
Corporate Tax Planning and Financial Performance of Listed Manufacturing Companies in Nigeria

Muideen Olalekan Agboola
Ismaila Yusuf PhD
Mohammed Aliyu Yusuf PhD

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

magboola@fudutsinma.edu.ng;

yusuf4real82@gmail.com

kyismail@yahoo.com

Abstract

The dwindling in the financial performance of companies specifically the return on equity (ROE), attributable to high tax payment and the multiplicity of taxes, has identified among problems facing listed manufacturing companies in Nigeria (MCN). Tax planning aimed at reducing the tax liabilities and improving the return available to equity holders of MCN. This study examined the extent to which tax planning influences the ROE of thirty-two sampled out of fifty-eight listed MCN. The study proxy tax planning using effective tax rate (ETR), book-tax difference (BTD) and tax-to-total assets (TAS) while ROE as the dependent variable. The correlational and panel research designs were adopted using the multiple regression model for the panel data collected from financial statements of the listed MCN for ten years from 2013 to 2022. The diagnostic test suggested panel corrected standard errors (PCSE) to correct the cross-sectional dependence among the data. The result of the PCSE regression model revealed that the ETR has negative impact on ROE, the BTD and TAS have positive significant impact on ROE of listed MCN. The limitation of the study is that this study based on historical data and ratio analysis. This may be subjected to manipulation and may not adequately predict the future because other non-financial variables may change the narratives. Government should review the issues surrounded by multiple taxes of manufacturing companies. This would significantly reduce the ETR hence, significantly improve return on equity. The study concludes that effective tax planning has significant impact on ROE of listed MCN. The management of listed MCN should improve the effective tax rate by proper timing of asset acquisition and disposal; ensure that the tax paid is always lower than the tax expense, and concentrate on qualifying capital expenditure, engaging the use of debt to finance asset acquisition for interest expense relief this would reduce the tax hence, the tax to total asset.

Keywords: Book tax difference, Effective tax rate, Return on equity, Tax planning, Tax-to-total assets.

1. Introduction

The company's financial performance concerns users of financial statements, especially in the manufacturing industry of most economies. It is for this purpose the objective of many companies includes maximization of stakeholders' interest in terms of profit maximization (Khan, 2017; Liu et al., 2022; Poetri et al., 2020; Wang et al., 2021). Thus, healthy financial performance - higher profit - brings about an increase in shareholders' value, sustainable growth by reinvesting profits and diversifying into other areas of business, competitive advantage, economic stability, meeting the needs of customers, economies of scale, effective resources allocation and effective cost reductions through lean manufacturing processes that contribute significantly to bottom-line growth. It is the responsibility of the top management of the

companies to make favourable decisions to boost firm performance (Abbas et al., 2019; Hussain et al., 2019; Mamirkulova et al., 2020; Mubeen et al., 2021). To satisfy this objective, the management of the companies uses different tools such as tax planning, income smoothing, and earning management to increase revenue and maximize profit.

However, the profits from manufacturing companies, like other profit-orientated organizations, are subjected to taxes. As one of the external stakeholders, the government has an interest in the profits of the companies that serve as a base for government revenue through the collection of company income tax. Corporate taxation has been seen as a major source of government revenue worldwide. Government revenue, in turn, is used to provide public goods and services such as roads, electricity, water, and health facilities, among others, as benefits of tax payments. Nations such as Denmark and Finland have a high tax culture, with tax rates of about 55% and tax revenue to GDP ratios of over 40%, while public expenditure as a percentage of GDP was 70% (Iqbal & Todi, 2015). The governments of these countries spent substantially on their citizens, which motivated them to pay their taxes promptly. Successive governments in Nigeria, at various times in the past, have employed the instrument of tax policy to encourage industrial and corporate growth by providing social amenities and needed infrastructures such as good roads, electricity power, and good water projects (Nwaobia, 2013). This tax policy, however, affects the performance of the company through multiple taxation or excessive taxation.

Chukwudi et al. (2020) have identified high corporate tax rates and multiples taxation as reasons for high effective tax rates far above the statutory company income tax rate, which has become a major challenge for corporate entities. Income tax is the largest expense of most businesses after considering the cost of goods sold (Choi & Meek, 2011). Nigeria's diverse economy and evolving tax legislation present an intricate challenge and a strategic opportunity for manufacturing firms. The nation's tax regime, characterized by the Federal Inland Revenue Service (FIRS) alongside various state tax laws, creates a complex environment where astute tax planning becomes essential for business success and corporate governance. In this situation, corporate companies must employ proper and efficient tax planning strategies to mitigate tax burden. Tax planning constitutes methods that individuals, organizations, and businesses employ to evaluate their financial statements to reduce the tax burden on profits and incomes (Mgammal & Ismail, 2015).

Tax planning is a critical aspect of financial management for manufacturing companies, as it can significantly impact their financial performance. Manufacturing companies can plan their investments and expenses to take advantage of tax credits and deductions, thereby reducing their tax. A reduction in tax through tax planning can enhance after-tax returns, which may positively influence the financial performance of manufacturing firms. Effective tax planning can reduce the overall actual tax expense, thereby improving manufacturing companies' net income and financial performance. The converse is true if the actual tax liabilities are high due to improper tax planning, which affects investment decisions and hinders growth and innovation. This study provides deeper insights into how tax planning affects financial metrics such as return on equity, of manufacturing companies in Nigeria.

However, poor financial performance of manufacturing companies is alarming. Nigeria Exchange Group Limited (NGX) listed six manufacturing companies (Nestle Nigeria, Cadbury Nigeria, Dangote Sugar Refinery, Nigerian Breweries, International Breweries and Champion Breweries) together recorded ₦166.3bn losses as of September 30, 2023 (Bello, 2023). High tax rate and the multiplicity of taxes have been identified as major reasons for poor performance. A recent survey by the Manufacturers Association of Nigerians (MAN) showed that local manufacturers were paying over thirty (30) different taxes, levies and fees to agencies of Federal, State and Local governments in Nigeria (Kolawole, 2023). Consequently, these multiplicity of taxes and levies according to MAN's survey have severely depressed production

in the sector hence, performance. This abysmal performance of the manufacturing companies in Nigeria has been attributed to inadequate power supply, high dependence of Nigerians on foreign commodities, smuggling of foreign products into the country, trade liberalization, globalization, infrastructural deterioration, insufficient financial support, and other exogenous variables, which have resulted in the reduction in capacity utilization, gross fixed capital formation, and economic growth (Ogudu et al., 2018).

Numerous studies, such as Nwaobia et al. (2016) and Kurawa and Saidu (2018) on consumer goods companies in Nigeria, concentrated on the effective tax rate (ETR) to proxy tax planning but ignored the tax-to-assets ratio and book-tax differences. Previous empirical researches reported mixed relationships of the effect of tax planning on the financial performance. The study of Bitu and Sabri (2015) and Ying et al. (2017) reported a positively significant impact of tax planning on the financial performance. Similarly, the study of Lestari and Wardhani (2015) show that the tax planning has a significantly positive relationship on the financial performance in listed companies in Indonesia. In their study on the effect of tax planning on financial performance in the Stock Exchange of Thailand, Thanjunpong and Awirothananon (2017) concluded that the effect of tax planning proxy as ETR is positive while it is negative when TAS is used for measurement of tax planning.

Furthermore, Monday and Odion (2019); Madugba et al. (2020), Umeh et al. (2020), and Fagbemi, Olaniyi and Ogundipe (2020) concentrated on tax planning and firm value of listed consumer goods. Few studies, if any, used TAS as a proxy of tax planning in Nigeria focusing on listed manufacturing companies. Therefore, this study seeks to examine the effect of corporate tax planning on listed manufacturing companies in Nigeria for the period between 2013 and 2022 to add to the existing literature.

2. Conceptual Literature

This subsection explains in detail the concept and measurement of tax planning, differentiates between tax avoidance and tax evasion, and discusses financial performance.

2.1.1 Concept of Tax Planning

Geetha (2012) opined that tax planning is an arrangement made by individuals, trusts, companies or other entities of their financial affairs, to ensure that a full gain is taken, regarding all exemptions relating to taxes, rebates, allowances and other benefits or reliefs allowed under the law, without necessarily violating the legal provisions in any form. Tax Planning is the arrangement of financial activities so that maximum tax benefits are enjoyed by using all beneficial provisions in the tax laws. It entitles the taxpayer to avail of certain exemptions, deductions, rebates, and reliefs, to minimize its tax liability.

It shows from the above definitions that tax planning involves conscious efforts and a method of clever employment of the economic affairs of taxpayers, to secure the desired tax benefits, bearing in mind the legislative and judicial stand. This is different from tax avoidance which involves taking advantage of the loopholes in the tax legislation and administration or a deliberate act to reduce tax liability. It is a systematic effort adopted by a taxpayer to reduce tax liability within the legal framework (Geetha, 2012). Tax planning includes not only strategies aimed at minimization of tax liability, but it also takes into consideration the cash flow effect on the business in the perspective of when it is most profitable for a business to settle tax liability without incurring any penalty.

Different measures have been developed and used by researchers in exploring tax planning practices. According to Annuar, Salihu and Obid (2014), these measurements can be categorised into three different groups. Firstly, there are measures of tax planning/avoidance that use the ratio of tax to income such as effective tax rate which includes accounting effective tax rate, current effective tax rate, cash effective tax rate, long-term cash effective tax rate, cash flow effective tax rate.

Secondly, the measures of tax planning are specifically based on the difference between taxable and book income (book-tax gap). These include total book tax difference, temporary book-tax difference, and permanent book-tax difference. Thirdly, other tax planning measurements, such as tax-to-total assets ratio, and marginal tax rate, that are not captured by the first two mentioned above. Furthermore, tax planning/avoidance has been classified into conforming and non-conforming. Tax avoidance that is non-conforming involves lowering taxable income without reducing accounting income, whereas conforming entails lowering both incomes. Badertscher et al. (2016) asserted that many studies focused more on the non-conforming feature of tax planning than the conforming. The reason is associated with the relative easiness of measurement and source of information. The proxies of tax planning for this study were effective tax rate (ETR), book-tax difference (BTD), and tax-to-asset ratio (TAS) while the control variables were financial leverage, size, and age of the firm.

Effective Tax Rate

Effective tax rate (ETR) is defined as the rate at which corporate pre-tax profits are taxed. It is computed by dividing corporate income tax expenses by profit before tax as reported in the income statement (Kurawa & Saidu, 2018; Olabisi et al., 2019; Olarewaju & Olayiwola, 2019). The numerator – tax expense - is usually a combination of both current and deferred tax liability and both the numerator and the denominator (pre-tax income) are based on accrual accounting. It has been argued that accounting ETR does not capture deferral tax strategies by minimising tax liability using management discretion, conforming tax avoidance, and choice of accounting policies that may expose to aggressive earning management. However, ETR has been the most popular proxy of tax planning as most studies on tax planning/tax avoidance have used it (Aronmwan & Okaiwele 2020; Hanlon & Heitzman, 2010).

Book Tax Difference

Book tax difference is another measurement of tax planning. Book tax difference (BTD) has been conceptualized as the discrepancy that exists between accounting income and the anticipated taxable income (Wahab & Holland, 2015). These are differences between the taxable incomes disclosed to tax authorities and the pre-tax incomes reported in the financial statements. Formigoni et al. (2009) identified two categories of BTD, namely, permanent and temporary differences. Permanent differences refer to determined revenues or expenses that are disclosed in the accounts, but without tax effects, while temporary differences occur when both the tax and accounting systems capture the same amount of revenue or expense but diverge regarding the time of this recognition. Temporary differences refer to the difference in the period of recognizing revenue and/or expense items (Comprix et al., 2011).

Accordingly, BTD can be referred to as a tax gap at the firm level because it can identify the differences between tax theoretically due and tax paid (Wahab, 2016). The Total BTDs serve as a comprehensive metric that encompasses both temporary and permanent BTDs. Although the straightforward computation of the Total BTDs measure is attractive, it has been suggested that it may suffer from significant measurement error due to challenges related to estimating taxable income from financial statements (Hanlon 2003). However, many studies such as (Chukwudi et al., 2021; Osho & Orisamika, 2022) have used it.

Tax-to-Total Assets Ratio

This measurement is unpopular among the common proxies of tax planning. However, it has been in existence since 2009. The measurement was purposed by Tantiyavarong in the study of the determinants of tax planning and the association between tax planning and firm value in Thailand (Tantiyavarong, 2009). This proxy is measured by the ratio of tax expenses to total assets (Thanjunpong, 2015; Thanjunpong & Awirothananon, 2019). For this study, the tax-to-total assets ratio was adopted as the part of independent variables.

2.1.2 Financial Performance

Curristine (2005) and Ilesanmi (2011) defined performance as the yield or results of activities carried out for the purposes being pursued. Its objective is to strengthen the degree to which organizations achieve their purposes. Financial performance is an important objective that profit-oriented companies desire to achieve (Kajirwa, 2015). Yahaya and Lamidi (2015) opined that the range by which financial objectives will be fulfilled or have been fulfilled is known as financial performance. A company’s financial performance is subject to how effectively a firm uses its assets from its principal role of conducting business and its subsequent generation of revenues. Financial performance can also be seen as the general well-being of a firm in terms of financial health over a while. Omondi and Muturi, (2013) identified some financial performance analyses such as dividend growth, sales turnover, capital employed, and asset base among others about the firm.

Many measures have been used in various studies to evaluate financial performance. The most common performance measures were combined stock market and accounting measures, like Tobin’s Q or the ratio of market-to-book values, Stock market measures, such as the cumulative abnormal returns (CAR) and Accounting-based measures that are figures and ratios from the financial statements such as return-on-equity (ROE) and return-on-assets (ROA). Also, Ra’ed, et al. (2015) suggested that performance could be measured either objectively or subjectively. While objective measurements, in general, relied on financial data, subjective measurements depended upon managerial assessments.

The major accounting-based measures of performance are the return on assets (ROA), return on equity (ROE) and return on capital employed (ROCE). ROA is an indicator of how profitable a company is relative to its total assets while return on equity (ROE) is the amount of net income returned as a percentage of shareholders equity. Return on capital employed (ROCE) is used for comparing the relative profitability of companies after taking into account the amount of capital used. The EY Global Financial Services Institute (2015) opined that ROE is commonly used as a performance metric since it is a product of ROA and risk-adjusted return on capital. For the purpose of this study, the return on equity (ROE) is used as a measure of firm performance.

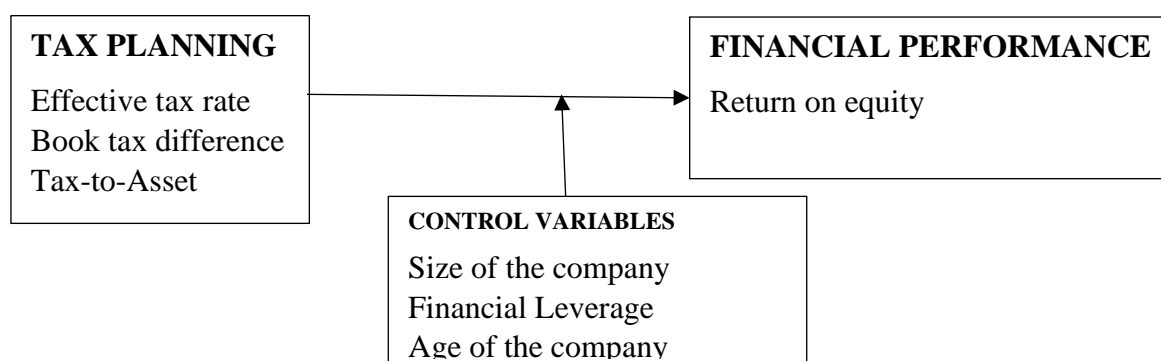


Figure 2.1: Conceptual Model – Tax Planning and Financial Performance

Source: *Organized by the Researcher based on Literature Review 2024*

2.2 Review of Empirical Studies

2.2.1 Effective Tax Rate (ETR) and Financial Performance

Kayode and Folajinmi (2020) investigated the relationship between ETR and the financial performance of 15 Nigerian food and beverages companies listed on the Nigerian Exchange Group for the period between 2008 to 2017. Using panel data regression estimate and used return on capital employed (ROCE) as a proxy of company performance, the results demonstrated that effective tax rate has a negative insignificant effect on financial performance.

However, this study used ROCE as a proxy of financial performance and the period covered was from 2008 to 2017. The study did not capture current tax issues in recent years with more provisions on tax reliefs. Therefore, our study focused on recent years from 2013 to 2022 to incorporate the most recent covered changes in tax laws and use return on equity (ROE) to proxy the financial performance of manufacturing companies in Nigeria.

Chukwudi et al., (2020) studied the effect of tax planning on the firm value of quoted consumer goods manufacturing firms in Nigeria and 21 companies were selected for the period of 10 years from 2009 to 2018. Ordinary least square regression was used to test the hypothesis and the study concluded that ETR has a negative significant impact on firm value proxied by Tobin's Q. This result is similar to that of the study carried out by Adejumo and Sanyaolu, (2020) on nine (9) selected deposit money banks (DMBs) in Nigeria. The study applied the generalized method of moment where the result reveals a significant negative effect of ETR on ROA. In addition, studies such as Olabisi et al., (2019) on 5 selected Oil and Gas companies in Nigeria using pooled Ordinary Least Squares (OLS) regression estimates between 2011–2016 reported a positive significant effect of ETR on financial performance.

The study such as Chukwudi et al., (2020) sampled subsectors of manufacturing companies as the domain of study and compared tax planning with the firm value while Adejumo and Sanyaolu, (2020), and Olabisi et al., (2019) used deposit money banks (DMBs) and Oil and Gas companies in Nigeria respectively. Our study focused on the manufacturing sector as a whole and sampled from all subsectors of listed MCN.

Mwaluku (2022) examined the effect of tax planning on the firm value of 13 manufacturing firms listed at the Nairobi Securities Exchange for ten years 2010 to 2019 using a panel data regression model and the results of the study indicated that effective tax rate had a positive and statistically significant influence on firm value. Furthermore, Akintoye et al. (2020) studied the effect of tax planning strategies on the profitability of manufacturing firms in Nigeria and adopted an ex-post facto research design for the study. The study selected a sample size of 46 manufacturing companies quoted on the Nigeria Stock Exchange from the population of 52 manufacturing companies and collected data from 10-year audited annual reports of the sampled companies from 2008 to 2017. The regression result reported no significant effect of tax planning (ETR) on the return on assets (ROA) of quoted manufacturing companies in Nigeria. The study concluded that tax planning strategies have both negative and positive effects on the profitability of quoted manufacturing companies in Nigeria.

Ogundajo and Onakoya (2016) employed secondary data from audited annual reports and accounts for a period of ten years from 2005 to 2014 to examine the influence of corporate tax planning on the financial performance of manufacturing firms quoted on the Nigerian Stock Exchange. Ten firms were purposefully selected from the population of twenty-eight listed consumer goods firms. The regression analysis GLS revealed that ETR has a negative and significant effect on ROA. Olajide and Ramon (2017), in the study of fifteen sampled listed companies on the Nigerian Stock Exchange, examined the impact of tax planning on firms' performance of listed companies in Nigeria. The population of the study was made up of 240 listed companies on the Nigerian Stock Exchange as of April 2012 using a survey and ex-post-facto research design. The regression result using SPSS revealed that tax planning has no significant effect on firms' performance.

Furthermore, Ogudu et al. (2018) examined the relationship between corporate income tax and manufacturing sector performance in Nigeria from 2013 to 2017 using the ex-post facto research design. The study sampled five consumer goods manufacturing companies from the population of 23 quoted manufacturing firms on the Nigerian Stock Exchange (NSE). The study employed fixed and random effect regression techniques to analyse the model. The result showed that company income tax directly impacted the net income and return on equity of manufacturing companies in Nigeria. The study recommended that the government channel

company income tax revenue to proper use, such as providing social amenities like electricity and a good road network.

In addition, Kurawa and Saidu (2018) assessed the effect of company income tax on the financial performance of listed consumer goods companies in Nigeria from 2006-2016 using data collected from the annual financial statements of the companies. The result of the regression analysis technique shows an insignificant negative relationship between corporate tax (ETR) and financial performance using return on assets as a measure of financial performance. Fagbemi et al. (2019) examined the corporate tax planning and financial performance of systemically important banks in Nigeria. The study used all eight systemically important banks (SIBs) in Nigeria as the population and the sample of the study. The Pooled OLS model was used for the model estimation of the secondary data derived from the annual reports of the SIBs. The result inferred that the effective tax rate (ETR) has an indirect and significant impact on the financial performance of SIBs in Nigeria.

The finding of the studies above such as Akintoye et al. (2020), and Ogudu et al. (2018) cannot be generalised in the current state of economy and manufacturing firms due to some recent reforms in tax administration in Nigeria from 2019 to 2023. Consequently, there is need for current study most importantly manufacturing sector with several taxes. Studies such as Ogundajo and Onakoya (2016), Olajide and Ramon (2017), and Kurawa and Saidu (2018) make use of ROA to proxy financial performance which is return to aggregate equity and debt. This is broader and interpreting it to different stakeholders is worrisome. To avoid this, ROE is more suitable for study related to tax planning using ETR, BTD and TAS. Tax planning aimed at improving return available to the owners. The main objective of manufacturing firm is to survive then to meet stakeholders' interest. The shareholder's interest is key for the fact that they provide capital, connection and governance for the survival of their company. Their main interest is the return on their equity. This suggests the adoption of ROE as compare to ROA for better understanding and interpretation by the shareholders. In view of the foregoing, this study hypothesises that:

H₀₁: Effective tax rate has no significant impact on ROE of listed manufacturing companies in Nigeria.

2.2.2 Book Tax Difference and Financial Performance

Ofor and Akaegbobi (2022) investigated the impact of book-tax differences on corporate performance. They focused on quoted consumer goods and industrial goods manufacturing companies listed on the Nigerian Stock Exchange from 2010 to 2019. Using a sample of twenty-three companies, the researchers employed an ex-post facto research design and analysed the data using Panel Least Squares (PLS) regression with E-views 9.0. The results revealed a positive and statistically significant relationship between book-tax differences and corporate performance. The scope of this study is limited to two subsectors in the manufacturing sector while our study focused on the whole sector considering post-adoption of International Financial Reporting Standards (IFRSs) from 2013 to 2022.

Angelina and Darmawan (2021) on the impact of tax planning on firm value in Indonesia, the study employed Tobins' Q to proxy of the firm value. The study sampled 135 listed manufacturing companies in the Indonesia Stock Exchange in 2016-2018 using the Eviews 9 as a test tool and a multiple regression test. The results indicate that book-tax difference has a negative effect on firm value. Osho and Orisamika (2022), the impact of book-tax differences on the return of assets for deposit money banks in Nigeria was investigated using an ex-post facto research design. The study used secondary data from all 14 deposit money banks listed on the Nigeria Exchange Group and collected data from the published financial statements of these banks for the period from 2006 to 2020. The result revealed a positive and significant effect of book-tax differences on the return on assets of deposit money banks. However, our

study aimed at examining the impact of tax planning on ROE of Nigerian manufacturing companies for the period between 2013 to 2022.

Furthermore, Onoja et al. (2020) studied the relationship between book-tax differences (BTDs) and financial distress surrogated by Altman's Z- scores of listed consumer goods firms in Nigeria. The study adopted the ex post facto research design. The study used data from sampled twenty-one consumer goods firms' annual reports from 2012 to 2019. The result of panel Error-Generalized Least Squares regression technique inferred that both temporary BTD and total BTD were positively related to financial distress. Chukwudi et al. (2020) sampled 21 quoted consumer goods manufacturing firms in Nigeria to examine the effect of Book Tax Differences (BTDs) on the firms' value. Adopting an ex-post facto research design to analyse the data obtained from annually published financials of the non-financial covering a period of ten years from 2009 to 2018, the result of ordinary least square regression concluded that book-tax difference has a positive but non-significant effect on firm value.

Widiatmoko and Indarti (2019) evaluated the effect of book-tax differences on earning persistence among Indonesian manufacturing enterprises. The study employed regression with conventional least squares to analyse data from 129 sampled manufacturing companies between 2014 and 2016. The results indicated that permanent BTDs have a positive non-significant effect and temporary BTDs have a negative significant effect on earnings persistence in Indonesia manufacturing companies. Brummer (2017) investigated the possibility of book-tax differences (BTDs) having an effect on earnings management in Finland. The study used data from 35,135 firm-year observations of profitable Finnish private firms from 2011 to 2015. The results of the OLS regression suggested that BTDs reflect well opportunistic earnings management even in a higher book-tax conformity context when there is a strong tax incentive. Similarly, Martinez and Souza (2016) studied the effect of book-tax differences on earnings persistence and tax planning before and after the adoption of IFRS in Brazil. The study employed pooled regression to analyse the secondary data sourced from the annual reports of industrial and commercial firms listed on the BMF and Bovespa between 2003 and 2012. The results indicated that BTDs have a non-significant positive effect on earnings before tax and interest.

Most of the studies such as Angelina and Darmawan (2021), Onoja et al. (2020), Chukwudi et al. (2020) and Widiatmoko and Indarti (2019) examined the book-tax difference and firm value, financial distress and earning management. Few studies such as Ofor and Akaegbobi (2022), and Osho and Orisamika (2022) evaluated BTD and financial performance using ROA. This study focuses on tax planning and performance of MCN. Therefore, this paper hypothesis as follows:

H₀₂: Book tax difference does not affect ROE of listed manufacturing companies in Nigeria.

2.2.3 Tax-to-Total Asset and Financial Performance

Thanjunpong and Awirothananon (2019) examine the effect of tax planning on financial performance in the Stock Exchange of Thailand. The population of the study was about 58 companies excluding the financial sector and 873 firm-years were sampled from 2014-2016. The study employed a multiple regression analysis technique to analyse data for BIG4 and non-BIG4 auditors. The results of regression reveal that tax planning proxy by the tax-to-total asset ratio is indirect and statistically significant at the 0.05 level of significance on performance measured by return on equity (ROE) for all sampled companies. The results are different for individual groups of BIG4 and non-BIG4 auditors. In BIG4 auditor companies, tax planning (tax-to-total assets ratio) shows a positive and insignificant relationship on ROE while non-BIG4 auditors reveal negative and statistically significant tax-to-total assets ratio on performance (ROE). The study recommends that the listed companies should engage the services of BIG4 auditors.

Chumaunphan et al. (2024) analysed the impact of tax planning and earning management on the financial health of listed companies in Thailand. Data were extracted from Form 56-1 on the website of the Stock Exchange of Thailand from 2018–2022. A multiple regression analysis was used to analyse 327 sampled companies. The result of analysis indicates that tax planning proxy by the tax-to-total asset ratio has a positive impact on financial health, measured by financial liquidity and operating efficiency, and a negative effect on earning management.

Similarly, in the study of Phomkul et al. (2022), the effect of profitability, operational efficiency, and inventory management on the corporate income tax planning for the auto parts industry group on board of investment in Eastern industrial estate were examined. A total of 69 samples were selected from a database of companies listed on the Thailand Board of Investment (BOI) and the Financial Statements of the Department of Business Development (DBD). The period of study covered 2016 to 2020. Tax planning as a dependent variable was measured by the tax-to-total assets ratio. The independent variables include operational efficiency measured by equity turnover and total asset turnover, profitability scaled by net profit margin and return on assets, and inventory measured by inventory turnover and average inventory period. The results of multiple regression analysis infer that profitability (ROA) has a direct impact on corporate tax planning measured by ETR and has a positive influence on tax planning (tax-to-total assets ratio).

Furthermore, Polpanumas et al. (2021) examined the relationship between tax planning and earnings management of public limited companies in Thailand. The study selected 414 samples including 100 top public limited companies ranked by the Department of Business Development (DBD) and the data was collected from the financial statements from year 2016-2018. The result of data analysis using multiple regression techniques reveals that tax planning proxy by the effective tax rate (ETR) and the tax-to-total assets ratio has a direct relationship with earnings management using Kothari et al. (2005)'s model. The study found that higher profits are achieved by the company that utilises tax planning as a policy to reduce corporate income tax expenses and earnings management.

The above studies Thanjunpong and Awirothananon (2019), Chumaunphan et al. (2024), Phomkul et al. (2022) and Polpanumas et al. (2021) are foreign domain not Nigeria. Out of these studies, Thanjunpong and Awirothananon (2019) investigated tax planning and ROE but in Thailand meanwhile Polpanumas et al. (2021) studied the impact of profitability (ROA) on tax planning. To the best knowledge of the researcher, very scanty studies in Nigeria examine the relationship between corporate tax planning and financial performance using the tax-to-asset ratio. Based on this, the study hypothesises that;

H₀₃: Tax-to-asset ratio does not affect the ROE of listed manufacturing companies in Nigeria.

2.3 Theoretical Review

This study adopts Hoffman's Tax Theory propounded by Hoffman in 1961. The theory posits that tax planning seeks to divert cash (income), which would ordinarily have flown to tax authorities, to the entities. Tax planning activities are laudable to the extent that they reduce taxable income to the barest minimum, without sacrificing accounting income. This theory believes that taxation is based on business or accounting concepts, therefore a firm can modify such activities towards the attainment of a reduction in tax liability. To achieve this, ETR, BTM and TAS as measurements of tax planning were employed to investigate the impact of tax planning on ROE. The theory thus recognized a positive association between firm tax planning activity and firm performance. Ogundajo and Onakoya (2016) asserted that Hoffman identified some ambiguity and loopholes in tax laws due to the unclear intentions of the legislators. The study concluded that successful tax schemes work with the legal concepts and precise wording of the statute and complying with these concepts very precisely as it relates to individual firms tends to be advantageous to companies in the form of tax savings.

3. Methodology

The study adopted correlational and longitudinal research designs. The population of this study comprises manufacturing companies clustered across agricultural, conglomerate, consumer goods, healthcare, industrial goods, natural resources, and oil and gas sectors on the floor of Nigeria Exchange Group Limited (NGX) as of December 2022. The study, therefore, covered the total of fifty-eight (58) manufacturing companies listed in Nigeria as of 31st December 2022.

The study used secondary data extracted from audited financial reports from well-established manufacturers in which financial performances can be measured reliably. In other words, only the manufacturing companies that had audited financial statements available from 2013 to 2022 were considered. In this case, only thirty (32) companies were purposively selected out of the total fifty-eight (58) companies in the sectors based on availability of data, consistently listed on the floor of NGX from 2013 to 2022 while companies with incessant loss were excluded to avoid data truncation and bias.

This study utilised descriptive statistics and static panel techniques for data analysis methods. Descriptive statistics such as the mean, mode, standard deviation, variance, minimum, and maximum were used in data presentation, while the static panel data regression models make use of three basic estimators and these are: Pooled regression also known as Ordinary Least Square (OLS), Fixed Effects estimator and Random Effects estimator. The three processes were carried out using the Hausman specification test and determine the most appropriate for the hypothesis.

The multiple regression model specification is presented below:

$$ROE_{it} = \beta_0 + \beta_1 ETR_{it} + \beta_2 BTD_{it} + \beta_3 TAS_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \beta_6 AGE_{it} + \varepsilon_{it}$$

Where:

ROE_{it} is the return on equity of firm i in period t , ETR_{it} is the effective tax rate of firm i in period t , BTD_{it} is the book-tax difference of firm i in period t , TAS_{it} is the tax-to-total assets of firm i in period t , $SIZE_{it}$ is the natural logarithm of total assets of firm i in period t , LEV_{it} is the leverage of firm i in period t and AGE_{it} is the age of firm i in period t . ε_{it} is the error term in year t , β_0 is the constant, and $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ and β_7 are the regression coefficient

Table 1

Variable Definition and Measurement for Dependent Variable and Independent Variables

Variable Acronym	Variable Name	Variable Type	Variable Measurement	Source(s)
ROE	Return on Equity	Dependent	Net income as a ratio of shareholders' equity	Vržina (2018); Fagbemi (2019)
ETR	Effective Tax Rate	Independent	Corporate income tax expenses divided by profit before tax	Kayode and Folajinmi (2020); Ogundajo and Onakoya (2016)
BTD	Book Tax Difference	Independent	$\frac{PBT - \text{Tax Expense}}{\text{Statutory tax rate}}$	Orji1 & John-Akamelu (2023); Wahab & Holland (2015).
TAS	Tax-to-Total Assets	Independent	The ratio of tax expenses to total assets	Chumaungphan et al. (2024)
SIZE	Firm Size	Control	Natural Log of total asset.	Gatsi, et al. (2013); Kurawa and Saidu (2018).
LEV	Financial Leverage	Control	Non-current debt divided by shareholders' fund.	Olabisi, et al. (2019)

AGE	Firm Age	Control	Natural log of the number of years between the date of establishment of the company and the year of observation	Gatsi, et al. (2013) and Olabisi, et al. (2019).
------------	----------	---------	---	--

Source: Organized by the Researcher based on Literature Reviewed (2024)

4. Results and Discussion

This subsection presents and discusses the descriptive statistic result. This is paramount for a better understanding of the type and nature of the variables. The descriptive statistics discussed in the section include mean, standard deviation, minimum, and maximum. To test for the normality of the distribution, skewness, and kurtosis were also discussed.

Table 2

Descriptive Statistics:

Variable	Obs.	Mean	Std. dev.	Min	Max	Skewness	Kurtosis
ROE	320	0.1403	0.3771	-3.7234	1.8728	-4.1736	53.3245
ETR	320	0.7264	0.2457	-0.8463	1.8305	-0.9889	16.0027
BTD	320	0.0051	0.0677	-0.6905	0.4005	-2.3755	41.1501
TAS	320	0.0287	0.0369	-0.0518	0.2531	2.3488	15.5893
SIZE	320	136.13	326.59	0.073	2658.5	5.0103	32.1807
LEV	320	0.5161	0.2999	-3.7768	1.5043	-9.0652	132.6828
AGE	320	49.094	16.993	8	91	0.0133	2.8088

Source: Researcher’s compilation from STATA 17 (2024)

Table 2 above depicts the descriptive statistics of selected Nigerian manufacturing companies from 2013 to 2022. ROE, the dependent variable, was 14.03% on average with a standard deviation of about 37.7%. This implies that on average, the selected manufacturing companies generated about 14% profit after tax scaling to shareholders’ equity and 37.7% was an average scatter of profits ranging from minimum return on equity to the maximum.

In addition, the result showed that the average ETR was 72.64% and a standard deviation of 24.57%. This indicates that on average the tax expense as a ratio of profit before tax of the sampled companies was very high up to over 70%. However, BTD and TAS were 0.5% and 2.87% respectively on average. The minimum BTD and the maximum were -69% and 40% respectively. This infers the extent of disparity in tax paid and tax expenses in the study. TAS ranged from -5.18% to 25.31% for the period. This shows that some companies had maximum of about 25% tax expenses on the shareholders’ equity.

Furthermore, the size of the companies proxied with the total assets of the companies had an average of 136.1 billion naira and a standard deviation of 326.6 billion naira, a minimum of 73 million naira, and a maximum of 2,658 billion naira. The average of about 136 billion denotes that the companies under review on average are capital intensive with a large variation of 326 billion between 74 million naira and 2,658 billion naira. LEV has an average value of 51% with a standard deviation of about 30%. The average value denotes the manufacturing companies were relatively using debt to finance their operation. Some companies under review had negative net assets which caused a minimum financial leverage of -377% while some of the companies heavily relied on debt to the tune of 150% of net assets.

Conclusively, AGE had an average value of about 49 years with a high standard deviation of about 17 years which implies substantial variation in age. The minimum and maximum age of the sampled manufacturing companies are 8 years and 91 years respectively. This proves that selected companies have been in the business for at least 8 years.

According to Hair et al. (2022), skewness values between -2 and +2 is considered acceptable and values beyond -2 and +2 denote substantial nonnormality. Going by this interpretation, Table 2 shows that ROE, SIZE and LEV are nonnormal. Similarly, Hair et al. (2010) and Bryne (2010) opined that kurtosis between -7 and +7 is considered normal while a value beyond that may indicate the presence of outliers in the panel. This denotes that there are presence of outliers in the dataset of all the variables except age. To reduce the effect of outliers in the dataset and avoid bias inferences, all affected variables (ROE, ETR, BTD, TAS, SIZE and LEV) were winsorized at the 5th and 95th percentile values of the data (Brownen-Trinh, 2018).

The pairwise correlation results between the dependent variable (ROE), independent variables, and control. Table 3 shows the results of the Pairwise Correlation Matrix and Variance Inflation Factor (VIF) results.

Table 3

Pairwise Correlation Matrix and Variance Inflation Factor (VIF) Results

	ROE	ETR	BTD	TAS	SIZE	LEV	AGE	VIF
ROE	1.0000							
ETR	-0.0228	1.0000						1.38
	0.6851							
BTD	0.2345*	0.4795*	1.0000					1.56
	0.0000	0.0000						
TAS	0.7387*	-0.3185*	-0.2754*	1.0000				1.20
	0.0000	0.0000	0.0000					
SIZE	0.1498*	0.0228	0.1198*	0.0298	1.0000			1.07
	0.0073	0.6849	0.0321	0.5957				
LEV	0.0253	-0.2198*	-0.3625*	-0.0102	0.0737	1.0000		1.20
	0.6527	0.0001	0.0000	0.8555	0.1885			
AGE	-0.1331*	-0.0591	-0.1292*	-0.1107*	0.1393*	0.0860	1.0000	1.07
	0.0172	0.2922	0.0207	0.0478	0.0126	0.1247		
Mean VIF								1.25

Source: Researcher's compilation from STATA 17 (2024)

Results in Table 3 infer that there is the absence of multicollinearity among the independent and control variables considering that none of the correlation coefficients is up to 0.7 (Hair et al., 2010). Similarly, Angahar and Malizu (2015) opined that there is no problem with multicollinearity if a VIF is less than 10. In Table 3, none of the VIF values presented is up to 10. It can, therefore be concluded that there is no problem of multicollinearity in the model. This study employed the Skewness and Kurtosis test developed by Alejo et al. (2015). Table 4 shows the results.

Table 4

Skewness and Kurtosis Tests for Residuals

Join Test for Normality on e		Join Test for Normality on u	
Chi 2(2)	8.15	Chi 2(2)	6.16
Prob > chi2	0.0170	Prob > chi2	0.0459
No of observations	300	Replications	50

Source: Researcher's compilation from STATA 17 (2024)

The result in Table 4 shows the joint test for normality on each component of the error term and the respective p-values. This implies that both components are asymmetric. Rejection of the null hypothesis brings us to the conclusion that sufficient evidence is available to say that the variables are not normally distributed. This result emphasizes that ordinary least square regression (OLS) might not fit for the panel, hence calling for further analyses. Table 5 presents the result of the Hausman specification test for the model.

Table 5

Hausman Specification Test Result

Comparison	Chi2	Prob>Chi2	Decision
FE vs RE	20.43	0.0088	FE

Source: Researcher’s compilation from STATA 17 (2024).

In Table 5, the p-value of 0.0088 is less than 0.05. Therefore, the result indicates that fixed effect regression model is the most appropriate. Table 6 displays the result of the Modified Wald test for groupwise heteroskedasticity in the fixed effect regression model.

Table 6

Groupwise Heteroskedasticity Test Result

Group	Chi2	Prob>Chi2	Decision
32	5.9e+05	0.0000	Present

Source: Researcher’s compilation from STATA 17 (2024).

In Table 6, the test statistic (Chi-squared) value of 5.9e+05 with a p-value of 0.0000 indicates evidence of groupwise heteroskedasticity in the panel data. This is testing for cross-sectional dependence also known as contemporaneous correlation using the Breusch-Pagan Lagrange Multiplier (LM) test of independence in Table 7.

Table 7

Breusch-Pagan LM Test of Dependence

Chi2	Prob>Chi2	Decision
804.72	0.0000	Present

Source: Researcher’s compilation from STATA 17 (2024).

Table 7 presents the result of the Breusch-Pagan Lagrange Multiplier (LM) test. The result specifies a Chi-squared (χ^2) statistic of 804.72 with a p-value of 0.0000. The test infers that there is significant evidence of cross-sectional dependence among the groups in the dataset. The Prais–Winsten regression, correlated panels corrected standard errors (PCSE), was used to correct them. Therefore, PCSE was found to be the most fitted model and its result was interpreted.

Table 8

PCSE Regression Result

ROE	Coefficient	std. err.	z	P> z 	[95% conf. interval]	Sig
ETR	0.0479	0.2282	1.66	0.096	-0.0085 0.1044	
BTD	1.8837	0.1506	12.51	0.000	1.5885 2.1789	***
TAS	4.6917	0.2735	17.15	0.000	4.1556 5.2278	***
SIZE	0.0053	0.2243	2.36	0.017	0.0009 0.0097	**
LEV	0.1784	0.0348	5.13	0.000	0.1102 0.2465	***
AGE	-0.0039	0.0109	-0.36	0.722	-0.0253 0.1758	

_CONS	0.1993	0.0645	-3.09	0.002	-0.3258	-0.0729	***
rhos =	0.0473	0.1145	0.55	0.336	0.0799	0.1195	
R-squared	0.7719						
P-value	0.0000						
Number of observations	320						
Chi-square	452.80						

*P-value < 1%, ***; P-value < 5%, **; P-value < 10%, **

Source: *Researcher's compilation from STATA 17 (2024)*

Table 8 shows the R-square of 0.7719 which indicates that approximately 77.19% of the variability in the dependent variable, ROE, is explained by the independent variables included in the model. The remaining 22.81% is explained by other factors not captured in this study. Similarly, the P-value of 0.0000 and the Chi-Square value of 452.8 significant at 1% is the test statistic for the overall significance of the model, indicating that the model is fitted.

The regression result indicated that the effective tax rate (ETR) has a direct and statistically insignificant impact on the financial performance proxy by return on asset (ROE) of listed manufacturing companies in Nigeria with a coefficient of 0.0479 and a p-value of value of 0.096. This infers that an increase in the ETR of the listed manufacturing company in Nigeria brings about a 4.8% decrease in financial performance, assuming all other variables are constant. The coefficient of 1.8837 for book-tax difference (BTD) suggests that a one-unit increase in BTD would lead to a 188.37 % increase in ROE and the relationship was statistically significant with a probability value of 0.0000. Similarly, TAS exerts a positive significant effect on financial performance (ROE) at a 5 percent level of significance. This variable was strongly and statistically significant with the p-value and coefficient of 0.0000 and 4.6917 respectively. This means a one-unit increase in tax-to-total assets increases ROE by 469.17%.

The control variables, size (SIZE) and leverage (LEV) have strong negative significant effects on financial performance (ROE) at a 5% level of significance with 0.017 and 0.000 p-values respectively. Age (AGE) on the other hand, has a strong positive insignificant effect on the financial performance of the companies at a 5 percent level of significance as observed with the coefficient of -0.0039 and p-value of 0.722.

4.1 Discussion of Research Findings

The regression result showed that the effective tax rate has a negative insignificant effect on the financial performance of listed manufacturing companies in Nigeria. The result implies that an increase in the effective tax rate causes an insignificant increase in financial performance. The result of the study is in line with that of Akintoye et al. (2020) and Olajide and Ramon (2017) who found an insignificant effect of ETR on performance. However, studies such as Adejumo and Sanyaolu (2020) and Fagbemi et al. (2019) found a significant effect of ETR on the profitability of Nigerian Deposit Money Banks. Chukwudi et al., (2020) also reported the negative significance of ETR on the financial performance of listed consumer goods firms in Nigeria.

Furthermore, the result revealed that book-tax difference (BTD) has a strong positive and significant effect on the financial performance of listed manufacturing companies in Nigeria. The outcome suggests that an increase in book-tax difference statistically increases the financial performance of companies in the sector. This indicates that managing the differences between book income and taxable is crucial for improving ROE. The result corroborates the findings by the study of Ofor and Akaegbobi (2022) and the result of Osho and Orisamika (2022) who reported a positive significant relationship BTD and performance, but in disagreement with Angelina and Darmawan (2021); Suleiman and Barnabas (2021); Widiatmoko and Indarti (2019) which a negative influence BTD on the performance. Similarly,

the tax-to-total assets (TAS) have a positive and statistically strong significant effect on the selected financial performance of listed manufacturing companies in Nigeria.

4.2 Policy implication of findings

The tax planning and its impact on profit is the reflection of tax policies. In line with Hoffman's Tax Theory, tax planning is expected to reduce tax expenses significantly and increase profit available for distribution. The government on the other hand formulates policies that would improve tax revenue to meet the objective of tax. When the profit available for distribution increases, the equity holders will have sufficient income which is subject to other forms of taxes, hence, increase aggregate tax income to government. Government should review the issues surrounded by multiple taxes of manufacturing companies, this would significantly reduce the effective tax rate hence, significantly improve return on equity.

5. Conclusion and Recommendations

The study found that the effective tax rate has a negative insignificant impact on ROE, the Book-tax difference and tax-to-total assets have a positive significant impact on ROE. Based on PCSE regression model study concludes that about seventy-seven percent changes in ROE are explained by effective tax planning of listed manufacturing companies in Nigeria.

The management of listed manufacturing companies in Nigeria should put in conscious efforts to improve the effective tax rate by proper timing of asset acquisition and disposal for capital allowances; ensure that the tax paid is always lower than the tax expense by prompt payment of tax, diversification of operation to benefit from tax incentives among others and concentrate on qualifying capital expenditure, engaging the use of debt to finance asset acquisition for interest expense relief this would reduce the tax hence the tax to total asset.

References

- Abbas, J., Raza, S., Nurunnabi, M., Minai, M. S., and Bano, S. (2019). The impact of entrepreneurial business networks on firms' performance through a mediating role of dynamic capabilities. *Sustainability* 11:3006. doi: 10.3390/su11113006
- Adejumo, B. T. & Sanyaolu, W. A (2020). Tax planning and Profitability of Nigerian Deposit Money Banks: Evidence from Dynamic Panel Model. *Accounting and Taxation Review*, 4(2): 162-169.
- Akintoye, I. R., Adegbe, F. F & Onyeka-Iheme C. V., (2020). Tax Planning Strategies and Profitability of Quoted Manufacturing Companies in Nigeria. *Journal of Finance and Accounting*. 8(3) 148-157. doi: 10.11648/j.jfa.20200803.16
- Angahar, P.A. & Malizu, J. (2015) 'The relationship between accounting information and stock market returns on the Nigerian Stock Exchange', *Management and Administrative Sciences Review*, 4(1) 76–86 [online] <https://doi.org/10.1080/09638189600000060>.
- Angelina, S. & Darmawan, A., (2021). The impact of tax planning on firm value. *Journal of Applied Accounting and Taxation Article History*, 6(2), 196-204
- Aronmwan, E. J., & Okaiwele, I. M. (2020). Measuring tax avoidance using effective tax rate: concepts and implications. *The Journal of Accounting and Management*, 10(1), 27-38.
- Badertscher, B. A.; Katz, S. P.; Rego, S. O. & Wilson, R. J. (2016). *Conforming tax avoidance and capital market pressure*. Available at <http://papers.ssrn.com>.
- Bello O. (2023, November 2). 6 Manufacturing Firms Post N166.3bn Losses In 9 Months. *Leadership*. <https://leadership.ng/6-manufacturing-firms-post-n166-3bn-losses-in-9-months/>
- Bitu, H., & Sabri, M. (2015). Tax planning strategies and corporate governance: Evidence from Iran. *International Journal of Economics and Financial Issues*, 5(1), 105-114.
- Brownen-Trinh, R. (2018). Effects of winsorization: The cases of forecasting non-GAAP and GAAP earnings. *Journal of Business Finance and Accounting*. 46(1-2), 105-135. <https://doi:10.1111/jbfa.12365>.

- Brummer, S. (2017). *Book-tax differences as a proxy for tax-induced earnings management: Evidence from Finnish private firms* [Master's thesis, Hanken School of Economics Helsinki]. <https://api.semanticscholar.org/CorpusID:168884618>
- Chen, S., Chen, X., Cheng, Q., & Shevlin, T., (2010). Are Family Firms More Tax Aggressive than Non-Family Firms. *Journal of Financial Economic*, 95. 41-61. 10.1016/j.jfineco.2009.02.003.
- Choi, W., & Meek, G. (2011). The use of tax planning strategies by multinational companies. *Journal of International Accounting*, 20(2), 143-158. <https://doi.org/10.1016/j.intacc.2011.03.005>
- Chukwudi, U. V., Okonkwo, O. T. & Asika E. R., (2020), Effect of Tax Planning on Firm Value of Quoted Manufacturing Companies in Nigeria. *International Journal of Finance and Banking Research*. 6(1), 1-10. doi: 10.11648/j.ijfbr.20200601.11
- Curristine T. (2005). Performance Information in the Budget Process: Results of the OECD 2005 Questionnaire. *Journal on Budgeting* 5(2), 13-13.
- EY Global Financial Services Institute. (2015). Analyzing bank performance - linking ROE, ROA and RAROC: U.S. commercial banks 1992-2014. *The Journal of Financial Perspectives*, 3(2), 1-25.
- Fagbemi, T. O. Olaniyi, T. A. & Ogundipe, A. A. (2019). The corporate tax planning and financial performance of systemically important banks in Nigeria. *Economic Horizons*, 21(1), 15 - 27
- Gatsi, J. G., Gadzo, S. G. & Kportorgbi, H. K. (2013). 'The effect of Corporate Income Tax on Financial Performance of Listed Manufacturing Companies in Ghana'. *Research Journal of Finance and Accounting*, 4(14). 118-124.
- Geetha, C. A. (2012). *A study on tax planning measures adopted by the salaried class in Kerala* [Doctoral dissertation, Mahatma Gandhi University India] <http://shodhganga.inflibnet.ac.in/handle/10603/25992>
- Greene, W.H. (2008). *Econometric analysis* (6th ed.). Pearson Prentice Hall, Upper Saddle River.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis in Statistica* (7th ed.). Upper Saddle River, New Jersey: Pearson Educational International. <https://doi.org/10.1111/j.1467-9574.192.tb01184.x>.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M., (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (4th ed.). Thousand Oaks, CA: Sage.
- Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, 50, 127-178.
- Hoffman, W. H., (1961). The accounting reviews. *American Accounting Association*. 36(2), 274-281. <https://www.jstor.org/stable/i302432>
- Hussain, T., Abbas, J., Wei, Z., and Nurunnabi, M. (2019). The effect of sustainable urban planning and slum disamenity on the value of neighboring residential property: application of the hedonic pricing model in rent price appraisal. *Sustainability*, 11(4), 1144. doi: 10.3390/su11041144
- Ilesanmi, O. A. (2011). The Impact of Strategic Planning on the Performance of Nigerian Banks. *European Journal of Scientific Research*, 65(1), 131-143.
- Institute of Chartered Accountants of Nigeria, (2014). *Study pack on advanced taxation*. Lagos: VI publishers.
- International Monetary Fund, Africa Dept. (2023). Nigeria's Tax Revenue Mobilization: Lessons from Successful Revenue Reform Episodes. 2023(094), 28-43. <https://doi.org/10.5089/9798400234545.002>
- Iqbal, R. & Todi, P., (2015). The Nordic Model: existence, emergence and sustainability. *Procedia Economics and Finance*, 30, 336-351.

doi:10.1016/S2212-5671(15)01301-5

- Kajirwa, M. (2015). Financial performance and the extent of financial disclosure: A study of listed companies in Kenya. *Research Journal of Finance and Accounting*, 6(5), 140-152.
- Kayode O. O. & Folajinmi A. F., (2020). Corporate Tax Planning and Financial Performance of Quoted Food and Beverages Companies in Nigeria. *Journal of Finance and Accounting*. 8(6), 266-275. doi:10.11648/j.jfa.20200806.13
- Khan, Z. A. (2017), Profit maximization as an objective of a firm – a robust perspective. *International Journal of Research in Finance and Marketing*, 7(6), 173-182.
- Kolawole Y. (2023, April 23). Global competitiveness: Over 30 taxes choke industries in Nigeria as FG plans 18 more. *Vanguard*. <https://www.vanguardngr.com/2023/04/global-competitiveness-over-30-taxes-choke-industries-in-nigeria-as-fg-plans-18-more>
- Koutsoyiannis, A. (2003). *Theory of Econometrics* (2nd ed.). Palgrave.
- Kurawa, J. M. & Saidu, H. (2018). Corporate tax and financial performance of listed Nigerian manufacturing. *Journal of Accounting and Financial Management*. 4 (4), 30 – 43. www.iiardpub.org
- Lestari, E. D., & Wardhani, R. (2015). The effect of tax planning and earnings management on firm value. *Journal of Modern Accounting and Auditing*, 11(4), 226-236. <https://doi.org/10.17265/1548-6583/2015.04.004>
- Liu, Q., Qu, X., Wang, D., Abbas, J., & Mubeen, R. (2022). Product market competition and firm performance: business survival through innovation and entrepreneurial orientation amid COVID-19 financial crisis. *Front. Psychol* 12, 790923. doi: 10.3389/fpsyg.2021.790923
- Madugba, J. U., Ekwe, M. C., & Kalu, E. E. (2020). Tax planning and firm value: A study of quoted consumer goods manufacturing firms in Nigeria. *Journal of Accounting and Taxation*, 12(2), 54-63. <https://doi.org/10.5897/JAT2020.0403>
- Mamirkulova, G., Mi, J., Abbas, J., Mahmood, S., Mubeen, R., and Ziapour, A. (2020). New Silk Road infrastructure opportunities in developing tourism environment for residents' better quality of life. *Glob. Ecol. Conserv.* 24, e01194. <https://doi.org/10.1016/j.gecco.2020.e01194>
- Martinez, A. L., & Souza, T. B. T. d. (2016). Book-tax differences, earnings persistence and tax planning before and after the adoption of IFRS in Brazil. *Advances in Scientific and Applied Accounting*, 9(2), 162-180.
- Mgammal, M. H. & Ismail, K. I. (2015). Corporate tax planning activities: Overview of concepts, theories, restrictions, motivations and approaches. *Mediterranean Journal of Social Sciences*. 6(6), S4. Doi:10.5901/mjss.2015.v6n6s4p350
- Monday, J. U., & Odion, M. I. (2019). Tax planning and firm value: A case of listed firms in Nigeria. *European Journal of Business and Management*, 11(14), 80-89. <https://doi.org/10.7176/EJBM>
- Mubeen, R., Han, D., Abbas, J., Álvarez-Otero, S., and Sial, M. S. (2021). The relationship between CEO duality and business Firms' performance: the moderating role of firm size and corporate social responsibility. *Front. Psychol*, 12, 669715. doi: 10.3389/fpsyg.2021.669715
- Nwaobia, A. N. & Jayeoba, O. O. (2016). Tax planning and firm's liquidity. *IJRD Journal of Business Management*. 2 (10), 1-22.
- Nwaobia, A.N., (2013). *Tax planning and corporate financial performance of listed manufacturing companies in Nigeria*. Unpublished PhD Thesis, Department of Accounting, Babcock University, Nigeria.
- Nwaobia, A.N., Kwarbai, J.D. & Ogundajo, G.O., (2016). Tax planning and firm value: evidence from Nigeria consumer goods industrial sector. *Research Journal of Finance and Accounting*, 7(12), 172-183.

- Ofor, T. N. & Akaegbobi, T. N. (2022). Book Tax Difference, Effective Tax Rate and Corporate Performance of Selected Quoted Consumer Goods and Industrial Goods Manufacturing Companies in Nigeria. *Journal of Accounting and Financial Management*, 8(2), 1-23.
- Ogudu, G. N., Kingsley, I., & Akinlosotu, N. T. (2018). Corporate income tax and manufacturing sector performance in Nigeria: a panel data analysis. *CBN Bullion*, 42(4), 28-36.
- Ogundajo, G. O. & Onakoya, A. B. (2016). Tax planning and financial performance of Nigerian manufacturing companies. *International Journal of Advanced Academic Research for Social and Management Sciences*, 2 (7), 64 – 79.
- Olabisi, J., Kajola, S. O., Oladejo, D. A., Ajayi, J. A. & Hamzah, I. A., (2019). Corporate Tax Planning and Performance of Nigerian Listed Oil & Gas Companies. *The Journal Contemporary Economy*, 4(1), 12–24.
- Olajide., D. S., & Ramon, A. (2017). Tax Planning and Companies Performance in Nigeria. *International Journal of Advanced Research*, 5(5), 1950–1956. <https://doi.org/10.21474/ijar01/4600>
- Olarewaju, O. M., & Olayiwola, J. A. (2019). Corporate Tax Planning and Financial Performance in Nigerian Non-Financial Quoted Companies. *African Development Review*, 31(2), 202–215. <https://doi.org/10.1111/1467-8268.12378>
- Omondi, M., & Muturi, W. (2013). Factors affecting the financial performance of listed companies at the Nairobi Securities Exchange in Kenya. *Research Journal of Finance and Accounting*, 4(15), 99-104.
- Onoja, M. L., Adediran, S. A. & Ude, A. O. (2020). Book tax differences and financial distress of listed consumer goods firms in Nigeria. *International Journal of Advanced Finance and Accounting*, 1(2), 31-51.
- Onomuhara, O. G., (2021). *Corporate tax saving strategy and the value of listed non-financial companies in Nigeria*. [Unpublished doctoral dissertation]., Igbinedion University, Okada, Edo State
- Orji, E.N. & John- Akamelu, C.R. (2023). Book Tax Differences and Financial Distress of Public Listed Consumer Goods Firms in Nigeria, *Journal of Global Accounting*, 9(1), 346 – 382. <https://journals.unizik.edu.ng/joga>
- Osho, A. E., & Orisamika, O. (2022). Tax Variances and Financial Performance of Deposit Money Banks Multinational Companies in Nigeria. *Journal of Accounting and Financial Management*, 8(7), 208-224.
- Phomkul, S. & Saengkhiew, P. (2022). The influence of Profitability, Operational Efficiency and Inventory Management on the Corporate Income Tax Planning for auto Parts Industry Group on Board of Investment in Eastern Industrial Estate. *Journal of Modern Learning Development*, 7(10), 236–254.
- Poetri, I. A. V., Pratama, V. A., & Sari, E. T. (2020). Maximum Profit on the Electrical Appliance Store in Sidoarjo. *International Journal of Management and Humanities*, 4(9), 126-165. <https://doi.org/10.35940/ijmh.I0925.054920>
- Polpanumas, A., Thanjunpong, S., Bangmek, R., & Waenkaeo, K. (2021). The Relationship between Tax Planning and Earnings Management of Public Limited Company in Thailand. *Parichart Journal*, 34(2), 66–82.
- Ra'ed, M., Mohammad, T., Idries, J. & Ali, T. (2015). Accounting vs Market Based Measures of Firm Performance related to Information Technology Investments. *International Review of Social Sciences and Humanities* 9(1), 129-145.
- Rego, S. O., & Wilson, R. (2012). Equity Risk Incentives and Corporate Tax Aggressiveness. *Journal of Accounting Research*. 50(3), 775–810. doi:10.1111/j.1475-679x.2012.00438.x
- Salawu, R. O. (2017). Corporate Governance and Tax Planning Among Non-Financial Quoted

- Companies in Nigeria. *African Research Review*, 11(3), 42. <https://doi.org/10.4314/afrev.v11i3.5>
- Salawu, R. O., Ogundipe, L. O. & Yeye, O. (2017). Granger causality between corporate tax planning and firm value of non-financial quoted companies in Nigeria. *International Journal of Business and Social Science* 8(9), 91-99.
- Salihu, I. B.; Obid, S. N. S. & Anuar, H. A. (2013). Measures of corporate tax avoidance: Empirical evidence from an emerging economy. *International Journal of Business and Society*, 14(3), pp. 412-427.
- Suleiman, S. & Barnabas, M. (2021). Effect of tax avoidance on accounting conservatism of listed non-financial firms in Nigeria. *Journal of Economics and Sustainability*, 3(2), 46-55.
- Tiley, J. (2005). *Revenue Law* (5th ed.). Oxford: Hart Publishing.
- Vržina, S. (2018). Corporate income tax planning and financial performance: Evidence from Serbia, *Contemporary Issues in Economics, Business and Management*, 463-472.
- Wang, C., Wang, D., Abbas, J., Duan, K., and Mubeen, R. (2021). Global financial crisis, smart lockdown strategies, and the COVID-19 spillover impacts: a global perspective implication from southeast Asia. *Front. Psychiatry* 12:643783. doi: 10.3389/fpsy.2021.64378
- Widiatmoko, J. & Indarti, M. G. K. (2019). Book tax differences, operating cash flow, leverage and earning persistence in Indonesian manufacturing companies. *Journal Dinamika Akuntansi*, 11(2), 151-159.