

Research Article

A Moderating Effect of Financial Performance in a Relationship Between Ownership Structure and Firm Performance of Listed Commercial Banks in Nigeria

Bugaje Shamsuddeen Yusuf* , **James Uchenna Okpe, Musa Musa Muhammad**

Department of Accounting, Federal University, Dutsin-Ma, Nigeria

Abstract

In order to better understand the moderating impacts of financial performance, this article looks at the relationship between ownership structure and firm performance of Nigerian listed commercial banks. Data on ownership structure and yearly financial reports at the firm level from 2013 to 2022 are used in the empirical analysis. Panel regression analysis methods. Block share ownership and foreign share ownership were employed in this study as independent variables, while ROA was used as a leveraged moderating effect to quantify business performance. Descriptive research and correlational research design are thus employed in this study as suitable research designs. The results indicate that around 47% of all shareholders have shares held by shareholders who possess at least 5% of the company, which is a proxy for block ownership of common shares across commercial banks in Nigeria. The foreign share ownership mean is 22.65%, with a standard deviation of 3.93%, a minimum value of 0%, and a maximum value of 1%, respectively. This indicates a sharp decline in foreign investment as a result of the unpredictability of the market and the high level of insecurity that permeates the nation. The return on assets of the commercial banks that are quoted is positively and significantly impacted by foreign ownership; a rise of one unit in the variable results in a 4.0% return on assets. At the 1% significant level, leverage mediated the association between the dependent and independent variables (FSO*LEV and BSO*LEV). The study suggested using a non-linear model to explore the hypothesis that a firm's performance could affect its ownership structure and to estimate the impact of block ownership on firms' performance.

Keywords

Ownership Structure, Banks, Firm Performance

1. Introduction

The ability of a business to operate and meet its financial responsibilities determines how well it performs, thus it is essential to comprehend the relationship between ownership and performance as well as the problem of leverage. Leverage must therefore be included in order to fully understand the relationship between the two variables. This is due to the fact

that a company needs to be solvent in order to turn a profit that can be saved for future growth and used to provide dividends to shareholders. All businesses desire profitability because without it, they would be unable to continue operating. It is determined by taking into account the organization's liabilities, worth, and assets [1].

*Corresponding author: Bugajeshamsuddeen@Gmail.Com (Bugaje Shamsuddeen Yusuf)

Received: 11 January 2024; **Accepted:** 1 February 2024; **Published:** 17 May 2024



Copyright: © The Author(s), 2024. Published by Science Publishing Group. This is an **Open Access** article, distributed under the terms of the Creative Commons Attribution 4.0 License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

Return on assets compares profit to all of the assets a company uses to create revenue, it is a helpful internal management ratio. It is therefore a means of evaluating a business's performance and profitability. Return on equity, which represents a company's profit as a percentage of the total amount of shareholder equity shown in the company's statement of financial status, is another important indicator of financial success [1].

Ownership structure can be defined as distribution of equity in terms of capital and votes, along with the identification of the equity owners. The ability to solve financing issues, the capacity to carry out large-scale operations and projects, economies of scale and scope, the capacity to carry out complex operations due to the presence of highly skilled personnel, and the ease with which new capital can be raised are just a few of the advantages this type of ownership has over other business ownership models [12]. The influence of corporate ownership and control separation must be examined as modern firms clearly separate ownership from management. Numerous research on ownership structure, profitability, and financial performance have been done, but most of these studies ignore the reasons behind good or poor performance. For this reason, estimating future profitability and evaluating current or past profitability are essential. This is due to the fact that a company's profitability is the most important measure of its performance, and an unsuccessful business will not be able to survive. Firm performance is therefore essential to the structure and growth of the organization since it evaluates the performance, success, and reputation of the business [6].

Block share Ownership refers to a significant portion of a company's shares being owned and this puts pressure on management to increase the company's value. Shareholders who own five percent or more of a company's total shares are known as block holders. It is significant to own more than 5% of a company's total shares; owners who hold this amount are referred to as block shareholders [25]. Foreign share ownership, on the other hand, refers to the portion of a company's equity that is held by foreigners. The percentage of shares held by foreign owners who were not individual investors was referred to as foreign ownership [7].

Financial performance refers to a company's earnings and losses during a given time period expressed in monetary terms. "The degree of execution of a firm over a period of time reported in terms of general advantages and misfortunes at that time". Therefore, one could consider financial performance to be an arbitrary evaluation of a business's capacity to make money from its main line of business. Leverage, as a modulator of financial performance, refers to a company's capacity to generate profit or gain sufficient to maintain both its short- and long-term expansion [33].

In Nigeria, the banking sector serves both individual consumers and the commercial community by offering financial capital. Over time, it hopes to attain the specified rates of

return on the credits and financial services provided. Since loans and advances rank highest among the bank's most important assets, evaluating their security, quality, and effect on the bank's financial standing is also essential. The most significant flaw that Nigerian banks have been exhibiting is their incapacity to recognize troublesome assets, which stems from their ambition to announce enormous profits at the conclusion of the fiscal year [32].

It is on this background that this study intends to examine the moderating effect of leverage on the relationship between Ownership Structure and financial performance of listed commercial banks in Nigeria.

1.1. Statement of Research Problem

As earlier stated, the Nigerian banking sector has been facing serious challenges particularly regarding maintaining identity of many commercial banks. Even after the banking reforms of the year 2004, some banks still had to continue changing their identity and ownership. This is as a result of ownership issues that adversely affect their performance and ultimately profitability. The performance measurement of business firms has for long been of interest and a major concern to shareholders, investors and the government of every nation [7, 8]. Most of the cases of firms' performance deterioration, total failure or exceptional success depend largely on their managerial leadership style aimed at enhancing financial performance [42]. Large credits and insufficient cash balances to meet customer demand were the main problems facing Nigeria's commercial banks; as a result, the banks' operating leverage was completely destroyed by their inability to pay back their debts, placing them in a higher liquidity risk status [28]. In 2004, the Central Bank of Nigeria announced a process of recapitalizing Nigerian banks through consolidation in order to overcome illiquidity crises; the recapitalization policy is one of the important issues announced in order to sanitize the banking system [27].

Since the form of modern business is clearly based on the split between ownership and management, there is high tendency of agency problems. Where the split is a bit diluted with different forms of ownership conflict of interest tends to arise. When an organization's ownership and control are separated, managers are more likely to prioritize their personal interests above the organizations'. As a result, there is a conflict of interest between the shareholders and the managers. The type and manner of ownership involved in these conflicts varies. Managers normally prioritized their interest over the organizational interest, but the shareholders priorities profit. Even after declaring profit, Shareholder's demand dividend and managers prefers retention for reinvestment even on negative NPV projects.

There was a recent example of a bank whose financial performance was impacted by ownership issues and operational constraints. A new bank called Polaris Bank will be founded to take over the assets and liabilities of Skye Bank

Nigeria Plc., whose operating license was withdrawn by the Central Bank of Nigeria (CBN) and the Nigeria Deposit Insurance Corporation (NDIC) revealed to the public [9]. The managing director/chief executive officer, the deputy managing director, the two longest-serving executive directors on the management team, the chairman of the bank's board of directors, and all non-executive directors resigned when the CBN interfered in Skye Bank in July 2016. It's also resulted in the CBN appointing a new board of directors and management to secure the bank's survival [9].

Therefore, this study uses both the Agency, Stakeholder, and free cash flow theory as a theoretical gap with stakeholder theory as the more relevant theory to support the study. In this regard, it is argued and recommended that researchers should combine multiple theories to better explain a phenomenon and to extend a body of knowledge within and across disciplines [32]. The study seeks to fill the theoretical gaps in ownership structure and performance. Literature concerning the use of a single theory as most previous studies focused on the relationship between ownership structures BSO & FSO on financial performance on the other hand, mostly used one theory in isolation.

Review of extant literatures revealed that most of the studies conducted on ownership structure, financial performance and profitability in the developed and developing countries have inconsistent, inconclusive and mixed findings [7, 8, 23, 32, 35, 37, 38, 40, 42, 43]. These inconsistencies need to be addressed by introducing the role of leverage to examine the actual relationship. Thus, in order to extend the methodology of ownership structure research in Nigeria, this study argues for longitudinal and panel data, correlational research design as other studies [8-38, 40, 43].

In conclusion, this research addressed the problem of conflicts between agents and their principals which came as a result of the split of ownership and control. The issue of inconsistency in findings among studies of ownership structure and performance will also be addressed by introducing the moderator i.e., Leverage as to the best of my knowledge, out of the several studies on ownership structure and performance, studies that uses this moderating variable to support the relationship between ownership structure and financial performance of listed commercial banks in Nigeria are less pronounced.

The following research questions are raised with a view to answering them at the end of the study:

1. What is the effect of ownership structure (BSO, FSO) on firm performance?
2. How does leverage moderate ownership structure (BSO, FSO) to influence firm performance?

1.2. Objectives of the Study

1. To examine the effect of ownership structure (BSO, FSO) on firm performance
2. To determine whether leverage moderate the relation-

ship between ownership structure (BSO, FSO) and firm performance.

1.3. Hypotheses for Research

HO1: Ownership structure (Block and foreign share ownership) has no major impact on the Return on Assets of Nigeria's listed commercial banks.

HO2: Leverage has no impact on the link between the Ownership Structure (Block and foreign share ownership) and the Return on Assets of Nigeria's listed commercial banks.

The study covers commercial banks listed on the floor of the Nigerian stock exchange market between 1st January 2013 and December 2022.

2. Literature Review

2.1. The Conceptual Review of Firm Performance

Performance is defined as fulfilling a duty in a way that releases the performer from all further responsibilities under the terms of the agreement. The core of the concept of business performance is the belief that an organization is the voluntary association of productive assets, including human, physical, and capital resources, with the aim of accomplishing a shared objective [32]. According a company is considered to be operating effectively if it makes good use of its resources in order to achieve a high level of performance. A company's performance may be influenced by the market in which it competes as well as by the firm's own efficacy or efficiency. The performance of a firm can be viewed from different perspective. However, this study viewed firm performance from the operational and financial perspectives with an emphasis on financial performance which is to be measured by Return on assets [2].

2.1.1. Return on Asset

Return on assets compares earnings to all of the assets used by the company to generate those earnings, it is widely regarded as a strong internal management ratio. Thus, it serves as a means of assessing the effectiveness, performance, and profitability of the company. It also offers useful data regarding how well a business uses its assets to generate revenue. It displays the percentage of profit that a business makes in comparison to all of its resources. It is therefore also regarded as an efficiency metric. A business that has a high return on assets is likely adept at turning assets into earnings. Return on assets (ROA) is commonly seen as a steady measure of financial success; a rising ROA suggests higher profit margins, while a falling ROA suggests lower profit margins. [1].

2.1.2. The Structure of Ownership

Different scholars have characterized ownership structure in different ways, but all definitions place emphasis on the characteristics of the institution that controls power: its owners. As a result, the allocation of equity in terms of capital, voting rights, and the names of the equity owners can be used to characterize the ownership structure. These kinds of arrangements are essential to corporate governance because they affect the profitability of the companies that managers oversee as well as their own motivations [21]. Ownership structure as the percentage of stockholders' ownership. In addition there are three different kinds of ownership structures. The initial type of ownership concentration is total concentration, in which a single stockholder controls the whole company and typically retains 50% of the equity [42]. In addition, there can be multiple stockholders with scattered ownership, or a single stockholder with a shareholding below 10% and total ownership and control separated completely. Third, a corporation may have some large shareholders in addition to a relative concentration of ownership [21].

2.1.3. Block Share Ownership

In the context of this study, are holders of substantial portion of total shares of the company that exercises a pressure on managers to maximize the value of the company. Block shareholders as owners of significant portion of company's capital are struggling to have control and influence managers to protect their investment [12].

2.2. Empirical Review

Numerous academics have studied ownership structure and company financial success, both inside and outside of Nigeria. In an effort to provide empirical evidence that management, institutional ownership, and public ownership have an impact on company profitability uses secondary data from companies listed on the Indonesia Stock Exchange that was obtained from the Indonesian Capital Market Directory (ICMD) in 2013. Path Analysis was used to assess the data after purposeful sampling. The results showed that profitability has a positive direct or indirect impact on firm value, as does managerial ownership, institutional ownership, public ownership, and public ownership all have positive direct or indirect effects on the value of the company [3].

The impact of ownership structure—measured by managerial, institutional, and foreign ownership—on the profitability—measured by return on assets—of a subset of Nigerian deposit money banks between 2011 and 2019. The correlation research design was used in the study. Panel multiple regression analysis was utilized for the study of secondary data that were taken out of the annual reports of certain banks. The study's conclusions showed that foreign and managerial ownership had a major impact on the profitability of Nigeria's listed deposit money banks. However, the study discovered that the financial performance of Nigerian listed Deposit

Money Banks is not considerably impacted by institutional ownership [1].

The causal association between corporate governance factors including dividend policy and ownership structure and financial performance. He examined the direction of causality by examining panel data on certain listed companies in Tunisia, an emerging economy, using the bootstrap panel Granger non-causality tests. Using [30] methods, results are based on 154 firm-year observations from 1996 to 2017 and demonstrate the presence of both unidirectional and bidirectional substantial causal links between the two used variables [15].

In a similar vein, the study examined how corporate diversification mediated the relationship between listed firms' financial performance and ownership structure in Kenya. Panel data from 35 listed firms between 2003 and 2017 were used in the study. The results showed that institutional ownership and financial performance were favorably and significantly mediated by corporate diversification. Additionally, company diversification had a statistically significant but negative mediating relationship between foreign ownership and financial performance. The direct relationship between institutional and foreign ownership and financial performance was statistically insignificant, but these mediation effects persisted. [39]

In the context of Ghanaian banks, the study examined the moderating influence of ownership on the relationships between corporate governance and financial performance. In analyzing a panel dataset of 414 banks over an 18-year period using the multiple regression method and a sample of 23 institutions. The results showed that performance is positively impacted by audit independence, chief executive officer (CEO) duality, non-executive directors, and bank size [10].

The results also showed that there is an interaction between corporate governance and profitability when there is foreign ownership.

The impact of financial leverage on the profitability of 1,503 publicly traded Chinese manufacturing enterprises. The study's sample consists of China's listed manufacturing enterprises. The industrial companies' annual financial data from 2008 to 2016 can be obtained through the ORBIS database. The author used a simultaneous equation approach to account for any endogeneity in the analysis of the study data. Next, panel data for the years 2008–2016 was subjected to regression analysis utilizing two-step Generalized Method of Moments (GMM) approach, OLS, Fixed-effects, First-difference, and Random-effects techniques. Results indicated that there is an inverted U-shaped link between financial leverage and profitability, indicating that the tax shield may be the cause of the positive outcomes of this relationship [11].

The impact of capital structure, company selection, and human capital on the profitability of 48,673 Vietnamese construction companies in 2016. The findings demonstrated that using more debt in the capital structure would improve the firm's performance, but whether return on equity (ROE) or

return on assets (ROA) was used to measure firm profitability, the positive effect was steadily diminishing. Additionally, statistics showed that human capital had a beneficial effect on how well business operations performed. The establishment of the industrial park and the operational state of the business had little bearing on the profitability of the enterprise [34].

Used an unbalanced panel data on A-share listed companies of Shanghai and Shenzhen in China's capital market during the 2014–2019 period in an attempt to investigate the moderating effect of leverage on ownership structure. They discovered that institutional investors with longer holding periods and higher shareholding ratios are negatively associated with the cost of capital in China's capital market [35]. Additionally, the research validates the moderating role of ownership structure in the institutional investor-cost of capital connection. It was also shown that ownership concentration lessens the adverse effect of institutional investors on the cost of capital and increases the likelihood that China's state-owned firms will implement adjustments at the corporate governance level [35].

CEO duality was used as a moderating variable to examine the relationship between ownership structure, one of the corporate governance tools, and the performance of the company. Data for a sample of 180 companies listed on the Amman Stock Exchange (ASE) for the years 2009 to 2017 were analyzed using the panel data method in their study. Three ownership structure factors are used: CEO duality is the moderating variable, while the other three are management ownership, government ownership, and family ownership. The firm's performance was estimated by the study using Tobin's Q. The results demonstrate that the ownership structure mechanisms have a major impact on the (TQ)-measured company performance. When there is a notable inverse link between family and managerial ownership and (TQ). However, there is a strong positive correlation between government ownership and (TQ). Conversely, the association between family ownership and (TQ) is significantly positively impacted by the moderating influence of CEO duality, whereas the relationship between managerial ownership and government ownership and (TQ) is significantly negatively impacted [10].

2.2.1. Block Share Ownership and Firm Performance

Block holders is defined as holders of at least 5 per cent of the total shares of the company. They are of the opinion that holding more than 5% of the total share is significant and shareholders who owns more than or at least 5% of the total share of a company are regarded as block shareholders [24]. While in another study is define as block shareholder as any shareholder holding at least 5% of outstanding share. [4]. Measured block share ownership as the percentage of a company's shares that is owned by the largest owner [11], however, saw ownership of block shares in two ways: the

first block holder had more than 30% of the equity, while the second block holder held 10%. Block share ownership, then is the proportion of a large interest in shares to the entire number of equity shares in a company [17].

2.2.2. Foreign Share Ownership and Firm Performance

Shareholders from nations other than the one in which the company is registered are referred to as foreign shareholders. [21], Calculates foreign share ownership by dividing the market value of equity by the number of shares held by foreigners and multiplying the result by the market price per share. According to the percentage of a company's equity held by foreigners is the measure of foreign share ownership. Comparably, the percentage of shares held by foreign investors who are not individual investors at the conclusion of the fiscal year is used to measure foreign ownership [7]. While examining the relationship between institutional systems—configurations of nations with comparable institutional features—and firm performance, the study discovered that while foreign ownership generally improves performance, the extent of the benefit varies depending on the configuration [42].

According to foreign ownership represents the capital that overseas investors have invested in their home companies. It's also thought of as a way for companies to raise capital. Using panel data from 710 businesses that have signed up for the Vietnam stock market between 2013 and 2016, they analyze the impact of foreign ownership on business performance. Fixed Effect Model (FEM) and Heckman two-step are applied by the authors. According to the study's empirical findings, foreign ownership initially has a negative impact on firm performance as measured by Tobin's Q, but once it exceeds 24.4%, the correlation turns positive. The business performance of listed companies has a U-shaped relationship with foreign institutional or individual ownership as well. Additionally, this essay highlights the various effects of foreign ownership on the performance of firms by size and by industry [25].

2.2.3. Leverage as Moderator and Firm Performance

The ability of a business to pay off debt in accordance with the loan's payback schedule is known as leverage and used a sample of 20 listed chemical companies from the Karachi Stock Exchange to measure the financial performance of those companies and found a positive correlation between financial leverage and financial performance. Using a sample of 40 saving and credit cooperative societies registered by Sacco society regulatory authority (SASRA) between the years of [2010] and [2012] [33-42].

2.3. Theoretical Framework

The study on the impact of ownership structure on the financial performance of listed commercial banks is foreground largely by three theories.

2.3.1. Agency Theory

Agency theory was initially developed and argued on the increase in the gap between ownership and control of large organizations arising from the decrease in equity ownership. This situation provides a platform for managers to pursue their own interest, instead of maximizing returns to shareholders [5]. The theory holds that shareholders of a company are the only owners, and the duty of top management should be solely to ensure that shareholders' interests are met. It is worth reiterating that the duty of top managers is essentially to manage the company in such a way that the returns to shareholders are maximized thereby increasing the profit and cash flow [5].

Moreover, managers do not always run the firm to maximize returns to shareholders. They developed their agency theory based on the principal – agent problem as a key factor to determine firm performance. They consider agency relationship as a contract under which one or more persons (principal(s)) engage another person (the agent) to perform some services on their behalf by delegating some decision-making authority to the agent. The problem arising from this delegation of authority is that the interest of managers and shareholders is not always the same. In this instance the manager responsible for the day to day running of a firm works toward achieving his personal goals rather than maximizing the corporate goals of shareholders [30].

2.3.2. Free Cash Flow Theory

According to [29], free cash flow is the money that is still available after a company has invested in all viable projects with a positive NPV. Jensen claims that calculating free cash flow for a company is challenging due to the apparent difficulty in determining the precise number of potential investments for a company. Given that it was born out of a significant agency problem, free cash flow theory is strongly tied to agency theory. According to the previous study, when senior managers have access to free cash flows, they frequently choose to invest in initiatives with negative net present value (NPV) rather than provide dividends to shareholders. He contends that as a company's turnover rises, management pay generally tends to follow. Hence the objective of the company is to increase the size of the firm by investing in various projects even if such projects have negative NPV [29].

Free cash flow is the excess fund that requires investment in a project that yields a high positive NPV when discounted at a relevant cost of capital. The study further views firms as going concerns whose free cash flow should be invested in viable projects that yield positive NPV. From the explanation by Jensen, free cash flow is obtained from the company's pre-

vious activities, which are meant to provide capital for further expansion of its business activities or the payment of dividend to shareholders [29]. The study recognizes that time is of the essence in creating value for money. Hence, according to him, the incremental value of money that is free in the company's books should be reinvested in projects with a positive net present value or shared to investors. With all the valuable and useful information the definition is criticized for its lacking in accounting precision [13]. The information required for the calculation of free cash flow, according to the study, it is not publicly available and is therefore unobservable. It is very difficult for firms to disclose the actual set of positive net present value (NPV) projects that are available to them at any point in time [29].

2.3.3. Stakeholder Theory

Stakeholder theory has its roots in definition of corporate social responsibility, wherein he defines a socially responsible company as one that strikes a balance among many interests. It also considers the country [31], local communities, dealers, suppliers, and employees. Later, [16] refined this notion by defining a stakeholder as any organization or people that can influence or be impacted by the accomplishment of the firm's goals. Businesses have obligations to the community government, suppliers, consumers, employers, and shareholders, among other members of society. As a result, businesses have a moral and ethical duty to fulfill some obligations to this group of stakeholders willingly. The study defines stakeholders as people and constituencies that participate in wealth-creating capacity and activities—whether voluntarily or involuntarily—and who, as such, are potential beneficiaries and/or risk bearers, made another significant contribution to our understanding of the stakeholder theory [31]. The work of [31], who view stakeholder Research Methodology, was another contribution to the understanding of the stakeholder theory.

3. Research Methodology

This chapter outlines the examination's methodology. Along with the variables of the study, it also describes the research design, population of the study, sample and sampling process, sources, and method of data collection and analysis.

3.1. Research Design

The primary focus of correlational study design is quantitative relationship measurement [20, 26]. Correlational research design is hence the most suited design for this investigation. This is because it performs better when figuring out how two or more variables relate to one another. According to study a correlational design facilitates the investigation of relationships by identifying some of their consequences [13]. As a result, it aids in the analysis of data by establishing a potential relationship between variables [20]. This study will

employ a descriptive research design to collect, measure, and analyze data from annual financial reports, which are secondary sources, of the banks that were sampled between 2013 and 2022. The moderating effects of profitability and leverage on the link between ownership structure and financial performance of Nigerian listed commercial banks are thought to be sufficiently measured by the design. The fact book and the annual reports and accounts of commercial banks listed on the Nigerian stock exchange included all the pertinent and required information as in [18, 36, 41].

The population of this study comprises all the 14 Commercial banks listed on the floor of the Nigerian Stock Exchange as of 31 December 2022.

3.2. Sample Size and Sampling Technique

The Morgan's formula for sample size was used in the calculation, with a tolerance error of 0.05, and the result was (12) thirteen banks represent the sample size, as shown below. As a result, 13 banks were chosen from the 15 banks listed on the Nigerian stock exchange and used as the study's sample size. This is in line with the similar approach used by [Krejcie and Morgan, 1970] as cited in [18].

The formula for Determining Sample Size for a Finite Population is shown in equation 1 Equation 1:

$$n = \frac{X^2 NP(1-P)}{e^2(N-1) + X^2 P(1-P)}$$

Where:

$X^2 = 3.841$ is the table value of χ^2 for [1] degree of freedom at the desired confidence level 3.841

$n=15$ total number of populations

$P=0.5$ the population proportion for cluster (assumed to be

0.5 since this would be the maximum sample size

$e^2=0.05$ the degree of accuracy expressed as a proportion is 0.05

Therefore:

$$n = \frac{3.841(15)(0.5)(0.5)}{(0.05)^2(15-1) + 3.841(15)(0.5)}$$

$$n = \frac{236.2(0.5)}{0.0025(15)+1.9205(0.5)} = \frac{12.1}{0.305+0.96005} = \frac{12.1}{1.21} = 12.10 = 12 \text{ approx}$$

$n=62$

According to the formula which shows the total number of sample Banks from the sectors.

3.3. Model Specification

$$ROA = \beta_0 + \beta_1(FS)it + \beta_2 (AGE)it + \beta_3 (BSO)it + \beta_4 (FSO)it + \epsilon_{its} \quad (1)$$

$$ROA = \beta_0 + \beta_1(FS)it + \beta_2 (AGE) it + \beta_3 (BSO)it + \beta_4 (FSO)it + \beta_5(LEV)it + \beta_6(BSO \times LEV) + \beta_7(FSO \times LEV) + \epsilon_{its} \quad (2)$$

Where:

$B_0 \dots \beta_n$ is intercept

BSO is Block share ownership

FSO is foreign share ownership

ROA is return on assets

LEV is leverage

FS is firm size as control variables

Age is the age of the firm after listing

ϵ is the error term.

4. Results and Discussion

Table 1. Descriptive Statistics of the Variables.

Variables	Obs	Mean	Std. Dev	Min	Max
Return on Assets	120	011.92	0340	.1751	.0659
Block share ownership	120	47.007	9.123	0	1.009
foreign share ownership	120	22.65	3.093	0	1
Firm size,	120	20.678	8.982	18.524	22.649
Firm age	120	20.666	12.598	7	51
Leverage	120	19.812	87.138	19.812	2.547

Source: STATA Output 12.0 based on data in Appendix A

Table 1 Reports the descriptive statistics of the units of analysis (Nigerian listed commercial banks) in terms of the

dependent and explanatory variables that were employed in the study for the period of 2013-2022. The results of the firm performance show that the levels of average firm financial performance measured by ROA is 11.82% while the highest financial performance achieved by the banks for the period under study were 65.90% and the lowest was -1.75% respectively. In addition, ROA has standard deviation of 34.01% respectively. This is in line with the findings of [22, 34].

Ownership structure is proxied by block ownership and foreign ownership. Table 1. Shows that percentage of shares held by shareholders who own at least 5%, which is the proxy for block ownership of common shares across commercial banks in Nigeria is around 47.00% of total shareholders. This suggests that the ownership structure of Nigerian banks is highly concentrated relative to financial firms in the US or the UK [34].

Foreign share ownership mean is 22.65% with standard deviation of 3.93%, minimum of 0% and a maximum value of 1 % respectively which shows drastic fallout of foreign investors due to market uncertainty and level of insecurity bedeviling the country.

4.1. Regression Results

The relationships between the main independent variables and the dependent variable and the extent to which the relationships are moderated in the presence of Leverage were determined statistically using regression analysis. The statistical analyses were carried out in a step process, as recommended by [1], were done in a number of studies. The results of the analyses are shown in Table 2.

Table 2. Regressions Result.

Variables	Model 1	Model 2
Constant	1.3805*** (8.17)	1.3736*** (8.46)
FS	-.0124 (-1.53)	3.7210*** (2.83)
AGE	.0012 (1.47)	3.1240*** (.253)
BSO	.0221*** (1.98)	.0172 *** (1.45)
FSO	-.0164*** (0.82)	-.0154 (-0.78)
LEV		.0068*** (2.45)
BSO*LEV		.0143*** (1.79)
FSO*LEV		.0029 *** (-0.48)
Obs	120	120
Adjusted R2	0.1051	0.1090
Rho	.6651	.6534
P value	0.0000	0.0001
F value	3.28	3.73
Sig	.0542	.0539

Source: STATA Output 12.0 based on data in Appendix B. NOTE: ***, ** and * indicate 1% and 5% and 10% significant levels respectively; the t-value is presented in bracket in parenthesis while the other Figures represent the coefficient.

The impact of the ownership structure of return on assets on the Nigerian commercial banks that are quoted is shown in Table 2 above. The return on assets of the listed commercial banks, the dependent variable, varies by 10.51%, and evidence from the pooled effect model [1] shows that the independent factors can account for this variance. When the Durbin Watson statistic is more than 0.0000, the pooled effect model 1's F-statistics demonstrate that the model is statistically significant. According to model [1], the β coefficient indicates that foreign ownership and block ownership have a

positive and significant link with the commercial banks' return on assets, whereas firm size and age have a negative and negligible association with the dependent variable's return on assets. From the fixed effect model, the independent variables explain 38.9% variation on the dependent variable.

Table 2 Model 2 documented the interacting moderating variable of Leverage and shows the moderating interactions of ROA with the independent variables, First, the beta values of model 1 the main effect variables show some improvements as FS, AGE, BSO, LEV are significant at 1% level while FSO

are insignificant. On the other hand, the statistic coefficient in model 2 Table 2 Shows that leverage moderated the relationship between dependent and independent variables. BSO, FSO and ROA (BSO*LEV, FSO*LEV) at 1% level of significant.

4.2. Testing of Hypotheses

The hypotheses developed on the relationship between the independent variables and dependent variables as well as the moderating effects of LEV as depicted in the conceptual models in chapter three, are tested in this section. The hypotheses of the study are classified into two groups as hypotheses on the main effects; hypotheses on the moderating effects of LEV.

4.2.1. Hypothesis One: The Main Effects

(i). Block Share Ownership on Return on Assets

The coefficient result in Model 1 shows that BSO are positively and significantly ($P > 0.01$) related to ROA. Hence, the results rejected hypothesis one (H01) which states that BSO has no significant impact on ROA.

(ii). Foreign Share Ownership on Return on Assets

The result of Model 1 provides evidence suggesting that the link between FSO and ROA are significant. Therefore, H01 which predicts that FSO has no significant impact on ROA is rejected.

4.2.2. Hypothesis Two on Moderating Effect of Leverage

(i). Moderating Effect of Leverage on block share ownership and return on assets.

The result in Model 2 Table 2 Reveals that the Leverage had positive significant interacting effect on the relationship between block share ownership and return on assets. Therefore, null hypothesis (H02) which predicts that Leverage has no significant moderating effect on relationship between block share ownership and return on assets is rejected.

(ii). Moderating Effect of Leverage on foreign share ownership and return on assets.

The result in Table 2 Reveals that the Leverage had positive significant interacting effect on the relationship between foreign share ownership and return on assets. Therefore, null hypothesis (H02) which predicts that Leverage has no significant moderating effect on relationship between foreign share ownership and return on assets is rejected.

4.3. Discussion of Results

The study provides updated existing evidence of the relationship between ownership structure and return on assets, this study determined the perception of the ownership structure and return on assets in Nigerian listed commercial banks. Furthermore, it examined the moderating effect of firm financial performance.

4.3.1. Ownership Structure and Return on Assets

In terms of the dependent and explanatory variables that were used in the study for the period of 2013–2022, the descriptive statistics on the data of this study offer significant evidence showing that the mean descriptive statistics of the units of analysis (Nigerian listed commercial banks). The financial performance data indicate that, during the research period, the banks achieved the maximum financial performance of 65.90% and the lower of -1.75%. The average company performance, as assessed by ROA, is 11.82%. Furthermore, the standard deviation of ROA is 34.01%. The results of [22, 34] are consistent with this.

Block ownership and foreign ownership serve as stand-ins for ownership structure. Table 1 indicates that approximately 47.00% of all shareholders are stockholders who own at least 5% of the shares, which is a proxy for block ownership of common shares across commercial banks in Nigeria. According to [34], this indicates that the ownership structure of Nigerian banks is significantly more concentrated than that of financial institutions in the US or the UK. It is important to highlight that this study's ownership proportion varies from 0% to 99.98% with a standard variation of 9.12%, reflecting the variability of ownership amongst commercial banks. This could be related to the fact that most developing markets, including Nigeria, have a market for corporate control and lax corporate governance frameworks.

The foreign share ownership mean is 22.65%, with a standard deviation of 3.93%. The smallest value is 0%, and the maximum value is 1%. These figures illustrate the significant impact of foreign investors due to the unpredictability of the market and the high level of insecurity prevalent in the nation. According to the regression model, foreign ownership has a positive, substantial impact on the return on assets (ROA) of the chosen Nigerian banks from [2013] to [2022], with a significance level of 1%. This demonstrates how having foreign ownership enhances banks' operations. This suggests that the return on assets will rise by N1.70 kobo for every 1% increase in foreign shareholding. This finding suggests that greater performance is correlated with a larger percentage of foreign ownership. As a result, the data provides support for rejecting the initial null hypothesis, which held that foreign ownership had no appreciable impact on the return on assets (ROA) of the chosen Nigerian banks. This aligns with the research conducted by [12] and deviates from the findings of [1]. The model summary of the regression findings displays the combined and overall influence of the repressors, which are ownership structure (foreign shareholding) and return on assets of the chosen banks in Nigeria.

The model is well fitted, as indicated by the F-value of 3.28, which is significant at 1% (0.000). The coefficient of determination R^2 , on the other hand, is 19%, and it describes how changes in the independent variable affect the individual variance of the dependent variable (ROA). It can be concluded that block share ownership and ownership structure

(foreign shareholding) together have a predictive power of 19 when it comes to influencing the financial performance of a chosen Nigerian bank; the remaining 81 components are explained by other factors that the model does not account for.

The impact of foreign ownership on the listed commercial banks' return on assets is favorable and large, with a rise of one unit in the variable translating into a 4.0% return on assets. Since diversifying investments from the domestic economy is one of the goals of cross-border banking, this finding validates the theory of portfolio diversification and confirms the a-priori anticipation of the outcomes. The inference is that the profitability of the banking sector will rise as more private investors acquire shares in commercial banks. The results also support the conclusions of the following studies [7, 8, 35, 38, 40, 42, 43] and they are not inconsistent with [41].

4.3.2. Moderating Effects of Leverage

Table 2 Model 2 documented the interacting moderating variable of Leverage and shows the moderating interactions of ROA with the independent variables. First, the beta values of model 1 the main effect variables show some improvements as FS, AGE, LEV, BSO and FSO are significant at 1% level. On the other hand, the statistic coefficient in model 2 Table 2. Reveals that leverage altered the relationship between dependent and independent variables. While the interactions of BSO*LEV were unable to significantly alter the relationship between BSO and ROA, FSO and ROA (FSO*LEV) did at the 1% level of significance.

5. Conclusion and Recommendations

5.1. Conclusion

Based on the fixed-effects model regression analysis, the study find that: all ownership structures have a significantly positive effect on return on assets. Ownership structure does positively affect firm performance. Also, at a 1% level of significance, the study find that BSO have a significant impact on firm performance. This finding also aligns with the findings of [2, 8, 19, 21, 23, 32, 37, 38, 40, 43] The issue of endogeneity was first raised by [41] and several researchers have tried investigating the reverse impact of firms' performance on ownership structure. In this study, a 2SLS did not reveal any endogeneity. [21] For instance tried investigating the reverse impact of firms' performance on Block ownership and found that Block ownership was endogenous to compensation packages rather than firms' performance. We conclude in this study that firms' performance is neither endogenous to Block or Foreign ownership.

5.2. Recommendations

Following the findings of this study, we hereby make the following recommendations:

Firms in Nigeria should pursue policy of diffused ownership structure as against concentrated ownership. Managers and/or directors in a firm that is highly concentrated (where few own large percentage of equity shares) will be difficult to monitored and controlled. They may also use their positions to improve their lots against the wish of the other minority shareholders, who would have preferred the business going for projects that are viable. Regulators should enact relevant laws that will guide against a group of persons or institutional investors to own large percentage of the equity shares of performing public quoted firms. A non-linear model should be used in estimating the influence of Block ownership on firms' performance and in testing the possibility of firms' performance influencing ownership structure.

Future line of research should be directed at studying the impact of leverage on both the ownership structure and performance. The issue of endogeneity should be taken into consideration. Efforts should also be made to increase the size of the sample and variables, especially finding suitable quantifiable indicators of ownership mode.

5.3. Limitations of the Study

The data for the variables of interest were derived from Private companies. Public companies were not studied, although they appear to be strong drivers of the Nigerian economy. Also, the methodology adopted for establishing endogeneity could have been done using the simultaneous equation approach rather than a 2LS.

Abbreviations

NPV: Net Present Value
 CBN: Central Bank of Nigeria
 NDIC: Nigeria Deposit Insurance Corporation
 ROA: Return on Assets
 ICMD: Indonesian Capital Market Directory
 GMM: Generalized Method of Moments
 ROE: Return on Equity
 ROA: Return on Assets
 TQ: Tobin's Q
 CEO Duality: Chief Executive Officer
 FEM: Fixed Effect Model
 SASRA: Sacco Society Regulatory Authority
 B0: β_0 Is Intercept
 BSO: Block Share Ownership
 FSO: Foreign Share Ownership
 LEV: Leverage
 FS: Firm Size
 ε : The Error Term

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] Abubakar, A. (2021). An Analysis on the Impact of Firm Size on Profitability of Listed Deposit Money Banks in Nigeria. *Asian Journal of Economics, Business and Accounting*, 21(3), 72–84. <https://doi.org/10.9734/ajeaba/2021/v21i330361>
- [2] Adeleke, A., Ogundele, O. J. K., & Oyenuga, O. O. (2008). *Business Policy and Strategy* (2nd ed.). Lagos: Concept Publications Limited.
- [3] Andriani, B. (2021). Influence of Ownership Structure on Company Profitability and Value in Companies. *ATESTASI: Jurnal Ilmiah Akuntansi* 4(1), 112-119. <https://doi.org/10.33096/atestasi.v4i1.727>
- [4] Balsmeier, B., & Czarnitzki, D. (2015). Ownership Concentration, Institutional Development and Firm Performance in Central and Eastern Europe. *Managerial And Decision Economics*. <https://doi.org/10.1002/mde>
- [5] Berle, & Means. (1932). *Corporate ownership structure and firm performance*. New York: Macmillan.
- [6] Bhutta, N. T., & Hasan, A. (2013). Impact of Firm Specific Factors on Profitability of Firms in Food Sector, 2013(April), 19–25.
- [7] Bremholm, A. (2015). *Foreign ownership and foreign directors – the effects on firm performance in Japan*. Lund University School of Economics and Management.
- [8] Carney, M., Estrin, S., Liang, Z., & Shapiro, D. (2018). National institutional systems, foreign ownership and firm performance: The case of understudied countries. *Journal of World Business*, (March), 0–1. <https://doi.org/10.1016/j.jwb.2018.03.003>
- [9] Central Bank of Nigeria (2018) press release.
- [10] Dakhallallh, M. M., Rashid, N. M. N. M., Abdullah, W. A. W., & Dakhallallh, A. M. (2019a). The Effect of Ownership Structure on Firm Performance among Jordanian Public Shareholders Companies: Board Independence as a Moderating Variable. *International Journal of Academic Research in Progressive Education and Development*, 8(3), 13–31. <https://doi.org/10.6007/ijarped/v8-i3/6212>
- [11] Dalci, I. (2018), "Impact of financial leverage on profitability of listed manufacturing firms in China", *Pacific Accounting Review*, Vol. 30 No. 4, pp. 410-432. <https://doi.org/10.1108/PAR-01-2018-0008>
- [12] Demsetz, H., & Villalonga, B. (2001). Ownership structure and corporate performance. *Journal of Corporate Finance*, 7(2001), 209–233.
- [13] Denga, D. I., & Ali, A. (1983). *An introduction to research methods and statistics in education and social sciences* (3rd Editio). Calabar: Rapid Educational Publishers.
- [14] Džanić, A. (2012). Concentration of ownership and corporate performance: evidence from the Zagreb Stock Exchange. *Financial Theory and Practice*, 36(1), 29–52. <https://doi.org/10.3326/finfp.36.1>
- [15] El-Ammari, A. (2021). Ownership structure, dividend policy, and financial performance: A causality analysis. *Corporate Ownership & Control*, 18(3), 161-174. <https://doi.org/10.22495/cocv18i3art13>
- [16] Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston MA: Ballinger.
- [17] Galal, H. M., & Soliman, M. M. (2017). The Effect of Ownership Structure on Firm's Financial Performance: An Empirical Study on the Most Active Firms in the Egyptian Stock Exchange. *European Journal of Business and Management*, 9(15), 90–104.
- [18] Garko, J. (2014). *garko 2014*,. PHD dissertation, Accounting department, BUK.
- [19] Guillaume, A. (2018). *Ownership Structure And Firm Performance : Empirical Study*.
- [20] Gujarati, D. N. (2004). *Basic Econometrics* (Fourth). USA: The McGraw-Hill.
- [21] Gulliano, I., Giacomo, N., & Andrea, S. (2007). Ownership structure, risk and performance in the European banking industry. *Journal of Banking and Finance*, 31, 2127–2149.
- [22] Hanafi, M. M., Setiyono, B. and Sanjaya, I. P. S. (2018), "Ownership structure and firm performance: evidence from the subprime crisis period", *Corporate Governance*, Vol. 18 No. 2, pp. 206-219. <https://doi.org/10.1108/CG-10-2016-0203>
- [23] Herbert, W., & Agwor, T. C. (2021). Corporate governance disclosure and corporate performance of Nigerian banks. *Journal of Research in Emerging Markets*, 3(3), 14–36. <https://doi.org/10.30585/jrems.v3i3.674>
- [24] Hoang, L. T., Nguyen, C. C., & Hu, B. (2017). Ownership Structure and Firm Performance Improvement: Does it Matter in the Vietnamese Stock Market? 1–13. <https://doi.org/10.1111/1759-3441.12185>
- [25] Hong, N. T. H., & Loan, N. T. (2017). *Assessment of the Relationship between Foreign Ownership and Firm Performance on Vietnamese Listed Companies*.
- [26] Huang, H. W., Rose-Green, E., & Lee, C. C. (2012). CEO age and financial reporting quality. *Accounting Horizons*, 26(4), 725–740.
- [27] Ikpefan, O. A. (2012). Bank Capitalization and Performance in Nigeria Banking Industry (1986-2006) Empirical Evidence. *European Journal of Accounting Auditing and Finance Research*, 1(4), 12–32.
- [28] Isa, M. A. (2011). Bank consolidation and solvency: the Nigerian Experience. *International Journal of Research in Research and Management*, 3(2), 35.
- [29] Jensen, M. C. (1984). Agency cost of free cash flow, corporate finance and takeovers. *The American Economic Review*, 76(2), 323–329.
- [30] Jensen, M. C., & Meckling, D. (1976). Managerial behavior, agency cost and ownership structure. *Journal of Financial Economics*, 3(4).

- [31] Johnson, H. L. (1971). *Business in contemporary society: Framework and issues*. Belmont: CA Wadsworth.
- [32] Kafidipe, A., Uwalomwa, U., Dahunsi, O., & Okeme, F. O. (2021). Corporate governance, risk management and financial performance of listed deposit money bank in Nigeria. *Cogent Business and Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1888679>
- [33] Mohammed, A. (2014). Relationship between leverage and financial performance (Evidence of listed chemical companies of Pakistan). *Research Journal of Finance & Accounting*, 5(23).
- [34] Nguyen, V. (2020). Human capital, capital structure choice and firm profitability in developing countries: An empirical study in Vietnam. *Accounting*, 6(2), 127-136.
- [35] Obaje, F. O., Abdullahi, S. R., & Ude, A. O. (2021). Moderating Effect of Firm Size on the Relationship between Board Structure and Firm Financial Performance. *International Journal of Academic Research in Business and Social Sciences*, 6(3), 97–117. <https://doi.org/10.6007/ijarbss/v6-i9/2270>
- [36] Samaila, I. A. (2014). *Corporate governance and financial reporting quality in the Nigerian oil marketing industry*.
- [37] Shah, S. Z. A., Butt, A. S., & Saeed, M. M. (2011). Ownership structure and performance of firms: Empirical evidence from an emerging market. *African Journal of Business Management*, 5(2), 515–523. <https://doi.org/10.5897/AJBM10.675>
- [38] Tanko, U. M. (2020). The moderating effect of profitability on the relationship between ownership structure and corporate tax avoidance in Nigeria listed consumers goods firms. *International Journal of Business and Technopreneurship*, 10(2), 153–172. <https://ijbt.unimap.edu.my/index.php/volume-10-no-2-june-2020>
- [39] Tanui, D. P. J., Katana, H., Alosi, G., Khahenda, L., & Adhi-ambo, V. E.. (2021). Ownership Structure and Financial Performance of Listed Firms in Kenya: Mediation Role of Corporate Diversification. *Journal of Advanced Research in Economics and Administrative Sciences*, 2(2), 16-34. <https://doi.org/10.47631/jareas.v2i2.222>
- [40] Ugwu, M. O., & Omeje, A. N. (2021). Private Ownership Structure and Firm Productivity: A Firm - Level Empirical Evidence from Nigeria. *South Asian Journal of Social Studies and Economics*, 11(4), 9–22. <https://doi.org/10.9734/sajsse/2021/v11i430289>
- [41] Usman, S., & Yero, J. (2012). Ownership concentration and earnings management practice of Nigerian listed conglomerates. *American International Journal of Contemporary Research*, 2(7)
- [42] Wah, C. S. E. E. (2015). “ *The Effects of Foreign Equity Ownership and Foreign Directors ’ Presence on Financial Performance of Malaysian Listed Manufacturing Companies*” *Master Of Business Administration Faculty Of Accountancy And Management*. Universiti Tunku Abdul Rahman Faculty.
- [43] Zik-Rullahi, A. A., & Farouk, M. A. (2020). Share Ownership, Executive Compensation and Financial Performance: Does Degree of Leverage in Listed DMBS Matters? *JOURNAL OF MANAGEMENT SCIENCES*, 1(1), 331–350.