 when corporate social responsibility expenditure decreases by one unit.

b. Corporate Social Responsibility Disclosure (CSR) and Return on Asset (ROA)

From the regression results in Table 3 also, corporate social responsibility disclosure has a positive value of 0.382103. This implies that there is a positive relationship between corporate social responsibility disclosure and return on asset. The implication of this is that return on asset will increase by 0.382103 when corporate social responsibility disclosure increases by one unit while return on asset will decrease by 0.382103 when corporate social responsibility disclosure decreases by one unit.

2. Interpretation of R-Squared and Adjusted R-Squared

The R-squared (R^2) value obtained from the regression analysis as shown in Table 3 is 0.891689. This means that the regression line has goodness of fit. This also implies that about 89% of changes in return on asset are explained by corporate social responsibility expenditure and corporate social responsibility disclosure while the remaining 11% is explained by other factors outside the model. The Adjusted R-squared value from the regression result in table 4.3 is 0.833038. This shows that the coefficient of determination obtained is very reliable. The result also implies that, if the coefficient of determination is adjusted, about 83% of the total variations in return on asset are explained by corporate social responsibility expenditure and corporate social responsibility disclosure while the remaining 17% is explained by other factors outside the model.

3. Significance of Individual Parameters (Independent Variables): To determine the significance of individual parameter, we compare the P-value of each parameter with the alpha value of 0.05. From the regression result, the P-value for corporate social responsibility expenditure is 0.0474 while the alpha value is 0.05. However, since the P-value is less than the alpha value (i.e. $0.0474 < 0.05$), we therefore conclude that corporate social responsibility expenditure is statistically significant. Lastly from the regression result, the P-value for corporate social responsibility disclosure is 0.0220 while the alpha value is 0.05. However, since the P-value is less than the alpha value (i.e. $0.0220 < 0.05$), we therefore conclude that corporate social responsibility disclosure is statistically significant.

4. Significance of Overall Parameters (Estimated Model): To determine the overall significance of the model, we compare the prob (F-statistic value) with the alpha value of 0.05. From the regression result, prob (F-statistic value) is 0.000460 while the alpha value is 0.05. However, since the prob(F-statistic) value is less than the alpha value (i.e. $0.000460 < 0.05$), we therefore conclude that the regression model estimated is statistically significant. This also means that corporate social responsibility expenditure and corporate social responsibility disclosure have joint significant effect on return on asset.

Testing of Research Hypotheses

The null hypotheses formulated in chapter one of this study are tested using the p-values obtained from the regression results. The decision rule for accepting or rejecting any of these null hypotheses is stated below:

Decision Rule: Reject the null hypotheses at 5% level of significance if the *p-value* is less than *alpha value* of 0.05. Contrarily, retain the null hypotheses at 5% level of significance if the *p-value* is greater than *alpha value* of 0.05.

Hypothesis One:

H₀₁: There is no significant relationship between corporate social responsibility expenditure and net profit margin of oil and gas firms in Nigeria.

Decision on Hypothesis One: The *p-value* for corporate social responsibility expenditure from Table 4 is 0.0127. However, since the *p-value* is less than 0.05 levels of significance (i.e. $0.0127 < 0.05$), we therefore reject the null hypothesis one and conclude that there is a significant relationship between corporate social responsibility expenditure and net profit margin of oil and gas firms in Nigeria.

Hypothesis Two

H₀₂: There is no significant relationship between corporate social responsibility expenditure and return on asset of oil and gas firms in Nigeria.

Decision on Hypothesis Two: The *p-value* for corporate social responsibility expenditure from Table 3 is 0.0474. However, since the *p-value* is less than 0.05 levels of significance (i.e. $0.0474 < 0.05$), we therefore reject the null hypothesis two and conclude that there is a significant relationship between corporate social responsibility expenditure and return on asset of oil and gas firms in Nigeria.

Hypothesis Three

H₀₃: There is no significant relationship between corporate social responsibility disclosure and net profit margin of oil and gas firms in Nigeria of Rivers State.

Decision on Hypothesis Three: The *p-value* for corporate social responsibility disclosure from Table 2 is 0.0011. However, since the *p-value* is less than 0.05 levels of significance (i.e. $0.0011 < 0.05$), we therefore reject the null hypothesis three and conclude that there is a significant relationship between corporate social responsibility disclosure and net profit margin of oil and gas firms in Nigeria.

Hypothesis Four

H₀₄: There is no significant relationship between corporate social responsibility disclosure and return on asset of oil and gas firms in Nigeria.

Decision on Hypothesis Four: The *p-value* for corporate social responsibility disclosure from Table 3 is 0.0220. However, since the *p-value* is less than 0.05 levels of significance (i.e. $0.0220 < 0.05$), we therefore reject the null hypothesis four and conclude that there is a significant relationship between corporate social responsibility disclosure and return on asset of oil and gas firms in Nigeria.

IX. Discussion of Findings

This study has provided a critical analysis of the effects of corporate social responsibility on financial performance of oil and gas firms in Nigeria. The findings of this study are discussed in this section as follows:

Corporate Social Responsibility Expenditure and Net Profit Margin

The results of the study showed that corporate social responsibility expenditure has a positive and significant effect on net profit margin of oil and gas firms in Nigeria. This implies that increase in corporate social responsibility expenditure will lead to significant increase in net profit margin of oil and gas firms in Nigeria. It can therefore be inferred that corporate social responsibility expenditure as a proxy of corporate social responsibility has significant positive effect on financial performance of oil and gas firms in Nigeria. This finding is in agreement with the finding of Joshua, Efiong, and Imong (2019) who established that corporate social responsibility expenditure has a positive and significant effect on operating profit of listed oil and gas firms in Nigeria. This finding is also in agreement with the finding of Rateb (2018) which stated that corporate social responsibility expenditure has positive and significant effect on profit after tax of non-financial companies listed on the Amman Stock Exchange (ASE) over the period 2014-2016.

Corporate Social Responsibility Expenditure and Return on Asset

Evidences that emerged from the results of the study showed that corporate social responsibility expenditure has a positive and significant effect on return on asset of oil and gas firms in Nigeria. This implies that increase in corporate social responsibility expenditure will lead to significant increase in return on asset of oil and gas firms in Nigeria. It can therefore be inferred that corporate social responsibility expenditure as a proxy of corporate social responsibility has significant positive effect on financial performance of oil and gas firms in Nigeria. This finding is in agreement with the finding of Bariweni (2024) who found that there is a significant positive relationship between corporate social responsibility expenditure and firm performance at 5% level of significant while a positive significant association was also recorded against corporate social responsibility expenditure size and return on assets.

Corporate Social Responsibility Disclosure and Net Profit Margin

Furthermore, the result of the study showed that corporate social responsibility disclosure has a positive and significant effect on net profit margin of oil and gas firms in Nigeria. This implies that increase in corporate social responsibility disclosure will lead to significant increase in net profit margin of oil and gas firms in Nigeria. It can therefore be inferred that corporate social responsibility disclosure as a proxy of corporate social responsibility has significant positive effect on financial performance of oil and gas firms in Nigeria. This finding agrees with the finding of Ohaka and Ogaluzor (2018) who stated that there was a positive and significant effect of corporate social responsibility accounting on net profit margin of oil and gas firms in Nigeria.

Corporate Social Responsibility Disclosure and Return on Asset

Lastly, the results of the study showed that corporate social responsibility disclosure has a positive and significant effect on return on asset of oil and gas firms in Nigeria. This implies that increase in corporate social responsibility disclosure will lead to significant increase in return on asset of oil and gas firms in Nigeria. It can therefore be inferred that corporate social responsibility disclosure as a proxy of corporate social responsibility has significant positive effect on financial performance of oil and gas firms in Nigeria. This finding is in agreement with the finding of Daferighe, Akpanuko and Offiong (2019) who revealed that at 5 per cent level of significance, corporate social responsibility disclosure has positive relationship with return on asset and net assets per share of food and beverages firms listed in the Nigerian Stock Exchange. Daferighe, Akpanuko and Offiong (2019) also found that larger corporate social responsibility disclosure contributes positively and significantly to the return on asset of oil and gas firms in Nigeria.

X. Conclusion and Recommendations**Conclusion**

The study has empirically examined the effects of corporate social responsibility on financial performance of oil and gas firms in Nigeria. From the analysis above, the study found that corporate social responsibility expenditure and corporate social responsibility disclosure have individual and joint significant effect on net profit margin and return on asset of oil and gas firms in Nigeria. The study therefore concludes that corporate social responsibility plays significant positive role in improving the financial performance of oil and gas firms in Nigeria.

Recommendations

Based on the findings and conclusion of the study, the following recommendations are hereby presented:

1. Given the positive and significant relationship between corporate social responsibility accounting and financial performance, management of oil and gas firms should ensure that social responsibility is inbuilt into their policy statements and back up with effective budget.
2. Shareholders at the annual general meeting should encourage the management of their firms to have well-structured corporate social responsibility programme in view of its benefits.
3. Government may by way of tax incentive motivate oil and gas firms to actively embark on corporate social responsibility as it will impact on their successes and reduce the burden on government in terms of provision of amenities for the society, communities and nation at large.
4. Management of oil and gas firms should create a unit or department within their firms that will be responsible for their social responsibility programmes which should ensure that their social responsibility policies are adequately implemented.

References

1. Adekunle, O., & Aghedo, A. (2014). Corporate governance and financial performance of selected quoted companies in Nigeria. *European Journal of Business and Management*, 6(9), 53-60.
2. Bariweni, B. (2024). Corporate social responsibility and financial performance of quoted oil and gas companies in Nigeria. *British Journal of Multidisciplinary and Advanced Studies: Business and Management Sciences*, 5(1), 74-89.
3. Chen, H., & Wang, X. (2011). Corporate social responsibility and corporate financial performance in China: An empirical research from Chinese firms. *Corporate Governance*, 11(4), 361-370.
4. Cole, G.A. (2005). *Organizational behaviour*. Nottingham: TJ International.
5. Crowther, D. & Aras, G. (2018). Corporate social responsibility. Retrieved on 10th July, 2019 from www.bookboon.com
6. Daferighe, E. E., Akpanuko, E. E., & Offiong, P. E. (2019). Social accounting practices and profitability of companies in Nigeria. *Archives of Business Research*, 7(5), 233-246.
7. Ehioghien, E. E., & Eneh, O. (2019). Corporate social responsibility accounting and financial performance of insurance companies in Nigeria (2007-2016). *International Journal of Academic Accounting, Finance & Management Research*, 3(5), 16-25.
8. Ekwe, M. C., & Duru, A. N. (2012). Liquidity management and corporate profitability in Nigeria. *ESUT Journal of Accountancy*, 3(1), 22 – 28.
9. Ekwok, J., & Ugor, O. (2019). The role of corporate social responsibility in promoting sustainable community development in Rivers State. *International Journal of Research in Business Studies and Management*, 3(11), 1-21.
10. Emekekwe, P. E. (2008). *Corporate financial management*. 5th Revised Ed; Kinshasha: African Bureau of Educational Sciences.
11. Etale, G., Ochuba, I., & Sawyerr, K. (2021). The effect of social cost accounting on profitability with a focus on GlaxoSmithKline Consumer Nigeria PLC in a case study. *Journal of Business Ethics*, 100(2), 349–366.
12. Eweje, G. (2018). Multinational oil companies' CSR initiatives in Nigeria: The Skepticism of Stakeholders in Host Communities. *Journal of Managerial Law*, 49(5/6), 77-89.
13. Glyn, R., Cornell, U., & Samuels, G. (2016). *Financial management* (9TH ed.) Delhi, Modern Printers.
14. Iloma, M. R. & Chukwu, G. J (2023). Corporate Social Responsibility and Profitability of Listed Oil Firms in Nigeria. *Journal of Accounting, Finance and Auditing Studies* 9(3), 1-16.
15. Kaplan, H. (2015). *Financial management*. John Wiley & Sons.
16. Kasim, H. (2022). *The Relationship Between Oil and Gas Industry Investment in Alternative Energy and Corporate Social Responsibility* (Doctoral dissertation). Available from ProQuest Digital Dissertations and Theses Database (UMI No. 3499193).
17. Kornom-Gbaraba, M. E., & Aernan, J. E. (2021). Impact of corporate social responsibility cost on the financial performance of international oil companies in Rivers State, Nigeria. *International Journal of Innovative Finance and Economics Research* 9(1), 109-117.
18. Kpolovie, P. J., & Sado, A. A. (2016). CSR for conflict resolution in Niger Delta oil & gas industry. *British Journal of Environmental Sciences*, 4(5), 1-53.
19. Lyndon, M. E., Ikechukwu, S. O., & Ayaundu, E. S. (2019). Social cost accounting and profitability of Glaxo Smith Kline Nigeria Plc. listed on the NSE. *European Journal of Business and Innovation Research*, 9(1), 31-52.

20. Mills, T. (2018). Financial performance. New York, DP Publications.
21. Oboreh, L. E., &Arukaro, J. (2021). Corporate social responsibility and performance of selected quoted companies in Nigeria. *International Journal of Business & Law Research*, 9(2), 83-96
22. Ofoburku, S. A. &Nwakoby, N. P. (2015). Effects of training on employees' productivity in Nigeria insurance industry. *British Journal of Economics, Management & Trade* 7(3), 227-235.
23. Ogbadu, E. E. (2019). Profitability through effective management of materials. *Journal of Economics and International Finance*,1(4), 99-105.
24. Ohaka, J., &Ogaluzor, O. I. (2018). Corporate social responsibility accounting and the effect of donations on profitability of oil and gas companies in Nigeria. *International Journal of Academic Research in Accounting, Finance and Management Sciences* Vol. 8(3), 265–276.
25. Orlitzky, M. (2013). Corporate social responsibility, noise, and stock market volatility. *The Academy of Management Perspectives*, 27(3), 230-254.
26. Pearce, J.A. & Robinson, R.B. (2015). *Strategic Management* (12th ed). New York: McGraw-Hill.
27. Solanke, F. T., Olugbamiye, D. O., Olasehinde, S., Efuntade, A. O., Olaniyi, R. B., & Kolawole, I. B. (2022). Corporate social responsibility and financial performance of oil and gas industry in Nigeria. *Proceedings of the 7th Annual International Academic Conference on Accounting and Finance*.
28. Ugwu, A. N. (2020). Issues in corporate social responsibility practices in oilproducing communities in Rivers State, Nigeria: Implications for community education. *Journal of Economics and Sustainable Development*, 11(4), 202-210.
29. Umoren, A. O., Isiafwe-Ogbari, M. E. &Atolagbe, T. M. (2016). Corporate social responsibility and firm performance: A study of listed firms in Nigeria. A Paper Presented at ICAN Second International Academic Conference on Accounting and Finance at Lagos Airport Hotel, Ikeja, May 18-20, 983-998.

APPENDIX

YEAR	OIL AND GAS FIRMS	NPM	ROA	CSRE	CSRD
2018	CONOIL PLC	0.70	1.250	16.79	6.66
2019		0.87	1.010	24.07	6.17
2020		0.17	1.750	28.71	4.85
2021		1.41	1.590	37.12	3.60
2022		2.03	1.660	41.63	4.02
2023		0.72	1.520	47.13	8.69
2018	OANDO PLC	1.99	1.077	262.31	47.26
2019		2.46	1.142	190.58	34.06
2020		0.13	1.928	199.39	51.42
2021		1.19	2.014	171.22	81.61
2022		2.37	2.902	185.48	76.39
2023		2.46	1.404	192.16	85.64
2018	FORTE OIL PLC	0.89	1.895	62.03	42.56
2019		1.10	2.231	112.60	51.55
2020		0.48	2.697	163.39	50.27
2021		0.45	3.545	115.18	68.68
2022		0.56	3.751	140.76	62.62
2023		0.27	3.822	121.92	74.22
2018	AGIP OIL COMPANY LIMITED	0.97	2.180	44.18	22.38
2019		1.26	2.430	52.91	35.85
2020		0.90	2.709	56.17	55.33
2021		0.59	3.552	55.99	47.79
2022		1.11	3.839	61.19	43.81

2023		0.94	2.763	62.31	41.11
2018	TOTAL E&P NIGERIA LIMITED	0.64	4.382	51.71	32.25
2019		0.12	3.264	49.24	35.20
2020		0.19	2.108	58.12	26.49
2021		0.25	2.760	62.75	28.63
2022		0.33	2.917	70.67	34.55
2023		0.45	2.723	66.75	44.88

	NPM	ROA	CSRE	CSRD
Mean	0.933333	2.427167	93.48200	40.28467
Median	0.795000	2.330500	62.17000	41.83500
Maximum	2.460000	4.382000	262.3100	85.64000
Minimum	0.120000	1.010000	16.79000	3.600000
Std. Dev.	0.703216	0.929359	64.88141	23.69649
Skewness	0.963034	0.282381	0.961404	0.079758
Kurtosis	2.935952	2.115985	2.783922	2.272076
Jarque-Bera	4.642304	1.375549	4.679847	0.694149
Probability	0.098160	0.502694	0.096335	0.706753
Sum	28.00000	72.81500	2804.460	1208.540
Sum Sq. Dev.	14.34087	25.04753	122078.3	16284.18
Observations	30	30	30	30