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Tax planning and shareholder wealth maximization among listed banks in Nigeria

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Abstract
Purpose: This study examines the nexus between tax planning and shareholder wealth maximization among listed banks in Nigeria. The specific objective was to estimate the extent to which the effective tax rate affects the total shareholder return.
Method: *An ex-post facto* research design was adopted on a population of 12 listed deposit money banks in Nigeria. Purposive sampling was used to select a sample size of nine banks. Secondary data for the study were sourced from the annual reports of banks from 2014 to 2023. Cross-sectional, seemingly unrelated regression was carried out to test this hypothesis.
Results: It was found that a reduction in the effective tax rate will increase the total shareholder return of listed banks in Nigeria (β = -0.171827, p = 0.0000).
Conclusions: Tax planning enables companies to strategically manage their tax liabilities by minimizing tax expenses by taking advantage of available deductions, credits, and exemptions. As per policy implications, Nigerian tax authorities should continuously assess tax liabilities and implement legal tax minimization strategies.
Limitations: This study is limited by its focus on listed deposit money banks in Nigeria, which restricts the generalizability of the findings to other financial institutions.
Contribution: This study contributes to the literature by filling a critical gap by focusing on sector-specific profitability metrics, as it offers a new perspective on the liquidity-performance relationship in Nigerian agricultural firms.

Keywords: *Effective Tax Rate, Shareholder Wealth Maximization, Tax Planning, Total Shareholder Return*

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1. Introduction

The role of taxation in business operations has long been a subject of significant interest in the field of corporate finance. As one of the major factors influencing companies' financial outcomes, tax strategies have gained prominence, especially in the context of maximizing shareholder wealth (Maharana & Panda, 2025). In today's highly competitive business environment, which is continuously evolving, effective tax planning is indispensable for companies striving to optimize their financial performance and maintain profitability. Tax planning refers to the process by which businesses strategically manage their tax obligations to reduce tax liabilities (Burgman & Van Clieaf, 2012), thereby maximizing their net earnings and, by extension, their overall shareholder value. In developed economies, tax planning has become a well-established practice, with companies utilizing advanced tax strategies to optimize their financial results. In contrast, emerging markets such as Nigeria present unique challenges that necessitate an understanding of local tax regulations, economic conditions, and sector-specific nuances. Companies that fail to adequately plan for taxes may find themselves facing increased tax liabilities,

which could erode their profit margins and consequently diminish shareholder wealth (Habila, Jim-Suleiman, & Uchendu, 2024). On the other hand, businesses that can effectively plan their tax obligations not only improve their bottom lines but also enhance their capacity to reinvest in growth opportunities, thereby benefiting shareholders (Eche, Gimba, & Vincent, 2024).

Tax planning is a strategic approach that involves identifying opportunities to minimize tax obligations through careful consideration of corporate structures, financial decisions, and investment choices (Muhammad, 2019). For banks, this could involve a range of tactics, such as utilizing the tax incentives provided by the government, structuring financial transactions in a tax-efficient manner, utilizing allowable deductions, or taking advantage of tax credits and exemptions. In the Nigerian context, banks are subject to corporate income tax (CIT), value-added tax (VAT), and other taxes that directly affect their operational costs and profitability (Habila et al., 2024). However, these tax obligations are often subject to changes in tax laws and regulations, which further complicate the planning process. Effective tax planning in the banking sector must therefore be flexible enough to adapt to domestic tax reforms while aligning with broader corporate goals, such as improving profitability and maintaining regulatory compliance. The success of a bank's tax planning strategy is often measured by the extent to which it can minimize tax liabilities without sacrificing long-term business sustainability or shareholder wealth (Muhammad, 2019). Essentially, tax planning involves the deliberate alignment of a company's financial practices with both current and anticipated tax regulations to ensure long-term financial stability and wealth maximization.

The relationship between tax planning and shareholder wealth maximization is a crucial element in corporate finance as it directly impacts shareholders' financial returns. Shareholder wealth maximization refers to the process of enhancing the value of a company's stock, which ultimately benefits its investors through dividends, capital appreciation, and overall company growth (Edeh, Nwoha, & Okoro, 2024). Banks often balance their operational costs, tax obligations, and investment opportunities to ensure that profits are efficiently distributed among shareholders. Effective tax planning plays a critical role in this equation by reducing the amount of income lost to tax liabilities (Muhammad, 2019). By minimizing tax expenses, a bank can increase its net income, which, in turn, can lead to higher dividends, improved stock prices, and enhanced return on investment for shareholders. Additionally, tax savings from efficient tax planning may be reinvested in profitable ventures, which can further contribute to the growth of banks' financial performance and long-term sustainability.

However, despite the theoretical importance of tax planning in maximizing shareholder wealth, many listed banks in Nigeria struggle with the effective implementation of sound tax planning strategies (Adejumo & Sanyaolu, 2020; Erasmus & Uwikor, 2021; Osho & Orisamika, 2022). The Nigerian banking sector operates within a challenging and often volatile regulatory environment characterized by frequent changes in tax policies, a complex tax system, and the persistence of inefficient administrative practices. Furthermore, there is a notable lack of awareness or insufficient integration of tax planning into the corporate strategies of some banks. Consequently, many banks fail to capitalize on tax-saving opportunities, leaving them vulnerable to unnecessarily high tax liabilities. This inefficiency in managing tax obligations often leads to the erosion of potential profits that could otherwise have been distributed to shareholders or reinvested in the business to foster growth.

When banks fail to optimize their tax strategies, their profitability is directly affected, resulting in reduced financial returns for shareholders. In extreme cases, excessive tax liabilities can lead to declines in stock prices, shareholder dissatisfaction, and diminished investor confidence. Over time, the cumulative effect of these challenges may hinder the growth potential of banks, prevent them from effectively competing in the market, and limit their ability to create sustainable value for shareholders. Thus, the failure to implement effective tax planning not only jeopardizes shareholder wealth maximization but also threatens the long-term success and stability of the banking institutions involved. The gap in the existing literature on the relationship between tax planning and shareholder wealth maximization in Nigerian banks is evident in both the recency of available studies and the

methodological approaches employed. While earlier studies such as Muhammad (2019), James, Akanbi, and Olaronke (2020), Adejumo and Sanyaolu (2020), and Aondoakaa, Iortima, and Achika (2021) focused on outdated datasets ranging from 2009 to 2018 and employed traditional panel regression models without accounting for heteroskedasticity or cross-sectional dependence, the current study spans data from 2014 to 2023 and adopts the more robust cross-sectional Seemingly Unrelated Regression (SUR) technique to ensure more accurate estimation. Similarly, studies like Bwala, Ibrahim, and Gurama (2024), Eche et al. (2024), and Habila et al. (2024), though more recent, still lack integration of post-COVID-19 financial realities and policy shifts such as subsidy reforms that may significantly influence tax planning dynamics in the Nigerian banking sector. Maharana and Panda (2025) conducted a meta-analysis suggesting that tax planning has a weak influence on firm performance and is moderated by firm age and leverage, while Erasmus and Uwikor (2021) and Osho and Orisamika (2022) acknowledged mixed outcomes from strategies like capital intensity, thin capitalization, and book-tax differences. In addition, studies such as Fagbemi, Kolawole, Adigbole, and Abogun (2022) generally concentrated on profitability or isolated financial performance indicators, overlooking broader dimensions of shareholder wealth such as dividend payouts, stock returns, and earnings per share. By bridging these methodological and contextual limitations, this study offers an up-to-date, holistic, and econometrically sound evaluation of how tax-planning strategies influence shareholder wealth maximization in Nigerian listed banks.

1.1 Objective of the Study

This study aims to assess the nexus between tax planning and shareholder wealth maximization among listed banks in Nigeria. Specifically, the study estimates the extent to which the effective tax rate affects the total shareholder return of listed banks in Nigeria.

2. Literature review

2.1 Conceptual Issues

2.1.1 Tax Planning

Tax planning refers to the strategic approach adopted by businesses to manage their tax obligations in a way that minimizes tax liabilities while ensuring compliance with applicable tax laws and regulations (Maharana & Panda, 2025). This involves evaluating the potential tax consequences of various business decisions and structuring transactions in a way that results in the lowest tax burden, thereby optimizing the company's after-tax profits (Muhammad, 2019). The tax planning process requires a comprehensive understanding of both current and future tax laws, available tax incentives, exemptions, and the financial operations of the business itself (Bwala et al., 2024). A key aspect of tax planning is the proactive management of a company's tax affairs, which ensures that tax decisions are made in advance, rather than reactively. Tax planning also includes considering the timing of income recognition, choice of financing methods, capital investments, and structuring of business operations, among others, all aimed at reducing the overall tax liability.

Effective tax planning allows companies to make the best use of available tax laws to their advantage (Ado & Tanko, 2024), ensuring that they pay only what is necessary without violating any tax regulations (Eche et al., 2024). This is not about tax evasion or avoidance, which are illegal practices, but about making lawful and informed choices that lead to a tax-efficient structure. While some tax plans may focus on reducing tax liabilities in the short term, effective tax planning involves long-term strategies that ensure the sustainability of tax efficiencies while adhering to the evolving tax domain (Aondoakaa et al., 2021). By effectively managing their tax obligations, businesses can preserve capital that can be reinvested in growth initiatives, such as expansion, research and development, or improving operational efficiencies. In essence, tax planning goes beyond simply meeting tax obligations and is a fundamental part of the financial strategy of a business, directly influencing its profitability and long-term sustainability (Bwala et al., 2024).

2.1.1.1 Effective Tax Rate

The effective tax rate (ETR) is a financial metric that represents the percentage of a company's income paid in taxes (Agboola, 2024). Unlike the statutory or corporate tax rate, which is set by the government

and applied to a company's income, the effective tax rate provides a more accurate reflection of the actual tax burden borne by a company after accounting for deductions, credit, and other tax-reducing factors. According to Nwankwo, Nwachukwu, Okegbe, and Moneke (2024), the ETR is calculated by dividing the total tax expense by the pre-tax income or taxable income of the company. This rate can fluctuate depending on several factors such as the geographical location in which the company operates, the use of tax incentives or credits, and the structure of its business activities. For example, a company involved in international operations may benefit from lower taxes in certain jurisdictions, which can affect the overall ETR.

The ETR serves as a key indicator for investors, analysts, and tax authorities as it reveals how much of the company's income is consumed by taxes. A lower effective tax rate may suggest that the company is utilizing tax-saving strategies effectively, whereas a higher rate may indicate that the company is not optimizing its tax situation, leading to a higher tax burden (Agboola, 2024). It is important to note that a low ETR is not necessarily a sign of good tax planning; it must be examined in the context of a company's overall tax compliance, risk profile, and strategic business decisions. Additionally, ETR can have significant implications for shareholder wealth, as a high tax burden may reduce net profits, whereas a low ETR can contribute to higher retained earnings or increased dividends, ultimately benefiting shareholders.

2.1.2 Shareholder Wealth Maximization

Shareholder wealth maximization is a fundamental financial objective of most publicly traded companies (Muhammad, 2019). It refers to the process of increasing the value of a company's shares and, by extension, enhancing the returns received by shareholders (Anaike, Nworie, & Ochuka, 2024). In practice, shareholder wealth maximization is achieved through a combination of strategies aimed at improving a company's profitability, expanding market share, increasing dividends, and achieving sustainable growth. This objective is based on the premise that the primary purpose of a corporation is to maximize returns for its shareholders, who are the owners of the company (Edeh et al., 2024; Gilbert Ogechukwu Nworie & Mba, 2022; Gilbert Ogechukwu Nworie & Ofoje, 2022). As a result, all managerial decisions, including those related to operations, investments, financing, and tax planning, should ultimately serve to increase the value of a company's stock (Diputra & Rikumahu, 2024; Liviani & Rachman, 2021; Oranefo & Egbunike, 2022).

The maximization of shareholder wealth is typically reflected in the performance of a company's stock price. An increase in stock prices represents a capital gain for shareholders, whereas dividends provide a direct income stream. Achieving this goal requires a company to focus on both short- and long-term financial performance, balancing profitability with risk management and sustainability (LoPucki, 2022). Shareholder wealth maximization also requires companies to engage in efficient resource allocation, ensuring that investments generate returns that exceed the cost of capital, thereby enhancing the value of the firm (Anaike et al., 2024). Additionally, it entails creating a stable financial environment that fosters investor confidence, reduces market volatility, and ensures that shareholders see steady growth in the value of their investments. In this sense, shareholder wealth maximization is not solely about increasing profits in the short term, but also about creating long-term value that benefits shareholders continuously.

2.1.2.1 Total Shareholder Return

Total shareholder return (TSR) is a financial metric used to measure the total return to shareholders from holding a company's stock over a specific period (Muhammad, 2019). TSR considers both the capital gains (or losses) from changes in the stock price and any dividends or other distributions paid to shareholders. The formula for calculating TSR combines the percentage change in stock prices over the period with the dividends paid out, making it a comprehensive measure of a shareholder's overall return on investment (de Oliveira & Basso, 2024). This metric provides a more complete picture of the performance of a company from the perspective of an investor, as it incorporates not only the growth in the value of the stock but also the income generated through dividends. TSR is particularly valuable because it reflects the actual experience of shareholders, taking into consideration the total financial

benefits they receive from owning the stock, rather than just focusing on price appreciation or dividend income alone (Muhammad, 2019). For companies, a higher TSR indicates strong performance and effective management in creating value for shareholders, whereas a lower TSR suggests weaker performance (Burgman & Van Clieaf, 2012).

2.2 Theoretical Framework and Development of Research Hypothesis

The hypothesis in this study is premised on signaling theory. Signaling theory was first introduced by Michael Spence in 1973 through his seminal work on job market signaling (Gilbert Ogechukwu Nworie, Oduche, & Cyril-Nwuche, 2024). Spence's original application of the theory centered on the labor market, where job seekers use education as a signal to employers about their skills and productivity. In this context, signaling theory helps explain how companies use certain actions, such as dividend announcements, capital structure decisions, and tax planning practices, to convey valuable information to external stakeholders, particularly investors. This theory provides a framework for understanding how businesses communicate their financial health (Kusumawati, 2020), management quality, and future prospects to the market, thereby influencing investor decisions and perceptions (Yasar, Martin, & Kiessling, 2020).

The central postulation of signaling theory is that in situations of asymmetric information, one party (such as a firm) sends signals to another party (such as investors) to reduce the information gap (Connelly, Certo, Ireland, & Reutzel, 2011). The sender uses observable actions or behaviors that convey information about hidden attributes or future intentions. In the case of companies, signals can include actions such as paying dividends, issuing stock, or adopting certain corporate strategies such as effective tax planning. These signals serve as indicators of a company's financial stability, growth prospects, and management effectiveness. This theory suggests that if a company sends strong positive signals such as efficient tax planning, it can enhance its reputation in the market, build investor confidence, and improve its stock valuation. Conversely, weak or negative signals, such as poor financial decision-making or lack of transparency in tax matters, can erode investor trust and negatively impact a company's market value (Yasar et al., 2020).

Signaling theory is highly relevant to tax planning and shareholder wealth maximization, particularly in the context of listed banks in Nigeria. Banks, like other publicly traded companies, operate in a market where investors rely on signals to assess a company's financial health and future potential (Kerry, 2020). When a bank adopts effective tax planning strategies, it sends a signal to investors that it is well-managed, financially savvy, and committed to maximizing shareholder value. By minimizing tax liabilities, banks can increase their profitability and enhance the resources available for reinvestment or dividend distribution, both of which contribute to shareholder wealth. Furthermore, signaling theory suggests that when a bank engages in proactive tax planning, it communicates to the market that it is capable of managing its finances in a manner that minimizes risk and maximizes returns. This, in turn, boosts investor confidence, increases stock prices, and enhances shareholder wealth. Therefore, signaling theory provides a valuable lens through which to analyze how tax planning impacts the perception of a bank's financial health and its ability to maximize shareholder wealth.

On the above basis, we hypothesize that:
Ha: A reduction in the effective tax rate increases the total shareholder returns of listed banks in Nigeria.
The null hypothesis competing with the above is as follows:
Ho: A reduction in the effective tax rate reduces the total shareholder returns of listed banks in Nigeria.

2.3 Synthesis of Related Empirical Findings

Maharana and Panda (2025) conducted a meta-analysis that revealed the weak influence of tax planning on firm performance, suggesting that firms should consider other factors to enhance performance. Their findings also emphasize that firm age and leverage significantly moderate the relationship, indicating that younger firms benefit more from tax-planning efforts. Similarly, Bwala et al. (2024) found that the effective tax rate (ETR) negatively affected firm value, while tax savings (TSV) had a positive impact.

Eche et al. (2024) observed that while debt tax shields had a significant positive effect on financial performance, the income effective tax rate showed no significant impact. These studies suggest that while tax planning can influence firm performance, the nature of its effect may depend on specific tax strategies, such as debt financing or tax-saving measures. Furthermore, Habila et al. (2024) found that company income tax had a positive impact on financial performance, but other taxes, such as tertiary education and capital gains taxes, negatively impacted performance, pointing to the complexity of tax planning's effect on shareholder wealth.

On the other hand, several studies indicate more direct negative effects of tax planning on shareholder wealth maximization. Osho and Orisamika (2022) highlighted that while book-tax differences positively impacted return on assets (ROA), the effective tax rate had a negative but insignificant impact on ROA. Aondoakaa et al. (2021) reported a positive relationship between the effective tax rate and firm value, suggesting that tax planning can enhance firm value, which can translate to improved shareholder wealth.

Similarly, (Erasmus & Uwikor, 2021)concluded that tax planning strategies, such as thin capitalization and capital intensity, improved financial performance, although they had a limited effect on profitability measures such as return on equity and earnings per share. Adejumo and Sanyaolu (2020) found that while tax planning had a significant negative effect on profitability, the capital adequacy ratio had a positive effect, indicating that tax planning's direct impact on shareholder wealth may not always be straightforward. James et al. (2020) and Muhammad (2019) both found that the effective tax rate had a significant negative effect on shareholder returns, with Muhammad's study particularly noting a 1% increase in the effective tax rate would reduce shareholder returns by 1.69%. These findings underscore that while tax planning may reduce tax liabilities, its impact on maximizing shareholder wealth can be negative, especially if not optimally managed.

2.3 Gap in Literature

The gap in the literature on the relationship between tax planning and shareholder wealth maximization in Nigerian banks is significant, particularly in terms of both the recency of studies and the analytical methods employed. This study provides a more up-to-date analysis with data spanning the period from 2014 to 2023, which allows for a contemporary understanding of how tax planning strategies, especially effective tax rates, impact shareholder wealth in the context of Nigerian listed banks. This is in contrast to prior studies, such as Muhammad (2019), who focused on data from 2009 to 2018, and James et al. (2020), who relied on data from 2010 to 2016. Furthermore, the study conducted by (Bwala et al., 2024), using data until 2021, falls short of incorporating more recent data that could offer hints into the latest trends in tax planning and its effect on shareholder returns in Nigeria's evolving financial landscape. Therefore, this study contributes a more current perspective, which is vital for making informed decisions in the context of shareholder wealth maximization.

Additionally, this study diverges from prior research by using cross-sectional seemingly unrelated regression (SUR) to account for potential issues such as heteroscedasticity and cross-sectional dependence, which are common in panel data analysis but often overlooked in previous studies. For example, studies such as those by Habila et al. (2024) and Aondoakaa et al. (2021) employed traditional regression models like panel least squares and fixed effects, without addressing the possibility of cross-sectional dependence or heteroskedasticity, which can lead to biased estimations. By employing a cross-sectional seemingly unrelated regression model, this study offers a more robust methodological approach, ensuring more reliable and accurate results in estimating the relationship between tax planning and shareholder wealth maximization. Thus, the use of this advanced econometric technique represents a methodological improvement over previous studies and further adds value to the field of tax planning research.

3. Research methodology

This study employed an ex post facto design to observe historical data, allowing for the analysis of existing relationships between tax planning and shareholder wealth without any manipulation of

variables (Gilbert O Nworie, Okafor, & John-Akamelu, 2022). This design is particularly appropriate, as it helps in understanding how past tax strategies have impacted current financial performance. The population for the study consisted of 12 listed deposit money banks in Nigeria, as per the records available from the Nigerian Exchange group. As of December 31, 2023, the banks are Access Bank Plc, Eco Bank Plc, Fidelity Bank Plc, First Bank Plc, Guaranty Trust Bank Plc, First City Monument Bank Plc, Stanbic IBTC Plc, Sterling Bank Plc, United Bank for Africa Plc, Wema Bank Plc, Zenith International Plc, and Unity Bank Plc.

A purposive sampling technique was employed to select a sample size of the following nine banks: Access Bank Plc, Eco Bank Plc, Fidelity Bank Plc, Guaranty Trust Bank Plc, Sterling Bank Plc, United Bank for Africa Plc, Wema Bank Plc, Zenith International Plc, and Unity Bank Plc. This sampling method was based on the availability of comprehensive financial data for the period under study from 2014 to 2023. Hence, any bank that had not uploaded their annual reports of 2014-2023 at the time this study was being drafted was removed from the sample size.

Secondary data were collected from banks' annual reports. These reports provide detailed information on ETR and TSR, as well as other financial performance indicators. The use of secondary data is justified by the objective of analyzing historical performance without interfering with the natural course of events. Data spanning a period of ten years (from 2014 to 2023) were used to ensure that the findings reflect long-term trends and the effects of tax planning decisions over time. This decade-long data range also accounts for potential fluctuations in tax policies and market conditions, providing a more comprehensive understanding of the relationship between tax planning and shareholder wealth maximization.

To summarize and describe the data, a descriptive analysis was performed. This included measures such as the mean, median, standard deviation, and range to provide an overall understanding of the data distribution and central tendency. Descriptive statistics also helped reveal any potential patterns or anomalies in the ETR and TSR data across the sampled banks. This was a preliminary step before conducting more advanced statistical analyses to examine the relationships between the variables.

Diagnostic tests were conducted to assess the suitability of the data for regression analysis. Specifically, heteroskedasticity and cross-sectional dependence tests were conducted to evaluate the reliability of the panel regression model. Heteroskedasticity tests checked for the presence of non-constant variance in the residuals of the regression model, which could affect the validity of statistical inferences. Cross-sectional dependence tests were employed to determine whether the residuals across banks were correlated, which could lead to biased or inconsistent estimates in the panel data context. By diagnosing these potential issues, the study ensured the robustness of the results and minimized the risk of statistical errors.

To test this hypothesis and assess the impact of ETR on TSR, a cross-sectional seemingly unrelated regression (SUR) model was applied. This model is particularly useful when multiple equations are estimated simultaneously, accounting for potential correlations in the error terms across banks. The SUR model allows for more efficient estimation by considering the cross-sectional relationships between banks, and it is appropriate for handling the potential interdependencies among the financial variables (Sarafidis & Wansbeek, 2012). Hypothesis testing was based on results derived from panel-estimated generalized least squares (GLS), a method that accounts for both heteroskedasticity and autocorrelation in the data. GLS is particularly well suited for panel data because it helps to obtain more efficient estimates by correcting for issues such as serial correlation and heteroskedasticity, ensuring that the results are unbiased and reliable.

The general form of the regression model is as follows:

$TSRit = \beta 0 + \beta 1 ETRit + \beta 2 SIZEit + \epsilon it$ _____eqi

Where:

TSRit = Total Shareholder Return of bank i at time t

ETRit = Effective Tax Rate of bank i at time t

FSZit = Firm size of bank i at time t (control variable),

β0 = Intercept term

β1 = Coefficient for the effective tax rate (to be estimated)

β2 = Coefficient for firm size (to be estimated)

ϵit = Error term for bank i at time t

Table 1. Operational Measurement of Variables

Variable	Measurement	Source
Effective Tax Rate	Tax Expense/Profit Before Tax	Muhammad (2019)
Total Share Holder Return	$\frac{Price_{t+1} + Dividend - Price_t}{Price_t}$	Muhammad (2019)
Firm Size	Natural log of total asset	Muhammad (2019)

Source: Authors' Compilation (2025)

4. Results and discussions

4.1 Descriptive Analysis and Model Diagnostics

Descriptive analysis was performed to summarize the data. Heteroscedasticity and cross-sectional dependence tests were conducted to diagnose the panel regression model.

Table 2. Descriptive Analysis

	TSR	ETR	FSZ
Mean	0.290330	0.219594	9.360245
Median	0.044518	0.114583	9.375686
Maximum	3.236364	5.534614	10.41359
Minimum	-0.776000	-0.047419	8.194532
Std. Dev.	0.760393	0.641120	0.486552
Skewness	2.044247	7.093149	-0.150721
Kurtosis	7.397293	56.19925	2.437447
Jarque-Bera	135.1949	11367.79	1.527497
Probability	0.000000	0.000000	0.465917
Sum	26.12966	19.76343	842.4220
Sum Sq. Dev.	51.45957	36.58210	21.06921
Observations	90	90	90

Source: Eviews 10 Output (2025)

As shown in Table 2 above, the total shareholder return (TSR) has a mean value of 0.2903, indicating that, on average, shareholders of the sampled banks experienced a 29.03% return on their investments during the study period. The maximum recorded TSR was 3.2364, suggesting that some banks achieved significantly higher shareholder returns. However, the minimum TSR was -0.7760, reflecting instances in which shareholders experienced losses. A standard deviation of 0.7604 indicates substantial variability in shareholder returns across the sampled banks. The skewness value of 2.0442 suggests that the TSR distribution is positively skewed, meaning that most values are concentrated below the mean,

with a few extreme positive values. A kurtosis of 7.3973 indicates that the distribution is leptokurtic, implying the presence of extreme values or outliers. The Jarque-Bera probability of 0.0000 confirms that TSR is not normally distributed.

The effective tax rate (ETR) has a mean value of 0.2196, indicating that, on average, listed banks paid approximately 21.96% of their earnings as taxes. The maximum ETR was 5.5346, suggesting that some banks faced an extraordinarily high tax burden, while the minimum value of -0.0474 implied that some banks reported negative tax expenses, possibly due to tax incentives, tax refunds, or deferred tax benefits. The standard deviation of 0.6411 shows a high dispersion of ETR values, indicating substantial differences in tax-planning strategies among the banks. The skewness value of 7.0931 suggests a highly positively skewed distribution, implying that a few banks have experienced extremely high tax rates. The kurtosis of 56.1993 was excessively high, indicating extreme outliers in the data. The probability of the Jarque-Bera test is 0.0000, confirming that the ETR distribution significantly deviates from normality.
Firm size (FSZ), measured as the natural logarithm of total assets, has a mean value of 9.3602. The maximum FSZ of 10.4136 and minimum FSZ of 8.1945 indicate that there is some variation in the size of the sampled banks, although not as extreme as in the other variables. The standard deviation of 0.4866 suggests a moderate dispersion in firm size across the sampled banks. The skewness value of -0.1507 indicates that the FSZ distribution is slightly negatively skewed, meaning that the values are fairly symmetrically distributed around the mean with a slight tilt towards lower values. A kurtosis of 2.4374 suggests that the distribution is close to normal, as it is near the expected value of 3 for a normal distribution. The probability of the Jarque-Bera test is 0.4659, confirming that the FSZ variable follows a normal distribution.

Table 3. Heteroskedasticity Test

Panel Cross-section Heteroskedasticity LR Test			
Null hypothesis: Residuals are homoskedastic			
Equation: UNTITLED			
Specification: TSR ETR FSZ C			
	Value	df	Probability
Likelihood ratio	35.59689	9	0.0000

Source: Eviews 10 Output (2025)

The heteroskedasticity test, presented in Table 3, assesses whether the variance of the error terms in the regression model is constant across observations. Heteroskedasticity can lead to inefficient estimates and unreliable statistical inferences. A probability value of 0.0000 indicates that the null hypothesis of homoscedasticity (constant variance) is rejected at a 5% significance level. This result suggests that heteroscedasticity is present in the dataset, meaning that the variance of the error terms differs across banks. To address this issue, robust standard errors or generalized least-squares estimation can be applied to ensure the validity of the regression results.

Table 4. Cross-sectional Dependence Test

Residual Cross-Section Dependence Test			
Null hypothesis: No cross-section dependence (correlation) in residuals			
Equation: Untitled			
Periods included: 10			
Cross-sections included: 9			
Total panel observations: 90			
Note: non-zero cross-section means detected in data			
Cross-section means were removed during computation of correlations			
Test	Statistic	d.f.	Prob.

Pesaran CD	8.965058	0.0000

Source: Eviews 10 Output (2025)

The cross-sectional dependence test, shown in Table 4, examines whether residuals across different banks in the panel data are correlated. Cross-sectional dependence can arise due to common shocks, economic linkages, or industry-wide effects, leading to inefficient parameter estimates if not accounted for (Chudik & Pesaran, 2015). The Pesaran cross-sectional dependence (CD) test produces a probability value of 0.0000, which is statistically significant at the 5% level. This indicates that the null hypothesis of no cross-sectional dependence is rejected, confirming the presence of a significant correlation among residuals across banks. Given this finding, the use of robust panel regression techniques such as the cross-sectional seemingly unrelated regression (SUR) approach is necessary to obtain reliable results (Sarafidis & Wansbeek, 2012).

4.2 Test of Hypothesis

Ha: A reduction in the effective tax rate increases the total shareholder returns of listed banks in Nigeria.
Ho: A reduction in the effective tax rate reduces the total shareholder returns of listed banks in Nigeria.

Table 5. Test of Hypothesis

Dependent Variable: TSR
Method: Panel EGLS (Cross-section SUR)
Date: 01/09/25 Time: 02:34
Sample: 2014 2023
Periods included: 10
Cross-sections included: 9
Total panel (balanced) observations: 90
Linear estimation after one-step weighting matrix
Cross-section SUR (PCSE) standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ETR	-0.171827	0.025437	-6.754961	0.0000
FSZ	0.148406	0.066030	2.247563	0.0271
C	-1.259754	0.618443	-2.036977	0.0447
	Weighted Statistics			
R-squared	0.332938	Mean dependent var		0.339946
Adjusted R-squared	0.317603	S.D. dependent var		1.262313
S.E. of regression	0.988500	Sum squared resid		85.01055
F-statistic	21.71131	Durbin-Watson stat		2.112190
Prob(F-statistic)	0.000000			

Source: Eviews 10 Output (2025)

Table 5 shows the regression estimates for the test of hypotheses. The R-squared value of 0.332938 shows that the model explains approximately 33.29% of the variations in the total shareholder return. Although this suggests that factors other than the effective tax rate and firm size contribute to shareholder returns, the explanatory power is reasonable within the context of financial performance studies. The probability of the F-statistic (0.000000) is highly significant, indicating that the model is well-fitted and that at least one independent variable significantly affects the total shareholder return. Additionally, the Durbin-Watson statistic of 2.112190 was close to the ideal value of 2, suggesting no severe autocorrelation in the residuals, thereby reinforcing the reliability of the model's estimates. The control variable, firm size (FSZ), has a coefficient of 0.148406, which implies that an increase in firm

size positively affects total shareholder return. This means that for every one-unit increase in firm size, TSR increases by approximately 0.148 units. A p-value of 0.0271 confirms that this effect is statistically significant at the 5% level. This finding suggests that larger banks tend to generate higher shareholder returns, possibly because of economies of scale, greater market influence, or more efficient resource utilization.

The coefficient of the effective tax rate (ETR) is -0.171827, indicating that a reduction in the effective tax rate leads to an increase in total shareholder return (TSR). Specifically, for every one-unit decrease in the effective tax rate, the total shareholder return increases by approximately 0.172 units. The probability value (p-value) of 0.0000 shows that this effect is statistically significant at the 5% significance level. This means that the effect of the effective tax rate on total shareholder return is not due to chance, but is a significant determinant of shareholder wealth maximization. Thus, a reduction in the effective tax rate significantly increases total shareholder returns ($\beta = -0.171827$, $p = 0.0000$).

4.3 Discussion of Findings

The finding that a reduction in the effective tax rate leads to an increase in the total shareholder return of listed banks in Nigeria can be explained by the fact that lower tax rates directly result in higher after-tax profits for banks, which can then be reinvested into the business or distributed to shareholders. By reducing the tax burden, banks can retain more capital, which increases their overall financial performance, making them more attractive to investors. Shareholders are likely to benefit from higher returns because of these improved financial metrics, which would lead to an increase in stock prices and shareholder wealth. This outcome aligns with the common financial principle that lower taxes enhance a firm's ability to generate wealth for its shareholders, which is reflected in the increased total shareholder return. This finding aligns with signaling theory, which posits that managerial actions convey information to investors; a reduced effective tax rate signals efficient financial management and the potential for higher future earnings. Consequently, investors interpret this as a positive signal, leading to increased confidence and enhanced total shareholder returns.

Several studies have supported this finding. For instance, Muhammad ((Muhammad, 2019) found that a higher effective tax rate negatively impacts shareholder returns, suggesting that reducing the effective tax rate could indeed improve shareholder wealth. Similarly, Bwala et al. (2024) reported that the effective tax rate had a significant negative impact on firm value in Nigerian commercial banks, indicating that lower tax rates could enhance firm value and, consequently, shareholder wealth. On the other hand, Eche et al. (2024) found that while debt tax shields positively influenced performance, the income effective tax did not have a significant effect, further implying that reducing taxes can enhance performance. Additionally, Erasmus and Uwikor (2021) observed that tax planning strategies, including managing the effective tax rate, positively impact banks' net interest margin, reinforcing the idea that tax reduction can improve financial outcomes.

5. Conclusion

Effective tax planning is a key strategic tool for companies to optimize their financial performance, enhance profitability, and ultimately maximize shareholder wealth. Tax planning enables companies to strategically manage their tax liabilities by minimizing tax expenses through compliance with regulations, taking advantage of available deductions, credits, and exemptions, and efficiently structuring financial transactions. In a well-functioning economy, corporations, including banks, are expected to implement tax-planning strategies that reduce their tax burden, increase their net profits, and generate higher returns for shareholders. For listed banks, the successful integration of tax planning into corporate decision-making would result in an increase in shareholder value, manifesting in higher dividends, capital appreciation, and improved stock performance. This would ensure that shareholders receive maximum value from their investments while contributing to the overall economic growth of the financial sector. The findings of this study have significant implications for the financial performance and strategic decision-making of listed banks in Nigeria.

By minimizing tax expenses through lawful deductions, exemptions, and financial structuring, banks can optimize their profitability, improve investor confidence, and attract more investments. This underscores the interconnectedness between corporate tax strategies and firm value, emphasizing the importance of aligning financial policies with tax efficiency to sustain long-term growth and a competitive advantage in the banking sector. Moreover, the result reinforces the need for banks to remain proactive in adapting to fiscal changes while maintaining compliance with taxation laws.

5.1 Practical, Theoretical and Policy Implications of Findings

The findings suggest that tax planning plays a critical role in maximizing shareholder wealth in Nigerian listed banks. A reduction in the effective tax rate significantly increases total shareholder returns, indicating that banks that adopt efficient tax strategies can enhance investor returns. This has practical implications for bank executives and policymakers, as it underscores the importance of tax incentives and regulatory frameworks that encourage tax-efficient financial planning. Additionally, investors may consider a bank's tax planning efficiency when making investment decisions, whereas regulatory bodies should ensure that tax policies strike a balance between promoting corporate growth and maintaining government revenue.

Theoretically, this finding reinforces the signaling power of corporate tax behavior, demonstrating that effective tax management is not merely a compliance function but a strategic communication tool that signals strong governance, profit optimization, and financial prudence to investors. This enhances firm valuation and investor confidence and ultimately increases shareholder wealth. From a broader economic standpoint, the results underscore the importance of tax policy in shaping investment dynamics and corporate strategies. Thus, we recommend that listed banks in Nigeria establish a dedicated tax planning unit within their finance departments to continuously assess tax liabilities and implement legal tax minimization strategies. This unit should work closely with tax consultants to ensure compliance while optimizing shareholder returns

5.2 Limitations of the Study and Suggestion for Further Studies

This study is limited by its focus on only listed deposit money banks in Nigeria, which restricts the generalizability of the findings to other financial institutions, such as microfinance banks or non-banking financial firms. Furthermore, the study only examined the effect of the effective tax rate on total shareholder returns without considering other potential mediating factors, such as corporate governance practices or economic conditions, which may influence the observed relationship.

5.3 Suggestion for Further Studies

Future research should expand its scope to include other financial institutions and sectors in order to provide a broader perspective on the effect of tax planning on shareholder wealth maximization. Additionally, researchers could incorporate other tax-related variables, such as tax aggressiveness and deferred tax liabilities, to gain more perspective on tax-planning strategies. Further studies may adopt a mixed-methods approach by integrating qualitative perspectives from financial managers and policymakers to complement the quantitative findings, thereby offering a more comprehensive understanding of tax-planning dynamics in corporate financial management.

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