

Innovations

Corporate Tax Saving Strategies and Financial Performance of Companies Listed in the Nigerian Exchange Group

¹ Lass, Ruth; ² Edith O. Onyeonu

^{1,2} Accountancy Department, Faculty of Business Administration, University of Nigeria, Nsukka

Abstract: *This study examined corporate tax-saving strategies and the financial performance of companies listed on the Nigerian Exchange Group. The study examines the impact and relationship between tax-saving strategies and financial performance. The objectives are to ascertain the effect of tax-saving strategies on return on assets, determine the impact of tax-saving strategies on earnings per share, and identify the relationship between tax-saving strategies and the current ratio of the selected quoted companies. The target population includes all companies listed on the Nigerian Exchange Group. The non-probability sampling technique was employed to select a sample of 50 companies, which was chosen based on the researcher's judgment. The panel regression analysis was used to test hypotheses one and two. On the contrary, the Panel Auto Regression Distribution Lag (ARDL) estimation method was employed to test hypothesis three, which examines the relationship between the variables. The findings show that the tax-saving strategies have a positive, significant, and non-significant effect on the return on assets. Tax-saving strategies have a positive/negative, non-significant impact on earnings per share, and they have a long-term and short-term relationship with the current ratio of the selected quoted companies. It is recommended that the sampled companies use non-tax savings as tax-saving strategies to reduce tax liabilities and optimally utilise the best option that improves return on assets. There is an urgent need for a continuous review of tax-saving strategies adopted by listed companies to ensure the effective and efficient application of these strategies, thereby enhancing the earnings per share of the sampled companies. The quoted companies should optimally utilise the best option that enhances the company's performance. They should ensure that corporate tax saving is part of their corporate strategies, as this will improve their financial performance by reducing the tax burden.*

Keywords: *Tax saving strategies, return on asset, earnings per shares, current asset, Autoregressive Distributed Lag (ARDL), and long and short-run relationship*

1. Introduction

Since taxes are coercive, economic units assigned the tax duty never plan to bear the actual tax burden fully (Commonwealth Association of Tax Administrators (CATA), 2007). This truth is revealed by the history of taxation over time and throughout the world. Economic entities, particularly corporate entities, constantly adopt strategies to minimise, delay, or avoid making tax payments. There are legal and unlawful ways for economic entities to delay, minimise, or avoid paying taxes. The tax planning strategy is a legal method, whereas tax evasion refers to an unlawful way (Murphy, 2004).

The concept of tax planning strategy first emerged in 1947 when distinguished Judge Hand ruled in the case of *Commissioner v. Newman* that structuring one's affairs to minimise taxes is not unlawful. Hoffman's tax planning idea in 1961 backs up this claim. Hoffman contends that it is essential for businesses to comprehend the current tax regulations and implement them in a way that minimises their tax exposure. Hoffman claims that paying more tax than the law requires is economically ineffective. Scholes et al. (1992) framework for tax planning also emphasises the necessity of tax planning for corporate entities. Corporate tax strategies are fundamental to financial planning, enabling tax managers and companies to reduce tax liabilities and enhance performance legally. Tax strategies are the deliberate attempt to carefully minimise the burden within the tax law's parameters and consider the tax payable at a future date. According to the country's tax rules, paying taxes is not an option for taxpayers; instead, it is an expense from their perspective. Taxpayers are not required to pay more than they can afford to support the government. Therefore, taxpayers typically take advantage of tax law loopholes to ensure the government receives the least tax revenue feasible.

The Nigerian tax system is a three-way arrangement that encompasses tax legislation, policy, and administration, similar to those of other national tax systems. Nigerian tax laws are based on tax theory implemented through tax administration to prevent a standoff between taxpayers and the government. Nigeria, a nation with a lower middle-class income, needs an effective tax system to run smoothly. As the country's tax system becomes less effective and less transparent, it is up to individual businesses to carefully manage their taxes to avoid paying excessive taxes that could harm their ability to conduct business.

While tax payments by businesses are considered mandatory, it has been argued that taxes are a vital operating expense that has created a significant barrier to their ability to generate profits (Okoye and Akenbor, 2010). This isn't how taxation is intended to work; if the tax system functions properly, corporations should be able to pay their taxes without undue hardship. The search for a link between corporate tax

strategy and the financial performance of companies listed in the Nigerian Exchange Group is motivated by the heavy tax burden and negative sentiments facing Nigerian companies. In such circumstances, it's crucial to understand the corporate tax methods employed by these businesses and how they relate to their financial performance.

To promote industrial and corporate growth, successive Nigerian governments have utilised taxation as a key tool of fiscal policy to manage the country's economy (Nwaobia, 2013). Tax plays a significant role in the success and failure of any organisation because it is used to protect emerging industries, encourage investment in specific regions of the economy that are deemed necessary for economic growth, and also because a high tax regime is likely to erode the profit available for investment opportunities. Dickson and Nwaobia (2012) and Ihendinihu (2009) observed that unfavourable tax policy is a key factor in developing a subversive economy where law-abiding taxpayers and businesses seek refuge from high tax regimes.

The main obstacle for corporate organisations is the significant tax rates and various levies that result in a substantial tax burden above the statutory corporate tax. According to the Official List of Collection Act of 1998, multiple taxes are now imposed on businesses and individuals (Bammeke, 2012). Due to the overlap and compelling collection of some of these taxes from corporate entities, it has become uneconomical for businesses in terms of cost structure (Nwaobia, 2013). The success of any company as a continuing concern depends on its financial performance. Nigeria's high tax rate and many taxes significantly impact the company's financial performance. This has led to a conflict between management and shareholders. While management pursues other interests, shareholders desire to maximise their value over the long term. Poor tax strategy and increasing tax obligations can decrease business performance and economic activity.

There has been considerable discussion in finance, economics, and accounting on how tax-saving strategies impact business performance. Previous related work, particularly from the theoretical perspectives of this topic, has shown that it is highly disputed due to several academic viewpoints. The first position is risk minimisation, which contends that reducing corporate taxes will reduce firm value (Dhaliwal and Wang, 2016). The second is the notion of cash flow, which argues that tax reductions shift funds from the state to shareholders, thereby enhancing corporate performance. The researcher needs to carry out this investigation because neither of these two leading ideas has been able to fit precisely into actual situations up to this point.

When considering the corporation tax issue, it can be argued that numerous issues related to taxes and tax collection arise, including administration, compliance, corruption, poor governance, and difficulties in developing human capital. Therefore, as it is now implemented, the corporate tax is not a tax on economic rents or pure profits (Junaidu & Hauwa, 2018). However, tax reliefs and refunds are anticipated to impact business expansion and performance. Nevertheless, according to several studies on tax strategy planning and financial performance (Teraoui and Kaddour, 2012; and Noor & James, 2014), observed taxes have a substantial negative impact on a company's performance. A few others produce inconsistent and ambiguous findings. Therefore, further research in this area is necessary, as inconsistencies exist in previous studies.

Furthermore, a company might indeed be profitable while still performing poorly; therefore, judging a company's performance does not depend solely on this factor. Consequently, assessing these organisations' order aspects is necessary to determine their success. Indicators other than the firm's profit can be used to measure the firm's overall success. According to the literature reviewed, the majority of existing studies have focused on profitability in various consumer goods industries, non-financial corporations, food and beverage manufacturing companies, and the oil and gas industries. For instance, as a measure of profitability, Junaidu and Hauwa (2018) and Odunayo and John (2019) employed ROA in their research. A few others used indices such as earnings per share and the Tobin-Q, as noted by Oyeshile and Adegbe (2020) and Omes and Appah (2021). This study considered all sectors in the Nigerian Exchange group and utilised a range of performance metrics, including profitability, liquidity, gearing, investor sentiment, and efficiency ratio, to advance the body of knowledge. The most relevant ratio to this study was used. These ratios are typically employed for analysing financial performance. With accurate metrics, organisations can more effectively evaluate the success of their plans, focus on procedures that yield desired outcomes, track their progress, and make informed business decisions. In line with the argument, the following hypotheses are formulated:

Ho: Tax saving strategy does not positively and significantly affect the return on assets of the selected quoted companies in the Nigerian Exchange Group.

Ho: There is no positive and significant effect of tax saving strategy on earnings per share of the selected quoted companies in the Nigerian Exchange Group.

Ho: There is no significant positive relationship between tax saving strategy and the current ratio of the selected quoted companies in the Nigerian Exchange Group.

2. Literature Review

A limited number of studies have been conducted regarding strategies for corporate tax savings and the financial performance of firms listed on the Nigerian Exchange Group. The literature in accounting and finance offers a comprehensive overview of this area of research. Omesi and Appah (2021) explored the influence of corporate tax planning on the value of Nigerian consumer goods firms. The results of their analysis indicated that the effective tax rate, tax savings, and capital intensity had no significant impact on the worth of corporate entities. This conclusion aligns with the research conducted by Felix and Aruna (2021), who analysed how tax planning influenced the performance of Nigerian development banks. They found that while tax savings exhibited a positive effect on return on equity, the impact was insignificant. Conversely, the effective tax rate was found to have a negligible adverse impact on the return on equity. Furthermore, a study by Ebubechukwu and Obada (2021) on tax planning and corporate performance in Nigeria concluded that the effective tax rate does not significantly impact the performance of Nigerian food and beverage companies.

In a separate investigation, Eneisik and Moses (2021) conducted an empirical analysis examining the relationship between tax planning strategies and the financial outcomes of banks in Nigeria. Their findings reveal that capital intensity, thin capitalisation, and the effective tax rate exert a negative and statistically insignificant influence on the return on equity of publicly listed Nigerian banks. The research also indicates that these same factors have a negligible impact on earnings per share. Conversely, the net interest margin for listed banks in Nigeria is notably and positively influenced by the effective tax rate, thin capitalisation, and capital intensity. The results of the study suggest that tax planning methodologies have led to a reduction in tax liabilities, consequently enhancing the financial performance of Nigeria's publicly traded banks. Nonetheless, these results contradict the conclusions drawn by John and Stephanie (2021). Their research into the connection among corporate governance, tax planning, and financial performance within fifty unlisted firms in Nigeria found a significant and positive relationship between tax planning and performance. Vu and Le (2021) examined how tax planning affects the value of non-financial companies listed in Vietnam, with state ownership serving as a moderating factor. Their findings reaffirm earlier insights that indicate a negative and insignificant effect of the effective tax rate on firm value.

Additionally, Abdullahi et al. (2021) conducted a study regarding the effect of corporate tax planning on the financial performance of companies listed on the Nigerian Exchange Group (NSE). The findings of this study are contradictory. This outcome suggests that financial performance may deteriorate with a significant increase in capital intensity. However, the investigation also reveals a significant

positive correlation between leverage and return on assets (ROA), suggesting that firms with high levels of debt often experience an increase in ROA.

Oyeshile and Adegbeie (2020) examined the impact of corporate tax planning on the financial performance of publicly listed food and beverage companies in Nigeria. Their findings indicated no substantial positive influence on the performance of these firms. Ishola et al. (2020) analysed how tax planning strategies affect the financial performance of manufacturing companies in Nigeria, revealing a positive yet statistically insignificant effect of these strategies on performance. Similarly, research by Akintoye et al. (2020) on tax planning methods and profitability among listed manufacturing firms in Nigeria corroborated this, showing no significant link between tax planning and performance outcomes. In contrast, Timothy et al. (2020) presented findings that diverged from these results. They explored the relationship between corporate tax planning and the performance of non-financial firms in Nigeria, identifying a significant and positive correlation between tax planning strategies and firm value. However, this conclusion was contested by Chukwudi et al. (2020), who found that corporate value is adversely and significantly affected by tax planning when evaluated by the effective tax rate. Lastly, Odunayo and John (2019) examined the connection between corporate tax planning and the financial performance of publicly listed non-financial companies in Nigeria. Their investigation revealed a definitive correlation between tax savings and financial performance. Thus, corporate tax planning that optimises tax savings has a significant impact on the profitability of non-financial firms.

Theory Underpinning the Study

This research focuses on tax-saving techniques and financial outcomes, rooted in Hoffman's tax planning theory established in 1961. This theory posits that taxation is linked to business principles, allowing organisations to modify their operations to lessen their tax obligations. Consequently, the theory suggests a positive correlation between tax planning efforts and a company's financial success (Hoffman, 1961; Omesie & Appah, 2021). Hoffman (1961) noted that businesses exploit certain loopholes within the legal tax structure to create opportunities for tax savings, which subsequently improve overall performance. Omesie and Appah (2021) pointed out that this theory highlights the importance of tax planning in minimising tax liabilities without adversely affecting reported income. Furthermore, this theory advocates for decreased tax payments to the government, thereby enhancing an organisation's financial stability and growth prospects (Nwaobia & Jayeoba, 2016). Engaging in tax planning activities provides benefits and helps reduce taxable income without altering the accounting income (Akintoye et al., 2020).

Fagbemi et al. (2019) indicate that the theory of tax planning is relevant when there is a need to reduce corporate tax income without adversely affecting accounting income, which is where tax-saving strategies come into play. Akintoye et al. (2020) and Ogundajo and Onakoya (2016) noted that Hoffman pointed out various complexities and gaps in tax codes due to underlying motives that may not be straightforward. They concluded that corporations can achieve tax savings by following these regulations and devising effective tax strategies with proper legal counsel. According to Hoffman (1961), as cited by Abdul-Wahab and Holland (2012), Abdul-Wahab (2016), and Akintoye et al. (2020), four key principles of tax planning are presented: tax planning is intricate, it yields multiple advantages, it is often misapplied, and many individuals do not recognise its benefits. Hoffman's (1961) theory suggests that sustainable tax planning can only be effective for a limited duration if the strategies for managing taxes are not adaptive (Akintoye et al., 2020; Abdul-Wahab, 2016). Therefore, as long as a company's approach to tax planning abides by the relevant tax laws, this theory endorses it. This theory is pertinent to the study because firms that effectively exploit tax code loopholes and maintain suitable leverage typically generate a tax shield on deductible interest, resulting in reduced tax liabilities and increased after-tax income, which in turn enhances overall business performance.

3. Methodology

This study utilised an *ex-post facto* research design to investigate the influence of corporate tax savings on the financial performance of companies listed on the Nigerian Exchange Group. The selection of an *ex-post facto* research design is justified by the reliance on historical data, given that the researcher does not aim to alter any of the data. The analysis employs secondary data sources. The panel data, covering the period from 2013 to 2022, were obtained from the annual reports and financial statements of the selected firms. The population for this study comprises one hundred and fifty-six (156) companies across various sectors as of the end of 2022. However, some firms were no longer operational as of that year, while others were excluded due to inadequate information, resulting in a sample size of 50 companies. The selected companies span eleven distinct categories: agriculture, conglomerate, construction/real estate, consumer goods, financial services, healthcare, information and communication technology (ICT), industrial goods, natural resources, oil and gas, and services. Based on the criteria above, the sample comprises a total of 50 firms.

The study's dependent variable is financial performance, which is assessed through return on assets, earnings per share and current ratio. Conversely, the independent variable, tax-saving strategies, is represented by income-effective tax-saving strategies, non-debt tax-saving strategies, and debt tax-saving strategies. The

estimation approach encompasses pre-estimation, diagnostics, and primary tests. Hypotheses one and two examine the effect of the independent variable on the dependent variable. Thus, panel regression analysis was employed to investigate hypotheses 1 and 2. In contrast, the Panel Auto Regression Distribution Lag (ARDL) estimation technique was identified as the suitable method for evaluating hypothesis three, as this hypothesis seeks to explore the relationship between the variables.

Model Specification

The researcher deemed it necessary to develop a functional model of the relationship between tax-saving strategies and financial performance (FP). The model can be identified as follows;

$$FP_t = a_{0i} + b_{1i}IETSS_{t-i} + b_{2i}NDTSSL_{t-i} + b_{3i}DTSS_{t-i} + e_{it} \quad 1$$

This equation can be re-written for hypotheses one to three as :

$$ROA_t = a_{0i} + b_{1i}IETSS_{t-i} + b_{2i}NDTSSL_{t-i} + b_{3i}DTSS_{t-i} + e_{it} \quad 2$$

$$EPS_t = a_{0i} + b_{1i}IETSS_{t-i} + b_{2i}NDTSSL_{t-i} + b_{3i}DTSS_{t-i} + e_{it} \quad 3$$

For hypothesis three, this equation is as follows:

$$CR_t = a_{0i} + b_{1i}CR_{t-i} + b_{2i}IETSS_{t-i} + b_{2i}NDTSSL_{t-i} + b_{3i}DTSS_{t-i} + e_{it} \quad 4$$

Following Pesaran et al. (2001), this study's model is expressed as follows:

$$\Delta CR_t = a_{0i} + \sum_{i=1}^{p-1} a_{1i} \Delta CR_{t-i} + \sum_{i=1}^{q-1} a_{2i} \Delta IETSS_{t-i} + \sum_{i=1}^{q-1} a_{3i} \Delta NDTSSL_{t-i} + \sum_{i=1}^{q-1} a_{4i} \Delta DTSS_{t-i} + \Delta clb + e_{it} \quad 1$$

Where: clb represents the residual generated

Δ signifies change; ROA = return on assets; EPS = earnings per share; CR = current ratio

IETSS = income-effective tax-saving strategy

NDTSS = non-debt tax saving strategy

DTSS = debt tax saving strategy

i and t represent the country and time, respectively. The terms in the square brackets contain the long-run growth regression.

4. Results

Data Analysis and Results

A series of tests was conducted to determine the effect and the long- and short-run relationships between corporate tax-saving strategies and the financial performance of companies listed on the Nigerian Exchange Group from 2002 to 2022. The pre-test comes first, followed by the primary test.

Pre-Test**Table 4.1:** Descriptive statistics of variables for the period

	ROA	EPS	CR	IETSS	NDTSS L	DTSS
Mean	0.101	12.104	1.257	1.274	0.038	0.037
Maximum	2.229	1123.3	4.775	310.85	2.169	0.848
Minimum	0.002	0.010	0.002	0.002	8.175	3.861
Std. Dev.	0.168	58.353	0.689	14.945	0.122	0.066
Skewness	6.608	14.957	0.901	18.875	14.946	6.039
Kurtosis	65.82 1	270.27 1	4.981	378.03 3	241.101	57.47 4
Sum	50.56 8	6051.7 8	628.5	636.88 3	19.1862	18.77 4
Observations	500	500	500	500	500	500

Source: Researcher's Computation in E-views.

Table 4.1 presents the descriptive statistics of corporate tax-saving strategies and financial performance measures, which formed the independent and dependent variables used in the study, with a total of 500 observations. The Table shows that the measures of firm performance, return on assets, earnings per share, and current ratio have an average value of 0.101, 12.104, and 1.257, with a standard deviation of 0.168, 58.353, and 0.689, a minimum value of -0.002, 0.010, and 0.002 and maximum values of 2.229, 1123.3, and 4.775, respectively. The standard deviation indicates that the data deviate from the mean value, implying that the data are dispersed from the mean because the standard deviation is higher than the mean value.

It was also noted that the corporate tax-saving strategies measures have a positive value; this suggests that all the sampled companies used the corporate tax-saving strategies measure on average in their daily operations. The standard deviations of the corporate tax saving strategies measures are large and far from the mean. This indicates that the sampled financial institutions' corporate tax-saving strategies indices are widely dispersed across the distribution. Furthermore, the tax-saving strategies proxies, categorised as income-effective, non-debt, and debt tax-saving strategies, showed mean values of 1.274, 0.038, and 0.037, respectively. This indicates that, on average, the overall sampled companies used 1.274, 0.038, and 0.037 strategies, respectively.

Regarding the normality status of the individual variables, Table 4.1 reveals that the skewness, which measures the degree of variation from the mean, is positive for all

variables. The data set is right-skewed, indicating that most of the sampled companies employed the tax-saving strategies. Kurtosis has a positive value for all variables. The degree of tailedness of all variables employed throughout the time has a heavier tail, known as the leptokurtic distribution.

Correlation Test

Table 4.2: Correlation Analysis

	ROA	EPS	CR	IETSS	NDTSSL	DTSS
ROA	1					
EPS	0.2565	1				
CR	- 0.0379	- 0.0871	1			
IETSS	0.0114 7	- 0.0112	0.0348	1		
NDTSSL	- 0.4699	- 0.0356	0.0106	-0.0112	1	
DTSS	0.3970	- 0.0283	-0.1668	-0.0378	0.5239	1

Source: Author's Computation via E-views (2024).

The Pearson correlation results are shown in Table 4.2. From the result, no high correlation was found among the variables. As a result, multicollinearity does not threaten the interpretation of the regression coefficients of the independent variables in this model. The results indicate that all variables are significantly apart, both positively and negatively; this suggests that our variables are not closely related.

Unit Root Test

For Hypothesis 3, a unit root test was conducted to avoid spurious results. This ensures that we don't end up with spurious estimation results, as studies conducted with non-stationary series often produce spurious results. Again, it is also necessary to perform the unit root test to determine the order of integration of the series, which will aid in choosing the appropriate estimation method. The hypothesis is as follows:

H_0 : The null hypothesis states that there is a unit root.

H_1 : The alternative hypothesis states that there is no unit root.

Decision Rule

The p-values must be lower than or at a 5% significance level to reject the H_0 and accept H_1 .

Table 4.3: Panel Unit Root Test: Summary

S/N	Variab les	Levin, Lin & Chu t*	Im, Pesaran and Shin W- stat	ADF - Fisher Chi- square	PP - Fisher Chi-square	Order s
1	CR	-57.0778** PV (0.0000)	-2.66764** PV (0.0038)	136.762** PV (0.0086)	281.062** PV (0.0000)	1(1)
2	IETSS	-9.55154** PV (0.0000)	-2.52499** PV (0.0058)	157.389** PV (0.0002)	303.589** PV (0.0000)	1(0)
3	NDTSS L	-360.343** PV (0.0000)	-41.4819** PV (0.0000)	155.502** PV (0.0003)	203.871** PV (0.0000)	1(0)
4	DTSS	-66.2969** PV (0.0000)	-12.4477** PV (0.0000)	242.265** PV (0.0000)	363.645** PV (0.0000)	1(1)

Source: Author's Computation via E-views (2024).

Note: ** Suggests Stationarity at the given significance level.

The stationary characteristics of the series are displayed in Table 4.3 following the application of the panel unit root test (Summary). The results reported above indicate that the p-values are highly significant. The series is stationary at different orders of integration. The dataset exhibits a combination of 1(0) and 1(1), providing necessary theoretical support for the adoption of the ARDL estimation approach proposed by Pesaran, Shin, and Smith (2001) to test for the cointegrating relationship.

Research Hypothesis

Hypothesis One: The tax-saving strategy does not have a positive and significant impact on the return on assets of the selected quoted companies in the Nigerian Exchange Group.

The Haussmann test was conducted to determine the best model for the analysis. The Haussmann hypothesis is stated below:

Haussmann Test Hypothesis

H₀: The random effect model is appropriate

H₁: Fixed effect model is appropriate;

If the p-value of the test result is less than 5%, reject the null hypothesis; otherwise, accept the alternative hypothesis.

The Hausmann test result is shown in Table 4.4. The cross-section chi-square statistic is 9.689216, and the p-value is 0.0214, as presented in Table 4.4 below. The p-value of the Hausmann chi-square statistic is lower than 5%, so the null hypothesis is rejected for hypothesis one. In conclusion, the fixed effect technique is better than the random effect technique for hypothesis one.

Table 4.4: Hausmann Test for Hypothesis One

Hypothesis One			
Test summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	9.689216	3	0.0214

Source: E-view 13 Output, 2024.

Table 4.5: Panel Regression Result for Hypothesis One

Dependent Variable: Return on Asset

Variables	Coefficient	Std Error	t-statistics	Pro.
IETSS	0.000184	0.000389	0.472479	0.6368
NDTSS	0.692698	0.063565	10.89739	0.0000
DTSS	0.183164	0.125277	1.462067	0.1444
C	0.067444	0.006724	10.03008	0.0000
R ²	51.72%			
F- stat	9.21			
P-value	0.000000			
Durbin-Watson stat	2 1.61			

Source: E-view 13 Output, 2024.

The results in Table 4.5 show a positive impact of the explained variable (return on assets) and explanatory variables (tax-saving strategy), as indicated in the equation below: $ROCE = 0.067444 + (0.000184) IETSS + (0.692698) NDTSS + (0.183164) DTSS$.

The results also showed that a point change in income-effective tax-saving strategies, non-debt tax-saving strategies, and debt tax-saving strategies would result in a 0.000184, 0.692698, and 0.183164 point change in return on assets for the sampled

companies. The explanatory variables, income-effective tax-saving strategies, showed an insignificant effect on return on assets. On the other hand, non-debt tax-saving strategies significantly affected the return on assets and debt tax-saving strategies showed an insignificant impact on the return on assets with a p-values of 0.6368 greater than the 5% level of significance, 0.0000 lower than the 5% level of significance and 0.1444 greater than a 5% significance level. The R^2 explains a 51.72% variation in return on assets (ROA). This indicates that the independent variable accounted for a 51.72% change in the dependent variable. The F-statistic of 9.21, the Durbin-Watson statistic of 1.61, and the corresponding probability value of approximately 0.000 indicate that the entire model is statistically significant and reliable for meaningful analysis. The finding is substantiated by the study of John and Stephanie (2021), who investigated the relationship between corporate governance, tax planning, and the financial success of fifty non-financial quoted firms in Nigeria. Their results proved that tax planning affects the return on companies' assets. On the other hand, the findings contradict those of Ebubechukwu and Obada (2021), who established that the effective tax rate does not significantly impact the effectiveness of Nigerian food and beverage companies.

Hypothesis Two: There is no positive and significant effect of tax saving strategy on earnings per share of the selected quoted companies in the Nigerian Exchange Group.

Table 4.6: Haussmann Test for Hypothesis Two

Hypothesis One			
Test summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.375865	3	0.7112

Table 4.7: Panel Regression Result for Hypothesis Two

Dependent Variable: Earnings Per Share

Variables	Coefficient	Std Error	t-statistics	Pro.
IETSS	-0.027918	0.166512	-0.167664	0.8669
NDTSS	1.151949	25.81821	0.044618	0.9644
DTSS	-32.24307	49.57366	-0.650407	0.5157
C	13.30559	4.42324	3.008103	0.002

		9		8
R ²	0.12%			
F- stat	0.20			
P-value	0.895851			
Durbin-Watson stat	2 2.02			

Source: E-view 13 Output, 2024.

The results in Table 4.7 show a negative and positive impact of the explained variable (earnings per share) and explanatory variables (tax-saving strategy), as indicated in the equation below: $ROCE = 13.30559 + (-0.027918) IETSS + (1.151949) NDTSS + (-32.24307) DTSS$.

The results also showed that a point change in income-effective tax-saving strategies, non-debt tax-saving strategies, and debt tax-saving strategies would result in a -0.027918, 1.151949, and -32.24307 point change in earnings per share for the sampled companies. The explanatory variables of income-effective, non-debt, and debt tax-saving strategies showed no significant effect on earnings per share, with p-values of 0.8669, 0.9644, and 0.5157, all of which are greater than the 5% significance level. The R² explains a 0.12% variation in earnings per share. This indicates that the independent variable accounted for a 0.12 % change in the dependent variable. Although one measure of the independent variable (non-debt tax-saving strategies) is positively signed, the F-statistic of 0.20, the Durbin-Watson statistic of 2.02, and the corresponding probability value of 0.895851 indicate that the entire model is not statistically significant. The findings do not align with our apriori expectations.

Additionally, the findings are supported by Eneisik and Moses (2021) and Oyeshile and Adegbe (2020), whose results indicate that effective tax rates have a statistically insignificant negative effect on the return on equity of quoted Nigerian banks. Their results showed that tax planning has a negative, yet non-significant, impact on performance. Based on the findings, the null hypothesis is accepted, and a conclusion is drawn that the tax-saving strategy measured by income-effective tax-saving strategies, non-debt tax-saving strategies and debt tax-saving strategies had no significant impact on the earnings per share (EPS) of the selected companies for the period studied.

Hypothesis Three: There is no positive significant relationship between tax saving strategy and the current ratio of the selected quoted companies in the Nigerian Exchange Group.

Table 4.8: Appropriate Lag Length

Lag	LogL	LR	FPE	AIC	SC	HQ
1	-342.2144	550.0503*	9.31e-05*	2.069796*	2.290250*	2.157545*

Source: Author's Computation via E-views (2024).

Table 4.9: Panel Regression Result for Hypothesis Three

Dependent Variable: Current Ratio

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Long-run (Pooled) Coefficients				
IETSS	0.030165	0.008081	3.732700	0.0002
NDTSS	-4.638589	0.417120	-11.12051	0.0000
DTSS	0.901501	0.533404	1.690091	0.0917
C	1.239675	0.012328	100.5589	0.0000
Short-run (Mean-Group) Coefficients				
COINTEQ	-0.271504	0.047371	-5.731415	0.0000
D(IETSS)	-0.144078	0.169791	-0.848561	0.3966
D(NDTSS)	-7.943112	6.255386	-1.269804	0.2048
D(DTSS)	1.853656	3.934826	0.471090	0.6378

Source: Author's Computation via E-views (2024).

This estimation method tests the long and short-run relationships among variables. The regression outcomes for both the long and short runs are shown in Table 4.9. From the result, the cointegrating equation, also known as the error correction term, has a negative (the proper sign) value of -0.271504 and is statistically significant with a probability value of 0.0000. This implies a long-run equilibrium relationship between the dependent and independent variables, as the error term is statistically significant, negative, and less than 1. The coefficient value of 27% implies that if there is any disequilibrium in the system, it will take an average of 27% of the year for the system to return from the short run to the long run across the sampled companies. Looking at the long-run result, IETSS is positive and statistically significant with CR; NDTSS is negative but statistically significant with CR, while DTSS has a positive but insignificant relationship with CR. In the short run, the result revealed that IETSS, NDTSS and DTSS are negative and statistically have an insignificant relationship with CR. The implication is that, in the long run, IETSS will significantly impact CR; NDTSS will also affect CR, albeit negatively, while DTSS, in the long run, will not positively impact CR. IETSS, in the short term, does not affect CR, but will significantly impact

CR in the long term. NDTSS, on the other hand, has a negative and insignificant relationship with CR in the short term; in the long term, it will have a negative and significant relationship with CR. DTSS has a negative and insignificant relationship with CR in the short run and a positive, insignificant relationship in the long run. This suggests that the tax strategies employed by the sample companies ultimately improve performance in the long run, while in the short term, there was a decrease in performance among the sampled companies during the period under study. The system will correct itself in the long run at a speed of 27%. To a greater extent, the findings align with our *a priori* expectations in the long run and contradict the findings of Onyeka-Iheme & Chimeruo (2019) and Nwaobia and Jayeoba (2016), whose study shows no relationship between the study variables.

5. Conclusion

There has been considerable discussion in finance, economics, and accounting on how tax-saving strategies impact business performance. This study was conducted to contribute to the existing body of literature. To address this gap, the study provides insights into the impact that tax-saving strategies may have on the financial performance of companies in Nigeria. The underlying motivation of this research is to analyse the impact of corporate tax-saving strategies on the financial performance of listed companies and to determine the long- and short-run relationships between tax-saving strategies and the financial performance of listed companies.

The data for the study were extracted from the annual reports of fifty selected companies from 2013 to 2022. The result of our analysis was mixed. Our empirical results suggest that corporate tax-saving strategies have both negative/positive effects on financial performance, as well as significant and non-significant effects on the financial performance of the selected companies. Considering the short-term shortcomings, it was established that a speed of 27% would be required for the system to reach equilibrium in the long term. However, the entire model is significant. For our sampled companies, the non-debt saving strategies was found to be a more secure tax saving strategy. It was positive and significantly impacted the financial performance of the selected companies. Though positive, the other tax-saving proxies did not considerably affect the financial performance of the selected companies. However, it can be concluded that the corporate tax-saving strategies adopted by the companies had an impact on their financial performance during the study period. This suggests that managers considering improving their financial performance can adopt and utilise some of these strategies, especially the non-debt tax-saving strategy, which, to an extent, is proven to be more effective in this study. Conclusively, the corporate tax saving strategies have both positive/negative and significant/insignificant effect on the selected companies for the period.

6. Recommendations

Based on the findings, the study recommends the following:

- The study recommends that the management of the sampled companies use non-tax savings as tax-saving strategies to reduce tax liabilities and optimally utilise the best option that improves return on assets.
- There is an urgent need for a continuous review of tax-saving strategies adopted by listed companies to ensure the effective and efficient application of these strategies, thereby enhancing the earnings per share of the sampled companies.
- The quoted companies have utilised various corporate tax-saving strategies. They should optimally utilise the best option that enhances the company's performance (return on equity). This is possible with the engagement of an independent, qualified tax consultant to review the available options and their consequences.
- Our finding shows the long-run benefits of using different tax strategies. The companies should, therefore, ensure that corporate tax saving is part of their corporate strategy, as this will enhance their financial performance by reducing the tax burden.

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