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Corporate Governance and Social Responsibility Expenditure of Oil and Gas Firms in Nigeria

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Abstract: *This study investigated the relationship between corporate governance practices and corporate social responsibility expenditure in the oil and gas sector in Nigeria. The research design is ex-post facto, analyzing secondary data from annual reports of selected oil and gas firms listed on the Nigerian Exchange Group. Utilizing data from 2012 to 2023, the research focused on board characteristics such as board size, independence, and meeting frequency to understand their impact on Corporate Social Responsibility (CSR) expenditures. Employing a Spearman Rank-Order Covariance Analysis, the study revealed that board size has a very weak and statistically non-significant relationship with CSR expenditures. In contrast, board independence shows a significant negative relationship. The frequency of board meetings has a weak but statistically significant positive relationship with CSR expenditures. The implication of the findings is that larger boards do not necessarily lead to higher CSR expenditures and that whereas independent boards are associated with lower CSR expenditures, more frequent board meetings are linked to higher CSR expenditures. The study therefore concluded that it is more beneficial for firms to focus on optimizing board effectiveness rather than merely increasing board size or meeting frequency. The study recommends that oil and gas firms in Nigeria should enhance board independence to improve cost efficiency in CSR activities and ensure that board meetings focus more on strategic CSR planning rather than merely increasing the number of meetings. These insights not only elucidate the developments in Nigeria in governance and CSR but also draws essential recommendation for corporate governance in the country's oil and gas sector.*

Keywords: Corporate governance practices, corporate social responsibility expenditure, oil and gas sector, Nigeria, board characteristics, board size, board independence, board meetings

INTRODUCTION

Corporate governance means the structures and processes for the direction and control of companies, which are the part of internal and external corporate mechanisms (Larcker & Tayan, 2020). Governance practices that are effective like having a board of directors that is well composed, and independent oversight, and board meetings that happen regularly are very important in making sure that the companies achieved their Corporate Social Responsibility (CSR) objectives (Puni & Anlesinya, 2020).

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These governance methods in such cases help management's interests to be in line with the interests of the stakeholders, thus, increasing the transparency, accountability, and ethical business conduct (Jensen & Meckling, 1976).

CSR or corporate social responsibility is a company's way of showing the good citizenship and good administration of the company resources to reach the common good (Akpom & Gregg, 2018). In the past few decades, the concept of CSR has attracted the attention of many people around the world as companies more and more realize the significance of their social and environmental effects in addition to their financial results (Olanipekun, et al., 2020). In the oil and gas industry, which very often is situated in the regions with the serious social and environmental issues, the role of CSR is very important (Schaltegger & Burritt, 2018). Nigeria, due to its position as one of the top oil producers in Africa, is the perfect combination of economic activity, social responsibility, and environmental stewardship (Oyelaran-Oyeyinka & Adeya, 2003). One important aspect that is very discussed in the CSR literature is the governance practices of the companies. In the oil and gas sector, corporate governance practices like the size of the board, the independence of the board, and the frequency of board meetings are the key factors in determining the degree and the effectiveness of CSR activities (Emeka-Okoli, et al., 2024). A well-organized board that has independent directors can give unbiased supervision and strategic guidance, which is the most important for solving the complex environmental and social problems that the industry has (Hillman & Dalziel, 2003). The regular board meetings guarantee the constant involvement in the CSR projects and the quick decision making to solve the issues that are emerging (Lipton & Lorsch, 1992). These activities not only improve the impression of the firm but also help the firm to be sustained and be profitable in the future.

The performance of oil and gas companies in Nigeria is a good illustration of how strong corporate governance can influence the success of CSR initiatives (Emeka-Okoli, et al., 2024). Rather, a significant sector of the national economy causes problems in many of the Nigerian oil and gas firms through their low governance and inadequate CSR efforts (Amaeshi, et al., 2006). Governance structures that are weak have usually resulted in supervisory negligence and misalignment of corporate activities to the societal expectations, and, thereby, the loss of the environmental quality and the rise of social discontent (Meynhardt & Gomez, 2019). Thus, this research is a study of the oil and gas sector in Nigeria to find out how the companies can in board management optimize the costs of CSR and positively develop the relations with the community.

Statement of the Problem

Corporate governance and Corporate Social Responsibility (CSR) are pivotal in ensuring the sustainability and ethical operations of organizations, especially in sectors like oil and gas. In developed countries, large corporations such as Royal Dutch Shell are recognized for their strong corporate governance structures and their commitment to CSR. Shell's governance framework is built on a well-structured board with a diverse mix of independent directors, ensuring effective oversight of CSR initiatives. These initiatives focus on mitigating environmental harm, promoting community development, and ensuring ethical business practices. Shell’s approach shows a clear alignment between governance practices and CSR objectives, with a positive impact on both business performance and society.

In contrast, the situation in Nigeria’s oil and gas sector paints a starkly different picture. Despite the

existence of regulatory frameworks designed to promote CSR, many oil and gas companies in Nigeria fail to integrate CSR into their business strategies effectively. These companies often view CSR as an additional financial burden, rather than a long-term investment in sustainability and community relations. This limited investment in CSR results in minimal expenditure, contributing to environmental degradation and social unrest in the local communities affected by oil extraction. Furthermore, Nigeria's legislative environment and enforcement mechanisms for CSR are not as robust as those in developed countries, leading to a less effective regulatory framework for promoting good corporate governance and CSR practices.

This gap in effective governance and CSR integration is compounded by the limited empirical studies on the relationship between corporate governance practices and CSR expenditure in Nigeria. While much of the existing literature on CSR and governance focuses on developed economies, there is a significant lack of research exploring how specific corporate governance characteristics—such as board size, board independence, and meeting frequency—affect CSR expenditure in the Nigerian context. This gap presents an opportunity to explore the dynamics of governance and CSR in a developing economy where governance structures and CSR practices may operate differently.

This study aims to address this research gap by investigating how corporate governance practices influence CSR expenditure in Nigeria's oil and gas sector. Specifically, the study will examine the role of board size, board independence, and the frequency of board meetings in shaping CSR expenditure in Nigerian oil and gas companies. By doing so, the research seeks to provide insights into how governance structures can enhance or hinder CSR initiatives, and how this, in turn, affects both corporate performance and societal outcomes.

REVIEW OF RELATED LITERATURE

Corporate Governance

Corporate governance is the system under which a company is managed and controlled through the set of rules, practices, and processes (Parupalli et al., 2017). It consists of the vehicles that empower companies to be accountable, and those in power, to themselves. Governance structures and principles such as the distribution of rights and responsibilities among the various stakeholders such as the board of directors, managers, shareholders, and other stakeholders, and rules and procedures for decision making on corporate affairs are identified by the governance structures and principles (Yussoff et al., 2018). Good corporate governance should be the means by which the company assures its stakeholders and among them are the investors, employees, and customers. Thus, the company's relationship with the wider community is also included. It is the process of diminishing conflicts between the parties and facilitating the effective and ethical management of the company, which will eventually be reflected in the performance and the value of the company.

Board Size

Board size is the measure of the number of directors on a company's board of directors (Kripa & Dorina, 2016). Decisions made by the board of directors can be influenced by the dimensions of their board size by their effectiveness and efficiency in their decision-making processes. It is true that large boards involve a variety of different views and knowledge, which is an advantage when it comes to the environments of complex decision making (Onyali & Okerekeoti, 2018). On the other hand, large boards may have problems with coordination, communication, and slow decision-making. It has been

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argued that small boards, in turn, can benefit from a more direct and fast decision-making process, while it may be the case that the small board lacks enough personnel and diverse opinions that larger boards have (Yameen et al., 2019). The optimal board size differs from one company to another depending on the company's precise requirements and environment, thus, the company should manage its diverse ideas with the ability to come up with decisions quickly and efficiently.

Board Independence

A board independence means that the members of a company's board of directors are people who are neither associated nor have any interests that might impair their decision-making objectivity (Onatuyeh & Odu, 2019). Al-said (2021) argues that outside or independent directors who are not related to the company's executive management and there are no substantial business or personal connections with the organization. Their objective is to guarantee the provision of the most beneficial recommendations for the shareholders and the best in the board to the effect of disinterest decision-making for their part. The core aspect of the superlative action monitoring management by a board's independence is in lessening conflicts of interests, and in augmenting the likelihood that the board will use its potential to challenge and control the management proposals (Onatuyeh & Proso, 2019). It is a critical component of good corporate governance, which refers to the organization and ensures its accountability as well as the protection of the interests of the stakeholders.

Board Meetings

Board meetings are a formal gathering of the board of directors of a company to interact and come to a conclusion on various issues of a corporative nature (Ud Din et al., 2021). These meetings are the instruments for governance and the reason for the company to go to the strategic direction. The leading role of the board is the supervision of the company, to notify issues of crucial importance and to take a decision about the running of the corporation on a policy, strategy, financial and other parts of the business (Nguyen et al., 2021). Timely and well-structured board meetings should be a guarantee of ongoing supervision, fast decision-making, and effective communication of the governance elites (Maulida, 2022). They create a space for the directors to fulfill their fiduciary duties, namely the duties of care and loyalty, the duties of the stakeholders, and the engagement in the governance of the company.

Corporate Social Responsibility

Corporate Social Responsibility (CSR) means the actions and techniques that firms follow to control their business activities in such a way that the community benefits from it (ElAlfy, et. al., 2020). CSR has a broad spectrum of activities which includes ethical business management, environmental sustainability, fair social behavior, and development of community programs, plus the actions to improve the life of workers, users, and the society (Dashwood, 2020). The principle of CSR states that organizations should not only sprint for profit but also evaluate the social and ecological effects of their activities (Gangi, et. al., 2019, Gyane, 2019). A functioning Corporate Social Responsibility can boost a business procedure, develop consumer trust, enhance talent attraction and retention to the company as well as help the organization take a leadership position within the community through coordinating their desires and anticipation with the company, and thus contribute to successful long-term business.

Independent Variables **Dependent Variables**

Conceptual Framework

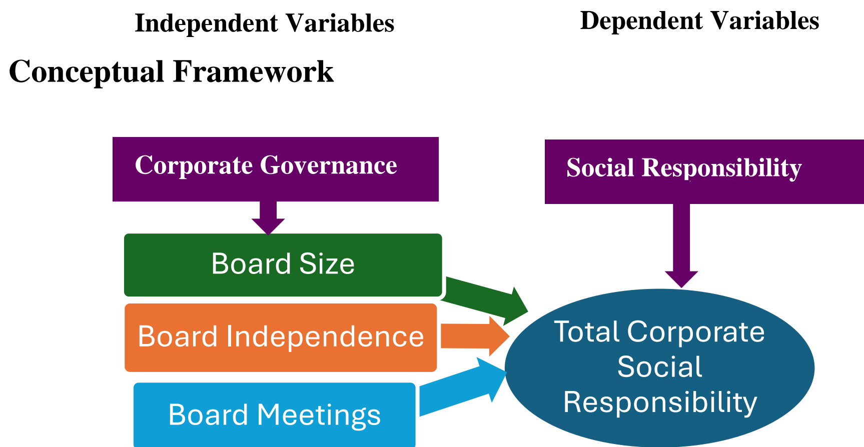

Figure 2.1.1: Contextual Framework of the Study
Source: Researcher's Arrangement, 2024

Theoretical Framework
The study was developed from Stakeholders theory which says that a firm's success is determined by its ability to manage and balance the interests of different stakeholders in a successful way. The Stakeholders theory, which has been developed by R. Edward Freeman in the 1980s, holds that firms should create value not only for shareholders but also for all those who are stakeholders that include such members as employees, customers, suppliers, communities, and the environment (Freeman, 1984). social contract theory is one which posits that through an implied social contract, business operate under the good will of society, thus they must conduct themselves in a manner that is socially acceptable, and, beneficial, legal or otherwise to secure the social contract perspective. The study was based on the Stakeholders theory due to the fact that it considers that a firm's success is tied to its ability to manage and balance the interests of different stakeholders correctly. Through the consideration of a wider perspective of the influence of corporate actions on society, the Stakeholder Theory becomes a more developed framework for the study of governance practices and corporate social responsibility and their results.

In the case of this study, Stakeholder Theory demonstrates how ethical management practices and social accountability are the main duties of a company, as a part of its strategic framework (Donaldson & Preston, 1995). Governance practices like board composition, board independence, and board meetings can have a significant effect on the way a company listens to the demands of its stakeholders. Thus, the larger board may analyze the issues from different angles and will be able to make the right decision on CSR issues. Likewise, independent directors check the performance impartially, to be sure the company's actions sit with the generalities of the stakeholders that are environmental and social in nature (Hillman & Dalziel, 2003). Continual board meetings make it easy to get involved with CSR, and thus transparency and accountability in addressing the concerns of stakeholders are improved (Lipton & Lorsch, 1992).

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Empirical Review

Onyekwelu and Ekwe (2015) examined the cointegration, magnitude and strength of the relationship between corporate social responsibility and key financial performance indicators in Nigeria with a focus on the Nigeria banking sector from the year 1988-2011. The research made use of the ordinary least square (simple linear regression) for the analysis. Findings from the analysis show that performance in their profit before taxes and the gross annual revenues were caused by changes in investment Corporate Social Responsibility (CSR) while no linear relationships could be established between the price for the shares and amount invested in CSR.

Ubesie, et al. (2019) ascertained the effect of human capital expenditures on corporate social responsibility of oil and gas firms in Nigeria It spanned for the period of 10 years (2008-2017) and made use of secondary data extracted from the financial reports and accounts of the oil and gas firms selected for the period. The study adopted *ex-post facto* research design and employed the panel least squares multiple regression analysis. Findings of the study provided empirical evidence that human capital expenditures proxy by expenditure on salaries and wages, on education and training and expenditure on health have significant positive effect on Corporate Social Responsibility (CSR) of oil and gas firms in Nigeria.

Ratmono, et al. (2021) examined the association of corporate governance factors with corporate social responsibility (CSR) disclosure and its crucial role for a company to get better financial performance. The purposive sampling method was used to select 194 companies from a total of 582 observations. The technique used in this study was the Structural Equation Model (SEM) approach, which utilized the Partial Least Square (PLS) alternative method. The findings of this research showed that state ownership, the number of board commissioners, and proportion of independent commissioners had a very good positive impact on CSR disclosure. The issues of foreign ownership and the educational background of the board members, however, were found to be issues that did not significantly influence the CSR disclosure of the firm.

Ude, et al. (2021) observed the consequences of corporate governance practices on the ownership of oil and gas firms in Nigeria. The study involved the sample of five randomly chosen oil and gas firms from a sample of 2010 to 2020. Descriptive statistics and Panel Least Squares (PLS) simple and multiple regression analysis techniques were among the analytical tools used. The results showed that the indexes of corporate governance, i.e. board size, board composition, board diligence, and board independence, had a positive and statistically significant impact on Corporate Social Responsibility cost of oil and gas companies in Nigeria.

Edeh et al. (2022) analyzed the influence of Corporate Social Responsibilities on the turnover of Breweries firms in Nigeria by using the secondary data from three Breweries firms in Nigeria specifically selected. The independent variable is turnover and the corporate social responsibility of the Nigeria Breweries firm for the year under study is the dependent variable. The data analysis was done using Regression Analysis. The donations and gifts part of corporate social responsibility has been defined and is important and it is necessary to continue to do it to make not only the community but also the companiesies comfortable in the environment. Additionally, public health and education and training were not important.

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Inyang, et al. (2023) investigated how corporate social responsibility (CSR) practices can affect the corporate performances of industrial goods sector listed companies in Nigeria and other developing countries. These data were used to run the ordinary least squares panel data regression, fixed and random effects models, stationarity test, cross-section dependence test, and the Hausman test. Corporate giving, employee welfare package, and creditor days are the three factors that have a significant positive effect on return on assets (a measure of corporate performance) thus the threat to profit-maximization is not created by CSR but rather by corporate managers who are using CSR for their own benefit.

Amahalu and Okudo (2023) ascertained the effect of Corporate Social Responsibility on Financial Performance of quoted oil and gas firms in Nigeria from 2009-2021. Specifically, this study ascertained the effect of Donation on net profit margin, return on assets, return on equity of quoted Oil and Gas firms. This study employed ex-post facto research design. The sample size of this study consists of seven quoted oil and gas firms in Nigeria. Pearson Coefficient Correlation and simple linear regression analysis were employed. The study found a significant positive relationship between Net Profit Margin, Return on Assets, Return on Equity and Donations.

Oburota and Ebiaghan (2023) examined four firm-specific of CSR disclosure drivers in the Nigerian oil and gas industry over ten (10) years spanning through 2012 to 2021.The regressor employed are Return on Asset, Leverage, firm size, and, Dividend Per Share. Meanwhile, the regressed is CSRD. Data collected was sourced from the targeted oil and gas multinationals from 2012-2021. Data set was described using panel least square method. The finding shows that all the variables except LEV have direct (linear) and high (considerable) effect on CSRD whereas, LEV has adverse (non-linear) and high (considerable) but significant with CSRD.

Narayanan, et al. (2023) examined the effects of corporate social responsibility on organizational performance in manufacturing sector in Nigeria, with focus on Flour Mills Nigeria Plc. The quantitative research method was applied using a survey strategy while data was obtained from 150 respondents using the questionnaire instrument. The quantitative outcomes presented that CSR has a statistically substantial association with customer satisfaction, firm profitability, firm market value, competitive advantage, and with organizational performance.

Olulu-Briggs (2024) has observed how financial leverage, firm size, and profitability affect the value of the quoted insurance companies in Nigeria in the period of 2010-2022. Information on the secondary time-series basis was obtained from the unbiased annual reports of 20 QICs. The results of the GMM test indicated that the long-term debt and firm size are the primary drivers of the Tobin's Q ratio, while the short term debt and ROE also have a positive impact on the Tobin's Q ratio, however, this was not proved by the significance. The research suggests that financial leverage and firm size are the two factors that determine firm value amid QICs in Nigeria.

Gap in Empirical Literature

The present study fills a crucial empirical gap by precisely investigating the link between corporate governance practices and social responsibility costs of oil and gas companies in Nigeria. Past studies like Ude et al., (2021) only used data from 2010 to 2020, while the current study employs the data for the period from 2012 to 2023, giving the authors a chance to deliver new findings concerning the

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dynamics between the two aspects over time. The analysis of these new patterns and developments makes a timely contribution to the literature, reflecting the current state of corporate governance and CSR in Nigeria's oil and gas sector.

This research is unique in its emphasis on the environmental and social impacts of the oil and gas industry. Researches, including Ubesie et al., (2019) and Edeh et al., (2022), focused on CSR in different sectors, yet concentrating on the oil and gas sector, gives a more comprehensive perspective of how governance practices affect CSR costs in this industry. Moreover, this study addresses this very pertinent sector and provides both the general and specific issues that the oil and gas companies face in Nigeria.

The current research goes beyond the existing literature by considering a wider spectrum of governance variables apart from those identified by Ude, et al. (2021); which include board size, board composition, board diligence, and board independence. The current study is likely to capture the dynamics of corporate governance practices in terms of board meeting frequencies and gender diversities, among others. This comprehensive approach enables a more detailed analysis of how different aspects of corporate governance impact CSR costs.

METHODOLOGY

The *ex-post facto* research design is ideal for this study because it allows the analysis of historical data to identify relationships between corporate governance practices and CSR expenditure in Nigerian oil and gas firms. Since governance practices cannot be manipulated, the design is well-suited for examining the impact of variables such as board size, independence, and meeting frequency on CSR spending using existing data.

The study uses a purposive sample of five oil and gas companies listed on the Nigerian Exchange Group (NGX): Conoil Plc., Eterna Plc., Japaul Gold & Ventures Plc., MRS Oil Nigeria Plc., and Seplat Energy Plc. These firms were chosen for their data completeness and industry significance, providing a representative view of the sector. The sample includes key players from both upstream and downstream segments, ensuring diversity in the analysis. The time frame for the study is from 2012 to 2023, allowing for an in-depth examination of governance practices and CSR expenditure trends over time. This approach ensures reliable, relevant, and comprehensive data for the study's objectives.

Model Specification

The model used in this study is a correlation model specified to examine the relationship between corporate governance practices and social responsibility costs. The model includes the following variables:

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$$r = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \sum (y_i - \bar{y})^2}}$$

Where,
r = Pearson Correlation Coefficient
x_i = x variable samples y_i = y variable sample
$\bar{x}$ = mean of values in x variable $\bar{y}$ =mean of values in y variable

x represents Corporate Social Responsibility Cost
y represents Board Size, Board Independence, and Board Meetings
The method of data analysis involves the use of correlation analysis to determine the strength and direction of the relationship between corporate governance practices and social responsibility costs. The analysis will be conducted using statistical software to ensure accuracy and reliability of the results.

DATA ANALYSIS AND DISCUSSION

Table 4.1.1: Descriptive Statistics for the Variables

	LOGCSRC	BSIZE	BIND	BDMT
Mean	7.109291	9.216667	0.251351	5.633333
Median	7.142914	9.000000	0.200000	5.000000
Maximum	8.577222	18.00000	0.600000	13.00000
Minimum	5.541577	5.000000	0.100000	4.000000
Std. Dev.	0.774316	2.545129	0.142672	1.982693
Skewness	-0.147918	0.663480	0.968656	1.780869
Kurtosis	2.107058	4.204145	2.650038	6.070908
Jarque-Bera	2.212160	8.026975	9.689119	55.29115
Probability	0.330853	0.018070	0.007871	0.000000
Sum	426.5575	553.0000	15.08108	338.0000
Sum Sq. Dev.	35.37432	382.1833	1.200969	231.9333
Observations	60	60	60	60

Source: Eviews 10.0 Software, 2024

The normality of each variable distribution is a major point in the statistical analysis and is particularly significant when verifying the appropriateness of some statistical tests which need to be normal. The descriptive statistics for these variables, which incorporate skewness, kurtosis, and the Jarque-Bera test, impart knowledge concerning the distributional features of the data.

LOGCSRC (Log of Corporate Social Responsibility Cost): LOGCSRC's mean value of 7.109291 is accompanied by a median of 7.142914, which shows that the data is centered around the mean in a symmetric way. The fact that the skewness is -0.147918 implies that the distribution is nearly symmetric with a slight left skew, as the zero is near the value. The kurtosis which is 2.107058 does not reach the value of the normal distribution kurtosis which is 3, so we can say that the distribution is somewhat platykurtic (flatter than a normal distribution). The Jarque-Bera statistic is 2.212160, and the probability is 0.330853, which is more than the 0.05 significance level. Thus, the null hypothesis was not rejected. Hence, the LOGCSRC data is said to be normally distributed.

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BSIZE (Board Size): The mean value of BSIZE is 9.216667, and the median is 9.000000, which indicates the data is almost symmetrical. The skewness score of 0.663480 suggests a significant right skewness. The kurtosis of 4.204145 is greater than 3, thus suggesting a distribution with a higher peak (kurtosis) and hence more outliers than a normal distribution. The Jarque-Bera statistic is 8.026975 and the significance value is 0.018070, which is less than 0.05. The null hypothesis is, therefore, rejected. Consequently, BSIZE is not normally distributed.

BIND (Board Independence): For BIND, the mean of 0.251351 closely corresponds to a median of 0.200000, indicating a slight right tail. This right-skewed behavior is further confirmed by the skewness value of 0.968656, which suggests a slight agar. The kurtosis of 2.650038 which is somewhat below the value of 3, denotes a distribution that is somewhat platykurtic. The value of the Jarque Bera test is 9.689119 with the corresponding probability of 0.007871 (the latter being less than 0.05), thus we reject the null hypothesis of the normal distribution. Consequently, BIND does not follow a normal distribution.

BDMT (Board Meetings): BDMT has a mean of 5.633333 and a median of 5.000000, which means that the data has a light tendency to the right, still, the median is close to the mean. The further evidence of this is in the skewness measure of 1.780869 which reflects a great positive skewness of the distribution. The kurtosis of 6.070908 has a striking difference in value from 3, which implies the existence of a leptokurtic distribution with thick tails. The Jarque-Bera statistic (55.29115) together with the probability (0.000000) leads to the decisive rejection of the normality assumption. Hence, the distribution of BDMT is found to be highly non-normal.

Table 4.2.2: Spearman Rank-Order Covariance Analysis Result

	BSIZE / LOGCSRC	BIND / LOGCSRC	BDMT / LOGCSRC
Correlation	-0.232697	-0.456452	-0.365757
t-Statistic	-1.822185	-3.906987	-2.992901
P-Values	0.0736	0.0002	0.0041
Observation	60	60	60

Source: Eviews 10.0 Software, 2024

The Spearman Rank-Order Covariance Analysis gives a clue about the capability of the Board Size (BSIZE), Board Independent (BIND), Board Meetings (BDMT) among the independent variables to affect the output variable, a Corporate Social Responsibility Cost (CSRC). The Spearman correlation coefficients, t-statistics, and p-values are used to evaluate the strength, direction, and statistical significance of these relationships.

Board Size (BSIZE) and LOGCSRC: The correlation coefficient between BSIZE and LOGCSRC is -0.232697 which is a weak negative relationship. So, if we think of board size as something that is good for the company, then we should probably expect to see social responsibility costs dipping. On the contrary, the t-statistic of -1.822185 and the p-value of 0.0736 text show that this connection is not statistically significant at the 0.05 level. Therefore, while there is a negative association between the two, the relationship is not strong enough to be meaningful.

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Board Independence (BIND) and LOGCSRC: The correlation coefficient for BIND and LOGCSRC is -0.456452, which indicates the great negative correlation. Consequently, lower corporate social responsibility costs are related to higher board independence. The t-statistic is -3.906987 and the p-value is 0.0002, both of them prove that the relationship is statistically significant. So, there is a clear and high significant inverse relationship between the independence of the board and the CSR costs, which, thus, means that more independent boards may be more cost-effective with CSR expenditures.

Board Meetings (BDMT) and LOGCSRC: The correlation between BDMT and LOGCSRC is 0.365757, which indicates a moderate positive connection. This means that as the frequency of board meetings rises, the corporate social responsibility cost also rises. The t-statistic of 2.992901 and the p-value of 0.0041 proved that this relation is statistically significant. Consequently, the data imply that having more frequent board meetings is related to higher CSR costs, which could be a sign of the board being more involved and engaged in CSR activities.

Test of Hypotheses

Decision Rule: If the correlation coefficient "r" is less than 0.3, it indicates that there is none or a very weak relationship between the variables. If r falls between 0.3 and 0.5, the relationship is considered weak. A correlation coefficient between 0.5 and 0.7 signifies a moderate relationship. When r is greater than 0.7, it indicates a strong relationship between the variables. Following the guidelines outlined by Gujarati and Porter (2009), the decision rule entails accepting the alternative hypothesis (H1) under the following conditions: if the coefficient exhibits either a positive or negative sign, the absolute value of the t-statistic is greater than 2.0, and the p-value associated with the t-statistic is less than 0.05. Otherwise, the null hypothesis (H0) is accepted, and H1 is rejected.

Hypothesis One

H_0: Board size have a statistically weak relationship with corporate social responsibility cost of oil and gas firms in Nigeria.

H_1: Board size have a statistically strong relationship with corporate social responsibility cost of oil and gas firms in Nigeria.

Presentation of Test Results

Table 4.2.2: Spearman Rank-Order Covariance Analysis Result

Decision: The correlation coefficient for board size and corporate social responsibility cost is -0.232697, which is less than 0.3, indicating a very weak relationship between the two variables. Furthermore, the absolute value of the t-statistic is 1.822185, which is less than the critical value of 2.0. Additionally, the p-value is 0.0736, which is greater than the significance level of 0.05. Based on these criteria, the null hypothesis (H0) is accepted. This means that there is non-statistically significant weak relationship between board size and corporate social responsibility cost of oil and gas firms in Nigeria.

Hypothesis Two

H_0: Board independence has a statistically weak relationship with corporate social responsibility cost of oil and gas firms in Nigeria.

H_1: Board independence has a statistically strong relationship with corporate social responsibility cost of oil and gas firms in Nigeria.

Presentation of Test Results

Table 4.2.2: Spearman Rank-Order Covariance Analysis Result

Decision: The correlation coefficient between board independence and corporate social responsibility cost is -0.456452, which is between 0.3 and 0.5, thus showing a weak relationship. The absolute value of the t-statistic is 3.906987, which is bigger than 2.0, the p-value is 0.0002, which is smaller than 0.05. Therefore, based on these criteria, the alternative hypothesis (H1) is accepted in this case. This means that there is a statistically significant weak relationship between board independence and corporate social responsibility cost of oil and gas firms in Nigeria.

Hypothesis Three

H_0: Board meetings have a statistically weak relationship with corporate social responsibility cost of oil and gas firms in Nigeria.

H_1: Board meetings have a statistically weak relationship with corporate social responsibility cost of oil and gas firms in Nigeria.

Presentation of Test Results

Table 4.2.2: Spearman Rank-Order Covariance Analysis Result

Decision: The correlation coefficient for board meetings and the cost of corporate social responsibility is 0.365757, which means that there is a weak relationship since it lies between 0.3 and 0.5. The t-statistic's absolute value is 2.992901 which is larger than 2.0, and the p-value comes out to be 0.0041, which is less than the 0.05. From this criterion it can be concluded that H1 (alternative hypothesis) is accepted. This, therefore, implies that there is a statistically significant weak association between board meetings and the corporate social responsibility cost of oil and gas companies in Nigeria.

DISCUSSION OF FINDINGS

Relationship between Board Size and CSR Expenditure

This conclusion that the board size is hardly linked to the corporate social responsibility actions of the oil and gas firms in Nigeria can be explained from different perspectives. On the one hand, it can be said that the large boards have a tendency to face coordination problems and communication issues, which in turn impede the decision-making process in the context of the CSR strategies. The larger boards may come across situations of conflict and power struggles, thus keeping the CSR policies implementation in the shadow. The results from the study of Onyekwelu and Ekwe (2015) proved that there was no direct relationship between the degree of CSR investment and the stock prices in the Nigerian banking sector, which in return, demonstrates that the board size dimension does not improve performance effectiveness. It then becomes evident that the board members' sizes along serve as a role in determining CSR activities.

On a second note, the larger boards might tend to give attention to the issues causing trouble, that is, regulatory compliance and risk management rather than the proactive approaches alongside CSR. To put it simply, directors may be physically present in a company due to the fact that instead of making a collective move to a given idea, they may evolve and saturate the debate with their own points of view. The research by Olulu-Briggs (2024), which revealed that long-term debt and firm size are positive for Tobin's Q ratio but not always significant for short-term debt and ROE, corroborates this bullet point. It has become clearer that factors, which are size-related, do not have an outright effect on the firm's performance ratios, and CSR is one of them.

Moreover, the low correlation might be because of the particular situation of the oil and gas industry in Nigeria, where the regulatory incentives and public pressure become the main drivers of the CSR actions than the inner governance structure. The study of Ubesie et al. (2019), which discovered that human capital expenditures have a positive effect on corporate social responsibility activities in the oil and gas sector, thus, other aspects besides board size are more important in ascertaining CSR expenditure, corroborates this finding.

Relationship between Board Independence and CSR Expenditures

The finding of the lack of connection between board independence and CSR expenses in the oil and gas industry may come from the fact that independent directors do not see CSR as a crucial part of the company's main responsibility in supervision. Often independent directors deal with aspects such as financial performance, risk management, and legal compliance failing sometimes to highlight CSR activities. Ude, et al. (2021) revealed that board independence was one of the corporate governance indices that significantly influenced CSR costs, but due to the differences in the current study governance practices, the recent period has been analyzed.

Also, they may not have the necessary knowledge that is highly specialized in the field of oil and gas which is so important for them to be able to handle CSR matters in the sector. CSR topics give the environmental and social impacts of the industry such as if independent directors dive into the matter. This corresponds well to the research of Ratmono, et al. (2021) which showed that some governance factors, for instance, the educational level of the commissioners' board, hardly made any impact on CSR disclosure, thus in order to be effective in CSR governance, expertise and knowledge are required. The weak connection could also be one of the reasons behind the phenomena of board independent directors' tokenism, who mostly serve in a compliance capacity instead of major involvement in CSR policy decision making. Edeh, et al. (2022) who found that the empirical figures of social responsibility contributions like donations and gifts are major while areas of public health and education are less supported, thus the idea that board composition and influence can be selectively addressed with a focus on CSR priorities is further reinforced. The findings that the impact of independent directors on CSR cost is not conversely direct added to the argument.

Relationship between Board Meetings and CSR Expenditures

The statistically weak relationship between board meetings and CSR expenditures implies that simply increasing the frequency of board meetings does not in any way guarantee higher or more efficient CSR expenditures. The fact of the matter is that these meetings may be completely preoccupied with the operational and financial aspects of the company outlining the short-term rather than taking care of the long-run strategic plans for CSR. Consequently, CSR priority may not be achieved in the managerial discussions. According to Narayanan et al. (2023) CSR is significantly linked with organizational performance metrics such as customer satisfaction and firm profitability thus showing that the CSR effectiveness is more strategic integration than board meeting participation.

Another possible explanation of this finding is that the depth of discussion during board meetings, which is of far more importance than the number of meetings held, determines the quality of the decision-making process. It also implies that if board meetings do not set aside enough time and resources for discussing and planning the CSR activities, the CSR costs may not be affected at all. Goodwill and Okudo (2023) established a positive relationship between CSR activities such as

donations and financial performance indicators, thereby emphasizing the importance of strategic focus rather than the number of meetings held.

Moreover, this might be one of the reasons why the bond is weak because CSR decisions often require specialists' knowledge and long-term planning, which may not be adequately dealt with in the routine board meetings. The research by Inyang et al. (2023), which showed that specific CSR practices such as corporate giving and employee welfare have positive significant effects on financial performance, stresses the need for targeted and well-planned CSR initiatives that go beyond what is usually discussed in regular board meetings.

CONCLUSION AND RECOMMENDATIONS

This study looked at the link between corporate governance (Board Size, Board Independence, and Board Meetings) and the spending on Corporate Social Responsibility (CSR) in the oil and gas companies in Nigeria. The analysis demonstrated that the Board Size which is a very weak negative relationship with CSR expenditures, hence, the bigger boards do not necessarily mean the higher have CSR expenditures. The Checkers of board independence were reported to exhibit a statistically significant weak negative relationship with CSR expenditures, which means that boards, which are, more independent are associated with lower CSR spending. On the other hand, the results show that the meetings of the Board displayed a statistically significant weak positive relation to the CSR Expenditures, thus revealing that the high frequency of the meetings of the board implies that the CSR Expenditures are more. These results open up the relationship of the distinctive characteristics of the board and the associated costs of CSR, which get the firms' focus away from things like board size and meeting frequency and towards board effectiveness optimization.

This study made the following recommendations:

i. A business's primary goal should not be solely the increase in board size to achieve better CSR results. They should still take into account board composition and efficient communication and coordination of the board members among themselves. A smaller, well-coordinated group might be more suggestive of the strategic CSR path than many separate board members.
ii. In spite of their critical role in governance, independent directors may have a negligible effect on CSR costs if they lack industry-specific expertise. Companies' efforts in improving supervisors' knowledge of CSR and industrial influence would conclude in better initiating CSR directives and budgets.
iii. Migrating to more frequent board meetings of itself may not guarantee that there will be expenditure on CSR. Board members must ensure that they conduct their meetings in such a way that they reserve time influx and grant enough resources to converse and think of new activities under CSR. This last bit is an important one and it would be a potential result of talking about CSR during meetings. Doing so may potentially contribute to more efficient CSR.

Knowledge Contribution

This work addresses the lack of empirical evidence by studying the link between corporate governance practices and social costs within the oil and gas sector in Nigeria from 2012 to 2023. This study provides the most up-to-date governance dynamics and CSR compliance in the area of economically and socially

impactful oil and gas industry. Considering key features of the boards like the size, independence, and frequency in the meetings from the study will help to understand widely the role of the governing body on the environment, society responsibility. From the outcomes obtained the main conclusion is that 'board independence is substantially lower than CSR costs, reflecting cost reduction' while 'the frequent meetings of the board directly result in extra funds for CSR'. This study makes a significant contribution to the existing literature through its focus on the understanding of corporate governance in a developing economy and through the practical insights it suggests for the improvement of board effectiveness in CSR activities.

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