



OWNERSHIP STRUCTURE AND FINANCIAL PERFORMANCE OF QUOTED DEPOSIT MONEY BANKS IN NIGERIA

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ABSTRACT

The financial performance of many organisations has been largely linked to their ownership structure over time, as it provides funding through owners' equity. This study examines the effect of ownership structure proxied by foreign ownership and board ownership on the firm performance of deposit money banks quoted on the Nigerian Exchange Group from 2016-2025. Firm performance was represented by return on assets (ROA) while firm size was employed as a control variable. The study adopts an ex post facto research design, and the panel data were sourced from the various editions of the bank's financial statements for the 10 years. The Random Effect estimation technique was specified as the most appropriate model estimator after the Hausman specification test. The results of the Random Effect show that foreign ownership has a significant positive effect on financial performance, while director ownership has an insignificant positive effect on financial performance. The study recommends, among others, that the financial sector regulators should encourage the formation of banks with foreign ownership in order for the foreign owners to bring in their expert knowledge and resources into the economy, as banks with foreign control usually have better performance.

KEYWORDS: Board Ownership, Financial Performance, Foreign Ownership, Ownership Structure, and Return on Assets.

1.0 . INTRODUCTION

Financial performance refers to the extent to which an organisation effectively utilises its financial and non-financial resources to achieve its economic objectives, generate profits, create shareholder value, and maintain long-term sustainability. It is commonly measured using accounting and market-based indicators such as Return on Assets (ROA), Return on Equity (ROE), Earnings per Share (EPS), Net Profit Margin (NPM), Tobin's Q, and market value. Recent studies view financial performance as a multidimensional concept that reflects profitability, efficiency, liquidity, solvency, and value creation for stakeholders (Alamin *et al.*, 2025). Contemporary literature further emphasises that financial performance is influenced by corporate governance, environmental, social and governance (ESG) practices, risk management, innovation, and strategic decision-making (Anita *et al.*, 2025).



Globally, studies conducted across developed and emerging economies indicate that firms with effective governance structures tend to record superior financial performance and enhanced firm value. Similarly, research on international firms and industries demonstrates that financial performance remains a critical indicator of organisational success because it reflects a firm's capacity to generate returns from invested resources while sustaining competitive advantage in dynamic business environments (Suprpto *et al.*, 2025). Evidence from African financial institutions reveals that profitability and operational efficiency differ across regions due to variations in economic development, regulatory quality, financial inclusion, and technological adoption (Msomi, 2023). Analyses further indicate that African banks have achieved returns that exceed global averages, reflecting improvements in revenue generation and operational efficiency across major African economies (Reuters, 2026). Recent evidence from Nigerian corporations and financial institutions demonstrates that strong governance structures and effective resource management enhance profitability and financial outcomes despite macroeconomic uncertainties (Fadun *et al.*, 2025).

Corporate ownership structure refers to the distribution of equity ownership among different classes of shareholders and the extent to which ownership rights and control are concentrated or dispersed within a corporation. It encompasses various ownership forms such as managerial ownership, institutional ownership, foreign ownership, family ownership, government ownership and ownership concentration. Ownership structure is a fundamental corporate governance mechanism because it influences managerial behaviour, monitoring effectiveness, strategic decision-making and organisational performance (Nguyen *et al.*, 2025). Contemporary governance literature suggests that ownership structure determines the alignment of interests between managers and shareholders, thereby mitigating agency conflicts and enhancing accountability. Recent global evidence indicates that ownership patterns have evolved from predominantly dispersed ownership models towards more concentrated and institutionally dominated structures, reflecting the growing influence of institutional investors, sovereign wealth funds and multinational investment entities in corporate governance processes (OECD, 2025).

Within the Nigerian banking sector, ownership structure plays an even more strategic role because of regulatory oversight and the systemic importance of banks. Nwude *et al.* (2023) note that different ownership categories significantly affect the risk-adjusted performance, profitability and operational efficiency of listed deposit money banks. Consequently, regulators such as the Central Bank of Nigeria continue to emphasise diversified and transparent ownership structures as a mechanism for strengthening corporate governance, safeguarding depositor interests and promoting sustainable financial performance within the Nigerian banking industry. Ownership structure is discussed under block-holder, foreign and director ownership in this study.

Foreign ownership refers to the proportion of a company's equity that is owned by investors, institutions, or corporations domiciled outside the country where the firm operates. It represents cross-border participation in corporate ownership and is often associated with the transfer of capital, managerial expertise, advanced technology and international governance practices (Roedder & Schmid, 2025). Director ownership, also known as managerial or insider ownership, refers to the proportion of a company's shares held by members of the board of directors, executive directors and senior management. The concept is derived from agency theory, which posits that when directors own shares in the firm, their interests become more closely aligned with those of



external shareholders, thereby reducing agency costs and encouraging decisions that maximise shareholder wealth. (Nguyen *et al.*, 2025).

Firm size used as a control variable in this study refers to the scale of a firm's operations and resources, commonly measured by total assets, total sales, market capitalisation, or the natural logarithm of total assets. Firm size reflects the economic capacity, market presence, resource base, and operational strength of an organisation (Kehinde *et al.*, 2026). In studies examining the relationship between ownership structure and financial performance, firm size is considered an appropriate control variable because it independently influences both ownership arrangements and performance outcomes. (Salihu *et al.*, 2024).

One of the major lapses in the literature on the effect of ownership structure on financial performance is the inconsistency of empirical findings regarding the relationship between ownership structure and financial performance. While some studies (Nwude *et al.*, 2023; Abdullahi, 2018) reported that ownership concentration, institutional ownership, and foreign ownership positively influence financial performance, others (Adebayo *et al.*, 2020; Uwuigbe *et al.*, 2021) reported negative or insignificant effects. These contradictory findings have made it difficult to establish a clear consensus on the ownership-performance nexus, thereby creating a need for further investigation using more recent data and robust analytical techniques.

Many Nigerian studies on ownership structure and financial performance have focused predominantly on manufacturing, consumer goods, industrial goods, and other non-financial sectors, with relatively fewer studies concentrating exclusively on deposit money banks. The banking sector possesses unique characteristics, including high regulatory oversight, capital adequacy requirements, and risk management frameworks, which distinguish it from non-financial firms. Consequently, findings from studies conducted on non-financial firms may not be directly applicable to banks, thereby creating a sectoral gap in the literature (Uwuigbe *et al.*, 2021).

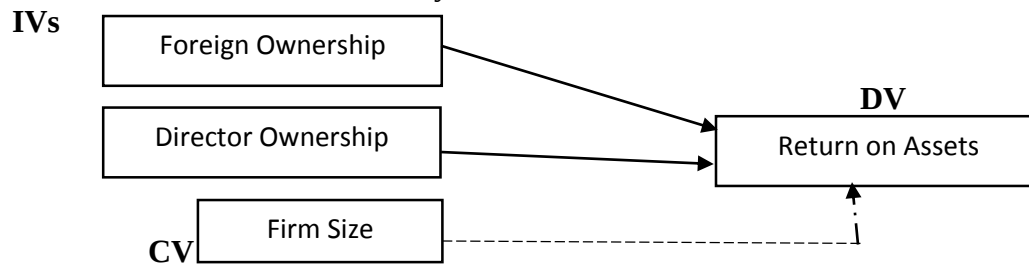
The main objective of this study is to determine the effect of ownership structure on financial performance of deposit money banks quoted in Nigeria, while the specific objectives are to: i) evaluate the effect of foreign ownership on financial performance of Nigerian deposit money banks and ii) investigate the effect of director ownership on financial performance of Nigerian deposit money banks. In order to achieve the stated objectives of this study, the following null hypotheses were developed to be tested as: H_{01} : Foreign ownership has no significant effect on financial performance of deposit money banks in Nigeria; and H_{02} : Director ownership (DIROWN) has no significant effect on financial performance of deposit money banks listed in Nigeria.

2.0 REVIEW OF RELATED LITERATURE

2.1 Conceptual Framework of the Study

The conceptual framework comprises the independent variable (Ownership structure) represented by foreign ownership and director ownership, while the dependent variable (financial performance) is measured by return on assets (ROA). Firm size was used as the control variable.

Figure 1: The Framework of the Study



Adapted from: Jinadu *et al.* (2018).

2.2 Conceptual Review

The conceptual review of this study, which captures the dependent variable, independent variables and the control variable is enumerated below.

2.2.1 Financial Performance

Financial performance is defined as the extent to which a firm generates profit relative to its resources, commonly measured using indicators such as ROA, ROE, and profit margins (Keter *et al.*, 2023). This reflects the efficiency of management in utilising assets to generate earnings. Anita *et al.* (2025) describe the ability of a firm to create shareholder wealth through increases in firm value measured by market-based indicators such as Tobin's Q and earnings per share. Financial performance is viewed as a multidimensional concept involving profitability, liquidity, and market-based outcomes rather than a single indicator (Jide, 2025). Financial performance is defined as net income generated per unit of total assets, reflecting how efficiently a firm uses its assets to generate profit (Sustainability). This perspective highlights efficiency in asset utilisation, meaning firms with higher returns on assets are better at converting investments into earnings.

Oluwagbade *et al.* (2023) define financial performance as the return accruing to shareholders through dividends and capital gains, often measured using EPS and market returns. This view captures market-based performance indicators, reflecting both income distribution and changes in share value over time. Financial performance refers to the ability of a firm to convert inputs into outputs efficiently, often assessed using profit margins and asset turnover ratios, emphasising operational efficiency, showing how well a firm controls costs and generates revenue from its resources (MDPI, 2025). Financial performance is described as a firm's capacity to remain profitable over time while maintaining financial stability and solvency (Donatus *et al.*, 2023). Financial performance is defined as performance reflected in stock market valuation, including Tobin's Q, market-to-book ratio, and share price movements (Anita *et al.*, 2024). This study defines financial performance as the measure of how well a firm uses its resources to generate profits and create value for its stakeholders over a given period.

2.2.2 Ownership Structure

Atasel and Şeker (2025) describe ownership structure as how shareholding is widely distributed among many small shareholders with limited individual control, adding that ownership structure reduces dominance but increases managerial autonomy and potential agency problems. Bello (2026) refers to ownership structure as the extent to which a small group of shareholders holds a large proportion of shares, giving them dominant control over corporate decisions, explaining that



concentration increases monitoring efficiency but may also lead to minority shareholder expropriation. Ownership structure is a core corporate governance mechanism that determines how effectively firms reduce agency conflicts between managers and shareholders (Quantrade Journal, 2025). This position maintains that the structure of ownership influences managerial accountability and firm discipline. Otuonye *et al.* (2026) view ownership structure as a mechanism that influences corporate risk-taking behaviour and risk governance practices, adding that certain ownership types, such as institutional ownership, tend to encourage more conservative risk management.

Yahaya *et al.* (2025) describe ownership structure to include foreign investors holding equity in domestic firms, introducing international governance standards and capital, asserting that foreign ownership often improves transparency and performance due to external monitoring pressure. Ownership structure is described as a network of control relations linking firms, subsidiaries, and ultimate owners across domestic and international boundaries (Abeltino *et al.*, 2026). This implies that modern firms often have layered ownership chains that obscure real control. Ownership structure is a governance tool that shapes the severity of agency conflicts between principals and agents, since different ownership forms either mitigate or intensify managerial opportunism. Ownership structure is widely viewed as a determinant of firm performance through its influence on monitoring efficiency and decision-making quality (Al-Janadi, 2021). Ownership structure in the context of this study is the distribution of a company's shares among different categories of shareholders and the extent of their control over the firm.

2.2.3 Foreign Ownership

Otuonye *et al.* (2026) define foreign ownership as a corporate governance mechanism that improves monitoring and accountability due to external investor scrutiny, arguing that foreign investors introduce stronger governance expectations and discipline managerial behaviour. Foreign ownership structure is associated with improved financial reporting quality because foreign investors demand higher disclosure standards, which reduces information asymmetry and improves investor confidence (Talabi *et al.*, 2025). Abubakar *et al.* (2020) define foreign ownership as a governance mechanism that reduces earnings manipulation through stronger oversight and auditing expectations, stressing that foreign investors discourage opportunistic financial reporting practices. Foreign ownership structure is described as a shareholding arrangement that positively influences firm performance through capital inflows and managerial efficiency (Tsegba *et al.*, 2017). They noted that firms with foreign shareholders often perform better due to improved access to capital and expertise.

Foreign ownership refers to the integration of domestic firms into global capital markets through equity participation by foreign investors (Abeltino *et al.*, 2026). This connects firms to international financial systems and investment networks. Foreign ownership structure is a channel through which global institutional standards and governance practices are transmitted into domestic firms (Springer Review, 2025). This explains why foreign investors often demand transparency, accountability, and strong reporting systems. Foreign ownership is defined as a mechanism through which global corporate governance standards are transferred into domestic firms, as foreign investors introduce practices such as transparency, accountability, and stronger board oversight (Areneke *et al.*, 2022). Foreign ownership structure refers to equity participation by foreign institutional investors such as pension funds, hedge funds, and multinational asset



managers in domestic firms. According to this study, foreign ownership refers to the proportion of a company's shares that are owned by investors or entities from outside the country where the company operates.

2.2.4 Director Ownership

Fulgence *et al.* (2024) describe director ownership as part of insider ownership where directors, executives, and managers hold equity stakes in the firm. This insider position, they pointed out, gives directors both decision-making power and financial interest in outcomes. Director ownership is described as a determinant of board effectiveness because it influences directors' commitment and oversight intensity (Munisi & Mersland, 2016). According to them, ownership encourages active participation in governance functions. Al-Janadi (2021) assert that director shareholding is associated with firm performance because it links board wealth to company profitability and market value since firms with higher director ownership often experience improved financial outcomes. Director ownership creates a trade-off between independence and alignment, as higher ownership may reduce objectivity in oversight (Pérez-Calero *et al.*, 2019). Boyd and Solarino (2016) define director ownership structure as the proportion of a firm's shares held by members of the board of directors, aligning their interests with shareholders.

Director ownership, also called insider or managerial ownership, refers to an ownership fraction or stake in a firm that is held by the directors of the company. Director ownership is measured by the natural logarithm of equity held by managers as shareholders in a firm (Ohiani *et al.*, 2018). Ozili and Uadiale (2017) assert that the propensity for managers to misappropriate profit in the short-term to benefit themselves at the expense of controlling and non-controlling shareholders tend to be greater if managers do not have substantial ownership stake in firms they manage particularly in widely-held firms (that is, firms with dispersed ownership) and that would Director or managerial ownership can align the interest between them and so reduce the total agency costs. The relationship between managerial ownership and agency costs is linear, and the optimal point for the firm is achieved when the managers acquire all of the shares of the company (Ogega, 2014). This study refers to director ownership as the percentage of a company's shares held by members of its board of directors, giving them both ownership and governance interests in the firm.

2.2.5 Firm Size (Control Variable)

A control variable refers to a factor that is not the primary variable of interest in a study but is deliberately included in the analytical model to account for its potential influence on the dependent variable. By controlling for such variables, researchers can minimise the risk that the observed relationship between the independent and dependent variables is distorted by extraneous factors, thereby improving the accuracy and validity of the findings (Gujarati & Porter, 2009). In regression and other quantitative analyses, control variables serve to isolate the net effect of the explanatory variables on the outcome variable, ensuring that the results are not confounded by other relevant influences. Consequently, the inclusion of control variables enhances the internal validity and reliability of a study by holding constant the effects of factors that could otherwise introduce bias into the estimation process (Wooldridge, 2016).

Firm size is widely acknowledged as one of the most important control variables in studies examining the effect of leverage on firm value because it exerts a significant influence on both financing decisions and market valuation. Larger firms generally possess greater financial



flexibility, stronger reputational capital, easier access to external sources of finance, and lower borrowing costs than smaller firms. These characteristics affect the extent to which firms utilise debt financing and how investors perceive the risks and benefits associated with such financing decisions. As a result, variations in firm size can independently affect firm value, making it necessary to control for this factor when investigating the relationship between leverage and market performance. In this study, firm size is measured as the total worth of a firm in terms of its total assets, reflecting the scale of resources under the firm's control and its capacity to generate future economic benefits.

2.3 Theoretical Foundation

Agency Theory developed by Michael C. Jensen and William H. Meckling in 1976 forms the most appropriate theoretical foundation of this study on ownership structure and financial performance because it directly explains how different ownership arrangements influence the monitoring of managers and the reduction of agency conflicts that arise from the separation of ownership and control in modern corporations. The theory provides a robust framework for understanding how ownership mechanisms such as director ownership and foreign ownership can mitigate managerial opportunism, reduce agency costs, and ultimately enhance financial performance.

2.4 Empirical Review

Olatunji *et al.* (2025) investigated the relationship between foreign ownership and financial performance of listed deposit money banks in Nigeria and Ghana with the main objective of evaluating whether foreign equity participation improves bank profitability across two West African economies; specifically, the study examined comparative effects of foreign, managerial and institutional ownership on ROA. The study covered banks in Nigeria and Ghana over the period 2013 to 2022. A quantitative ex-post facto research design was employed, and panel regression analysis was used to estimate the relationships. The findings showed that foreign ownership has a mixed but generally insignificant effect on financial performance, with no consistent superiority over domestic ownership structures. The study recommended balanced ownership diversification to improve governance efficiency; however, the study is limited by cross-country heterogeneity and differences in regulatory environments that may bias comparability.

Akinyemi (2025) examined the impact of foreign ownership through international diversification strategies on the financial performance of listed Nigerian banks with the main objective of assessing whether foreign-linked expansion improves profitability and valuation; specifically, the study evaluated how foreign operations influence resource efficiency and firm value. The study covered six listed Nigerian banks from 2012 to 2024. An *ex-post facto* research design was adopted, and advanced panel estimation techniques (Driscoll–Kraay standard errors and FGLS) were used. The findings revealed that foreign ownership through international diversification negatively affects profitability due to high operating costs and inefficient asset utilisation abroad. The study recommended improved strategic management of foreign operations and better allocation of international resources; however, the critique is that the study conflates foreign ownership with international expansion, which weakens the purity of the ownership-performance relationship.



Aldousari *et al.* (2025) analysed the effect of foreign ownership on bank risk-taking and performance in GCC banks with the main objective of determining how foreign shareholding influences financial stability and performance outcomes; specifically, the study assessed differences between foreign-owned and domestically owned banks in terms of risk exposure and profitability. The study covered 66 banks in GCC countries over the period 2014 to 2022, split between domestic and foreign ownership categories. A quantitative longitudinal research design was employed, and two-stage least squares (2SLS) combined with panel data techniques was used for robustness. The findings revealed that foreign ownership is associated with improved efficiency but also higher exposure to risk-taking behaviour, particularly during economic shocks such as COVID-19. The study recommended stronger regulatory oversight of foreign-controlled banks to balance efficiency gains and systemic risk; however, the study is limited by regional concentration and potential measurement differences in risk and performance indicators across countries.

Suleiman and Halilu (2025) examined the effect of board ownership structure on the financial performance of listed deposit money banks in Nigeria with the main objective of determining how board equity participation and board composition influence profitability; specifically, the study assessed the impact of board ownership, independent directors, audit committee size and board size on ROA. The study covered Nigerian listed banks over the period 2015 to 2024. An ex-post facto research design was adopted, and secondary data from annual reports were analysed using ordinary least squares (OLS) regression. The findings revealed that board ownership and board governance variables significantly and positively influence financial performance, suggesting that director equity participation enhances monitoring efficiency and reduces agency problems. The study recommended optimal board composition and increased director shareholding to strengthen governance mechanisms; however, a limitation is the potential omission of endogeneity issues and dynamic effects of governance changes over time.

Tijjani and Ahmad (2025) examined the effect of leadership and ownership structure on the financial performance of deposit money banks in Nigeria with the main objective of determining how board-related governance variables, including board composition and ownership structure, influence ROA, net interest margin and economic value added; specifically, the study evaluated managerial ownership, foreign ownership and board composition effects. The study covered Nigerian banks over the period 2014–2023. An ex-post facto research design was adopted, and panel regression analysis was used for estimation. The findings showed that board composition and ownership structure significantly influence financial performance, with stronger governance improving profitability and risk efficiency. The study recommended enhanced board independence and diversified ownership structures to improve bank stability; however, it is limited by possible multicollinearity among governance variables and weak control for macroeconomic conditions.

Dada *et al.* (2024) examined the effect of foreign ownership structure on the financial performance of listed deposit money banks in Nigeria with the main objective of determining how foreign shareholding influences return on assets in emerging market banks; specifically, the study assessed the impact of foreign ownership alongside managerial and institutional ownership on profitability. The study covered Nigerian listed banks over the period 2017–2021. An ex-post facto research design was adopted, and panel data regression techniques (including random effects estimation)



were used for analysis. The findings revealed that foreign ownership has a negative and statistically significant effect on bank performance, suggesting possible agency conflicts and profit repatriation effects in emerging markets. The study recommended tighter regulation of foreign shareholding in domestic banks to improve efficiency; however, the critique lies in its limited control for macroeconomic shocks and potential endogeneity between ownership structure and performance.

Nwude *et al.* (2023) examined the effect of ownership structure and ownership concentration on the financial performance of listed deposit money banks in Nigeria, with the main objective of determining how different ownership dimensions influence bank performance; specifically, the study assessed board ownership, institutional ownership and ownership concentration effects on risk-adjusted returns; the study was conducted within the Nigerian banking sector covering the period 2009–2020; an ex-post facto research design was adopted; panel data multiple regression analysis was employed; findings revealed that both disaggregated ownership structure and ownership concentration significantly and positively influence bank performance indicators, suggesting alignment of ownership and managerial interests; the study recommended improved governance structures to enhance ownership monitoring and efficiency; however, the study is limited by potential endogeneity issues and the use of novel indices that reduce comparability with earlier studies.

Ogabo *et al.* (2021) examined the impact of ownership structure on firm performance of the United Kingdom's FTSE 350 companies from the 2008-2018 fiscal years. The specific objectives were to explore the impact of managerial and institutional ownership on return on assets, return on equity, and Tobin's Q as measures of performance. A panel data set of 48 companies with 432 observations was analysed using descriptive statistics, a correlation matrix, and regression analysis. The results revealed that there is a significant positive impact of managerial ownership on firm performance without any entrenchment effect at managerial ownership above 5%. The regression results showed that the control variables of the percentage of independent directors on the board increase firms' performance, while the percentage of women on the board as a control variable decreases firms' performance. Nevertheless, the absence of recommendations and the focus on FTSE 350 firms may limit the practical applicability of the findings to firms operating in emerging markets.

Ohiani *et al.* (2018) examined the effect of ownership structure on the performance of listed financial firms in Nigeria. Data was collected from the annual reports of 28 insurance firms listed on the Nigerian Stock Exchange for the period from 2011 to 2016. The ex-post facto was employed by the study to examine the effect of ownership structure on the financial performance of listed insurance firms in Nigeria. Ownership structure, proxied by directors/managerial ownership, institutional ownership, and ownership concentration, was adopted as an independent variable. Firm financial performance as the dependent variable was proxied by Book value per Share. The study found ownership structure has a significant positive effect on the financial performance of the listed firms, except for concentrated ownership with negative effect. The study recommended that in order to enhance the financial performance of insurance firms in Nigeria, there should be an increase in management equity-holding in the firms, as this can stimulate the managers to maximise their efficiency and create more wealth for shareholders. However, the study measured



financial performance solely through book value per share, which may not comprehensively reflect the overall financial performance of firms.

2.5 Gaps in Literature

This study, covering 2016 to 2025, fills this gap by incorporating recent post-financial inclusion reforms, digital banking expansion, and post-COVID-19 adjustments that may have reshaped ownership-performance relationships in Nigerian deposit money banks. This extended timeframe provides more updated and policy-relevant evidence on whether earlier findings still hold under current economic conditions.

Existing studies often examine ownership variables in isolation or in partial combinations, such as focusing only on foreign ownership or ownership concentration without simultaneously integrating foreign and managerial/director ownerships within a unified empirical model. This creates a fragmented understanding of how different ownership categories jointly influence financial performance. This study addresses this gap by simultaneously modelling block-holder ownership, foreign ownership, and director/managerial ownership, thereby providing a more comprehensive assessment of ownership structure dynamics and their relative influence on bank performance in Nigeria.

3.0 METHODOLOGY

This study uses an *ex-post facto* research design because the data are historical in nature, having been generated through past corporate activities. The panel data for foreign ownership (FRNOWN), director ownership (DIROWN), return on assets (ROA) and firm size were used in this study as variables. The sample size of this study comprises thirteen (13) deposit money banks listed in Nigeria for 10 years from 2016 to 2025 with respect to block-holder ownership, foreign ownership, director ownership and their return on asset (ROA). A filtering sampling technique was used to separate the sample for the study. The data were sourced from the financial statements of the 13 listed deposit money banks (DMBs) obtainable from the Nigerian Stock Exchange websites. The data were analysed using Descriptive Statistics to test for the distribution pattern of the series, Correlation for multicollinearity, Normality test and heteroscedasticity test, the Hausman specification test, and the Random Effect estimation technique was adopted for the regression analysis. The Random Effect estimation was chosen because it is best for estimating cross-sectional or longitudinal data, as in this study.

3.1 Model Specification

The dependent variable for the study is financial performance proxied by return on assets (ROA), while the independent variables are Ownership structure, represented by foreign ownership director ownership and a control variable, firm size. The specified linear model, as used by Kiruri (2013) is expressed as follows:

$$ROA = f(FRNOWN + DIROWN + FSZ).$$

Econometrically, the above equation is represented as:

$$ROA_{it} = \beta_0 + \beta_1 FRNOWN_{it} + \beta_2 DIROWN_{it} + \beta_3 FSZ + \mu_{it} \dots\dots\dots (Model)$$

Where:

ROA = a predictor representing return on assets (a proxy for business performance);

β_0 = a constant;

$\beta_1 - 3$ = coefficients of the independent variables;



FRNOWN = a predictor representing foreign ownership (a proxy for the independent variable);
DIROWN = a predictor representing director ownership (a proxy for the independent variable);
FSZ = a predictor representing Firm size (a control variable);

μ = Error term (Residual);

it = Dated panel data; and

f = a Functional relationship.

Table 1 below defines the variables of this study

Variable	Acronym	Type	Measurement	Justification
Return on Assets	ROA	Dependent	Net profit divided by total assets.	Eze and Nwosu (2024), Keter <i>et al.</i> (2023), and Okafor and Eze (2022).
Foreign Ownership	FRNOWN	Independent	Percentage of foreign ownership.	Talabi <i>et al.</i> (2025), Adamu and Haruna (2020) and Abubakar <i>et al.</i> (2020).
Director Ownership	DIROWN	Independent	Total shares held by directors.	Suleiman and Halilu (2025) Eulgence <i>et al.</i> (2024) and Dakhallih <i>al.</i> (2021).
Firm Size	FRMSZ	Control	Natural Logarithm of total assets.	Dewi and Wirajaya (2025), Bui <i>et al.</i> (2023) and Wooldridge (2016).

Source: Researcher's Compilation, 2026.

4.0 RESULTS AND DISCUSSION

The statistical test conducted to analyse the data are as follows.

4.1 Descriptive Statistics

Table 2 below shows the descriptive statistics which summarise the entire data set.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
ROA	130	0.010	0.033	-0.242	0.106	-3.770	28.259
BLKOWN	130	0.408	0.271	0	1	0.467	2.565
FRNOWN	130	0.079	0.166	0	0.607	2.340	7.378
DIROWN	130	12.400	29.036	0	301.832	7.426	72.106
L_FRMSZ	130	9.071	0.373	8.179	9.792	-0.224	2.410

Source: STATA software 2026.

Table 3 above shows that the standard deviation of ROA, FRNOWN and DIROWN are higher than their respective means, indicating that these variables had a wider variability, while L_FRMSZ had a standard deviation that is lower than its mean, signifying that firm size was poorly dispersed and hence had poor variability. Results from Table 2 above show that ROA, FRMOWN, DIROWN and logged FRMSZ all have mean (0.408; 0.079; 12.400, and 9.071 respectively) which all lie between their respective Minimum (0; 0; 0; and 8.179) and their Maximum (1;

0.607;301.832; and 9.792 respectively). That the mean lies within the range of the Minimum and the Maximum is an indication that the series is evenly spread.

4.2 Correlation Analysis

The correlation analysis below is to attest the presence of multicollinearity in the model. The decision rule is to accept the presence of multicollinearity if any two independent variables correlate above 0.80, or reject the presence of multicollinearity if no pair of the independent variables correlates above the threshold.

Table 3 below shows the result of the correlation test for multicollinearity in the model.

	ROA	BLKOWN	FRNOWN	DIROWN	I_FRMSZ
ROA	1.0000				
BLKOWN	-0.1427	1.0000			
FRNOWN	0.1382	0.2588	1.0000		
DIROWN	-0.0785	0.0803	0.0232	1.0000	
I_FRMSZ	0.3168	-0.2844	-0.1819	-0.2805	1.0000

Source: STATA software, 2026.

The result from Table 3 above indicates that there is clearly no problem of multicollinearity in the model, as no two of the proxies of the independent variable correlate above 0.80, which, Hair *et al.* (2005) assert, signifies the absence of multicollinearity in the model.

4.3 Normality Test

Table 4 below displays the results of the normality test conducted to determine the pattern of the distribution of the residuals using the Skewness and Kurtosis techniques. The decision rule is that any model with a p-value higher than 0.05 has normally distributed residuals, while a p-value lower than or equal to 0.05 implies that the residuals were not normally distributed.

Table 4: Normality Test

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
residuals	156	0.1220	0.1431	5.13	0.2412

Source: STATA software, 2026.

A p-value of 0.2412 obtained in Table 4 above indicates that the residuals were normally distributed, which means one of the basic assumptions of Ordinary Least Squares (OLS) regression was upheld, and consequently, the estimation can be carried out with OLS.

4.4 Heteroskedasticity Test

Table 5 below presents the results of the Breusch-Pagan heteroscedasticity test carried out to ascertain the constancy of the residual variance. The decision rule is that if the p-value is lower than or equal to 0.05, the residual variance is not constant, while a p-value higher than 0.05 means the residual variance was constant.

Table 5 Heteroskedasticity Test

Ho:	Constant variance
Variables:	fitted values of etr
$\chi^2(1)$	20.15
Prob > χ^2	0.2217

Source: STATA software, 2026.

Table 5 above reveals that the model has a p-value of 0.2217, which means that the model has residuals with constant variance. This finding implies that the results obtained have high predictive power.

4.5 Hausman Specification Test

Having obtained random effect as the product of the Lagrange randomisation test in Table 6 above, there is a need to conduct the Hausman specification as below to know which of the random effect and fixed effects models would be a more appropriate estimation. Table 8 below shows the result of the Hausman specification test, with the decision of selecting random effect if the p-value is greater than 0.05, or select fixed effects if the p-value is lower than or equal to 0.05. See Appendix C.

Table 7: Hausman Specification Test

Hausman Test		
Prob> χ^2	=	0.2347RE

Source: STATA software, 2026.

The Hausman specification test, as shown in the above Table 7, reveals a p-value of 0.2347, an indication that the Null hypothesis, which states that differences in coefficients are not systematic, that is, not fixed, is accepted. Random effect, which would be consistent in the absence of a significant correlation, is therefore preferred for the estimation of the model.

4.6 Regression Analysis

Table 8 below presents the regression results based on random effect (RE). See Appendix D.

Table 8: Regression Analysis

ROA	COEF.	STD. ERR.	Z	P> Z
BLKOWN	-0.0141	0.0117	-1.20	0.229
FRNOWN	0.0484	0.0191	2.53	0.011
DIROWN	0.0511	0.0201	2.54	0.037
L_FRMSZ	0.0305	0.0083	3.64	0.000
_cons	-0.0034	0.0027	-1.26	0.253
R-squared Overall				0.3974
Wald χ^2 (4)				19.91
Prob> χ^2				0.0012

Source: STATA software, 2026.

The random effect estimation in Table 8 above shows a coefficient of determination (R-squared) of 0.3974, which means that the combined effect of FRNOWN, DIROWN and L_FRMSZ on ROA



is 0.3974, implying that these independent variables accounted for about 40% systemic variation observed in the dependent variable (financial performance) during the period from 2016-2025. The result also shows Wald chi2 of 19.91 and prob>chi2 of 0.0012 (1% level of significance), indicating the model is well specified.

4.7 Test of Hypotheses

Table 5 above revealed that foreign ownership has a significant (0.011) positive (2.53) effect on return on assets (ROA) at 1% level of significance. This result implies that the null hypothesis Two (H_{02}), which states that foreign ownership (FRNOWN) has no significant effect on return on assets (ROA), is rejected.

Table 5 above further showed that director ownership (DIROWN) has a significant (0.037) positive (2.54) effect on return on assets (ROA). This finding implies that the null hypothesis Three (H_{03}), which states that director ownership (DIROWN) has no significant effect on return on assets (ROA), is rejected.

4.8 Discussion of Findings

The finding of this study reveals that foreign ownership (FRNOWN) has a significant positive (2.53) effect on firm performance represented by return on assets (ROA) with a coefficient of -0.0484. This finding implies that if all other variables are kept constant, a unit increase in foreign ownership will increase firm performance by approximately 0.048 units. This finding agrees with that of Dada et al. (2024), Adamu and Haruna (2020), Aymen (2014) and Kiruri (2013) who reported that foreign ownership has a significant effect on firm performance. The finding, however, is at variance with that of Jinadu et al. (2018), whose report was that foreign ownership has an insignificant effect on firm performance.

The finding of this study also reveals that director ownership (DIROWN) has a significant positive effect on firm performance represented by return on assets (ROA) with a coefficient of 0.0511. This result infers that holding down the other variables, a unit increase in director ownership will increase firm performance by about 0.05 units. This finding tallies with that of Suleiman and Halilu (2025), Dakhallih et al. (2021), Ohiani et al. (2018), and Desoky et al. (2012), who reported that director ownership has an insignificant effect on firm performance. The finding, however, contradicts that of Hussain et al. (2018) and Saleh et al. (2017), whose report was that director ownership has a significant effect on firm perform

5.0 CONCLUSION AND RECOMMENDATION

5.1 Conclusion

This study concludes that the presence of foreign investors contributes positively to profitability through improved corporate governance practices, advanced managerial expertise, enhanced monitoring mechanisms, access to international capital, and the adoption of global best practices. Finally, this study concludes that when directors hold equity stakes in their banks, their interests become aligned with those of shareholders, thereby reducing agency conflicts and motivating management to make decisions that maximise firm value and profitability.



5.2 Recommendations

Based on the findings and conclusions drawn therefrom, the following recommendations have been made:

- i. Given the significant positive influence of foreign ownership on financial performance, policymakers and regulatory authorities should continue to create an enabling environment that attracts reputable foreign investors into the Nigerian banking sector through favourable investment policies, regulatory transparency, and improved investor protection mechanisms;
- ii. In view of the positive and significant effect of director ownership, banks should encourage reasonable levels of managerial and director shareholding through equity-based compensation schemes and stock ownership plans. Such initiatives would strengthen directors' commitment to organisational goals and improve long-term financial performance.

REFERENCES

- Abeltino, A., Pannone, A., & Bernardini, A. (2026).** Speculation and retail price transmission in the frozen concentrated orange juice market: A causal machine learning analysis. *Future Business Journal*, 12, 72. <https://doi.org/10.1186/s43093-026-00777-x>.
- Abubakar, A. A., Tobi, B. O., & Abdullahi, H. A. (2020).** Effect of credit risk management on financial performance of listed microfinance banks in Nigeria. *Research Journal of Finance and Accounting*, 11(18), 100–108. <https://doi.org/10.7176/RJFA/11-18-13>.
- Adamu, A., & Haruna, J. (2020).** Ownership structures and firm performance in Nigeria: A canonical correlation analysis. *Journal of Research in Emerging Markets*, 2(4), 21–32. <https://doi.org/10.30585/jrems.v2i4.537>.
- Adebayo, A. A., Adegbe, F. F., & Salawu, R. O. (2020).** Ownership structure and financial stability of selected listed companies in Nigeria. *The International Journal of Business & Management*, 8(5). <https://doi.org/10.24940/theijbm/2020/v8/i5/BM2005-09>
- Akinyemi, J. O. O. (2025).** International diversification strategy, resource intensity, and financial performance of listed banks in Nigeria. *Cogent Business & Management*, 12(1), 2579664.
- Aldousari, A., Mohammed, A., & Lindop, S. (2025).** How foreign and domestic ownership influenced risk-taking in GCC banks. *International Journal of Financial Studies*, 13(1), 33. <https://doi.org/10.3390/ijfs13010033>.
- Al-Janadi, Y. (2021).** Ownership structure and firm performance in the Middle East: A meta-analysis. *Journal of Risk and Financial Management*, 14(12), 577. <https://doi.org/10.3390/jrfm14120577>.



- . Anita, A., Sibarani, B. E., & Alamin, A. F. (2025). Linking ESG and credit risk: Evidence on financial performance and stock market returns in ASEAN banking sector. *International Journal of Application on Economics and Business*, 3(4), 1844–1857. <https://doi.org/10.24912/ijaeb.v3i4.1834-1857>
- Areneke, G., & Tunyi, A. A. (2022). Chairperson and CEO foreignness and CG quality of emerging markets MNCs: Moderating role of international board interlocks. *International Journal of Finance and Economics*, 27, 3071–3092. <https://doi.org/10.1002/ijfe.2313>.
- Atasel, O. Y., & Şeker, Y. (2025). Ownership structure and firm performance: Global evidence from 2000–2025. *Quantrade Journal of Complex Systems in Social Sciences*, 7(2), 173–183.
- Bello, I., Fijabi, K., Lasisi, R., & Akenroye, C. (2023). Cash flow effect and financial performance of quoted oil and gas sector 2013–2022: Evidence from Nigeria. *Journal of Accounting and Taxation*, 15(3), 107–118. <https://doi.org/10.5897/JAT2023.0573>.
- Boyd, B. K., & Solarino, A. M. (2016). Ownership of corporations: A review, synthesis, and research agenda. *Journal of Management*, 42(5), 1282–1314
- Bui, A. T., Nguyen, M. S., & Khuong, N. V. (2024). Corporate governance mechanism and firm value: Evidence from an emerging economy. *Cogent Business & Management*, 11(1), 2364844. <https://doi.org/10.1080/23311975.2024.2364844>
- Dada, O. B., Gbadebo, A. D., & Ibrahim, M. A. (2024). The impact of board diversity on financial performance: Firm-level evidence in Nigeria. *EL MUHASABA: Jurnal Akuntansi (e-Journal)*, 16(2), 1-17.
- Dakhlalh, M. M., Rashid, N., Amalina, W., Abdullah, W., & Dakhlalh, A. M. (2021). Ownership structure and firm performance: Evidence from Jordan. *Journal of Contemporary Issues in Business and Government*, 27(2), 79-90.
- Eze, C. O., & Nwosu, E. C. (2024). Examining the impact of capital structure on the financial performance of Nigeria's construction sector. *Advance Journal of Management, Accounting and Finance*, 2(5), 29-43.
- Fadun, O. S., Ochonogor, A. C., & Aduloju, S. A. (2025). Determinants of financial performance of non-life insurance companies in Nigeria. *International Journal of Insurance, Risk and Management Sciences*, 2(1), 1–16.
- Fulgence, S., Boateng, A., & Kwabi, F. (2024). Ownership structure, corporate governance disclosure, and the moderating effect of CEO power: Evidence from East Africa. *Accounting Forum*, 50(1), 13–42. <https://doi.org/10.1080/01559982.2024.2426108>.
- Gujarati, D. N., & Porter, D. C. (2009). *Basic econometrics* (5th ed.). McGraw-Hill Education.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the business: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics* 13(1), 305-360.
- Jide, I. (2025). Boardroom diversity and ESG performance: Examining Nigerian firms' commitment to sustainability: A case study of the Nigerian banking sector. *Journal of Islamic Finance and Accounting Research*, 4(2), 127–145.
- Jinadu, O., Uwuigbe, U., Uwuigbe, O. R., Asiriwa, O., Eriabie, S., Opeyemi, A., & Osiregbemhe, I. S. (2018). Ownership structure and corporate performance of multinational banks: Evidence from Nigeria. *Academy of Strategic Management Journal*, 17(5), 1-11.
- Johnson, J. L., Ellstrand, A. E., & Daily, C. M. (1996). Boards of directors: A review and research agenda. *Journal of Management*, 22(1), 409-438



- Kartini, N. P. D., & Wirajaya, I. G A. (2025)** *Profitability, Leverage, and Sales Growth: The Mediating Role of Dividend Policy in Determining Firm Value*, published in *E-Jurnal Akuntansi*, 35(1), 133–148.
- Keter, C. K. S., Cheboi, J. Y., Kosgei, D., & Chepserson, A. K. (2023).** Financial performance and firm value of listed companies: Financial performance measure ROA versus ROE. *Journal of Business, Economics and Management Research Studies*, 1(4), 1–11. <https://doi.org/10.69897/jobemrs.v1i4.78>.
- Luo, H., Huang, W., & Bai, Y., (2024).** Does the geographic location of blockholders matter? Evidence from Chinese firms' cross-regional investment. *Pacific-Basin Finance Journal*, 88, 102521. <https://doi.org/10.1016/j.pacfin.2024.102521>.
- Munisi, G. H., & Mersland, R. (2016).** Ownership, board compensation and company performance in Sub-Saharan African countries. *Journal of Emerging Market Finance*, 15(2), 191–224. <https://doi.org/10.1177/0972652716645893>
- Nguyen, D. N., Truong, Q. T., & Tran, N. T. (2022).** Employee-friendly practices and corporate financial performance: Evidence from a frontier market. *Cogent Business & Management*, 9(1), 2122163. <https://doi.org/10.1080/23311975.2022.2122163>.
- Nwude, E. C., Zakirai, M. S., & Nwude, C. A. (2023).** Ownership structure and bank performance in emerging market economy: Evidence from Nigerian listed deposit money banks. *SAGE Open*, 13(4), 1–17. <https://doi.org/10.1177/21582440231219382>
- OECD. (2025).** *OECD Corporate Governance Factbook 2025*. OECD Publishing. <https://doi.org/10.1787/f4f43735-en>.
- Ogabo, B., Ogar, G., & Nuipoko T. (2021).** Ownership structure and firm performance: the role of managerial and institutional ownership: Evidence from the UK. *American Journal of Industrial and Business Management*, 11(7), 1-16.
- Ogega, D. O. (2014).** *The effect of ownership structure on the financial Performance of commercial banks in Kenya*. A research project presented in partial fulfilment of the requirements for the award of Master of Science in Finance, University of Nairobi.
- Ohiani, D. L., Agbi, E. S., & Mustapha, L. O. (2018).** Effect of ownership structure on financial performance of listed insurance firms in Nigeria. *Journal of Accounting, Finance and Auditing Studies*, 4(3), 123–148.
- Okafor, G. I., Anichebe, A. S., Emeka-Nwokeji, N. A., & Agubata, N. S. (2022).** Sustainability environmental disclosure and financial performance of oil and gas companies in Nigeria. *International Journal of Trend in Scientific Research and Development*, 6(2).
- Olatunji, T. E., Akanbi, T. A., & Bakare, S. B. (2025).** The effect of ownership structure on the financial performance of listed deposit money banks in Nigeria and Ghana. *International Journal of Economics and Financial Management*, 10(10), 98–109.
- Oluwagbade, I. O., Akinadewo, I. S., Adebayo, O. B., & Ogundele, O. S. (2023).** Sustainability reporting practice and financial performance of listed industrial goods firms in Nigeria. [Journal details should be checked against the publisher's final record before use].
- Otuonye, C. C., Chukwu, U. C., Nworie, G. O., & Nworie, F. N. (2026).** Mapping the ownership structure–performance nexus: A study of Nigeria’s listed manufacturing firms. *CECCAR Business Review*, 7(2), 47–63. <https://doi.org/10.37945/cbr.2026.02.05>.
- Ozili, P. K & Uadiale, O. (2017).** Ownership concentration and bank profitability. *Future Business Journal*, 3(1), 159–171.



- Roedder, F., & Schmid, S. (2025).** The impact of foreign ownership on firms: A systematic literature review. *Management Review Quarterly*, 76, 1283–1311. <https://doi.org/10.1007/s11301-025-00504-w>.
- Salihu, S., Barde, B. E., & Adamu, A. (2024).** Effect of ownership structure on performance of quoted financial firms in Nigeria. *FUDMA Journal of Accounting and Finance Research*, 2(3), 49–62. <https://doi.org/10.33003/fujaf-r-2024.v2i3.119.49-62>.
- Suleiman, A., & Halilu, A. (2025).** *Effect of board size and board ownership structure on the financial performance of listed deposit money banks in Nigeria*. Zenodo. <https://doi.org/10.5281/zenodo.17596337>
- Suprpto, Y., Agustin, I. N., & Putri, A. A. (2025).** Does profitability matter? The dual role of ROA and ROE in the ESG–firm value relationship. *Journal of Enterprise and Development*, 7(2), 358–369. <https://doi.org/10.20414/jed.v7i2.13447>.
- Talabi, A. O., Taib, F. M., & Jalaludin, D. B. (2025).** Corporate governance, ownership and control structure and financial reporting quality: A comparative study of South African and Nigerian companies. *International Journal of Economics and Financial Issues*, 15(4), 259–272. <https://doi.org/10.32479/ijefi.19212>
- Tijjani, A., & Ahmad, S. M. (2025).** Effect of leadership and ownership structure on financial performance of deposit money banks in Nigeria. *International Journal of Trend in Scientific Research and Development*, 9(4), 110–157
- Tsegba, I. N., Herbert, W. E., & Ene, E. (2014).** Corporate ownership, corporate control and corporate performance in Sub-Saharan Africa: Evidence from Nigeria. *International Business Research*, 7(11), 73–83. <https://doi.org/10.5539/ibr.v7n11p73>
- Uwuigbe, U., Dahunsi, O., & Okeme, F. O. (2019).** Corporate governance, risk management and financial performance of listed deposit money bank in Nigeria. *Cogent Business & Management*, 8(1), 1888679. <https://doi.org/10.1080/23311975.2019.1888679>.
- Wooldridge, J. M. (2016).** *Introductory econometrics: A modern approach* (6th ed.). Cengage Learning.
- Yahaya, O. A. (2025).** How institutional and foreign ownership drive ESG disclosure in Nigeria? *Journal of Sustainability, Business and Economics*, 18(6), 12–37. <https://doi.org/10.10514/josabe.v18i6>.