



Analysing the Effects of Ownership Structure on Financial Performance of Oil Firms in Nigeria

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Abstract

Research Objective: This study investigated the impact of ownership structure on the financial performance of listed oil and gas firms in Nigeria's capital market.

Methodology: A quantitative approach was employed, using secondary data from publicly available financial reports of the listed firms. Panel data regression analysis was conducted to examine the relationship between ownership structure and financial performance, specifically return on assets.

Findings: The regression results revealed that ownership structure has a positive but insignificant effect on return on assets, indicating a potential but limited influence on financial performance for the sampled firms.

Conclusion: The findings suggest that while ownership structure may have a positive effect on financial performance, it is not a significant determinant for oil and gas firms in Nigeria.

Recommendations: Policymakers and investors should consider other corporate governance factors alongside ownership structure when seeking to enhance firm performance. Further research could explore additional variables that may have a more substantial impact on financial outcomes.

Key words: Corporate Governance, Financial Performance, ownership structure, oil & gas firms.

1.0 Introduction

Corporate governance therefore can be defined as a set of processes, customs, policies, laws, and institutions affecting the way a corporation is directed, administered, or controlled. It is about building effective mechanisms and measures, either to satisfy current social expectations or to satisfy the narrower expectations of shareholders. Corporate governance also deals with how



suppliers of finance to corporations assure themselves of getting a return on their investment. Corporate governance systems can be categorised according to the degree of ownership concentration and the identity of controlling shareholders (Duke & Kankpang, 2011).

Corporate governance could also be seen as a concept that includes communication channels, separation of roles and responsibilities, behaviour among the shareholders, the board of directors (both executives and non-executives), and the chief executive officer (CEO).

In 2001, the Enron scandal marked the commencement of a period in which corporate governance of, in particular, listed companies became a global discussion (Al-Malkawi & Pillai, 2012). The primary goal is to impose good behaviour on listed and now, non-listed firms (George & Karibo, 2014).

In Nigeria's oil and gas sector, ownership structures can be categorised into three main types: state-owned enterprises, privately owned companies, and multinational corporations. State owned enterprises like the Nigerian National Petroleum Corporation (NNPC) dominate production but often face challenges related to bureaucratic inefficiencies. Conversely, privately owned firms may exhibit greater agility and responsiveness to market changes but might lack the capital resources available to larger entities. Multinational corporations bring substantial investment and technological expertise but may prioritise profit repatriation over local reinvestment.

The effects of ownership structure on the financial performance of oil and gas firms in Nigeria presents a complex and multifaceted challenge such as: data availability and quality, defining ownership structure, measuring financial performance, economic and political instability, corruption and inefficiency etc. Addressing these challenges can contribute to a better understanding of the effect of ownership structure on financial performance in the Nigerian oil and gas sector, ultimately leading to improved governance and economic development.

The objective of this study is to:

Establish the influence of ownership structure on return on assets (ROA) of oil & gas firms in Nigeria.

The following research question will, therefore guide the study:

How far does ownership structure influence the return on assets (ROA) of oil & gas firms in Nigeria?

Statement of Hypotheses:

Ho. Ownership structure does not have a positive and significant influence on return on assets (ROA) of oil & gas firms in Nigeria.



The study assessed the influence of corporate governance on firm financial performance of listed oil and gas firms on the Nigerian Stock Exchange for 11 years (2012-2022). The researchers' choice of 2012 as the base year arose as a result of Nigeria's adoption of "International Financial Reporting Standard (IFRS)," in that year. In line with the objective set out in the study, the index used is Ownership Structure.

2.0 Review of Related Literature

Corporate governance gives ultimate authority and complete responsibility to the board of directors, and ensures transparency which in turn ensures strong and balanced economic development. The beauty of corporate governance is that it has a broad scope which includes both social and institutional aspects, and ultimately encourages a trustworthy, moral, as well as ethical environment (Akinleye, Olarewaju & Fajuyagbe, 2019).

Effective Corporate Governance Practice

Board governance normally includes the interests of all company stakeholders and considers the impacts of environment, social, and governance (ESG) risks and opportunities. "Jurisdictions across the world aim to influence the private sector through their own international corporate governance framework. These are mainly a regulatory mix of company and securities law, as well as listing rules and corporate governance codes," (Osundina, Olayinka & Chukwuma, 2016). As noted by OECD (2017), "these elements of 'self-law' are derived from company law and explain how the responsibilities and obligations of directors are effectively discharged."

However, the underlying goal of corporate governance legislation is to promote transparency and integrity in business. The flexible nature of this legislation acknowledges the individuality of companies, whereby each company has its own distinct institutional profile and unique blend of history and legacy.

Although there is no one universal system of effective corporate governance, there are opportunities for companies to apply commonly accepted international practices that promote market confidence and encourage more efficient global capital markets, (Narwal & Jindal, 2015).

According to Tricker (2015), corporate governance codes around the world have come together due to attributing factors such as globalisation of markets, companies, securities regulation and the increased activity of international institutional investors. Despite international convergence, the national bodies that publish and regulate local corporate governance codes vary significantly between countries.

Investors are recognizing corporate governance disclosures as a crucial insight into a company's practices, culture, data management and authenticity of reporting. The presence of effective



governance structures and metrics is a key element that can contribute to investor confidence in non-financial information and can help investors gain a better understanding of a company's prospects (WBCSD & PWC, 2018).

This shift has encouraged boards to focus on a long time horizon that will account for ESG-related risks and opportunities that may only materialise in future (maybe in 5 to 10 years rather than next financial quarter). "This inclusive and integrated approach to governance requires directors to act in the best interests of the company by acknowledging the legitimate needs, interests and expectations of all material stakeholders," (Babatunde & Akeju 2015).

Ownership Structure

Ownership structure refers to the types and composition of shareholders in a corporation. Ownership structure comprises some observable measures of ownership concentration or the extent of inside ownership (Ryu & Yoo, 2011). According to Yang, Chun & Ramadili (2009), there are two broad classifications for ownership structures. The first classification is according to the proportion of shares owned by insiders and outsiders while the second is the proportion of shares owned by institutional and individual shareholders (Anis, Chizema, Lui & Fakhreldin, 2017).

"This acquisition is deemed to be useful in reducing agency conflicts and aligning the interests of management and shareholders. Secondly, some outsiders who own a significant number of the firms' shares have more power and more incentive to monitor management activity, particularly the financial reporting process, thereby reducing the likelihood of earnings management," (Kim & Lu, 2011).

Classification of ownership structure considers the way control and ownership rights are developed and implemented. Ownership is considered from two main dimensions: ownership concentration and ownership identity. Ownership concentration refers to the number of shares owned by the majority shareholders while ownership identity relies on the people who have shares in the firm and how they use such shares to generate revenues for the shareholders (Mokhtar & Mellett, 2013).

"In a system of concentrated ownership, collective action problems allow controlling families to exercise influence on legislative outcomes, stifling the enactment of investor protection law," (Anderson & Reeb, 2003). Institutional investors are another important class of shareholders that usually may have the interest and profile to fill the monitoring role in widely held corporations.

"As always, large institutional investors have been pioneers in setting up corporate governance rules," (Gugler, Mueller & Yurtoglu, 2007). As their objective is to earn a profit from their stakes,



they are naturally sensitive to firm performance and are likely to create noise in the markets and wield significant influence on boards of directors.

Ownership structure is a significant factor in corporate governance. Companies with CEO Ownership, where the chief executive officer holds a significant stake in the company, often exhibit distinct characteristics. These characteristics can influence the company's culture, decision making, and overall performance. These characteristics include: alignment of interests, decision-making and risk tolerance, company culture and employee engagement, financial performance etc. CEO ownership can be a powerful driver for long-term growth and success, as it fosters alignment of interests, encourages conservative decision-making, and promotes a culture of ownership and responsibility.

3.0 Methodology

The study employed the Ex-Post facto design. "The ex-post facto research design also known as causal-comparative research involves the ascertaining of past factor(s) on the present happening or event". The study was carried out on the quoted companies listed on Nigerian Stock Exchange. However, all the studied firms are domiciled and operate within the geographical boundaries of Nigeria. The study concentrated on the oil and gas sector of The Nigerian Stock Exchange. This sector includes all companies engaged in operating and/or developing oil and gas field properties, and companies primarily engaged in recovering and producing liquid hydrocarbons from oil and gas field gases.

Secondary data were utilised in this study for the analysis. The data for this research work were sourced from annual reports of the sampled companies. The data collated were analysed using panel data analysis that provided the description analogies such as mean, median, standard deviation, etc. Data analysis was processed with the aid of E-views 10.0 statistical software. Presently, there are eleven (11) listed companies in the oil and gas sector of the Nigerian Stock Exchange thus:

1. 11 PLC (Mobil).
2. Ardova PLC
3. Capital Oil PLC
4. Conoil PLC
5. Eterna PLC
6. Japaul Gold & Ventures PLC
7. MRS Oil Nigeria PLC



8. Oando PLC
9. Rak Unity Pet. Co PLC
10. Seplant Pet. Dev. Co PLC
11. Total Nigeria PLC

The period of study covered is eight (11) years (2012 – 2022).

The sampling method used for this study is the purposive sampling method. This method is also known as judgmental, selective, or subjective sampling. The type of purposive sampling applied to this work is the total population sampling as it enables the researcher the choice to examine the entire population that has one or more shared characteristics and this is common to studies of particular groups within larger populations. The sample of this study is therefore drawn from the eleven (11) companies listed in the oil and gas sector of the Nigerian Stock Exchange. In the course of this study, a sectional sample of five (5) listed companies in the oil and gas sector was conducted. The decision to study five (5) out of the eleven (11) firms listed in the oil and gas sector of the Exchange was informed by the fact that some of the firms were on technical suspension and some moribund. Hence, six (6) firms were therefore dropped for the reason of inactivity in the capital market.

This selection of five (5) out of the eleven (11) listed companies was accomplished by picking the companies that were active in the capital market during the period of study.

The companies considered are listed below:

1. Conoil Plc
2. 11 Plc
3. MRS Nigeria Plc
4. Oando Plc
5. Total Nigeria Plc

Model Specification

In this research, corporate governance characteristics will serve as the independent variables while firms' financial performance represented by returns on assets (ROA) will serve as the dependent variable. The model is expressed in implicit and explicit forms below:

$$P = \beta_1 (CG) + \varepsilon$$

Where:



P = Profitability

CG = Corporate Governance

ε = Error Term

Econometrically, the model used to estimate the relationship between corporate governance

(Measured as ownership concentration) and profitability (measured as return on assets (ROA)) is:

$$ROA_{it} = \beta_0 + \beta_1 OC_{it} + \varepsilon_{it}$$

ROA = Return on Assets, which is an indicator of how profitable a company is relative to its total assets.

β_0 = Intercept

β_1 = Regression coefficient of the independent and control variables.

OC = Ownership Concentration, which represents the percentage of shares held by the top shareholders.

ε = Error Term

i = Number of companies

t = Time period (in years).

4.0 Data Presentation and Analysis

Table 1: Panel Data for the Focal and Explanatory Variables of the Sampled Oil and Gas

OIL & GAS				
	YE R	OS	ROA	FA
			₦	
CON OIL	2012	1	0.05	52
	2013	1	0.17	53
	2014	1	0.05	54
	2015	1	0.13	55
	2016	1	0.15	56



	2017	1	0.09	57
	2018	1	0.10	58
	2019	1	0.10	59
	2020	1	0.03	60
	2021	1	0.06	61
	2022	1	0.08	62
MRS NIG. PLC	2012	1	0.11	43
	2013	1	0.03	44
	2014	1	0.04	45
	2015	1	0.04	46
	2016	1	0.07	47
	2017	1	0.06	48
	2018	1	(0.06)	49
	2019	1	(0.09)	50
	2020	1	(0.13)	51
	2021	1	0.02	52
	2022	1	0.07	53
TOTAL NIG. PLC	2012	1	0.06	56
	2013	1	0.06	57
	2014	1	0.06	58
	2015	1	0.05	59
	2016	1	0.11	60
	2017	1	0.07	61



	2018	1	0.06	62
	2019	1	0.02	63
	2020	1	0.01	64
	2021	1	0.08	65
	2022	1	0.05	66
OANDO NIG PLC	2012	1	0.05	56
	2013	1	0.009	57
	2014	1	-3.34	58
	2015	1	-0.98	59
	2016	1	0.02	60
	2017	1	0.08	61
	2018	1	0.10	62
	2019	1	0.009	63
	2020	1	(2.08)	64
	2021	1	(0.25)	65
	2022	1	(0.41)	66
11 NIG. PLC.	2012	1	0.55	62
(MOBILE)	2013	1	0.50	63
	2014	1	0.46	64
	2015	1	0.27	65
	2016	1	0.41	66
	2017	1	0.27	67
	2018	1	0.28	68



	2019	1	0.23	69
	2020	1	0.15	70
	2021	1	0.02	71
	2022	1	0.03	72

Sources: Annual Report and Accounts of Sampled Oil and Gas Companies in Nigeria (2012-2022)

Where:

OS - Ownership Structure

ROA - Return on Assets

FA - Firm Age

The table above displays data gathered from annual reports and accounts of selected oil and gas companies in Nigeria. This information was sourced from the corporate websites of the respective firms, the Nigeria Stock Exchange Library, and online sources. The variables listed exhibit varying degrees of linearity, as indicated by subsequent analyses.

INDUSTRY PANEL DATA ANALYSIS

Table 2: Descriptive Statistic of the Industry Level Panel Data

	OS	ROA	FA
Mean	1.000000	-0.033127	58.80000
Median	1.000000	0.060000	60.00000
Maximum	1.000000	0.550000	72.00000
Minimum	1.000000	-3.340000	43.00000
Std. Dev.	0.000000	0.578622	7.090421
Skewness	0.000000	1.817053	-0.399600
Kurtosis	0.000000	27.62053	2.534997
Jarque-Bera	0.000000	1113.877	1.959255
Probability	0.000000	0.500000	0.375451
Sum	55.00000	-1.822000	3234.000



Sum Sq. Dev.	0.000000	18.07940	2714.800
Observations	55	55	55

Source: Computed by Researcher Using Eviews 10.0 Statistical Software

Table 2 above presents the variable descriptions derived from 55 observations of time series panel data concerning the sampled oil and gas companies in Nigeria. Within the table, the industry's minimum values are as follows: Ownership structure 1.00, Return on Assets -3.34, and firm age of 43. Conversely, the maximum values for the companies include Ownership structure 1.00, Return on Assets 0.55, and firm age of 72. Meanwhile, the industry means for the variables are as follows: Ownership structure 1.00, Return on Assets -0.0331, and firm age at 58.

The normality of the data distribution is evident through the coefficients of Skewness, Kurtosis, and Jarque-Bera Probability. As per Table 2, the Jarque-Bera Statistics probabilities for all variables (both focal and explanatory) have insignificant p-values. The insignificance of these p-values suggests a normal distribution for all studied variables. This observation is corroborated by the skewness coefficients, which indicate that outliers are not significantly distant from one for all variables. Additionally, the kurtosis coefficient provides further confirmation of normal distribution for all variables. These findings pertain to data extracted from annual reports and accounts of sampled oil and gas firms in Nigeria.

Table 3: Regression Analysis Result of the Industry Level Panel Data

Dependent Variable: ROA

Method: Panel Least Squares

Date: 05/16/24 Time: 14:17

Sample: 2012 2022

Periods included: 11

Cross-sections included: 5

Total panel (balanced) observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.
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OS	0.19098	0.489246	0.390356	0.66386
C	4.996847	3.422343	1.460066	0.14601
R-squared	0.740828	Mean dependent var	10.66613	
Adjusted R-squared	0.702797	S.D. dependent var	19.88069	
S.E. of regression	10.14137	Akaike info criterion	7.344772	
Sum squared resid	3572.596	Schwarz criterion	7.625548	
Log likelihood	-140.245	Hannan-Quinn criter.	7.446292	
F-statistic	18.50546	Durbin-Watson stat	1.497187	
Prob(F-statistic)	0.000000			

Source: *Computed by Researcher Using EvIEWS 11 Statistical Software*

Table 3 presents the impact of the independent variable on return on assets. Ownership structure exhibits a positive effect on return on assets but is not statistically significant, with a p-value of 0.66386. The adjusted R-squared (R²) value suggests that approximately 70% of the variations in return on assets are explained by the explanatory variable, ownership structure. The remaining 30% may be attributed to other factors influencing return on assets in the context of sampled oil and gas firms in Nigeria, as well as additional remote factors captured by the error term. Moreover, the probability of the F-statistic is significant, indicating the statistical adequacy of the multiple regression model and its results. Additionally, there is an absence of serial autocorrelation in the panel data extracted from the annual reports and accounts of the sampled oil and gas firms.

Test of Hypothesis

Restatement of the Hypothesis in Null and Alternate forms:

Null Hypothesis: Ownership Structure does not have a positive and significant influence on return on assets (ROA) of oil & gas firms in Nigeria.

Alternative Hypothesis: Ownership Structure has a positive and significant influence on return on assets (ROA) of oil & gas firms in Nigeria.

**Statement of Decision Rule:**

Reject the null hypothesis (H_0), if the p-value of the t-statistics is less than 0.05. Otherwise accept the null hypothesis and reject the alternative hypothesis.

Decision

In Table 3, the regression results indicate that ownership structure has a positive but insignificant influence on return on assets. This suggests that an increase in ownership structure may have a positive effect on return on assets for the sampled oil and gas firms in Nigeria, but this relationship is not statistically significant. With a p-value of 0.66386 for ownership structure, which is greater than the significance level of 0.05, the null hypothesis cannot be rejected, and the alternative hypothesis is not supported. Therefore, the study concludes that ownership structure exerts positive and insignificant effects on the return on assets of the sampled oil and gas firms in Nigeria.

Summary of Findings

Ownership structure demonstrates a positive effect on ROA, yet it lacks statistical significance, with a p-value of 0.66386. This implies that while ownership structure may impact financial performance positively, its influence is not robustly supported by the data.

In conclusion, ownership structure exhibits a positive but statistically insignificant effect on ROA. Future research could delve deeper into the nuances of ownership dynamics and their implications for corporate governance and financial outcomes.

5.0 Recommendations

Based on the aforementioned findings:

The stakeholders should regularly examine ownership structure's influence on ROA. This can be achieved by investigating how different ownership structures, such as state-owned enterprises versus private ownership, impact ROA in the Nigerian oil and gas industry. Analyse the governance implications of ownership dynamics to identify opportunities for optimising financial performance and creating sustainable value for stakeholders.

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