



Taraba State University, Jalingo  
Faculty of Management Sciences

ISSN NO. 1118-3527 for "Journal Of Management Science Research and Contemporary Issues (JMSRCI)  
Vol 2 (2), 2025

## **EFFECT OF TAX INCENTIVES ON FINANCIAL PERFORMANCE OF MANUFACTURING INDUSTRIES IN NIGERIA**

**BY**

**Prof. A. D. Zubairu  
YAKUBU, Gimba Ibrahim**

**Dr. Dr. M. A. Liman  
Dr. S. A. Halimatu**

**Nasarawa State University, Keffi  
Department of Taxation**

### **Abstract**

This study investigates the effect of tax incentives on the financial performance of manufacturing firms in Nigeria, focusing on tax holidays, capital allowances, investment tax credits, export tax incentives, and tax relief for research and development (R&D). The main objective was to examine how these incentives influence profitability, measured by return on assets (ROA), while assessing the distinct impact of each type of incentive. The study population comprised 58 manufacturing firms listed on the Nigeria Exchange Group (NGX) as of December 2024, and a sample of 32 firms was selected using proportionate sampling based on continuous listing from 2015 to 2024. Regression analysis was employed to test the relationships between tax incentives and financial performance, with variables measured using established methodologies from prior research. Findings revealed that tax holidays and Export tax incentives often fail to enhance profitability, as they have negative significant effect on financial performance of listed manufacturing firms in Nigeria. In contrast, capital allowances and investment tax credits have positive significant effect on financial performance of listed manufacturing firms in Nigeria. Furthermore, R&D tax relief has negative insignificant effect on financial performance of listed Manufacturing firms in Nigeria. The study concludes that tax incentives can enhance financial performance when strategically utilized, and it recommends that manufacturing firms reinvest tax reliefs into operations, plan and prioritize productive investments, build capacity to leverage incentives effectively, and adopt long-term R&D strategies.

**Keywords: Financial Performance, Return on Assets (ROA), and Tax Incentives**

### **Introduction**

The manufacturing sector plays a critical role in fostering economic growth, industrialization, and technological advancement across the world. A robust manufacturing base is often a significant driver of job creation and economic diversification. In both developed and developing nations, tax incentives have become a key fiscal policy tool designed to stimulate investment and enhance the financial performance of firms, particularly in the manufacturing sector. Tax incentives such as tax holidays, capital allowances, investment tax credits, export tax incentives, and research and development (R&D) tax reliefs are regularly deployed to encourage firms to invest in capital projects, engage in innovation, and expand their operations. These incentives are intended to reduce the financial burden on companies, thereby increasing profitability, improving liquidity, and, in some cases, boosting overall economic productivity (Boadi & Appiah, 2020). Governments



use tax incentives not only to attract domestic investment but also to make industries more competitive on a global scale, particularly in emerging markets such as Nigeria, where the manufacturing sector faces significant challenges.

In developed economies, tax relief schemes have been instrumental in fostering innovation and competitive advantages within industries. For instance, investment tax credits, which provide firms with deductions based on their capital expenditures, have been a core component of industrial policy in the United States (Cesarotti et al., 2019). This system enables manufacturers to lower their upfront costs, making it easier to invest in new technologies and infrastructure. Similarly, capital allowances, which permit businesses to deduct the cost of capital assets over time, have facilitated expansion in the industrial sector. Firms benefit from these measures by reducing their taxable income, which subsequently enhances their cash flow and profitability (OECD, 2020). Furthermore, tax holidays offered to new firms help alleviate the financial pressures they face when establishing operations, particularly in capital-intensive industries. Such incentives encourage both domestic and foreign investment, fostering a more competitive and innovative manufacturing environment (Cesarotti et al., 2019).

Tax holidays for new manufacturing firms. This incentive allows firms to be exempt from certain taxes for a specified period, typically between three to five years, depending on the nature of the industry. This period of tax exemption is aimed at providing firms with the financial relief needed to overcome the initial challenges of setting up operations, such as securing financing, building infrastructure, and establishing a customer base. While tax holidays are designed to encourage investment, they have not always led to sustainable financial performance in Nigerian manufacturing firms. The implementation of tax holidays often faces challenges such as inadequate monitoring and enforcement, which may result in some firms not fully benefiting from the incentive (Adeniran et al., 2018).

Capital allowances are another critical tax incentive used to encourage investment in the manufacturing sector. In Nigeria, capital allowances are provided under the Companies Income Tax Act (CITA), which allows manufacturing firms to deduct the cost of acquiring capital assets, such as machinery, equipment, and buildings, from their taxable income over time. This incentive is particularly important for manufacturing firms, as they tend to have substantial capital expenditures that need to be recouped over time (Owolabi & Adegbe, 2020).

Investment tax credits are another incentive designed to encourage manufacturing firms to increase their capital investment. By offering firms the opportunity to reduce their tax liabilities based on the amount they invest in qualifying capital expenditures, investment tax credits can be a powerful tool for stimulating manufacturing sector growth. However, in Nigeria, the impact of investment tax credits has been less significant, as many firms face challenges in accessing the necessary financing to make the required investments. In some cases, the benefits derived from the tax credits are outweighed by the high capital costs of setting up or upgrading manufacturing facilities (Ayodele et al., 2020). Export tax incentives are also common in many countries, particularly for manufacturing firms engaged in export activities. By reducing or eliminating taxes on export goods, governments aim to make their products more competitive in international markets. In Nigeria, the Export Expansion Grant (EEG) has been implemented to encourage manufacturing firms to export their products. Despite these incentives, Nigerian manufacturing firms still face significant barriers to increasing their export volumes, such as poor logistics, inadequate infrastructure, and the high cost of doing business (Adewuyi et al., 2019).



Research and development (R&D) tax reliefs are another critical measure designed to encourage innovation within the manufacturing sector. By offering firms tax deductions or credits for expenses incurred on R&D activities, governments hope to foster technological advancement and improve productivity within industries. In Nigeria, R&D tax incentives have been provided under the Nigerian Investment Promotion Commission (NIPC) Act, which offers tax reliefs to firms involved in R&D (Udo & Anigbogu, 2021). Studies such as those by Adebayo and Owolabi (2021), Ayodele, Adebayo, and Olubunmi (2020), and Shittu and Nwachukwu (2019) suggest that while tax incentives are available to firms, many manufacturers either do not fully access these incentives or fail to utilize them effectively due to bureaucratic inefficiencies, lack of awareness, or capacity limitations. Moreover, the gap in knowledge regarding how these incentives interact with firm-specific characteristics, such as firm size, management capacity, and access to finance, further complicates the evaluation of their impact on financial performance.

Ayodele et al. (2020) observed that investment tax credits and export tax incentives positively affected large firms, they also highlighted that small and medium-sized enterprises (SMEs) faced more significant barriers in accessing these benefits. Shittu and Nwachukwu (2019) emphasized that despite the government's efforts to incentivize firms through tax holidays and other relief measures, the benefits are often not realized due to poor administrative processes and a lack of proper guidance on how to claim these incentives. Therefore, the main objective of this study is to examine the effect of tax incentives on financial performance of listed manufacturing companies in Nigeria with specific objectives to: assess the effect of tax holiday, capital allowance, investment tax credits, export tax incentives, and research and development (R&D) tax reliefs on financial performance of listed manufacturing companies in Nigeria being proxy by Return on Assets (ROA) from 2015-2023. The study is hypothetical that tax holiday, capital allowance, investment tax credits, export tax incentives, and research and development (R&D) tax reliefs has no significant effect on ROA of manufacturing companies in Nigeria.

The motivation for this study stems from the need to critically assess the actual impact of these tax incentives on the financial performance of manufacturing industries in Nigeria. While tax incentives are often cited as key policy tools for stimulating economic growth, there is a gap in the literature regarding their effectiveness in the Nigerian context. The manufacturing sector continues to face challenges that prevent the full utilization of these incentives, such as inadequate infrastructure, unstable macroeconomic conditions, and poor implementation of tax policies. Therefore, it is essential to examine how different tax incentives affect the financial outcomes of Nigerian manufacturing firms. This study aims to provide empirical evidence that can guide policymakers in refining tax policies to enhance the financial performance.

## **Literature Review**

### **Concept of Financial Performance**

Financial performance is a fundamental concept in corporate finance and accounting, reflecting a company's ability to generate profit and create value for its stakeholders. It encompasses various dimensions, including profitability, liquidity, solvency, and efficiency, and is often measured through key financial ratios. The significance of financial performance extends to assessing the effectiveness of management decisions, the efficiency of operations, and the overall health of the organization. According to Koller, et al. (2020), financial performance metrics are essential for evaluating how well a company uses its resources to generate earnings relative to its assets, equity,



and revenue. Financial performance refers to the achievement of a company in terms of profitability, efficiency, liquidity, and stability over a specific period of time. It is typically measured using various financial indicators and ratios that provide insight into how well the company is using its resources to generate revenue and maximize shareholder value (Hitt, et al., 2016; Pandey, 2012).

Hitt, et al. (2016) defined financial performance as the outcome of a company's financial strategies and decisions, reflected in measures such as profitability, return on assets, and cash flow adequacy. It indicates the effectiveness of management in creating value for shareholders. According to Kaplan and Norton (1996), financial performance is evaluated through financial metrics that assess profitability, liquidity, solvency, and efficiency.

Pandey (2012) opined that financial performance encompasses the financial health and profitability of a firm, evaluated through various ratios and indicators such as return on equity, earnings per share, and operating profit margin. It reflects the company's ability to achieve its financial objectives and create shareholder value. Brigham and Ehrhardt (2013) see financial performance as the ability of a firm to generate earnings and profitability, manage liquidity and solvency, and optimize the use of its assets to create value for shareholders while Ross, et al. (2016) see financial performance as a measures of the effectiveness of a firm's financial decisions and strategies in generating profits and cash flows, ensuring liquidity, and maximizing shareholder wealth.

**Return on Assets (ROA)** is a financial ratio that measures a company's profitability by evaluating how effectively it uses its assets to generate earnings. It is calculated by dividing net income by average total assets. ROA is expressed as a percentage and indicates how efficient a company is at using its assets to generate profit. A higher ROA indicates better asset utilization and efficiency, whereas a lower ROA suggests less effective use of assets.

Hitt, et al. (2016) opined Return on Assets (ROA) measures the profitability of a company relative to its total assets, indicating how effectively the company is using its assets to generate profit. According to Pandey (2012), ROA evaluates the efficiency of asset utilization by comparing net income to average total assets, reflecting the company's profitability from its investments in assets. To Gitman and Zutter (2019), ROA assesses the company's ability to generate earnings relative to its investments in assets, indicating how efficiently the company is utilizing its resources." (Principles of Managerial Finance, Pearson).

According to Ross, et al. (2016), ROA measures how efficiently a firm uses its assets to generate profit. It is calculated by dividing net income by average total assets, indicating the company's ability to generate earnings relative to its asset base. Bodie, et al. (2014) defined ROA as a key measure of profitability that evaluates the company's ability to generate earnings from its investments in assets. It is calculated by dividing net income by average total assets, providing insights into asset efficiency and profitability.

Furthermore, Van Horne and Wachowicz (2013) stated that ROA assesses the profitability of a company's assets by comparing net income to average total assets. It reflects how effectively the company is using its resources to generate profit and is a critical measure of financial performance while Brigham and Ehrhardt (2013) opined that ROA measures the profitability of a company's investments in assets.



### **Concept of Tax Incentives**

Tax incentives are relief's granted to tax payers or industries in the form of set-offs from the total income before tax liability is determined. It could be in form of tax holidays or waivers. It is established by legislations or statute authorizing such payment of tax. According to Alexander Klemm (2009) Tax incentives are defined as all measures that provide for a more favorable tax treatment of certain activities or sectors compared to what is granted to general industry. Tax holidays are temporary exemption of a new firm or investment from certain specified taxes, typically at least corporate income tax. Sometimes administrative requirements are also waived, notably the need to file tax returns. Partial tax holidays offer reduced obligations rather than full exemption. Investment tax credit are deduction of a certain fraction of an investment from the tax liability. Rules differ regarding excess credits (credits in excess of tax liability) and include the possibility that they may be lost, carried forward or refunded.

### **Concept of Tax Holidays**

Tax holiday is a governmental incentive that temporarily reduces or eliminates taxes for consumer or business. Pioneer companies investing in specified industrial activities may on application, be granted a tax holiday for three years initially, which may be extended for up to two years upon satisfaction of specified conditions. Examples of economic activities that may be granted a tax holiday include glass and glassware manufacturing, manufacturing of fertilizers, and steel manufacturing. The tax holiday has been often used by developing and transition countries. It is directed to new firms and is not available to existing operations. With a tax holiday, new firms are allowed a period of time when they are exempt from the burden of income taxation. Sometimes, this grace period is extended to a subsequent period of taxation at a reduced rate.

For transition countries, one advantage of tax holidays is that they provide a simple regime for foreign investors because there is no need to calculate taxes in the early years of operation, at a time when the tax systems are not yet fully developed. This view is certainly not valid for long-term investors, for whom the tax treatment after the holiday has expired is as important as the treatment during the holiday in determining the after-tax profitability of the investment. In addition, the tax treatment of the initial capital expenditures made before and during the holiday period must be determined so that appropriate records will be available for the calculation of depreciation when the holiday ends.

### **Concept of Capital Allowance**

Capital allowances are akin to a tax deductible expense and are available in respect of qualifying capital expenditure incurred on the provision of certain assets in use for the purposes of a trade or rental business, they effectively allow a taxpayer to write off the cost of an asset over a period of time. Simply put, capital allowance is a way of reducing tax bill of a person that spent money on certain item used to benefit his business in the long term. The money incurred in procuring the item is termed 'qualifying expenditure. According to Kiabel (2012), capital expenditure is not an admissible expense in earning profits. But capital expenditure often results in the creation of fixed assets, such as plant or machinery, building etc. which are used for the purpose of earning profits. It is only therefore reasonable to give relief for the purposes of taxation in respect of these items of expenditure. Special allowances usually referred to as capital allowances are designed to provide this form of relief. When a fixed asset is put into use by a business, its value gets eroded



as a results of physical wear and tear, the passage of time or as a result of obsolescence. Moreover, income tax laws supported and strengthened by accounting practice, do not allow the cost of creating these assets as direct debits or charges against the profit of the business. It therefore becomes reasonable for the taxpayer to set aside some portions of the profit annually with which to replace the asset in question once its usefulness has expired. The setting aside to the profit and loss account portions of the cost of a fixed tangible asset to those periods benefiting from the use of the asset is referred to as depreciation. In the absence of such a charge the amount of profit shown by the accounts would be overstated by the need to make good periodically the wear and tear on or obsolescence of the asset used. This apart, depreciation charge ensures that the resources necessary for the replacement of fixed assets are retained in the business. Capital allowance is therefore seen as a relief that is granted to the taxpayer who incurred qualifying capital expenditure during a basis period in respect of assets in use for the purposes of the trade or business.

### **Investment Tax Credit**

Investment Tax credit is granted to a company that has incurred an expenditure for the replacement of an obsolete plant and machinery. This allowance is provided at the rate of 15 percent of the qualifying expenditure incurred on reconstructing the obsolete plant and machinery. According to Shah (2005), investment tax credit is usually earned when qualified buildings or equipment are purchased for use in a business. Likewise, Ohaka, and Agundu, (2012) opined that it may be applied against federal income tax and it allows companies to deduct a specified percentage of certain investment costs from their tax liability, in addition to the normal allowances for depreciation. Klemm (2009) described investment tax credit as a deduction of a certain fraction of an investment from the tax liability. Rules differ regarding excess credits (credits in excess of tax liability) and include the possibility that they may be lost, carried forward or refunded. Uwaigbe et al (2016) viewed investment tax credit as an incentive granted to a company that purchased qualified assets for use in production. Investment Tax Credit had all been adopted by various governments since the 1960s in order to protect domestic business entities from foreign competitors. Investment tax credit is now better applied towards supporting strategic sectors as well as promoting sustainable economic development. According to Brodzka (2013), investment tax credits are special deductions against corporate income tax otherwise payable. Investment tax credits are earned as a fixed percentage of qualifying investment expenditures. Investment tax credits are used to directly reduce the amount of taxes to be paid. Earned as some percentage of qualifying expenditures, they provide an offset against taxes otherwise payable rather than a deduction against the tax base. The main argument for using these instruments – as opposed to a reduced corporate income tax rate – is that subsidies to the cost of purchasing capital benefit only new investment. As a consequence, a larger reduction in the effective tax rate on investment can be achieved at a lower revenue cost. Investment tax credits according to UNCTD (2000), may be flat or incremental. A flat investment tax credit is earned as a fixed percentage of investment expenditures incurred in a year on qualifying (targeted) capital. In contrast, an incremental investment tax credit is earned as a fixed percentage of qualifying investment expenditures in a year in excess of some base that is typically a moving-average base (e.g. the average investment expenditure by the taxpayer over the previous three years). The intent behind the incremental tax credit is to improve the targeting of the relief to incremental expenditures that would not have Kiabel (2011) argued that investment tax credit has a direct bearing on the tax liability of the



beneficiary since it is deducted directly from the tax liability. He further states that the purpose of this incentive is to ensure that it is utilized in business expansion. An investment allowance of 10% on the cost of qualifying expenditures in respect of plant and machinery is available as a deduction from assessable profits in the year of purchase. This incentive has been deleted effective 1 September 2023. However, there is scope to claim the incentive for expenditure incurred on or before the effective date. It is also noteworthy that there is no restriction to the full claim of capital allowance in any year of assessment for companies in the mining, manufacturing, and agricultural sectors, and upstream and midstream gas operations (Uwaegbute, et al , 2025).

### **Concept of Export Tax Incentives**

Export tax incentives are fiscal concessions directed at reducing the effective tax burden on firms that generate foreign exchange through export activities. These incentives can take the form of tax reliefs on export income, duty drawbacks, or exemptions on certain taxes to enhance export competitiveness and reduce the cost disadvantage in international markets. Export-related incentives are part of broader tax incentive schemes administered under laws like the Industrial Development (Income Tax Relief) Act (including pioneer status and export accomplishment incentives), which aim to encourage industrialization through export expansion and investment growth. (Rapu, et al 2013).

Developing countries have a long history of export incentives to decrease overall export tax burdens, allowing exporters to minimize costs without lowering profit. Benefits like these have taken for various kinds over the years, including tax and non-tax benefits. This covers tax credits, export funding programs, and export facilitation. As well as justifying improving incentives to encourage the export sector investment, export incentives are also politically driven, and their impact on economic distortions is sometimes ignored. (Hussien, A. M. 2021).

In Nigeria, the government has put incentives in key sectors like manufacturing sector. Export Processing Zones (EPZ), for instance, are big beneficiaries of the incentives. Numerous tax incentives are provided in Nigeria's EPZs, the most significant of which are: 10 year corporate income tax holiday, followed by a 25% rate compared to the standard 30% for the next 10 years and 10 year exemption from all withholding taxes, exemption from import duties on machinery, raw materials, and inputs (Network-Africa, & Action Aid International, 2016).

### **Concept of Tax Relief for Research Development**

Industrial establishments are expected to engage in Research and Development (R&D) for the improvement of their processes and products. Up to 120 percent of expenses on (R&D) are tax deductible, provided that such R&D activities are carried out in Nigeria and are connected with the business from which income or profits is derived. Also, for the purpose of R&D on Local raw materials, 140 per-cent of expenses are allowed. Where the research is long-term, it will be regarded as a capital expenditure and will be written off against profit. The result of such research could be patented and protected in accordance with internationally accepted Industrial Property Rights.

Research and development (R&D) expenses are another aspect related to firms' investment decisions which contribute to lower effective tax rates. There are many fiscal incentives through multiple jurisdictions that promote the investment in R&D. Research and development programs are conditional on tax rates and credit incentives (Hanlon & Heitzman, 2010). Research and development (R&D) is the effort a firm put in toward the innovation, introduction and



improvement of its products and procedures. It is a series of investigative activities to improve existing products and procedures or to lead to the development of new products and procedures. R&D is different from most activities performed by a corporation in the process of operation. The research and development is typically not performed with the expectation or goal of immediate profit. Instead, it is focused on long-term profitability for a company. The tax system in Nigeria encourages firm to embark on research & development by allowing the cost incurred to be deducted. It can therefore be said that investments in R&D helps to reduce the amount taxed.

### **Empirical Review**

Nwanyanwu, et al (2025) investigated the relationship between Investment Tax Credit and the financial performance of Nigerian agro-allied companies. The measures of financial were net profit margin and return on equity. Secondary data were obtained from the published audited financial statements of the five listed agro-allied companies listed on the Nigerian Stock Exchange for a period of 13 years (2012-2024). The data were analyzed with the aid of the Statistical Package for Social Science (SPSS). Specifically, descriptive statistical tools were used to assess the frequency of the study variables. To test the null hypotheses, regression analyses were performed to determine the relationship between the explanatory variable and the dependent variables. The study found a negative and statistically insignificant relationship between investment tax credits and net profit margin, and a positive but statistically insignificant relationship between investment tax credits and return on equity of listed agro-allied companies in Nigeria.

Chukwu and Okafor (2023) investigated the effect of investment tax credits on the financial performance of listed agricultural firms in Nigeria. The study employed a panel least squares regression technique on secondary data obtained from the financial reports of 14 firms from 2012 to 2021. Results indicated that firms benefiting from investment tax credits showed significantly higher returns on assets and equity compared to non-beneficiary firms. The study emphasized that tax credits serve as important fiscal stimuli for capital formation. However, the research could be critiqued for ignoring sectoral risks peculiar to agriculture, such as climatic variability and market instability, which might influence firm outcomes.

Eze (2023) analyzed the influence of tax holidays on the financial performance of agro-allied firms in Nigeria. Using secondary data from audited financial statements of 15 agro-allied firms from 2012 to 2021, the study applied panel regression techniques. Financial performance was proxied by return on assets (ROA), net profit margin (NPM), and earnings per share (EPS). The results indicated a significant positive relationship between tax holidays and ROA and EPS, but no significant effect on NPM. The study was thorough in controlling for firm size and leverage as confounding variables. However, the critique of the study includes its narrow focus on only agro-allied firms, which may not reflect broader industry dynamics. Furthermore, the study did not perform robustness checks such as using alternative performance measures or testing for autocorrelation, which could have improved the credibility of the results.

Nnadi (2023) assessed the effect of tax holidays on the financial performance of indigenous firms operating within Nigeria's Industrial Development Centers. The study employed a quasi-experimental design using propensity score matching (PSM) to compare firms that enjoyed tax



holidays with similar firms that did not over a period from 2011 to 2020. Financial performance was measured using return on equity (ROE) and gross profit margin (GPM). Results indicated that tax holidays significantly enhanced both ROE and GPM. The application of PSM improved causal interpretation by reducing selection bias. However, the study's major critique is that it did not account for the duration of the tax holidays, which may influence the magnitude of financial benefits, thereby risking an oversimplification of the effects.

Arowolo and Adebisi (2023) assessed the relationship between capital allowances and the financial performance of Nigerian listed technology firms. They used panel data from 12 firms for the period 2012–2021 and applied a dynamic panel estimation method (system GMM) to address endogeneity. The study found that capital allowances significantly improved return on assets and return on equity, enabling firms to reduce taxable income and enhance reinvestment opportunities. A key critique of the work is that it did not examine whether the size of the firms moderated the strength of the relationship between capital allowances and financial performance.

Chinwe and Okafor (2023) examined the moderating role of capital allowances on the relationship between asset investment and financial performance of manufacturing firms in Nigeria. Data were collected from audited annual reports of 30 firms from 2011 to 2021, and the researchers adopted a hierarchical multiple regression technique. The study found that capital allowances positively moderated the relationship between asset investment and financial performance, suggesting that tax reliefs amplified the beneficial effects of asset acquisitions on profitability metrics like earnings per share (EPS) and return on investment (ROI). A notable critique of the study is the potential endogeneity between capital investments and financial performance, which the authors acknowledged but did not correct for, possibly biasing the results.

Kabir and Yusuf (2023) examined the effect of export promotion incentives, including tax rebates, on the financial performance of Bangladeshi textile exporters. Using structural equation modeling (SEM) on survey data from 120 exporting firms, they found that tax rebates positively impacted financial performance, mediated by increased market expansion efforts. While the study was methodologically sound, it suffered from potential endogeneity issues as firms that performed well might have been more likely to access incentives.

Akinyemi and Ogunleye (2022) explored the effects of export tax incentives on the financial performance of Nigeria's textile industry. They utilized a fixed-effects regression model on panel data from 2010 to 2020 for 30 firms. Their findings revealed that export tax incentives led to increased profitability, measured by return on sales and return on assets. However, a critique of this study is that it did not control for external factors such as global textile market conditions, which might have impacted financial performance independently of the tax incentives.

## **Theoretical Framework**

### **Incentive Theory of Taxation**

The Incentive Theory of Taxation, developed by Stiglitz (1985), explores the role of tax incentives in shaping firms' behavior, particularly in terms of how they allocate their financial resources. This theory asserts that tax reliefs, such as R&D tax credits or investment tax allowances, influence firms to engage in activities that contribute to economic growth, such as innovation, capital



expansion, or environmental sustainability. The theory suggests that tax incentives align the interests of the government and firms by encouraging behavior that leads to broader economic benefits while simultaneously improving a firm's financial performance. According to the Incentive Theory of Taxation, tax incentives are a tool used by governments to encourage firms to invest in areas that have positive externalities, such as technological advancement, environmental conservation, and economic development. By reducing the financial burden on firms through tax breaks, governments incentivize businesses to invest in R&D, infrastructure, or new market development, which can improve their efficiency and profitability. This alignment of tax incentives with broader economic goals is key to understanding how these incentives can enhance both firm performance and overall economic growth.

**Tax Preference Theory**, introduced by Musgrave (1959), focuses on the role of tax incentives in influencing the behavior of firms and ultimately improving their financial performance. The central premise of this theory is that tax incentives, such as tax credits, deductions, or exemptions, lower a firm's tax liability, thereby increasing its after-tax income. This increase in disposable income allows firms to reallocate resources toward productive investments, such as expanding operations, upgrading equipment, or investing in research and development (R&D). These investments can lead to improvements in operational efficiency, enhanced competitiveness, and, ultimately, higher financial performance.

This theory argues that tax incentives can be strategically used by governments to stimulate particular activities within the private sector. For instance, tax credits for R&D encourage companies to invest in innovation, while tax holidays may attract foreign direct investment. The reduction in tax burdens that tax incentives provide gives firms the financial flexibility to pursue these investments without worrying about the immediate costs. This can lead to an expansion of the firm's capacity, better profitability, and a more robust market position. The theory underscores the idea that tax incentives act as a catalyst for business growth by making it financially viable for firms to invest in key areas that drive long-term performance.

### **Research Design**

This study adopts ex-post facto research design. The research design is considered or viewed as appropriate because the study depended intensely on already existing data which were extracted from published audited annual financial statements of the companies. The secondary source of data collection was employed because there is the availability of this data in the annual financial reports.

### **3.2 Population, Sample and Sampling Technique**

The population of this study comprised of all 58 manufacturing companies cutting across different sub-sectors (consumer goods, industrial goods, conglomerate, oil and gas, agricultural and natural resources) listed on the Nigeria Exchange Group (NGX) as at 31st December 2024. The selection of the manufacturing sector for this study was anchored in its intrinsic complexity and economic significance, making it an ideal setting for investigating the delicate interplay between tax incentives and financial performance. Table 3.1 below provide list of the population.



**Table 3.1: Population of the study**

<b>Sub-sectors</b>	<b>Population</b>
Consumer goods	20
Industrial goods	11
Oil & Gas	9
Conglomerates	5
Agriculture	5
Natural Resources	4
Construction R/E	4
<b>Total</b>	<b>58</b>

For this study, the sample size was scientifically determined using Taro Yamane formula as shown below:

$$n = \frac{N}{1+N(e)^2}$$

where:

n= sampling size

N = Total population = 51

e = level of significance = 0.05

∴ Sample size ≈ 51

However, the study utilized only 32 firms as samples. This is based on the criteria that all the firms must be listed prior to 2015 and remained listed to 2024.

This study applied two sampling techniques for the purpose of the study. In the first stage, the study adopted proportionate sampling technique. This sampling technique ensures that firms in each sub-sector were proportionally represented in the final sample.

**Table 3.2: Distribution of Sample by subsector**

<b>Sub-sectors</b>	<b>Population</b>	<b>Projected Sample</b>	<b>Actual Sample</b>	<b>Percentage</b>
Consumer goods	20	18	14	44%
Industrial goods	11	10	7	22%
Oil & Gas	9	8	7	22%
Conglomerates	5	3	1	3%
Agriculture	5	4	1	3%
Natural Resources	4	4	1	3%
Construction&R/E	4	4	1	3%
<b>Total</b>	<b>58</b>	<b>51</b>	<b>32</b>	<b>100</b>



### Method of Data Collection

The study used the data mainly from secondary sources. This is because the estimation of the model employed in the study requires using data in the form of financial and market information. In this regard, the sources of data for the study were drawn from the published audited annual reports and accounts of the listed manufacturing companies for all the years that were covered in the study.

### Technique for Data Analysis and Model Specification

The study adopted quantitative methods to examine the effect of tax incentives on the financial performance of manufacturing companies in Nigeria. Descriptive statistics were used to summarize the data, including measures of central tendency and dispersion, in order to identify trends and patterns over the period 2015–2024. Inferential analysis was conducted using multiple regression to determine the relationship between tax incentives and tax revenue. Diagnostic tests such as multicollinearity, normality, heteroscedasticity, and Hausman tests were performed to ensure the reliability and validity of the estimates. The regression model specified tax revenue as the dependent variable, while different forms of tax incentives (e.g., tax holidays, capital allowances, and deductions) served as the independent variables.

Hypothesis Testing: The regression analysis was used to test hypotheses regarding the impact of different tax incentives on tax revenue. The linear function between the variables is specified below:

$$ROA_{it} = \beta_0 + \beta_1 THD_{it} + \beta_2 CAL_{it} + \beta_3 ITC_{it} + \beta_4 ETI_{it} + \beta_5 TRR_{it} + \varepsilon_{it}$$

Where:

*ROA* = Return on Asset

*THD* = Tax Holidays

*CAL* = Capital Allowance

*ITC* = Investment Tax Credits

*ETI* = Export tax incentives

*TRR* = Tax Relief for Research and Development

*t* = year

*ε* = Error Margin

$\beta_0$  = Intercept

$\beta_1 - \beta_5$  = Regression Coefficient



**Definitions of the Variables in the Model**

S/N	Variable	Measurement	Source
1	Financial Performance	$ROA = Net\ income / Total\ asset$	Asare and Boateng (2021).
2	Tax Holidays	Tax Holiday Benefit = Expected Tax without Holiday – Actual Tax Paid	Mensah (2020)
3	Capital Allowance	Tax Savings from Capital Allowances = Capital Allowances Claimed × Statutory Tax Rate	Adebayo and Owolabi (2021).
4	Investment Tax Credits	ITC = Investment Value × ITC Rate	Abubakar and Idris (2020).
5	Export tax incentives	Estimated Export Tax Incentive = (Statutory Tax Rate – Effective Tax Rate) × Profit Before Tax	Abubakar and Bello (2020).
6	Tax Relief for Research and Development	Tax Relief = R&D Tax Credit Disclosed Or Tax Relief = R&D Expenditure × Enhancement Rate × Tax Rate	Bassey and Eze (2021).

**Justification of Method**

Panel multiple regression is chosen for this study because it efficiently analyzes both the cross-sectional differences among listed manufacturing companies and their financial performance trends over time. It controls for firm-specific characteristics and improves the accuracy of the estimated effects of tax incentives. The period 2015–2024 is selected to capture recent tax reforms in Nigeria, including the 2017 National Tax Policy, and the 2021 Finance Act, providing a comprehensive view of how tax incentives influence financial performance. Using panel data also addresses potential issues like omitted variable bias and enhances the robustness of the findings, making the methodology well-suited for evaluating the long-term effects of tax incentives on firm performance.

**Data Analysis**

Table 4.2.1 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
roa	320	.0416856	.3192801	-4.4859	1.5105
thd	320	8.811826	.9621376	5.3681	10.7772
cal	320	10.60239	.9012665	6.9948	12.3046
itc	320	3.782457	9.804895	.1235	147.4793
eti	320	8.706863	.9421226	4.0755	10.5213
trr	320	3.695329	4.048171	0	9.6197

**Source: Generated using Stata, 2025**

The descriptive statistics offer a clear preliminary picture of how the key variables behave and are distributed in the analysis of tax incentives and the financial performance of manufacturing firms in Nigeria. The study is based on 320 firm-year observations, which provides a sufficiently robust and balanced dataset to support reliable empirical analysis.



Financial performance, measured by Return on Assets (ROA), has an average value of about 0.042, indicating that manufacturing firms, on the whole, generate relatively modest returns from their asset base. However, the wide spread of values, reflected in the large standard deviation and the range from a minimum of -4.486 to a maximum of 1.511, points to considerable differences in performance across firms and over time. This suggests that while some firms struggle with severe losses, others are able to utilize their assets more efficiently, highlighting the diverse operating conditions within the Nigerian manufacturing sector.

**Table 4.2.2 Correlation Result**

	roa	thd	cal	itc	eti	trr
roa	1.0000					
thd	-0.0744	1.0000				
cal	0.0953	0.7983	1.0000			
itc	-0.0838	-0.0309	-0.0357	1.0000		
eti	0.0946	0.7634	0.9855	-0.0374	1.0000	
trr	-0.1368	0.2813	0.2608	-0.0368	0.2433	1.0000

**Source: Generated using Stata, 2025**

The correlation results presented in Table 4.2.2 provide preliminary evidence on the direction and strength of the relationships among financial performance and the various tax incentive variables considered in the study. Return on Assets (ROA), which serves as the measure of financial performance, shows generally weak correlations with the tax incentive variables, suggesting that no single incentive has a strong linear association with firm performance at this preliminary stage. Specifically, ROA exhibits a weak negative correlation with Tax Holidays (THD) at -0.0744, implying that higher levels of tax holidays are marginally associated with lower financial performance. However, the magnitude of this relationship is very small, indicating that tax holidays, on their own, may not have a strong direct influence on profitability. Similarly, ROA is weakly and negatively correlated with Investment Tax Credits (ITC) (-0.0838) and Tax Relief for Research and Development (TRR) (-0.1368). These results suggest that, at the bivariate level, firms that benefit more from these incentives do not necessarily record higher returns on assets, possibly due to adjustment costs, time lags, or inefficiencies in the utilization of such incentives. In contrast, ROA shows weak positive correlations with Capital Allowance (CAL) (0.0953) and Export Tax Incentives (ETI) (0.0946). This suggests that capital-related and export-oriented incentives may support firm performance, but their effects are likely influenced by other firm-specific or macroeconomic factors.

**Table 4.2.3 Variance Inflation Factor**

Variable	VIF	1/VIF
cal	1.45	0.689
eti	1.60	0.625
thd	2.94	0.339
trr	1.09	0.914
itc	1.00	0.998
Mean VIF	1.48	

**Source: Generated using Stata, 2025**



The Variance Inflation Factor (VIF) results indicate that multicollinearity is not a concern in the model. All explanatory variables record VIF values well below the commonly accepted thresholds of 10. Capital Allowance (CAL) and Export Tax Incentives (ETI) have low VIF values of 1.45 and 1.60 respectively, suggesting minimal correlation with other variables. Tax Holidays (THD) show the highest VIF of 2.94, but this value remains within acceptable limits. Tax Relief for Research and Development (TRR) and Investment Tax Credits (ITC) record VIF values close to 1, indicating near independence from other regressors. The mean VIF of 1.48 further confirms that multicollinearity is minimal, implying that the regression estimates are reliable and the model is well-suited for further analysis.

**Table 4.2.4 Breusch-Pagan Heteroskedasticity Test**

Ho: Constant variance  
Variables: fitted values of roa  
chi2(1) = 0.00  
Prob > chi2 = 0.9830

Source: Generated using Stata, 2025

The Breusch–Pagan heteroskedasticity test results indicate that the null hypothesis of constant variance cannot be rejected. The chi-square value of 0.00 with a probability of 0.9830 is far above the 5% significance level, suggesting the absence of heteroskedasticity in the model. This implies that the error terms are homoskedastic, and the regression estimates are efficient and reliable for inference.

**Table 4.2.5 Hausman Specification Result**

		(b)	(B)	(b-B)
sqrt(diag(V_b-V_B))	fixed	random	Difference	S.E.
thd	-.0518884	-.0611659	.0092775	.0095441
cal	.163241	.2247746	-.0615336	.0369838
itc	.0292744	.0295421	-.0002677	.0001149
eti	-.1605236	-.1508494	-.0096742	.0217038
trr	-.0078337	-.0062206	-.0016131	.0052614

b = consistent under Ho and Ha; obtained from xtreg  
B = inconsistent under Ha, efficient under Ho; obtained from xtreg  
Test: Ho: difference in coefficients not systematic  
chi2(5) = (b-B)' [(V\_b-V\_B)^(-1)] (b-B)  
= 183.34  
Prob>chi2 = 0.0000

Source: Generated using Stata, 2025

The Hausman specification test reported in Table 4.2.5 was conducted to determine the appropriate panel estimation technique between the fixed effects and random effects models. The null hypothesis of the test states that the difference in coefficients between the fixed and random effects models is not systematic, implying that the random effects estimator is appropriate and efficient.



**Table 4.2.6 Regression Result**

R-sq: within = 0.7394  
 between = 0.5071  
 overall = 0.6953

F(5,283) = 160.59  
 Prob > F = 0.0000

	roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
	thd	-.0518884	.0195281	-2.66	0.008	-.0903272 -.0134497
	cal	.163241	.0770665	2.12	0.035	.0115448 .3149372
	itc	.0292744	.0010604	27.61	0.000	.0271871 .0313617
	eti	-.1605236	.06359	-2.52	0.012	-.2856931 -.0353542
	trr	-.0078337	.0059437	-1.32	0.189	-.0195331 .0038657

**Source: Generated using Stata, 2025**

The model demonstrates strong explanatory power, with a within R-squared of 0.7394, indicating that about 74% of the variations in Return on Assets (ROA) within Nigerian manufacturing firms over time are explained by the tax incentive variables. The overall F-statistic of 160.59, with a probability value of 0.0000, confirms that the tax incentives jointly exert a statistically significant effect on the financial performance of firms in the manufacturing sector.

**Discussion of Findings**

Tax Holidays (THD) show a negative and statistically significant effect on ROA, with a coefficient of -0.0519 (p = 0.008). Consequently, the null hypothesis that tax holidays have no significant effect on the financial performance of manufacturing firms is rejected at the 5% level. This finding suggests that, within the Nigerian manufacturing sector, tax holidays may not translate into improved profitability, possibly due to weak implementation, inefficiencies, or firms’ inability to convert temporary tax relief into sustainable operational gains.

Capital Allowance (CAL) has a positive and statistically significant effect on ROA, with a coefficient of 0.1632 (p = 0.035). Thus, the null hypothesis of no significant effect of capital allowance on financial performance is rejected at the 5% significance level. This result highlights the importance of capital-based tax incentives in enhancing asset utilization and profitability in Nigeria’s manufacturing sector.

Investment Tax Credits (ITC) exert a strong positive and highly significant influence on ROA, as indicated by a coefficient of 0.0293 (p = 0.000). Accordingly, the null hypothesis that investment tax credits have no significant effect on the financial performance of manufacturing firms is rejected at the 5% level. This confirms that investment-oriented incentives are particularly effective in improving profitability through increased capital investment and expansion within the manufacturing sector.

Export Tax Incentives (ETI) display a negative and statistically significant relationship with ROA, with a coefficient of -0.1605 (p = 0.012). As a result, the null hypothesis of no significant effect of export tax incentives on financial performance is rejected at the 5% level. The adverse effect suggests that structural challenges such as high production costs, logistics constraints, and exchange rate volatility may limit the profitability of export-oriented manufacturing firms in Nigeria.



Tax Relief for Research and Development (TRR) has a negative but statistically insignificant coefficient ( $p = 0.189$ ). Therefore, the null hypothesis that R&D tax relief has no significant effect on the financial performance of manufacturing firms is accepted at the 5% significance level. This implies that R&D incentives do not have a measurable short-term impact on profitability in the Nigerian manufacturing sector, possibly because the benefits of R&D investments are long-term in nature or remain underutilized.

This study investigates the effect of tax incentives on the financial performance of manufacturing firms in Nigeria, focusing on tax holidays, capital allowances, investment tax credits, export tax incentives, and tax relief for research and development (R&D).

The analysis shows that tax incentives affect manufacturing firms' financial performance differently. Tax holidays often fail to improve profitability, as firms treat them as temporary windfalls rather than investing in operations. Capital allowances consistently enhance performance by enabling productive investment and lowering the cost of capital. Investment tax credits positively impact profitability by encouraging modernization and technological upgrades, though the benefits depend on firms' capacity to implement projects effectively. Export tax incentives have limited or negative effects due to structural challenges such as poor infrastructure and high logistics costs, while R&D tax relief shows little short-term impact, reflecting the long-term nature of innovation and the need for firm-level capability.

## **Conclusion and Recommendations**

### **Conclusions**

The findings indicate that tax holidays in Nigerian manufacturing firms often fail to improve financial performance. Although these incentives are designed to stimulate growth, firms tend to treat them as temporary windfalls rather than investing in operational or productive improvements. This behavior aligns with the fiscal illusion hypothesis, which suggests that temporary relief can reduce managerial pressure to enhance efficiency. Consequently, profitability remains stagnant or even declines.

Capital allowances demonstrate a consistently positive effect on the financial performance of manufacturing firms. By lowering the effective cost of capital, these allowances encourage firms to invest in machinery, equipment, and other productive assets, leading to improved asset utilization and higher returns.

Investment tax credits are strongly associated with improved profitability among manufacturing firms. By reducing the cost of investment, ITCs incentivize modernization, technological upgrades, and productivity improvements, which directly contribute to financial performance.

Export tax incentives appear to have limited or negative effects on the financial performance of Nigerian manufacturing firms. While designed to promote exports, these incentives often fail to overcome structural challenges such as poor infrastructure, high logistics costs, and unstable exchange rates. The benefits of export incentives are therefore constrained by these non-tax barriers, which can offset any potential gains. In contrast, firms in markets with stronger



infrastructure, supportive institutions, and efficient logistics systems benefit more from export incentives, emphasizing that their effectiveness is highly context-dependent.

R&D tax relief shows little immediate impact on profitability in Nigerian manufacturing firms. The long-term nature of R&D activities means that benefits often take time to materialize through enhanced innovation, productivity, and competitive advantage. Furthermore, the effectiveness of R&D incentives depends on the firm's absorptive capacity and the presence of a supportive innovation ecosystem.

### **Recommendations**

The following recommendations are provided:

- i. Manufacturing firms should approach tax holidays strategically, ensuring that any temporary relief is reinvested into operational improvements, expansion, or productivity-enhancing projects rather than treated as windfall gains. Setting internal performance targets tied to the use of such incentives can help convert tax relief into measurable profitability.
- ii. To maximize the benefits of capital allowances, manufacturing firms should prioritize investments in machinery, equipment, and other productive assets that directly enhance operations. Proper planning and allocation of resources to these projects will ensure that allowances translate into tangible financial gains.
- iii. Manufacturing firms should actively leverage investment tax credits by building internal capacity to implement modernization and technological upgrade projects efficiently. Ensuring readiness before claiming incentives allows them to fully capitalize on the benefits, improving productivity and long-term profitability.
- iv. When utilizing export tax incentives, manufacturing firms need to carefully assess operational and logistical challenges, such as infrastructure limitations and high shipping costs. By aligning export strategies with available incentives and addressing internal bottlenecks, they can increase the likelihood of turning incentives into improved financial performance.
- v. Manufacturing firms should adopt long-term strategies for R&D activities, pairing tax relief with innovation planning, capability development, and knowledge management systems. This approach ensures that R&D incentives lead to meaningful innovation, enhanced competitiveness, and eventual profitability over time.



## References

- Brodzka, A. (2013). *Tax incentives in emerging economies*. Business Systems and Economics, 3(1), 26-36.
- Dopemu, O. S., & Monday, J. U. (2024). *Tax incentives and business growth: Evidence from Nigeria's manufacturing industry*. Journal of Economics and Sustainable Development.
- Etim, O., Ihenyen, J. C., Ekanem, D. J., Umo, U. P., & Enang, E. R. (2024). *Tax incentives and corporate profitability of industrial manufacturing firms in Nigeria*. International Journal of Accounting Intelligence.
- Fridson, M. S., & Alvarez, F. (2011). *Financial Statement Analysis: A Practitioner's Guide*. Wiley.
- Funmilayo, A. F., Igbekoyi, O. E., Dagunduro, M. E., Falana, G. A., & Oke, O. E. (2022). *Tax incentives and liquidity performance of quoted industrial goods firms in Nigeria*. European Journal of Business and Management.
- Gitman, L. J., & Zutter, C. J. (2019). *Principles of Managerial Finance*. Pearson.
- Hillier, D., Grinblatt, M., & Titman, S. (2012). *Financial Markets and Corporate Strategy*. McGraw-Hill Education.
- Kiabel, B. D. (2011). *Corporate tax incentives in Nigeria*. Asian Economic Review, 3(4), 244-246.
- Klemm, A. (2009). *Causes, benefits, and risks of business tax incentives*. IMF Working Paper, 21(9), 1-27.
- Olaoye, M. O. (2022). *Tax incentives and financial performance of manufacturing companies in Southwest Nigeria* (Unpublished thesis). Lead City University.
- Oluwagbemiga, O. E., Adeyemi, A. J., & Omojola, O. S. (2024). *Tax incentives and firm performance: Evidence from listed manufacturing firms in Nigeria*. African Journal of Business and Economic Research.
- Oluwole, O. S., Adekunle, A. R., & Olusola, O. S. (2020). *Effect of tax incentives on the growth and development of manufacturing firms in Nigeria*. African Journal of Accounting and Financial Research, 3(1), 77-84.
- Organisation for Economic Co-operation and Development (2020). *Tax incentives for investment in developing countries*. OECD Publishing.
- Pandey, I. M. (2012). *Financial Management*. Vikas Publishing House.
- Penman, S. H. (2013). *Financial Statement Analysis and Security Valuation*. McGraw-Hill Education.
- Revsine, L., Collins, D. W., Johnson, B. W., & Mittelstaedt, H. F. (2015). *Financial Reporting and Analysis*. McGraw-Hill Education.
- Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2016). *Fundamentals of Corporate Finance*. McGraw-Hill Education.
- Shah, A. (2005). *Fiscal incentives for investment and innovation*. Oxford: OUP.
- Tsegba, I. N., Musa, S. J., & Ibe, A. (2021). *Impact of tax incentives on investment performance of listed manufacturing companies in Nigeria*. Journal of Accounting and Management Sciences, 1(1), 34-56.
- United Nations Center for Tax Policy and Administration. (2018). *Design and assessment of tax incentives in developing countries: Selected issues and country experience*. UN CIAT.
- Uwuigbe, U., Uwuigbe, O. R., Adeyemo, K., & Anowai, N. C. (2016). *Tax incentives and the growth of manufacturing firms in Nigeria*. The Social Sciences Journal, 11(7), 11-16.