

Non-Current Asset And Taxpayable: Evidence Of Compatibility From Manufacturing Companies

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ABSTRACT

Persistent investment in non-current assets by manufacturing companies enhances product capacity and competitiveness as the government emphasizes industrialization which invariably affect their profitability and productivity. Procurement of new non-current asset has created vacuum for the manufacturing companies for reduction in tax payable. Therefore, this study investigated the impact of non-current assets on tax payable by Nigerian listed manufacturing companies. The annual published reports of twenty chosen companies served as the source of the data. Tax payable, and motor vehicle, furniture and fittings, plant and machinery, and buildings were engaged as dependent and independent variables respectively. Capital allowances and firm size were engaged as the control variable, which were analyzed with panel pooled regression analysis, correlation, fixed effect, and random effect together with Hausman test. Based on results from data analytical tools, it was discovered that furniture and fittings buildings, motor vehicle, and plant and machinery significantly downplay tax payable. In conclusion, Nigerian manufacturing companies' tax payable are negatively and significantly impacted by their non-current assets in Nigeria manufacturing companies. It is recommended that government should authoritatively and digitally monitoring the procurement of Noncurrent assets and the extant noncurrent assets to avoid irrational clamming of capital allowance, and to tremendously enhance tax payable by Nigeria manufacturing companies.

Keywords: Non-current assets; Tax payable; Plant and machinery; Furniture and fittings; Motor vehicles; Building; capital allowance

INTRODUCTION

Investment in non-current assets is essential to carrying out daily tasks and improves an organization's ability to deliver goods and services. According to Ahmad (2019), these investment products include furniture and fittings, equipment and machinery (including buildings and information technologies), and motor vehicles. Effective non-current asset investment is a key factor in an organization's ability to generate wealth for its owners (Okoro & Charles 2019). Investment in non-current asset dispense capital allowance such as initial and annual allowance which is claimable in profit made by the organization. This according to Adegbite and Olatunji (2024) reduces the chargeable income which invariably determined tax payable by the manufacturing companies. In another view of the extant researchers' non-current assets is the determinant of the value of tax payable.

Manufacturing companies circumvent the payment of tax due to the loophole on claimable capital allowance. Procurement of new non-current asset has created vacuum for the



manufacturing companies for reduction in tax payable. This ignited insincerity due to the fact that most of the existing manufacturing companies deliberately increase the cost of non-current assets. Also arbitrary inflation of non-current asset generated more obstacle to the tax revenue. Some companies arbitrarily increase the cost of non-current asset which invariably downplays the payment of tax.

The production sector is a decisive contributor to the Nigeria's tax revenue. Manufacturing companies continually invest in non-current assets to enhance product capacity and competitiveness as the government emphasizes industrialization (Ahmad, 2019). Ongoing changes and updates in regulations characterize Nigeria's tax landscape. Globally, Nigerian manufacturing companies focus on achieving tax efficiency to stay competitive and to enhance their potency for the future and current opportunities. The study stems from the recognition that manufacturing companies require strategic financial management to thrive in a challenging economic environment (Akinleye & Adesina, 2019). The manufacturing sector is economically significant in Nigeria. However, tax regulations are continuously changing which influences the financial landscape of manufacturing companies (Okobo et al., 2022). Exploring non-current assets to circumventing tax payable by the manufacturing companies legally and illegally has been lacking sufficient examination in Nigeria context which is explored by this study in order to detect their compatibility. Therefore, this study examines the effect of non-current assets on tax payable in Nigeria manufacturing companies. By analyzing the impact of non-current assets on tax payable, the study ultimately provides insights on how companies can optimize their tax strategies and financial performance. This has the potential to contribute to the existing literature on taxation and financial management in Nigeria.

LITERATURE REVIEW AND HYPOTHESIS

The Capital Asset Pricing Theory (CAPT)

Treynor, Sharpe, Lintner, and Mossin created the CAPT in the early 1960s, and it underwent several years of refinement. The Markowitz mean-variance theory is expanded upon by the capital asset pricing theory (CAPT). Three main ideas served as the foundation for CAPT. The first is the idea of a risk-free investment; the second is the idea of a market portfolio; and the third is the assumption that there is an efficient market. The model predicts the link among risk and equilibrium expected returns on assets. According to Bode et al. (2003), a security's beta-measured risk is its CAPT required rate of return. Beta is a metric used to quantify how much an asset contributes to the risk of a portfolio that is well-diversified. He continued by saying that beta is a helpful measure of the systemic risk of an asset.

For any mix of assets, the expected return–beta relationship is also valid. A portfolio's beta is just the weighted average of its asset betas, with the proportions of the portfolio serving as weights (Abolo, 2022). Portfolios of assets are assembled according to potential equilibrium prices under various circumstances. Since the theory forecasts the relationship between two or more investment risks, it was pertinent to this study. The theory made it easier to comprehend and explain how investments in noncurrent assets affect financial performance.

The performance of listed Nigerian manufacturing companies and investments in non-current assets were both studied by Uka et al. (2023). Secondary data was gathered during an eight-year period, from 2012 to 2019, from the annual reports and accounts of the fifteen (15) selected quoted corporations. Regression analysis, correlation, and descriptive statistics were used to analyze the gathered data. The empirical findings showed that investments in physical non-current assets positively and significantly affect the return on assets (ROA) of the chosen manufacturing companies. The debt to asset ratio and investments in non-current, intangible assets have a positive and considerable impact on return on assets; the assets turnover ratio has a negative but insignificant impact. The results of the study indicate that in Nigeria, the

financial performance of manufacturing firms is more influenced by tangible non-current assets than by intangible non-current assets.

Nworie et al. (2023) investigated the impact of current asset management on the financial performance of listed consumer products companies in Nigeria. To be more precise, the study used a causal-comparative research approach to assess how the debtor turnover ratio, cash ratio, and inventory turnover ratio affected the earnings per share of consumer goods companies listed on the Nigerian Exchange Group. Using the purposeful sampling technique, twelve (12) consumer products companies were chosen from a population of twenty-one to comprise the study sample. Over a ten-year span, from 2011 to 2020, secondary data was collected from the chosen companies' annual reports and accounts. Using the Ordinary Least Squares approach, the hypotheses were tested at the five percent significance level. The findings indicated that while the debtor and inventory turnover ratios had a beneficial effect, the cash ratio negatively affects the earnings per share of consumer goods businesses listed on the Nigerian Exchange Group.

Okobo et al. (2022) investigated how return on assets for Nigerian food manufacturing companies was affected by modifications to tangible non-current assets. The research used an ex post facto methodology, gathering information from leading food manufacturing firms that were listed between 2008 and 2020 on the Nigerian Stock Exchange. The results showed that tangible non-current assets significantly affect the return on assets of Nigerian food manufacturing firms. According to the study, the return on assets of publicly traded food manufacturing businesses is statistically significantly impacted by changes in investments in FMCs, plants and machines, and land and buildings. Food manufacturing enterprises' asset return was found to be enhanced by a rise in tangible non-current assets.

In their 2020 study, Sarafa and Joshua used panel data least square multiple regression from the audited annual reports of 20 manufacturing enterprises over a 14-year period to investigate the impact of asset efficiency on the financial performance of public manufacturing organizations in Nigeria. The study found that the ratio of turnover and firm size have a positive and statistically significant relationship with the financial performance of the firms under study, while the total asset turnover ratio, non-current asset turnover ratio, and inventory turnover ratio have a positive but statistically insignificant connection with the financial performance of manufacturing companies in Nigeria. The study comes to the conclusion that Nigerian manufacturing companies' financial performance benefits from asset efficiency. This study was conducted in the same domain, even though the researcher is looking at the effects of increases in non-current and not asset efficiency in the same sector.

Afolabi's (2020) study examined how liquidity management affected the success of ten manufacturing companies during a five-year span, from 2012 to 2016. Secondary data was collected and included in these companies' annual reports and accounts. The data analysis procedure used descriptive statistics, regression analysis, and correlation. The research discovered that the current ratio had a negative and substantial effect on the profitability of the selected businesses, while the quick and cash ratios showed a positive but insignificant relationship with ROA. In their examination of the relationship between fixed assets and financial performance, Ambuli et al. (2019) made special reference to Polaris Consulting and Service Limited. Employing correlation, regression, trend analysis, and ratio analysis on a five-year data set, the researchers found a favorable relationship between the company's performance and fixed asset management. They proposed that a key element of efficient performance is fixed asset management. The investigator did not take into account the effect of noncurrent asset acquisitions.

Akinleye and Adesina (2019) looked at how some Nigerian manufacturing companies used their assets over the previous five years. Descriptive statistics, regression analysis, and correlation were used to analyze the data. The study found that optimizing asset usage has a

significant and favorable impact on the performance of Nigerian manufacturing organizations, making it imperative to focus on this area. This study focused on how manufacturing organizations use their assets rather than the impacts of growing their non-current assets, even though it was conducted in the same field as the researcher. To evaluate the connection between the financial performance and asset growth rate of Nigerian manufacturing firms, Inyama et al. (2017) used multiple regressions and the Pearson product-moment correlation matrix to analyse six companies from the Nigerian stock exchange over a ten-year period. The outcome shows a positive and significant correlation between the growth rate of a firm's non-current assets and its net asset growth rate. It was proposed that Nigerian manufacturing firms might increase the value of their net assets and non-current assets by adding to their overall assets while decreasing the attributes of their current obligations. It was proposed that Nigerian manufacturing firms might increase the value of their net assets and non-current assets by adding to their overall assets while decreasing the attributes of their current obligations. Although the researcher and the industry in which the study was conducted are identical, the study's selected firms are relatively tiny since it lacks a strong basis for a logical conclusion.

The impact of material assets on the financial performance of Nigerian manufacturing companies is examined by Egbuhuzor (2017). Ten manufacturing firms that were listed on the stock exchange provided financial statement data for the study, which measured corporate performance using return on equity and return on assets. The multiple regression analysis's findings indicate that there is a negative correlation between return on assets and buildings and land and a high beneficial connection between return on assets and plant and machinery. Shafi'u et al. (2017) employed regression models to investigate the impact of intellectual capital on the five-year financial performance of listed Nigerian food product companies. According to their conclusions, financial performance is significantly improved by intellectual capital. Thus, firms, particularly those that manufacture food goods, might benefit financially by placing a high priority on intellectual capital. This study looked at the impact of intellectual capital on financial performance in the same industry rather than the impact of non-current asset additions, as the researcher had considered.

Al Shahrani and Tu (2016) looked at how organisational characteristics affect financial performance in their paper "Building a Theoretical Model." They examined the connections between the financial performance of service companies and organisational elements. They concluded that organisational elements in manufacturing organisations, as reported in numerous publications, can be linked to financial success since historically, productivity growth in manufacturing firms has been stronger than in service firms. The financial performance of Nigerian listed businesses' investments in property, plant, and equipment was also examined by Olatunji and Adegbite (2014). The study found that the variables that were independent and the dependent variable (net profit) had a significant and beneficial connection. The data came from the annual reports and accounts of thirteen selected Nigerian commercial banks between 2000 and 2012. The study discovered that investments in fixed assets had a positive and considerable influence on the profitability of Nigeria's banking sector. Despite working in the same sector, the researcher's research focuses on different industries than this study.

Using secondary data spanning five years, Heikal et al. (2014) examined the relationship between Corporate Profit Growth in the Automotive Industry on the Indonesia Stock Exchange and Return on Assets, Return on Equity, Net Profit Margin, Debt to Equity Ratio, and Current Ratio. They found that when they tested the variables jointly using the F-test, there was no significant growth; however, when they tested the variables jointly using the T-test, there was significant and positive growth, with the exception of DER and CR, which showed significant but negative growth. According to the research, businesses need to be able to show 19 that they have strong performance potential, room to grow, and can provide

investors with enough information about the business. Once more, the researcher conducted this study in a different industry and domain, and it solely examined Return on Assets in comparison to other ratios to make an informed decision.

Cyril and Ogbonna (2013) used multiple regressions to evaluate the impact of non-current assets on the return on assets of the Nigerian cement manufacturing company. Their results showed that non-current assets contributed a little but discernible amount to the return on assets. It suggested raising 16 investments in non-current assets to increase the return on assets in Nigeria's cement-producing industry. Rather than the fast-moving consumer products business in general, this study concentrated on the cement industry within the researcher's field of expertise.

Okwo et al. (2012) assessed how a firm's investment in noncurrent assets affected its operating profit margin. The data came from the 1999–2009 annual records of the sampled firms engaged in Nigerian brewing. The data was analysed statistically using regression analysis. Operational profit and noncurrent asset investment were shown to be positively correlated, though not statistically significant. The study discovered no proof that investment in non-current assets significantly increased operating profit for Nigerian brewing companies. This study was restricted to the brewing business, while research is being conducted on fast-moving consumer products companies in general within the same domain.

Iqbal & Mati (2012) investigate the connection between capital expenditure and non-financial company earnings. The research focusses on the company's profitability and its relationship to noncurrent assets because the company's profitability is affected by the efficient management of working capital and capital expenditure. The KSE 100 index's non-financial companies over the previous ten years were compiled. As a result, it includes, among other things, Jute, Vanaspati, Tobacco, Paper, Sugar, Textile, Engineering, Manufacturing, and Cement. The effects of non-current variables (I.V.) on profitability have been examined (D.V.) through the use of multiple regression analysis. The conclusion on the relationship between non-current assets and business success implies that the theory is widely accepted. However, a thorough examination of the data revealed that Nigeria had never before studied the relationship between tax responsibilities and non-current assets. The prior study examined the relationship between the financial performance of food manufacturing enterprises and their investments in non-current assets, as opposed to the current study, which examines the effect of tangible non-current assets on taxes that manufacturing companies in Nigeria must pay. Some researchers only looked into how non-current assets affected financial results. Since no previous study has examined the effect of non-current assets on tax obligations, this one is unique. The literature now has research gaps as a result.

Tax Payable

The procedure by which a public authority, such as the federal, state, or local government, levies a fee on individuals, partnerships, limited liability companies, sole proprietorships, and public corporations to raise money for the realization of public sector projects is known as taxation (Nnate et al., 2021). According to Shafi'u et al. (2017), tax is a compulsory levy imposed by government on profits, income, property, goods and services of individuals and companies to finance its expenditures, for which the taxpayers are not guaranteed a direct benefit. According to Akinleye et al. (2020), economic histories of developing and developed nations shows taxes are a crucial tool for governments to raise money and set fiscal objectives that control investment, manufacturing and consumption of certain commodities. He continued by saying that taxes are levied in order to govern industry and trade, safeguard emerging industries, limit inflation, lessen income inequality, and control the production of particular goods and services—all of which contribute to economic progress. Tax payable is an important part of a manufacturing organization's financial landscape, and its

intricacies become apparent when examining the role of non-current assets. Non-current assets form the backbone of a manufacturing firm's operational capacity(Akinleye & Adesina, 2019).

Plant and Machinery

Plant and machinery are tangible assets employed by the manufacturing companies to manufacture goods or provide services for more than a reporting year. Plant and machinery also refers to physical assets that businesses use for production, manufacturing, or service delivery. These resources include a vast array of facilities, machinery, tools, and equipment used directly for production process (Olatunji and Adegbite, 2014). Plant and machinery play a vital role in manufacturing companies since they are essential to the production process and have a direct impact on the productivity, competitiveness, and operational efficiency of the business (Das, 2017). Machinery and plants are necessary tools for converting raw materials or parts into final goods. According to Okobo et al., (2022) Plant and machinery make it possible to mechanize, automate, and optimize several industrial processes, including packing, assembly, manufacturing, and quality control. Precision engineering and cutting-edge technology are frequently incorporated into modern plants and machinery, producing goods of greater quality and with fewer flaws. Increased accuracy and repeatability in task execution by automated systems leads to consistent product standards and satisfied customers. All things considered, plant and machinery are invaluable assets for manufacturing companies, acting as the foundation of their business and propelling them to success in a fiercely competitive worldwide marketplace. In the ever-changing manufacturing industry, companies embrace technology innovations and invest in contemporary, efficient equipment to stay profitable, responsive, and flexible (Uka et al., 2023).

H₁: Plant and machinery have significant effect on tax payable in Nigeria manufacturing companies.

Furniture & Fittings

Fittings and furniture are material resources that are used in office work, manufacturing, or employee facilities. Accounting standards classify these assets as property, plant, and equipment (PPE). PPE assets are long-term in nature and are meant to be used in administrative or manufacturing processes rather than being sold. In manufacturing organizations, furniture, and fittings are important because they improve the organization's overall productivity and operational efficiency (Ahmad, 2019). Manufacturing businesses must grasp how to consider furniture and fittings as non-current assets and how this affects tax payments to run their financial operations efficiently. In particular, furniture and fittings are usually mobile objects utilized on an organization's property to facilitate its activities Inyama et al., (2017). Desks, seats, tables, cabinets, shelves, and other fixtures that aren't regarded as being a part of the actual building structure are a few examples. These assets are valued at cost, which includes all directly related expenses required to restore the asset to its intended location and operating condition. They are recognized as a component of the entity's property, plant, and equipment. It is significant to remember that under IFRS, IAS 16 and other pertinent standards' principles control the requirements for furniture and fittings' recognition, measurement, depreciation, and disclosure Al-Ani, (2014). Following these guidelines guarantees that the entity's investment in and use of its property, plant, and equipment assets—including furnishings and fittings—are appropriately shown in the financial statements.

H₂: Furniture & Fittings has effect on tax payable in manufacturing companies in Nigeria

Motor Vehicle

Every manufacturing company should consider motor vehicles as non-current asset as they are essential for moving people and goods between locations. Motor vehicles are road vehicle that

are motorized (either mechanically or electrically propelled), including any freight, and it is not driven on rails (Okobo et al., 2022). For manufacturing organizations, motor vehicles are important non-current assets since they are essential to many areas of their operations, including distribution, employee mobility, and the delivery of completed items and raw materials. Manufacturing businesses must comprehend how motor vehicles are treated as non-current assets and how this affects tax payments to properly manage their financial affairs (Iqbal & Mati, 2012). For example, trucks, vans, forklifts, and other vehicles used either inside in the production facility or externally for transportation are examples of physical assets used for transportation. Vehicles are categorized as property, plant, and equipment (PPE) under accounting rules. PPE is defined as long-term resources held for use in manufacturing, the provision of goods or services, or administrative needs, (Lubyanaya et al., 2016).

Motor vehicles are material goods kept for use in the production company's activities. They can be utilized for a number of things, including as personnel, finished goods, and raw material transportation, in addition to internal administrative tasks, it is also anticipated that motor vehicles will yield financial advantages for the organization for a duration that surpasses the reporting term (Shafi'u et al., 2017). This sets them apart from assets or consumables that are depleted in a single accounting period. Significant expenses are usually involved in the purchase, upkeep, and operation of motor vehicles. These expenses are capitalized and recorded as a component of the carrying amount of the motor vehicle, subject to the initial recognition and measurement requirements specified in IAS 16. Motor vehicles are first recorded at cost under IFRS, which includes all directly related expenses required to move the asset to its intended destination and put it in a usable state. Automobiles are then written down throughout their anticipated useful life to account for wear and tear or consumption (Okobo et al., 2022).

H₃: Motor vehicles have effect on tax payable in manufacturing companies in Nigeria

Building

A building as a non-current asset refers to a structure means that belongs to a company or an individual and is not meant to be sold during regular business operations. Because buildings are expected to deliver economic benefits to the organization for a protracted time frame, usually more than a year, they are frequently classified as non-current assets (Abolo, 2022). For manufacturing organizations, buildings are important non-current assets since they provide the necessary infrastructure for their operations. Manufacturing businesses must grasp how buildings are treated as non-current assets and how this affects their tax obligations to run their financial operations efficiently. Manufacturing organizations employ buildings as tangible assets for a variety of functions, such as production facilities, warehouses, administrative offices, and other operational requirements. Buildings are categorized as property, PPE under accounting rules. PPE is defined as long-term resources kept for use in production, the provision of goods or services, or administrative needs (Mary et al., 2012).

Buildings are classified as physical assets under the (IFRS) and belong under the Property, Plant, and Equipment category (PPE). Buildings are defined as follows in IAS 16 - Property, Plant and Equipment: Buildings are material possessions kept for use in the activities of the manufacturing organization (Abolo, 2022). They can accommodate production facilities, warehouses, administrative offices, and other operating requirements, among other uses. It is anticipated that buildings will bring financial advantages to the organization for a duration longer than the reporting period. They are regarded as long-term assets because they support the business's activities throughout several accounting years. Buildings are fixed and permanent structures that are immovable and intended to remain in place for an extended period. They are distinct from movable assets such as machinery or vehicles.

In general, buildings are recognized and recorded following IAS 16 principles, which guarantees that the reporting of buildings accurately reflects their economic significance and financial influence on the business's operations (Domnişoru & Vîntoru, 2008). The accounting definition of buildings highlights their function as long-term assets that sustain the business's main operations, add to its value, and are subject to particular accounting procedures like depreciation to represent their consumption over time.

H₄: Building has effect on tax payable in manufacturing companies in Nigeria

Capital Allowance

The Second Scheduled to the Companies Income Tax Act contains the laws pertaining to capital allowances (CITA). It is given in place of declining value. Therefore, it is a type of relief given to any business that had qualified capital expenditures made during a basis period for property, plant, and equipment that was being used for trade or business purposes at the end of the basis period (Nnate et al., 2021). An economy's ability to generate enough tax income for essential infrastructure development depends on a company's qualified capital expenditure at a given moment in time. Spending on an asset utilized for a trade or business that is eligible for capital allowances during a base period is referred to as qualifying capital expenditure. For any firm, qualifying capital expenditures are the key to generating revenue. These are resources that a company has bought in order to increase or produce future profits or economic activity (Uka et al., 2023). One crucial component of the Nigerian tax system is capital allowances. They enable producers to gradually write off the expense of deterioration on their non-current assets. These deductions have direct impact on the taxable income and tax obligations of a business. Scholars such as Ojo et al. (2018) assert that comprehending the intricacies of capital allowances in the Nigerian manufacturing sector is crucial. Traditional depreciation methodologies and capital allowances might have a complicated connection (Uka et al., 2023). Even though capital allowances offer a standardized approach, businesses are free to choose the depreciation strategies that best meet their needs. Afolabi and Fasua (2021) conducted studies that explore the relationship between capital allowances and depreciation procedures, highlighting the importance of tax concerns and financial reporting uniformity. The manufacturing sector encompasses a wide range of assets and operating needs. Policies about capital allowances should therefore consider these particular traits. According to Adeyemo et al. (2022), capital allowance regulations must be tailored to the particular difficulties faced by Nigerian manufacturing companies to provide fair and equal tax treatment for all businesses (Nnate et al., 2021). Capital allowances may have advantages, but there are compliance issues. Scholars like Akinleye & Adesina, (2019) pinpoint problems with documentation, enforcement, and record-keeping. These difficulties highlight the necessity of strong regulatory frameworks and governance procedures to guarantee correct capital allowance compliance. The Nigerian government regularly proposes laws to promote investment in specific sectors of the economy. Accelerated capital allowances are one such policy that can be employed as a tax planning instrument. Manufacturing businesses can increase their cash flow by deducting expenses upfront using these advantages. This encourages reinvestment in non-current assets and lowers their immediate tax obligations. In 2017, Das, (2017) conducted a study illustrating the advantages of using accelerated capital allowances for tax planning.

H₅: Capital allowance has significant effect on tax payable in manufacturing companies in Nigeria

Firm Size

A company's size can be represented by its firm's size, which is a scale. The total assets and sales of the company often indicate the size of the firm. Larger businesses will often garner

greater public attention and recognition. A larger corporation can provide a positive message to the general population. Because of a notion inherent in the traditional perspective of the corporation called economies of scale, it has an important role in determining the profitability of the business. It can be used to mean that big businesses can manufacture things for a lot less money. A company's size is ascertained by the employees' number it employs, which is a measure of market capitalization. The greater the overall assets, the more assets the company possesses. Total assets, sales, or corporate capital can be used to calculate the size of a company. In comparison to enterprises with smaller total assets, those with larger total assets are thought to have better prospects during a period of relative stability and are able to turn a profit. Due to their larger markets and greater potential for generating substantial profits, large enterprises are more competitive than small ones (Salehi et al., 2020).

H₆: Firm size has significant effect on tax payable in manufacturing companies in Nigeria

METHODOLOGY

The effect of non-current assets on tax payable in Nigerian manufacturing enterprises was examined in this study using an ex-post facto research technique. Data were collected from all sample units, which include ten (10) consumer goods firms and ten (10) industrial products firms from 2013 to 2023. The samples were chosen from manufacturing companies that are registered on the Nigerian Stock Exchange. Tax payable, and motor vehicle, furniture and fittings, plant and machinery, and buildings were engaged as dependent and independent variables respectively. Capital allowances and firm size were engaged as the control variable, which were analyzed with panel pooled regression analysis, correlation, fixed effect, and random effect together with Hausman test.

Model specification

To examine the impact of tangible non-current assets on tax payable in Nigeria Manufacturing Companies, tax payable is a dependent variable while Plant and machinery, Furniture and fittings, Motor vehicle, and building are independent variables, and capital allowance; and firm size are control variables. The model as used by Olatunji & Adegbite, (2014) was adopted in the current investigation except for capital allowance and firm size that was included in the current study.

The functional relationship between tax payable and non-current assets is as:

$$\text{TAXPAY} = f(\text{PLANTM}, \text{FIXFIT}, \text{MOTVE}, \text{BUILD}, \text{CAPALL}, \text{FIRMSIZE}) \quad (1)$$

$$\text{TAXPAY} = \alpha_0 + \beta_1\text{PLANTM} + \beta_2\text{FIXFIT} + \beta_3\text{MOTVE} + \beta_4\text{BUILD} + \beta_5\text{CAPALL} + \beta_6\text{FIRMSIZE} \quad (2)$$

Table 1. Measurement of Variables

VARIABLE	PROXIES	VARIABLE TYPE	MEASUREMENT
Tax Payable	TAXPAY	Dependent	Total tax paid
Plant and Machinery	PLANTM	Independent	Total plant and machinery
Furniture and Fittings	FIXFIT	Independent.	Aggregate value of material resources
Motor Vehicles	MOTVE	Independent.	The aggregate value of all motor vehicles
Building	BUILD	Independent	The aggregate value of all buildings

Capital Allowance	CAPALL	Control	The total value of deducted taxes on depreciation of tangible non-current assets.
Firm Size	FIRMSIZE	control	Total assets of the company

RESULTS AND DISCUSSION

Table 2. Correlation Matrix

	TAXPAY	PLANTM	FIXFIT	MOTVE	BUILD	CAPIALL	FIRMSIZE
TAXPAY	1.0000						
PLANTM	0.5737*	1.0000					
FIXFIT	0.4305	0.5912*	1.0000				
MOTVE	0.6052*	0.6677*	0.5645*	1.0000			
BUILD	0.5833*	0.5326*	0.6488*	0.6083*	1.0000		
CAPIALL	0.6852*	0.6076*	0.5257*	0.6729*	0.6845*	1.0000	
FIRMSIZE	0.6799*	0.6818*	0.6066*	0.6671*	0.5898*	0.6433*	1.0000

Source: Authors' Compilation (2024)

The associations between the variables were investigated through correlation matrix. A significant positive correlation between TAXPAY and PLANTM was found, with a coefficient of 0.5737. Furthermore, MOTVE and TAXPAY have a substantial positive correlation (0.6052), suggesting no multicollinearity between the variables, whereas FIXFIT and TAXPAY exhibit a positive association (0.4305). BUILD also shows a positive correlation of (0.5833), CAPIALL and TAXPAY are positively correlated with a figure of 0.6852, FIRMSIZE also show a positive relationship with TAXPAY (0.6799). All variables involved in the study exhibit non-multicollinearity because none of the correlation value is more than 0.7. To assess collinearity among the variables, a VIF (Variance Inflation Factor) test should be carried out based on the correlation matrix results.

Table 3. Variance Inflation Factor

VARIABLES	VIF	1/VIF
PLANTM	5.49	0.182149
CAPIALL	6.04	0.165563
MOTVE	7.72	0.129534
FIRMSIZE	6.48	0.154321
BUILD	4.04	0.247525
FIXFIT	3.95	0.253165
MEAN VIF	5.62	

Source: Authors' Compilation (2024)

The presence of multicollinearity was evaluated using the VIF test. Except for FIXFIT, which has a VIF value of 3.95, all of the VIF values in Table 4.2 are below the critical threshold of 10, indicating that heteroskedasticity which is a serious concern for the variables employed was absent in this study. PLANTM has the value of 5.49, closely followed by CAPIALL at 6.04. MOTVE exhibits a moderate VIF of 7.72, but the VIFs for FIRMSIZE and BUILD are 6.48 and 4.04, respectively. With a mean VIF of 5.62 across all variables, this is much above the level of concern. These findings imply that the model's variables do not indeed have problematically high levels of heteroskedasticity which can further be confirmed through linear regression as displayed in Table 3

Table 4. The Effect of Non-Current Asset on Tax Payable in Listed Manufacturing Companies in Nigeria

	(1)	(2)	(3)	(4)
Variables	Regression Analysis	Linear Regression	Fixed-effects (within) regression	Random-effects GLS regression
PLANTM	-0.209*** (0.000)	-0.209*** (0.000)	-0.302*** (0.000)	-0.209*** (0.000)
FIXFIT	-1.782* (0.096)	1.782** (0.032)	-1.418 (0.534)	-1.782* (0.094)
MOTVE	-1.242*** (0.000)	1.242*** (0.003)	-2.187*** (0.000)	-1.242*** (0.000)
BUILD	-0.266*** (0.000)	0.266** (0.011)	-0.455*** (0.000)	0.266*** (0.000)
CAPIALL	-0.0842*** (0.000)	0.0842 (0.105)	-0.0516* (0.080)	-0.0842*** (0.000)
FIRMSIZE	0.0266*** (0.000)	0.0266* (0.056)	0.0355*** (0.000)	0.0266*** (0.000)
CONS	-1549334.8*** (0.000)	-1549334.8*** (0.004)	-2353725.5*** (0.000)	-1549334.8*** (0.000)
<i>N</i>	220	220	220	220
<i>R</i> ²	0.877	0.877	0.823	
adj. <i>R</i> ²	0.873	0.873	0.800	

Source: Authors' Compilation (2024)

Table 5. Hausman Test

VARIABLES	Random Effect (b)	Fixed Effect (B)	Difference (b-B)	sqrt(diag(V_b-V_B)) S.E.
PLANTM	-.2087359	-.3017932	0.0930573	.
FIXFIT	-1.782205	-1.417945	-0.36426	.
MOTVE	-1.242494	-2.186704	0.94421	.
BUILD	-.2661809	-.45511	0.1889291	.
CAPIALL	-.0842164	-.0516081	-0.0326083	.
FIRMSIZE	.0265989	.0354507	-0.0088518	.
$\text{chi2}(6) = (b-B)'[(V_b - V_B)^{-1}](b-B)$ $= 48.69$ $\text{Prob} > \text{chi2} = 0.0000$				

Source: Authors' Compilation (2024)

Several analytical techniques were applied to ascertain the impact of noncurrent assets on tax payable as displayed in Table 3 The analytical results of pooled regression shown in the first column. However, as column 2 illustrates Linear Regression (Robust) which was used to

address potential problems of heteroskedasticity. The findings of the Robust Regression shows TAXPAY is significantly and negatively impacted by PLANTM with the result that TAXPAY always decreases by 0.2% as PLANTM increases by 1%. Also, FIXFIT significantly reduces TAXPAY by 1.7% which was significant at 0.030, this shows that a percentage increment in FIXFIT reduces TAXPAY by 1.7%. The effects of MOTVE and BUILD on TAXPAY are unfavorable because MOTVE and BUILD have significant and negative effects with probability values of 0.003 and 0.011 respectively which are less than 0.05 significant level, this indicate that TAXPAY is negatively impacted by MOTVE and BUILD because TAXPAY always reduces by 1.2% and 0.2% when MOTVE and BUILD increases by 1% respectively. CAPIALL also reduces the value of tax payable but FIRMSIZE significantly increase TAXPAY by 0.08% and 0.02% respectively.

Additionally, as indicated in columns 3 and 4, respectively, RE and FE regression model were analyzed. The better model between the FE and RE models was identified by employing an Hausman test. The fixed effect was deemed suitable by the Hausman test in Table 4 because $\text{Prob} > \chi^2 = 0.0000$, which is less than the 0.05 significance level. The H_0 hypothesis, according to this outcome, is that the RE model is a perfect model but rejected based on the outcome of Hausman test. According to the Fixed effects model, TAXPAY is significantly impacted negatively by PLANTM, with the result that TAXPAY always decreases by 0.3% as PLANTM increases by 1%, TAXPAY is also significantly impacted negatively by FIXFIT, with the result that TAXPAY always decreases by 1.4% as FIXFIT increases by 1%, The effects of MOTVE and BUILD on TAXPAY are also not favorable because TAXPAY always reduces by 2.18% and 0.45% when MOTVE and BUILD increases by 1% respectively, which are less than 0.05 significant level, this indicate that TAXPAY is negatively impacted by MOTVE and BUILD with the result that TAXPAY always reduces by 2.18% and 0.45% when MOTVE and BUILD increases by 1% respectively. CAPIALL also reduces the value of tax payable but FIRMSIZE significantly increase TAXPAY by 0.051% and 0.035% respectively.

Discussion of Findings

This study used PLANTM, BUILD, FIXFIT, and MOTVE as surrogates for tangible non-current assets to determine the effect of non-current assets on tax payable by manufacturing companies in Nigeria. The annual published reports of twenty chosen companies served as the source of the data. Tax payable, and motor vehicle, furniture and fittings, plant and machinery, and buildings were engaged as dependent and independent variables respectively. Capital allowances and firm size were engaged as the control variable, which were analyzed with panel pooled regression analysis, correlation, fixed effect, and random effect together with Hausman test. Fixed effect model was chosen and supported by Hausman test. According to Fixed effects regression results, PLANTM has negative effect on tax payable, that is, the more the procurement of PLANTM, the lesser is tax payable. The policy implication is that capital allowance both intial and annual are claimed on newly procured plant and machinery which invariably downplay the taxable income which tax payable is derived. The present outcome is in agreement with the research conducted by Adegbite, (2025); Adegbite and Inyanda, (2024) ; Ahmad (2019); Madubuko and Ogbonna (2013); Sahade (2023) but differs from the outcome of Uka et al. (2023); Okobo et al. (2022); and Anuar et al. (2021).

Also, the outcome indicates that a percentage rise in FIXFIT leads to a considerable decrease in TAXPAY. This divulges that FIXFIT drastically reduces the tax payable. This is also in consonance with the outcome of Adegbite, (2025); Adegbite and Ajagbe, (2023); Ahmad (2019); Madubuko and Ogbonna (2013); Sahade (2023) Uka et al. (2023); Salehi et al, (2020); Okobo et al. (2022); and Anuar et al. (2021) but in dissonance with the outcome of

Nnate et al (2021); Inyiama, et al (2017); Lubyana, et al (2016). In the same vein. MOTVE, which has the same capital allowance percentage, impacted tax payable negatively and significantly. This exhibited that investment in motor vehicles by the manufacturing companies enhance tax payable. This further authenticates the submission of Madubuko and Ogbonna (2013); Sahade (2023); Uka et al. (2023); Okobo et al. (2022); and Anuar et al. (2021) but unauthenticates the submission of Shafi'u, et al (2017); Sahade (2023); Salehi et al, (2020); and Uka et al, (2023). Additionally, the impact of BUILD on TAXPAY is also negative and significant which displayed that the more the construction of industrial building the lesser is tax payable in Nigeria manufacturing companies. The building also attracted with both initial and annul allowance which at the year-end reduces tax payable. This submission advocates the feedback of Adegbite, (2020); Adegbite, (2025); Shafi'u, et al (2017); Sahade (2023); Salehi et al, (2020); and Uka et al, (2023) but discards the submission of Madubuko and Ogbonna (2013); Sahade (2023); Uka et al. (2023); Okobo et al. (2022); and Anuar et al. (2021).

CONCLUSION

The impact of non-current assets on tax payable by Nigerian listed manufacturing companies is investigated in this study. The annual published reports of twenty chosen companies served as the source of the data. Tax payable, and motor vehicle, furniture and fittings, plant and machinery, and buildings were engaged as dependent and independent variables respectively. Capital allowances and firm size were engaged as the control variable, which were analyzed with panel pooled regression analysis, correlation, fixed effect, and random effect together with Hausman test. Based on results from data analytical tools, it was discovered that furniture and fittings buildings, motor vehicle, and plant and machinery significantly downplay tax payable. In conclusion, Nigerian manufacturing enterprises' tax payable are negatively and significantly impacted by their non-current assets in Nigeria manufacturing companies. It is recommended that government should authoritatively and digitally monitoring the procurement of Noncurrent assets and the extant noncurrent assets to avoid irrational clamming of capital allowance, and to tremendously enhance tax payable by Nigeria manufacturing companies.

This study contributes to the extant literature by econometric examined the effect of non-current assets on tax payable in Nigeria manufacturing companies. Most of the existing literature restricted their analytical tools to correlation, and regression but this study involved panel data analysis such as random effects model and fixed effects model to gauged the impacts of non-current assets on tax payable in Nigeria manufacturing companies. In addition, it also contributes to the development of effective tax policies and financial management practices in Nigeria's manufacturing sector.

REFERENCES

- Abolo, P. (2022). Non-Current Assets Investment and Financial Performance of Listed Insurance Companies in Nigeria. *Advanced Journal of Accounting, Management and Marketing*, 8(2), 1–17.
- Adegbite, T. A. (2020). The Effects of IFRS Adoption on Taxation in Nigerian Manufacturing Companies. *Financial Sciences*, 25(4); 1-15.
- Adegbite, T.A., and Ajagbe, S.T. (2023). Inventory Effectiveness and Nigeria Manufacturing Companies: Analysis with Return on Equity. *Iranian Journal of Accounting, Auditing and Finance*, 7(25), 1-12. doi: 10.22067/ijaaf.2023.43618.1291
- Adegbite T.A. and Inyanda S.J. (2024). Working Capital and Tax payable: Analysis of

- Interrelationship in Nigeria Manufacturing Companies. *Economics and Organization* 21(1), 25 – 45
- Adegbite T.A. (2025). Receivables and Tax Payable in Manufacturing Companies: Panel Analysis Reactions. *Iranian Journal of Accounting, Auditing and Finance*, 9(2), 21-42. published by Ferdowsi University of Mashhad.
- Ahmad, W. (2019). Impact of Current and Non-Current Assets on the Profitability of Pharmaceutical Companies of Pakistan. *International Journal of Management, Accounting and Economics*, 6(11), 770–780.
- Akinleye, G. T., & Adesina, O. D. (2019). Assets Utilization and Performance of Manufacturing Firms in Nigeria. *International Journal of Business and Management*, 14(4), 107–115. <https://doi.org/10.5539/ijbm.v14n4p107>
- Al-Ani, M. K. (2014). Effects of Assets Structure on The Financial Performance: Evidence From Sultanate of Oman. *Journal of US-China Public Administration*, 11(2), 170–179.
- Anuar, R. Bin, Jais, M. Bin, & Tinggi, M. (2021). Effect of Good Corporate Governance and Leverage on Profitability-Mediated Tax Avoidance (Study on Mining Companies listed on the Indonesia Stock Exchange 2016 – 2019). *International Journal of Academic Research in Accounting Finance and Management Sciences*, 11(2), 202–221. <https://doi.org/10.6007/IJARAFMS>
- Das, P. K. (2017). Financing Pattern and Utilization of Fixed Assets - A Study. *Asian Journal of Social Science Studies*, 2(2), 20. <https://doi.org/10.20849/ajsss.v2i2.159>
- Domnişoru, S., & Vinătoru, S. (2008). The financial audit complexity of the fixed assets. *European Research Studies Journal*, 11(4), 49–62.
- Inyiama, O. I., Oluchukwu, R., & Nnenna, C. V. (2017). Evaluation of the Relationship between Assets Growth Rate and Financial Performance of Manufacturing Firms in Nigeria. *International Journal of Managerial Studies and Research*, 5(10), 63–73. <https://doi.org/10.20431/2349-0349.0510006>
- Lubyayaya, A. V., Izmailov, A. M., Nikulina, E. Y., & Shaposhnikov, V. A. (2016). Evaluation of the effect of non-current fixed assets on profitability and asset management efficiency. *International Journal of Environmental and Science Education*, 11(15), 7745–7753.
- Madubuko Cyril, U., & Eunice Ogbonna, E. (2013). Evaluation of the Effect of Non-Current Assets on Return on Assets of Cement Manufacturing Industry in Nigeria. *Journal of Theoretical & Applied Statistics*, 3(2), 22–30. <https://doi.org/10.5829/idosi.jtas.2013.3.2.1206>
- Mary, I., David Okelue, U., & Uche, A. (2012). Investment in Fixed Assets and Firm Profitability: Evidence from the Nigerian Brewery Industry. *European Journal of Business and Management Wwww.Iiste.Org ISSN*, 4(20), 10–18. www.iiste.org
- Nnate, C., Oduneka, E., & Uche, B. (2021). Effect of Capital Allowance on Manufacturing Companies in Enugu State Nigeria. *Social Science and Humanities Journal*, 05(04), 2144–2153. <http://sshj.in/index.php/sshj/>
- Nworie, G. O., Moedu, V. O., & Onyali, C. I. (2023). Contribution of Current Assets Management to the Financial Performance of Listed Consumer Goods Firms in Nigeria. *International Journal of Trend ...*, 7(1), 77–87. https://www.researchgate.net/profile/Gilbert-Nworie/publication/366866962_Contribution_of_Current_Assets_Management_to_the_Financial_Performance_of_Listed_Consumer_Goods_Firms_in_Nigeria/links/63b5ccee_c3c99660ebcb0de8/Contribution-of-Current-Assets-Manage
- Okobo, M. M., Ugwoke, R. O., & Akpan, E. E. (2022). Investment in tangible noncurrent assets and financial performance of food manufacturing firms in Nigeria. *Investment Management and Financial Innovations*, 19(3), 360–372. [https://doi.org/10.21511/imfi.19\(3\).2022.30](https://doi.org/10.21511/imfi.19(3).2022.30)

- Olatunji, T. E., & Adegbite, T. A. (2014). Investment in Fixed Assets and Firm Profitability: Empirical Evidence from the Nigerian Banking Sector. *Asian Journal of Social Sciences and Management Studies*, 1(3), 78–82. <http://www.asianonlinejournals.com/index.php/AJSSMS>
- Sahade. (2023). The Influence of Fixed Asset Investment on Profitability (A study on PT . SEMEN TONASA in Pangkep Regency). *Jurnal Administrare: Jurnal Pemikiran Ilmiah Dan Pendidikan Administrasi Perkantoran*, 10(1), 195–202.
- Salehi, M., Dashtbayaz, M. L., & Gouji, A. S. (2020). The Effect Of Intellectual Capital On Corporate Performance. *ABAC Journal*, 40(4), 149–173.
- Shafi’u, A. K., Noraza, M. U., & Saleh, M. B. (2017). The impact of intellectual capital on the financial performance of listed Nigerian food products companies. *Journal of Accounting and Taxation*, 9(11), 147–160. <https://doi.org/10.5897/jat2017.0246>
- Uka, E. E., Ikem, O. C., & Itah, A. Y. A. (2023). Investment in Non-Current Assets and Financial Performance of Quoted Manufacturing Firms in Nigeria. *East African Scholars Journal of Economics, Business and Management*, 6(9), 318–330. <https://doi.org/10.36349/easjebm.2023.v06i09.003>