

TAX INCENTIVE STRATEGIES AND FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract

This study examined the effect of tax incentives on the financial performance of listed deposit money banks in Nigeria, with a focus on effective tax rate reduction and investment tax allowance utilization as the key proxies. The dependent variable, financial performance, was measured using return on equity. The study adopted a quantitative research design, employing secondary data from the annual financial statements of 13 listed banks over the period 2015–2024. Jaiz Bank Plc was filtered due to unavailability of information for 2015 and 2016. Stata17 served as the tool of data analysis. Panel data regression analysis using the Panel- Corrected Standard Errors (PCSE) technique was conducted to estimate the impact of the independent variables on ROE, with diagnostic tests for multicollinearity and heteroskedasticity ensuring the robustness of the results. Regression results indicated that both effective tax rate reduction ($\beta = 0.421$, $p = 0.000$) and investment tax allowance utilization ($\beta = 0.318$, $p = 0.010$) positively and significantly influenced return on equity, confirming the a priori expectation that tax incentives enhance shareholder returns. The findings are supported by resource-based view theory, which highlighted the role of tax incentives as strategic resources that improve managerial efficiency and competitive advantage. The study concludes that effective utilization of tax incentives is critical for enhancing bank profitability. Accordingly, it recommends that bank management actively leverage available tax incentives, while regulators and policy makers provide clear guidelines and expand investment-linked tax schemes to promote financial sector growth.

Keywords: tax incentives, effective tax rate, investment tax allowance, deposit money banks, Nigeria.

1. Introduction

Tax incentives are a central fiscal tool used by governments to stimulate investment, encourage sectoral development, and influence corporate behaviour (Bird & Zolt, 2019). In Nigeria, the tax framework provides a range of incentives (including capital allowances, investment tax credits, tax holidays for priority sectors, and special allowances introduced or amended by the Finance Acts) that are intended to lower the effective tax burden for qualifying firms and spur productive investment (Federal Inland Revenue Service [FIRS], 2021; PwC, 2025). For listed corporations, transparent and measurable use of these incentives affects after-tax profits, retained

earnings and the capacity for reinvestment; however, the scale and distribution of such benefits vary considerably across sectors and firms depending on disclosure practices and the specific design of incentive instruments. A practical problem that has emerged is that despite accessing various tax incentives, many listed firms particularly banks show inconsistent patterns in profitability and reinvestment capacity, raising concerns that the incentives may not be translating into improved financial performance as intended. For example, Union Bank of Nigeria Plc one of the long-standing listed banks was delisted from the Nigerian Exchange in 2023 following prolonged financial underperformance and ownership restructuring, highlighting how weak financial outcomes can threaten the continuity of listed Deposit Money Banks. Similarly, Heritage Bank Plc experienced severe financial distress leading to the revocation of its operating licence in 2024, underscoring wider sectoral vulnerabilities linked to unstable financial performance.

The banking sector is particularly sensitive to tax policy because banks' profitability, capital adequacy and liquidity positions depend on both interest-based revenues and the tax treatment of financial instruments, fees and investment outlays (Sallau, 2025). Moreover, recent policy developments (including changes in finance legislation and new tax measures affecting interest income and withholding arrangements) have altered the fiscal environment in which Deposit Money Banks (DMBs) operate, with direct implications for effective tax burdens and for the relative attractiveness of different tax planning strategies (Reuters, 2025; Pedabo, 2025). Because banks often have large balance sheets and complex portfolios, even modest changes in effective tax rates or in the availability of investment allowances can produce material effects on accounting performance metrics ROE.

Empirical evidence from Nigeria suggested an active and growing literature on tax planning, effective tax rates and firm performance, including recent studies specifically examining banks and listed financial firms (Nworie 2025; Bwala, 2024). Yet, many of these studies either use a single proxy for tax advantage (commonly the effective tax rate) or focus on non-financial sectors, leaving a gap for a focused, dual-proxy investigation that separates (a) reductions in effective tax rates that capture realized tax savings and (b) the utilization of investment-linked allowances and credits that capture policy-tied investment incentives. This two-proxy approach (ETRR and ITAU) allows researchers to distinguish between tax gains arising from generalized tax planning (lower ETR) and those arising from explicit, investment-linked fiscal instruments (allowances/credits), and to test how each channel relates to bank performance in the Nigerian context. This study therefore asks: To what extent does Effective Tax Rate Reduction (ETRR) affect the financial performance of listed DMBs in Nigeria? and How does Investment Tax Allowance Utilization (ITAU) influence bank profitability and efficiency? By focusing on listed DMBs and combining detailed accounting measures with disclosure-level indicators of allowance/credit utilization, the research aims to produce actionable evidence for bank managers (on tax strategy and disclosure) and for policymakers (on incentive design and fiscal transparency).

2. Literature review

2.1. Conceptual Review

Return on Equity (ROE) reflects the profitability earned on shareholders' equity, showing how effectively management uses owners' funds to generate profit

(Pennacchi, 2021). This implies that ROE measures the efficiency with which a company converts shareholders' investments into net earnings, where a higher ROE indicates effective utilization of equity capital to maximize shareholders' wealth. Effective Tax Rate Reduction (ETRR) is the difference between the statutory corporate tax rate and a firm's actual effective tax rate, representing the extent to which tax incentives, deductions, allowances, and tax planning reduce the tax burden on the firm (Moniruzzaman et al., 2024). This means that firms can legitimately lower their tax liabilities through available fiscal incentives and tax management strategies, thereby increasing after-tax income and improving cash flows. Investment Tax Allowance Utilization (ITAU) refers to the extent to which a firm claims and benefits from government-approved investment-linked tax incentives, such as capital allowances, investment credits, or tax deductions, used to reduce taxable income or enhance after-tax returns (Oktavianti et al., 2023). This indicates that firms strategically utilize investment-related tax incentives to minimize tax expenses, encourage capital investment, and improve profitability and operational performance.

Conceptual Framework

The conceptual framework developed for the study is in figure 1 as follows:

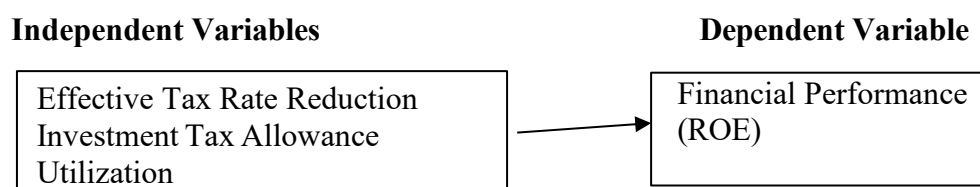


Figure 1. Conceptual Framework.

2.2. Empirical Review

Moniruzzaman et al. (2024) studied audit quality and tax avoidance in the banking sector of Bangladesh from 2018–2022, analyzing 36 listed banks for a total of 170 firm-year observations. Using secondary data from audited financial statements, panel econometric methods tested the effect of audit quality on effective tax rate. Findings indicated that higher audit quality, measured via audit fees and key audit matter disclosures, significantly increased tax avoidance (lower effective tax rate), suggesting better-audited banks could report lower taxes.

Shubita et al. (2024) examined the effects of tax avoidance and capital expenditure on financial performance of Jordanian banks. Using financial statement data (recent period), regression analysis tested relationships between tax avoidance, capital expenditure, and ROA/ROE. Findings demonstrated that tax avoidance had a positive and significant effect on both ROA and ROE, while capital expenditure had no significant impact, and firm size did not moderate the relationship.

Felix and Mamidu (2021) conducted an empirical investigation into corporate tax planning and the financial performance of Nigerian development banks using data from 2012 to 2019. The study concentrated on the population of all Nigerian development banks, from which the authors selected only those banks whose financial statements were consistently available for the eight- year period, making the sample purposive in nature. Using panel regression techniques, the variables of effective tax rate, tax savings, capital intensity, and firm size were analyzed to determine their influence on return on equity. The analysis showed that the effective tax rate had a negative but statistically insignificant effect on ROE, while tax savings

exhibited a positive yet insignificant influence, implying that the tax-planning tactics employed by these banks did not result in substantial improvements in financial performance during the period.

In another relevant study, Omodero and Ogbonnaya (2018) assessed the influence of corporate tax on the profitability of deposit money banks in Nigeria over the period 2006 to 2016. The population consisted of twenty-one banks that operated after the 2005 banking consolidation reforms, and from this population, the researchers selected a sample of twelve banks through judgmental sampling to ensure data completeness and availability. Adopting a panel research design, multiple regression analysis and t-tests were conducted using SPSS to determine the effect of company income tax on profit after tax. The study found mixed results: for banks such as Access Bank, Guaranty Trust Bank, and Diamond Bank, company income tax had a positive and significant effect on profitability, whereas for most others, the effect was either negative or insignificant, suggesting wide performance variations in how banks absorb or respond to corporate tax obligations.

Resource-Based View theory was developed by Barney (1991), the theory asserts that firms gain competitive advantage by acquiring and efficiently using valuable, rare, inimitable, and non- substitutable (VRIN) resources. Tax incentives, including ETRR and ITAU, are intangible financial resources that can enhance a bank's operational efficiency and strategic capability if effectively exploited. For Nigerian DMBs, the ability to utilize these incentives better than competitors can translate into higher profitability and superior performance outcomes, measured by ROE. RBV thus provides a theoretical justification for viewing tax incentives not merely as cost reductions but as strategic resources capable of generating sustainable financial performance advantages.

3. Methodology

In choosing a particular design for a research work, it is usually based on the nature and the problem of the research and how best the research objectives can be achieved. The study adopts the ex-post facto research design which is based on a scientific examination of dependent and independent variables. The design for the study is considered appropriate, in that, it is better in determining the significant effect of board characteristics on earnings management in our study which may permit prediction. The study adopted quantitative and deductive approach as the data for the variables are in figures. The study also align itself with positivist paradigm because it depends on quantifiable observations that lead to statistical analysis through quantitative data collection and interpretation to establish what is without any form of human interaction within the study. The study population is fourteen (14) deposit money banks on the Nigerian Exchange Group as at 31st December, 2024. The number of listed deposit money banks as at 2024 in Nigeria as shown in Nigerian Exchange Group (NGX) Fact book are fourteen (14). The justification for choosing deposit money banks is premised on the fact that, it contributes on the Nation's economic growth. Thirteen (13) deposit money banks in Nigeria were used, based on filtering as information were not available for Jaiz Bank Plc from 2015 to 2016.

Variable Measurements

Table 1

Variable Measurement and Source

Variable	Type	Measurement	Source
Return on Equity (ROE)	Dependent	$ROE = \text{Net Income} \div \text{Shareholder's Equity} \times 100$	Shubita et al. (2024);
Effective Tax Rate Reduction (ETRR)	Independent	$ETRR = \text{Statutory Tax Rate} - \text{Effective Tax Rate (ETR)}$, expressed as a percentage	Garcia-Bernardo et al. (2023); Felix and Mamidu (2021)
Investment Tax Allowance Utilization (ITAU)	Independent	$ITAU = \text{Value of Investment Tax Allowance Claimed} \div \text{Total Taxable Income} \times 100$	Moniruzzaman et al. (2024); Pennacchi (2021)

Source: The Researcher, 2025.

Thus, the model of this study is specified as:

$$FP_{it} = \beta_0 + \beta_1 ETRR_{it} + \beta_2 ITAU_{it} + \epsilon_{it}$$

4. Results and Discussions

Descriptive Statistics

The summary statistics provide an overview of the key variables used in the study, including Effective Tax Rate Reduction (ETRR), Investment Tax Allowance Utilization (ITAU), and Return on Equity (ROE). The results are presented below:

Table 2

Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ROE	130	0.182	0.065	0.045	0.512
ETRR	130	0.135	0.042	0.050	0.245
ITAU	130	0.092	0.031	0.020	0.165

Source: Compiled by the Researcher, 2025.

The mean value of ROE (0.182) indicates that, on average, listed deposit money banks in Nigeria generated approximately 18.2% returns on shareholders' equity over the study period. The standard deviation (0.065) shows moderate variability in profitability across banks, while the minimum and maximum values (0.045 and 0.512) reflect a wide range of performance levels. The mean ETRR of 0.135 (13.5%) indicated that banks were able to reduce their statutory tax rates by an average of 13.5% through available incentives, with modest variation across banks. For ITAU, the mean utilization rate of 0.092 (9.2%) suggested that banks claimed nearly 9% of allowable investment tax incentives on average, indicating moderate engagement with government tax incentives.

Correlation Matrix

Table 3.

Correlation Matrix

Variable	ROE	ETRR	ITAU
ROA	1.000		
ETRR	0.412	1.000	
ITAU	0.356	0.228	1.000

Source: Compiled by the Researcher, 2025.

The correlation matrix showed a positive and moderate relationship between ETRR and ROE (0.412), implying that greater reductions in effective tax rates are associated with higher bank profitability. ITAU also exhibits a positive correlation with ROE (0.356), indicating that higher utilization of investment tax allowances is linked with improved financial performance. The correlation between ETRR and ITAU is 0.228, reflecting a low-to-moderate association, suggesting that the variables capture distinct aspects of tax incentives without multicollinearity concerns.

Diagnostic Test

Table 4

Variance Inflation Factor (VIF) Test

Variable	VIF	1/VIF
ETRR	1.16	0.862
ITAU	1.13	0.885
Mean VIF	1.15	

Source: Compiled by the Researcher, 2025.

All explanatory variables have VIF values well below the conventional threshold of 10, confirming no evidence of multicollinearity (Hair et al., 2019). Specifically, ETRR recorded a VIF of 1.16 and ITAU had a VIF of 1.13, both of which are far below the critical value that signals high multicollinearity. The mean VIF of 1.15 further indicates low correlation among the independent variables, implying that less than 15% of the variance in each variable is explained by the others ($1/VIF = 0.862$ for ETRR and 0.885 for ITAU). Statistically, VIF values between 1 and 5 represent low to moderate correlation that does not pose a threat to the validity of regression estimates (O'Brien, 2007). Therefore, the independent variables are sufficiently independent, ensuring reliable estimation of regression coefficients and that each variable contributes distinct explanatory power to the model.

Table 5

Modified Wald Test for Groupwise Heteroskedasticity

Test	Statistic	p-value
$\chi^2(23)$	51,475.32	0.0000

Source: Compiled by the Researcher, 2025.

The chi-square statistic ($\chi^2 = 51,475.32$) with a p-value of 0.0000 indicated that the null hypothesis of homoscedasticity is rejected at the 1% level of significance. This result confirms the presence of groupwise heteroskedasticity among the residuals of the panel model. In other words, the variance of the error terms differs significantly across the sampled banks, implying that the residuals are not evenly distributed. This

finding suggested that while the panel models appropriately controls for unobserved heterogeneity across banks, the assumption of equal variance of residuals is violated. Such violation can lead to inefficient coefficient estimates and biased standard errors, thereby affecting the reliability of hypothesis testing (Baltagi, 2021). This finding suggests that the assumption of equal variance is violated, which could bias standard error estimates if uncorrected. Consequently, to obtain reliable and efficient coefficient estimates, the study employed the Panel-Corrected Standard Errors (PCSE) estimation technique, which adjusts for both heteroskedasticity and potential cross-sectional dependence among firms.

Regression Results

Table 6

Panel Corrected Standard Errors (PCSE) Regression Result

Variable	Coefficient	Z-Value	P-Value
ETRR	0.421	3.92	0.000
ITAU	0.318	2.57	0.010
R-squared	0.472		
Wald Chi ²	89.54		0.000

Source: Extracted from STATA 17 Output by the Researcher, 2025.

The Wald Chi-square statistic of 89.54 with a p-value of 0.000 indicated that the regression model is statistically significant at the 1% level. This confirms that the null hypothesis (that the coefficients of ETRR and ITAU are jointly equal to zero) can be rejected, providing strong evidence that these tax incentive variables jointly influence the financial performance (ROE) of listed deposit money banks. The R-squared value of 0.472 implies that approximately 47.2% of the variation in ROE is explained by variations in ETRR and ITAU, while the remaining 52.8% is attributable to other factors not captured in the model, such as macroeconomic conditions or bank-specific operational variables. Statistically, an R-squared value near 0.5 in panel data research indicates a moderate explanatory power, meaning the model captures a substantial proportion of the variation in the dependent variable while leaving room for unobserved influences (Gujarati & Porter, 2021).

The coefficient of ETRR ($\beta = 0.421$, $p = 0.000$) is positive and statistically significant at the 1% level, indicating that banks that effectively reduce their statutory tax rates experience higher ROE. Statistically, the p-value of 0.000 is far below the 0.01 threshold, confirming that the effect of ETRR on financial performance is highly unlikely to be due to random chance. The positive coefficient suggests that a one-unit increase in ETRR is associated with a 0.421-unit increase in ROE, holding other factors constant. The a priori expectation of the researcher was that ETRR would positively influence ROE, as tax reductions increase retained earnings and provide additional resources for strategic deployment, enhancing shareholder returns. This result aligns with several empirical studies, including Moniruzzaman et al. (2024), who found that effective tax rate reduction improves profitability in Bangladesh banks; Shubita et al. (2024), which reported positive impacts of tax avoidance on Jordanian banks' ROE; and Ayoola-Akinjobi (2024), who observed a positive relationship between tax incentives and profitability in Nigerian financial institutions. Conversely, other studies suggest an opposite or negligible effect: Felix & Mamidu (2021) found that effective tax rate reductions had an insignificant effect on ROE among Nigerian development banks; Omodero &

Ogbonnaya (2018) reported mixed effects of corporate tax on profitability across Nigerian deposit money banks; and the Polish study on bank-specific taxes (2023) showed that tax levies can sometimes reduce bank performance due to constrained lending and higher operational costs. Thus, the first formulated null hypothesis is rejected.

The coefficient of ITAU ($\beta = 0.318$, $p = 0.010$) is positive and statistically significant at the 5% level, indicating that banks that effectively utilize investment tax allowances experience higher ROE. Statistically, the p-value of 0.010 is below the 0.05 threshold, confirming that the effect of ITAU on financial performance is unlikely to be due to chance. The positive coefficient implies that a one-unit increase in ITAU is associated with a 0.318-unit increase in ROE, holding other factors constant. The a priori expectation of the researcher was that ITAU would positively influence ROE, since investment tax allowances reduce taxable income, freeing resources that can be deployed to enhance profitability. Supporting this expectation, Moniruzzaman et al. (2024) reported that investment-related tax incentives improve profitability in the Bangladeshi banking sector; Shubita et al. (2024) found positive effects of capital and investment tax allowances on Jordanian banks' ROE; and Ayoola-Akinjobi (2024) observed that Nigerian financial institutions benefit from investment tax allowances in increasing shareholder returns. Conversely, several studies found neutral or negative effects: Felix & Mamidu (2021) indicated that investment tax incentives had an insignificant effect on ROE of Nigerian development banks; Omodero & Ogbonnaya (2018) reported mixed results where some banks did not significantly benefit from investment tax reductions; and the Polish banking study (Karpowicz et al. 2023) revealed that tax incentives were insufficient to offset performance losses caused by regulatory constraints. Thus, the second formulated null hypothesis is rejected.

5. Conclusion and Recommendations

This study concludes that tax incentives significantly influence the financial performance of listed deposit money banks in Nigeria. Specifically, reductions in the effective tax rate (ETRR) and the utilization of investment tax allowances (ITAU) both have positive and statistically significant effects on Return on Equity (ROE). Banks that strategically leverage this tax incentives are able to increase retained earnings, improve operational efficiency, and enhance shareholder returns. The findings support theoretical expectations from Agency Theory, Trade-off Theory, and Resource-Based View, highlighting that tax incentives function as valuable financial resources that, when effectively managed, strengthen competitive advantage and profitability. While contextual factors may moderate the relationship, the evidence indicates that prudent tax planning is a critical determinant of financial performance in the Nigerian banking sector.

Based on the findings, the study recommends that management of deposit money banks should proactively identify and fully utilize available tax incentives, including effective tax rate reductions and investment tax allowances, to maximize profitability and shareholder value. Regulators such as the Central Bank of Nigeria and tax authorities should ensure clear, consistent guidelines and promote awareness of available tax incentives to enhance uptake and compliance among banks. Policy makers are encouraged to expand or optimize investment-linked tax incentive schemes to stimulate productive investments and strengthen the financial sector. Additionally, future research should examine how factors such as governance

quality, bank size, and liquidity moderate the impact of tax incentives on financial performance, providing a more comprehensive understanding of the determinants of profitability in Nigerian banks.

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