



IMPACT OF ANNUAL ALLOWANCE ON THE FINANCIAL PERFORMANCE OF LISTED MANUFACTURING FIRMS IN NIGERIA

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ABSTRACT

Tax incentives is an inbuilt expansionary tax fiscal policy that has the capacity to boost economic growth and prosperity. The scheme over time has been undermined, misused and abused by the relevant quarters. This study tends to rekindle the need and opportunity available in sincere implementation of tax incentives aids available to listed manufacturing firms in Nigeria. The study specifically examined the effect of tax incentives proxied by tax holiday, loss relief, capital allowance and tax credit on profitability of listed manufacturing firms in Nigeria; assessed the impact of tax incentives on market value; evaluated the influence of tax incentives on liquidity and analysed the effect of tax incentives on operational efficiency of listed manufacturing firms in Nigeria. The population of the study consisted of thirty-four (34) consumers and industrial goods firms listed on Nigerian Exchange Group (NGX). Purposive sampling technique was used in selecting 20 firms for a period of twelve years from 2012 to 2023. Secondary data on variables such as tax holiday, loss relief, capital allowance, tax credit, profitability, liquidity, market value and operational efficiency were obtained from the audited annual reports of the sampled firms and website of Nigerian Investment Promotion Commission (NIPC). Descriptive statistics, correlation analysis, variance inflation factors and Dynamic Generalised Methods of Moment were employed as data analysis techniques. The result from objective one revealed that tax incentives proxied by annual allowance ($t= 0.1920$, $p<0.05$), loss relief ($t= 1.0652$, $p<0.05$) and tax holiday ($t= 0.5555$, $p<0.05$) had positive and significant influence on profitability measured by net profit margin. Results from objective two showed that annual allowance ($t\text{-stats} = 0.7394$ $p<0.05$), tax holiday ($t= 0.8216$, $p<0.05$) and tax credit ($t= 1.6872$, $p<0.05$) exerted positive and significant influence on Tobin's Q which is an index of market value. The result of

objective three disclosed that loss relief ($t = -0.7258, p < 0.05$), tax holiday ($t = -2.7772, p < 0.05$), tax credit ($t = -6.0322, p < 0.05$) had negative and significant effect on current ratio a proxy of liquidity. Outcome from objective four revealed that annual allowance ($t = 4.8056, p < 0.05$), loss relief ($t = 2.7903, p < 0.05$), tax holiday ($t = 1.2742, p < 0.05$) and tax credit ($t = 0.0966, p < 0.05$) had a positive and significant effect on asset turnover an index of operational efficiency. The study concluded that tax incentives have significant effect on financial performance of listed Nigerian manufacturing firms. It further recommended that policymakers should implement targeted incentive schemes or strategic incentive plans that target particular industries, or a strategic tax incentive that adds value or benefits the economy by expanding the manufacturing sector and reducing the tax burden in a way that increases demand for domestic goods in Nigeria.

Key Words: Annual Allowance, Financial Performance, Listed Manufacturing Firms, Nigeria

Introduction

Manufacturing companies in Nigeria have a very wide range of long-term financial performance, which ranges very bad to very good episodes (Timah & Chukwu, 2021). Chukwu and Wadike (2018) identified this trend and used it to categorise Nigerian brewing companies according to how consistently they made money. Consequently, it's safe to assume that several things influence the bottom lines of Nigerian manufacturing companies. A company's financial performance is closely related to its liquidity. A company is considered liquid if it can satisfy its short-term debts with its available cash on hand (Aluko, et. al., 2022). Planning and controlling a company's current assets and liabilities so that there is reduction in its risks of not being able to fulfil its short-term financial obligations and the risk of investing too much in these assets are both necessary for efficient liquidity performance (Hossein & Begum, 2020). Due to the fact that an organization's smooth operations can be negatively impacted by either inadequate or excessive liquidity, this largely influences the profitability and enterprises capacity to accomplish its economic pursuits (Abubakar, 2023).

Taxation is the process by which a portion of a person's or organization's income (or, on occasion, their goods and

services) is required to be paid to the government (Anyanwu, 2022). Tax payment serves the important aim of generating revenue for the government to spend on its various programs, redistribute wealth, and regulate the economy in a way that benefits all residents. Taxes, as defined by Ogbonna and Ebimobowei (2021), are levied by the legislative branch of a state on individuals and corporations for funding of public services and private necessities. Ogbonna and Ebimobowei (2022) noted further that taxes have allocation, distributional and stabilization functions. In Nigeria taxes are not necessarily earmarked to those expenditure most conducive to economic growth, either because of political 'inefficiencies' or because of redistribution policies that may yield benefit for society but will not be reflected in robust GDP growth rates (Akomolafe & Ohanyelu, 2022). The truth is that in Nigeria taxes are not earmarked to boost economic development because of corruption and other factors that affect the role of taxation as argued by Anyanwu (2022). He stated that the scope of these functions depends, among other things, to the political will and economic orientation of the people, their needs and aspirations as well as their willingness to pay tax. Ogbonna and Ebimobowei (2022) added finally that the extent to which a government can

perform its functions depend largely on the ability to design tax plans and administration as well as willingness and patriotism of the governed. The level of willingness and patriotism of the governed anchored on the political will power of the government to fight corruption and embark on expenditures that will boost the economy.

Taxation has been an important tool in the hands of government to achieve some of its fiscal and economic goals. Governments come up with bills and laws tailored towards attraction of investments and growth of industries with major objective being growth and development of the economy. This comes in form of attractive incentives to individuals as well as corporate entities. Tax has therefore been an important tool employed to develop and sustain industries. This is rationalized towards development of certain industries and as means of accumulating more wealth (Daniel & Helio, 2021).

Tax incentives are widespread around the globe and are always advancing. They are measures that accommodate a more encouraging duty treatment of specific exercises or segments contrasted with what is conceded to general industry, it comes in form of an offer to pay less tax. According to Institute of Economic Affairs (2021), tax incentive is an arrangement that concedes any individual or corporation body great conditions that move away from the ordinary arrangements of the excise enactments. It is normally given to people or corporate bodies that do something that the government is trying to encourage. A step that impacts the person or corporation in a constructive way, for that individual or corporate body or any measure that accommodates a better expense treatment of specific exercises or segments contrasted with what is accessible to the general business. It is a strategy meant

to enhance and expand flow of investments from abroad through lower taxation rates and to energize private division investment in monetary and social projects where government assumes a key part (Uwaoma & Ordu, 2014).

Tax incentives are monetary measures that are utilized to draw in home or oversee investments to certain financial exercises or specific regions in a nation. Tax incentives may take different structures (Institute of Economic Affairs, 2021). In the case of Nigeria the pertinent tax incentives include, exemption from paying tax for some few years after start up, allowances for investments related expenses, tax credits, accelerated devaluation policies, unique zones, subsidized investments, tax exemptions, decreased rates of taxation and indirect tax incentive (Dalimash, 2013). Different incentives have been applied by the Nigerian government in recent years to encourage international and domestic investors to invest in particular businesses that can boost a country's economy.

Statement of the Problem

Manufacturing companies are critical in any country's development as they serve as a means of providing sustenance, employment opportunities and food security which will trigger export of the produced goods and as a result improve the country's Gross Domestic Product (GDP) and the currency power. To this extent, the urgent need for Nigerian Government to introduce more incentives to the manufacturing sector so as to encourage more investments in the manufacturing sector is very germane. Over the years, there is serious outcry on the contribution of non-oil sector to the economic growth of Nigeria, this becomes glaring with the dwindling fortune in the oil price at the international market, which

necessitates attention on the neglected sectors like manufacturing firms. Any economy's manufacturing sector is vitally important (Abubakar, 2023). It is impossible to overstate the important roles that businesses in this sector play in fostering economic growth and development, particularly in the areas of job creation, domestic product growth, agricultural promotion through economic diversification, and a potential functional role in a country's foreign trade earnings.

As a result of these contributions, the industry has drawn the attention of the government. The government and other stakeholders, however, are worried and concerned about the sector's recent fall in performance. Since the majority of the companies in this area occasionally fold, the industry's performance has prospects of promising recovery. For instance, some manufacturing companies have been delisted from the Nigerian Exchange Group (NGX) due to their inability to achieve the minimum required rate of return, while the textile industries, including Answani Industries Nigeria Limited, Afriprint Nigeria Limited and Nigerian Synthetic Fabrics Limited, have folded (Banjoko, 2012).

Research Question

What is the impact of annual allowance on the financial performance of listed manufacturing firms in Nigeria?

Research Objective

The objective of this research is to ascertain the impact of annual allowance on the financial performance of listed manufacturing firms in Nigeria.

Research Hypothesis

H₀: Annual allowance does not have any significant effect on the financial

performance of listed manufacturing firms in Nigeria.

Literature Review

Tax Incentives

All around the globe, tax incentives are both common and getting varied all the time. They are rules that provide specific activities or parts of an industry preferential treatment in terms of duty, in comparison to the overall industry, typically through less tax payment offering. Tax incentives as conceptualised by The Institute of Economic Affairs (2022) encompass rebates or other financial benefits offered to individuals or corporations that deviate from the standard terms of excise laws. It has long been bestowed for private citizens or businesses that participate in endeavours backed by official government policy. A positive action is one that impact the person or company involved positively, or on any activity that better expense treatment possible for certain exercises or parts compared to the general business. This policy aims to decrease tax burdens and promote investment in government-led financial and social projects by the private investors (Uwaoma & Ordu, 2014), with the goal of increasing investment flows into the country.

Asliddin (2023) argued that tax incentives are an important part of a country's fiscal policy since they can encourage specific behaviours, boost economic growth, and help individuals and enterprises in specific ways. Efficient evaluation and implementation are crucial to the success of tax incentives. It is critical to enhance the monitoring and evaluation mechanism to guarantee that these incentives accomplish their objectives. Governments worldwide have utilised tax incentives, which can take the shape of tax credits or exemptions, to accomplish a range

of objectives. Investment incentives, new jobs, funding for R&D, and social protections for the poor are all part of this. Asliddin (2023) argued further that tax incentives, when planned and executed well, can help nations accomplish their social and economic objectives. Tax incentives are one kind of general fiscal tools that can be used to attract investments. Other options include sector prioritisation, infrastructure upgrade, and, the assignment of monopoly rights.

In addition, investors might be enticed to put money into certain projects or industries through tax incentives that can take the form of preferential tax treatments. The goal of providing tax incentives is attraction of foreign direct investment (FDI) or investment from domestic firms by lowering their expenses or increasing their rate of return. In order for a policy to be classified as a tax incentive, it needs to offer specific sectors, types of enterprises, activities, or investments preferential tax treatment compared to the industry average (Ofori, 2019). Tax incentives are laws that offer preferential tax treatment to certain businesses or industries compared to the industry as a whole (Zolt, 2015). As such, tax incentives can be thought of as unique clauses that permit tax

Any given programme involving fiscal assistance may be designed to use the tax system to provide that assistance (which may be referred to as a tax incentive), or a direct government assistance (which may be referred to as a direct expenditure). That is, the incentive process assumes payment of the proper tax by the taxpayer, and an appropriation by the government of an expenditure made to that taxpayer in the amount of the incentive benefit (Peter & Kiabel, 2015). Since Surrey's work, many other definitions of tax incentives have been adopted. For example, the International

Monetary Fund (2015) defined tax incentives are as special tax provisions which are a favourable deviation from the general tax laws, granted to selected investment projects or firms. From this simple definition, it can be deduced that tax incentives constitute a deliberate policy that exempts an entity from a tax liability or grants an entity a concession to a tax liability and intention for granting tax incentives is to favour (Ayangbah & Sun, 2017).

Annual Allowance

Businesses who have qualified for capital expenditures are eligible for this reimbursement both at the end of the first period and for each year that the asset is still in operation, regardless of whether they have already received the original reimbursement. The yearly allowance is unaffected by how long an asset has been occupied or used throughout the basis time, although it will be reduced proportionally if the basis timeframe is shorter than a year (Timah & Chukwu, 2021).

Market Value

The word value has to do with the worth of something. The market value of a firm is the worth of a firm in its market domain. The market value of a firm depends on all competitive advantages it has above all other firms in the same market. Competitive advantages always depend on such factors as customers' brand loyalty, goodwill of a firm, quality of a firm's product, easy access to funds, favorable government's policies, dedicated workforce, adaptation to environmental changes, absence of artificial and natural disasters (Kotler, 1988)

Theoretical Framework

Neo-Classical Theory, which was laid out by Adam Smith (1723–1790) and David Ricardo (1772–1833), is relevant to this study.

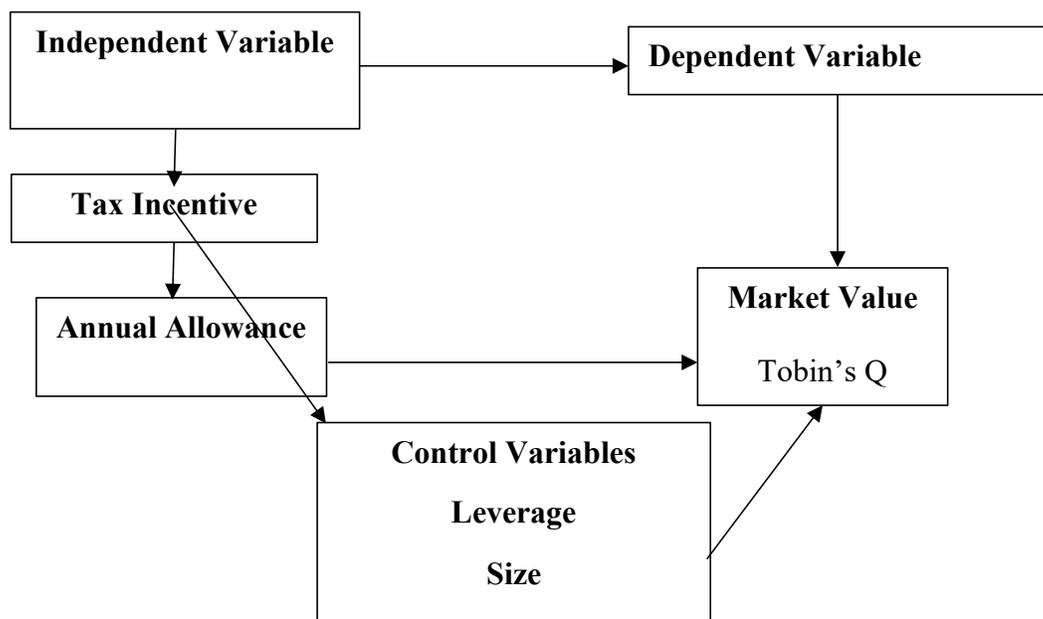
In subsequent years, it gained further recognition because of the contributions of Alfred Marshall (1842–1924) and Vilfredo Pareto (1848–1923). In 1900, it was improved upon by Mutt, Laffer, and others. Tax policy, according to Neo-Classical Theory (Eishe & Nadni, 1970), governments should value organisations based on the same assumptions: that taxes should be kept low and that firms should enjoy generous tax breaks. If this were not the case, a heavy tax load would restrict business profit-taking strategies, which would lead to less investment in production capital renewal and a subsequent economic downturn (Olaniyi & Oyedokun, 2019). A company will consider the costs, according to this theory. According to Fakile and Uwuigbe (2013) and Jooda et al. (2022), the Neo-Classical Theory of Taxation is relevant to this discussion since it proposes reevaluating tax laws in order to increase government income and provide tax incentives to businesses. This, in turn, promotes economic growth nationwide.

Empirical Review

A research by Kinyua and Okoro (2022) examined the impact of tax incentives on the financial performance of SACCOs in Nairobi County. The paper's primary foci were neoclassical economics, corruption and influence theory, and agglomeration economies. The research strategy used was a descriptive one. The sampled population included all registered SACCOs in Nairobi County. Using a representative rule of 10% and 30% of the target population, 41 SACCOs were selected using stratified random selection. After collecting and analysing

SASRA secondary data, the link between tax incentives and the profitability of SACCOs was found. Accelerated depreciation was discovered to be favourably connected with capital allowance and the financial success of SACCOs in Nairobi County. Research using correlation analysis demonstrated that capital allowance and accelerated depreciation improved SACCO profitability. Consequently, SACCO profitability increases with a bigger capital allowance and faster depreciation. Furthermore, it demonstrated a negative correlation between taxation and financial performance. Tax incentives explain 50.5% of the variance in financial performance, according to regression research, which revealed a positive correlation between financial success and the independent variables ($R\text{-Squared} = 0.505$). The tax incentives enhanced SACCO performance, as shown by the analysis of variance.

Oludi and Onowu (2022) examined the correlation between the tax incentive policies and financial performance of consumer products companies in Nigeria. Secondary sources were utilised by the authors. Multiregression analysis was used to examine the hypotheses. The results demonstrated a strong relationship between capital allowance and return on assets for producers of consumer goods in Nigeria. Nigerian consumer goods businesses' return on assets and investment tax allowance do not connect significantly. Companies in Nigeria that manufacture consumer goods do not see a significant impact on shareholder value from tax breaks or return on assets.

Figure 1: Conceptual Framework

Source: Researchers' Conceptualisation, 2025

Methodology

Research Design

The study employed *expost facto* research design. This design helped by providing a better understanding of the study variables and aided in the description, analysis and interpretation of the data that were collected from the study population's reports. Evaluation was also done on the relationship that existed among the relevant variables.

Population of the Study

This study's population consists of the 34 listed industrial and consumer goods firms quoted on the Nigerian Exchange Group (NGX). The reason for using these manufacturing sectors is that they are mandated to prepare their annual reports with the Nigerian Exchange Group (NGX) and this makes the information very credible and open to public analysis. Additionally, manufacturing industry is a major sector that have benefitted from tax incentives.

Table 1 List of Manufacturing Firms in Nigeria (Consumer and Industrial Goods)

S/N	Company Name	Year of Listing	Sector
1.	Cadbury Nigeria PLC	1976	Consumer Goods
2.	Dangote Cement PLC	2010	Industrial Goods
3.	Champion Brewery PLC	1983	Consumer Goods
4.	Dangote Sugar Refinery PLC	2007	Consumer Goods
5.	Berger Paints PLC	1959	Industrial Goods
6.	Greif Nigeria PLC	1940	Industrial Goods
7.	DN Tyre & Rubber PLC	1961	Consumer Goods
8.	Flour Mills Nigeria PLC	1979	Consumer Goods
9.	Golden Guinea Brewery PLC	1979	Consumer Goods

10.	Guinness Nigeria PLC	1965	Consumer Goods
11.	Beta Glass Nigeria PLC	1986	Industrial Goods
12.	BUA Cement PLC	2014	Industrial Goods
13.	Honeywell Flour Mills PLC	2009	Consumer Goods
14.	International Brewery PLC	1994	Consumer Goods
15.	McNichols PLC	2009	Consumer Goods
16.	Multi-Trex Integrated Foods PLC	2010	Consumer Goods
17.	Nigeria Flour Mills PLC	1978	Consumer Goods
18.	Nascon Allied Industries PLC	1992	Consumer Goods
19.	Nestle Nigeria PLC	1979	Consumer Goods
20.	Nigerian Breweries PLC	1973	Consumer Goods
21.	Nigerian Enamelware PLC	1979	Consumer Goods
22.	PZ Cussons Nigeria PLC	1972	Consumer Goods
23.	Unilever Nigeria PLC	1973	Consumer Goods
24.	Union Dicon Salt PLC	1993	Consumer Goods
25.	Vita Foam Nigeria PLC	1962	Consumer Goods
26.	BUA Foods Nigeria PLC	2022	Consumer Goods
27.	Lafarge Africa PLC	1979	Industrial Goods
28.	Austin Laz & Company PLC	1982	Industrial Goods
29.	Cap PLC	1978	Industrial Goods
30.	Cutix PLC	1987	Industrial Goods
31.	Notore Chemical Industries PLC	2018	Industrial Goods
32.	Premier Paints Nigeria PLC	1995	Industrial Goods
33.	Triple Gee & Company Nigeria PLC	1980	Industrial Goods
34.	Meyer PLC	1960	Industrial Goods

Source: www.nse.com.ng.https://ngxgroups.com accessed in December, 2024

Sample Frame

This study employed a purposive sampling technique to choose twenty (20) firms from both industries. The selection process was carried out over a twelve-year period, from 2012 to 2023. The two industries are consumer goods and industrial goods firms. The justification for using consumer goods and industrial goods firms is because of their contributions to Nigeria's GDP and economic growth as a non-oil sector.

Method of Data Collection

Secondary data used to examine the relationship between tax incentives and performance of listed manufacturing firms on the Nigerian Exchange Group were obtained

from the audited accounts and financial statements of the selected firms and from website of Nigerian Investment Promotion Commission (NIPC) from year 2012 to 2023. Data on tax holiday, loss relief, annual allowance, tax credit, revenue, total assets, net income, total debt and current assets were gotten through secondary source.

Methods of Data Analysis

This study utilised both descriptive and inferential statistics to achieve the broad and specific objectives of this study. The descriptive statistics used include measures of central tendency, particularly mean; and a measure of variability including range, standard deviation, skewness, kurtosis, and

Jacque Bera. Descriptive statistics used gave brief explanations about descriptive coefficients that summarized the given set of data, which could be either a representation of the entire population or a sample of a population. This assisted to determine whether the obtained data were normally distributed or not as one of the assumptions of Ordinary Least Square (OLS).

Inferential statistics adopted for data analysis was Difference Generalized Methods of Moment (GMM) due to endogeneity problem that surfaced in the study. Generalisation was used based on the outcome of the analysis. Other tests carried out were Pearson Correlation Analysis used for preliminary analysis, variance inflation

factors, test for heteroscedasticity and serial correlation using Breusch-Pagan Godfrey Test.

Model Specification

The following model specification was created in accordance with the (Mauda & Saidu, 2019) study on the tax incentives and financial success of selected manufacturing enterprises in Nigeria. The study used capital allowance, investment allowance and loss relief as measurement variables, with the following model:

$$PERF = \beta_0 + \beta_1CAL_{it} + \beta_2INVA_{it} + \beta_3LRI_{it} + \epsilon_t \tag{3.1}$$

Where: PERF = Performance; CAL = Capital Allowance; INVA= Investment Allowance; LR=Loss Relief.

The adapted model was modified to suit the objective of this study.

Research Objective: Find out the Effect of Tax Holiday on the Profitability of Listed Manufacturing Firms in Nigeria.

The model for achieving the research objective of the study is stated as follows:

$$NPM_{it} = \alpha NPM_{t-1} + TAI_{it} + \omega_i + \epsilon_{it} \tag{3.2}$$

$$NPM_{it} = \alpha NPM_{it-1} + \alpha_1AA_{it} + \alpha_2LSR_{it} + \alpha_3TH_{it} + \alpha_4TCR_{it} + \alpha_5LEV_{it} + \alpha_6SIZ_{it} + \omega_i + \epsilon_{it} \tag{3.3}$$

Objective Two: Evaluate the Impact of Tax Incentives on Market Value of Listed Manufacturing Firms in Nigeria.

The model for achieving the second objective of the study is stated as follows:

$$TBQ_{it} = \beta TBQ_{t-1} + TAI_{it} + \omega_i + \epsilon_{it} \tag{3.3}$$

$$TBQ_{it} = \beta TBQ_{t-1} + \beta_1AA_{it} + \beta_2LSR_{it} + \beta_3TH_{it} + \beta_4TCR_{it} + \beta_5LEV_{it} + \beta_6SIZ_{it} + \omega_i + \epsilon_{it} \tag{3.4}$$

Objective Three: Examine the Effect of Tax Incentives on Liquidity of Listed Manufacturing Firms in Nigeria.

The model for achieving the third objective of the study is stated as follows:

$$CR_{it} = \delta CR_{t-1} + TAI_{it} + \omega_i + \epsilon_{it} \tag{3.5}$$

$$CR_{it} = \delta CR_{t-1} + \delta_1AA_{it} + \delta_2LSR_{it} + \delta_3TH_{it} + \delta_4TCR_{it} + \delta_5LEV_{it} + \delta_6SIZ_{it} + \omega_i + \epsilon_{it} \tag{3.6}$$

Objective Four: Assess the influence of Tax Incentives on Operational Efficiency of Listed Manufacturing Firms in Nigeria.

The model for achieving the fourth objective of the study is stated as follows:

$$AST_{it} = \gamma AST_{t-1} + TAI_{it} + \omega_i + \epsilon_{it} \tag{3.7}$$

$$AST_{it} = \gamma AST_{t-1} + \gamma_1AA_{it} + \gamma_2LSR_{it} + \gamma_3TH_{it} + \gamma_4TCR_{it} + \gamma_5LEV_{it} + \gamma_6SIZ_{it} + \omega_i + \epsilon_{it} \tag{3.8}$$

Variable Type	Variable Name	Measurement	Empirical Sources	Apriori Expectation
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Dependent	Net Profit Margin	$\frac{\text{Profit Before Interest and Tax}}{\text{Sales}}$	Omiagbo & Daniel (2021); Teoh-Lee & Mathuveloo (2017)	
Liquidity	Current Ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Rochim & Nunung. (2017)	
Market Value	Tobin's Q	$\frac{\text{Market value of equity} + \text{book value of equity}}{\text{Book value of total asset}}$	Na et. al. (2021)	
Operational Efficiency	Assets Turnover	$\frac{\text{Sales}}{\text{Total Assets}}$	Siti, et. al. (2019)	
Independent	Tax Holiday	1 to reflect year received and 0 otherwise	Aluko, et al. (2022)	+
Tax Incentives	Annual Allowance	Log of Annual Allowance	Mauda & Saidu (2019);	+
	Loss Relief	1 or 0 to reflect loss year and non-loss year respectively	Yusuf & Yinka (2022)	+
	Tax Credit	Natural Logarithm of Tax Credit	Etim, et al. (2024)	+
Control	Leverage	$\frac{\text{Total Debt}}{\text{Total Equity}}$	Surabhi & Madhuri. (2023)	+
	Size	Log of Total Asset	Rohan & Pushpa (2024)	+

Source: Researchers' Compilations, 2025

Results and Discussions

This section shows the details of methods of analysis used to achieve the objectives of the study. The section details the various tests carried out and the instrument used in

carrying out the test. The methods of analysis consisted of both descriptive and inferential statistics. The results are displayed in the Tables.

Table 2: Descriptive Statistics

	Mean	Median	Max	Min	Std. D	Skewness	Kurtosis	JB	Obs.
NPM	0.357	0.066	14.244	0.301	9.272	15.264	2.340	533.9	240
CR	1.370	1.122	21.469	0.074	1.751	8.773	9.289	824.51	240
AST	1.228	0.913	17.407	-0.456	1.328	8.064	9.518	867.36	240
TBQ	0.600	0.613	1.29	-0.091	0.178	0.085	5.070	42.436	240
AA	5.904	6.309	7.926	0.000	1.605	-2.51	9.660	684.08	240
LSR	0.157	0.000	1.000	0.000	0.364	1.888	4.564	164.25	240
TH	0.182	0.000	1.000	0.000	0.387	1.647	3.711	111.61	240
TCR	2.054	0.000	7.666	0.000	2.607	0.588	1.559	33.992	240
LEV	0.373	0.370	1.498	0.014	0.220	1.246	7.870	294.26	240

SIZ	7.712	7.754	9.203	5.786	0.769	-0.296	2.274	8.632	240
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Source: Researchers' Computations, 2025

Descriptive Statistics

The descriptive statistics reported in Table 2 shows that the average of net profit margin of the sampled companies was approximately 36% which is considered good enough. The maximum and minimum values of NPM are 14.244 and 0.301 respectively. Current ratio (CR) which is a measure of liquidity performance across both consumer and industrial goods firms on the average is positive having the value of 1.370 with maximum and minimum values of 21.469 and 0.074. This implies that the sampled industry is moderately liquid, though with sufficient current assets to cover its current liabilities but with some potential strain. The fact is evident that the industry is highly capital intensive and the need to be liquid is essential for the purpose of meeting necessary obligations.

Asset turnover is the index of operational efficiency and it has the mean value of 1.228. The minimum of AST is -0.456 while the maximum is 17.407. The average of AST indicated that the sampled firms had low ratio which may be caused by underutilisation of assets or poor sales. The value of sampled firms is measured by Tobin's Q. The average value of TBQ is 0.600 with minimum

value of -0.091 and maximum value of 1.290. The value of manufacturing companies utilized in this study is very good.

The independent variable is tax incentives measured by Annual Allowance (AA), Loss Relief (LSR), Tax Holiday (TH) and Tax Credit (TCR). The mean of the independent variables is AA (5.904), LSR (0.157), TH (0.182) and TCR (2.054). This implies that all the firms sampled have been enjoying tax incentives, though the rate of incentive differs. The average value showed that tax credit is the incentive that firms have highly benefited from. The minimum values of 0 for LSR, TH and TCR indicated that there were periods that firms do not enjoy any of the incentives. The standard deviation value showed that NPM is the most volatile followed by TCR. Almost all the data were positively skewed except for annual allowance (AA) and firm size (SIZ). NPM, TCR, and SIZ have platykurtic distribution with a kurtosis value less than 3 having the values of 2.340, 1.559 and 2.2740 respectively while CR, TBQ, AST, LSR, TH, AA and LEV have leptokurtic distribution with kurtosis values of above 3. The Jaque-Bera showed that the data are normally distributed.

Table 3: Pearson Correlation Matrix

	NPM	CR	AST	TBQ	AA	LSR	TH	TCR	LEV	SIZ
NPM	1.0000									
CR	0.0647	1.0000								
AST	-0.0376	0.0528	1.0000							
TBQ	0.0957	0.0813	0.0488	1.0000						
AA	0.0519	-0.0989	0.0639	-0.0396	1.0000					
LSR	0.1513	-0.0477	0.0508	-0.0702	0.0635	1.0000				
TH	-0.0308	-0.0740	0.0079	0.0505	-0.0325	0.0682	1.0000			
TCR	-0.0515	-0.0255	0.0114	-0.1967	0.1200	0.2251	-0.0045	1.0000		
LEV	-0.0719	-0.2212	-0.1123	-0.3462	0.1126	0.2086	-0.0575	0.2808	1.0000	
SIZ	0.0100	-0.0475	-0.0098	0.0952	0.1233	0.1617	0.0911	0.1131	0.0855	1.0000

Source: Researchers' Computations, 2025

Correlation Matrix

Table 3 shows that the relationship between net profit margin and other variables are very weak. Current ratio (0.0647), Tobin's Q (0.0957), annual allowance (0.0519), loss relief (0.1513) and size (0.0100) had a very weak but positive association with net profit margin while asset turnover (-0.0376), tax holiday (-0.0308), tax credit (-0.0515) and leverage had weak and negative link with NPM. AST with coefficient of 0.0528 had a very weak connection with current ratio so also TBQ (0.0813), AA (-0.989), LSR (-0.0477), TH (-0.0740, TCR (-0.0255) and SIZ (-0.0475) while leverage had

a moderate association with CR. with a coefficient of (0.2212), TBQ, AA, LSR and TH had positive but very weak link with AST, the control variables also had weak and adverse connection with AST. Furthermore, it was revealed from table 4.2 that TCR had moderate but adverse association with TBQ with coefficients of (-0.1967) while other independent variables AA, LSR, TH also had a very weak link. TCR and LEV had a positive and fair connection with AA while LSR and TH frail and adverse association. The relationship between the explanatory variables does not show the existence of multicollinearity as it is not above the expected threshold of 0.7.

Table 4 :Variance Inflation Factors

Objectives	Mean VIF	Highest VIF	Remarks
1	2.7177	3.4121	Absence of Multicollinearity
2	2.8199	3.4990	Absence of Multicollinearity
3	2.5543	3.3882	Absence of Multicollinearity
4	2.5298	3.3298	Absence of Multicollinearity

Source: Researchers' Computations, 2025

Variance Inflation Factors

The variance inflation factors test was carried out to corroborates the outcome of Pearson correlation that found no multicollinearity issues among the variables employed in this study. Table 4 displayed the summary of the VIF tests for all the objectives of the study. From table 4.3 the highest VIF for objective one is 3.4121 with mean VIF of 2.7177. For objective two, the mean of VIF is 2.8199 while the highest VIF is 3.4990. For the third and fourth objectives the mean VIF are 2.5543 and 2.5298 while the highest VIF are 3.3882 and 3.3298 respectively. The outcome of the test showed there is no multicollinearity problems among

the variables since there is no variable that has more than the threshold of 10.

Post Estimation Tests

Table 4 presents the findings of the additional diagnostic tests for serial correlation and heteroscedasticity that were carried out for all the study's goal. For objective one, the null hypothesis that there is no first order serial relationship is rejected at the five percent level based on the model's results, which show an estimated Breusch-Godfrey p-value of 0.0175. Additionally, the heteroskedasticity test results showed a heteroscedasticity problem with a p-value of 0.0138, meaning that the null hypothesis of homoscedasticity is rejected at the 5% level.

Table 5: Summary of Serial Correlation and Heteroscedasticity Tests Results for Study Objectives

Financial Performance proxy	Test	Results	Remarks
Profitability	Breusch-Godfrey Serial Correlation test	F stat = 4.099 Prob > Chi2 = 0.0175	Existence of Serial correlation problem
	Breusch-Pagan Godfrey test for Heteroscedasticity	F stat = 9.205 Prob > Chi2 = 0.0138	Existence of Heteroscedasticity problem
Market Value	Breusch-Godfrey Serial Correlation test	F stat = 8.8709 Prob > Chi2 = 0.0532	Existence of Serial correlation problem
	Breusch-Pagan Godfrey test for Heteroscedasticity	F stat = 7.859 Prob > Chi2 = 0.0517	Existence of Heteroscedasticity problem
Liquidity	Breusch-Godfrey Serial Correlation test	F stat = 6.989 Prob > Chi2 = 0.0351	Existence of Serial correlation problem
	Breusch-Pagan Godfrey test for Heteroscedasticity	F stat = 1.284 Prob > Chi2 = 0.4008	No Existence of Heteroscedasticity problem
Operational Efficiency	Breusch-Godfrey Serial Correlation test	F stat = 6.816 Prob > Chi2 = 0.0542	Existence of Serial correlation problem
	Breusch-Pagan Godfrey test for Heteroscedasticity	F stat = 1.016 Prob > Chi2 = 0.5033	No Existence of Heteroscedasticity problem

Source: Researchers' Computations, 2025

The study uses generalized methods of moments to reach the results because of the evidence that the data utilized contradict the heteroscedasticity assumption. For objective two, the results also showed the serial correlation problem existed, the p-value of 0.0532 confirmed its existence. There is also the existence of heteroskedasticity issue as revealed by the Breusch-Godfrey test p-value of 0.0517. The outcome of both serial correlation and heteroskedasticity tests in respect of objective three showed that it is only serial correlation problem that existed the model is free of heteroskedasticity issue

meaning that the assumption that the residuals have constant variance hold and that the null hypothesis of homoscedastic is accepted at 5% level. So also, the results of both tests for objective four. The null hypothesis that there is no serial correlation is rejected while that of homoscedastic is accepted.

Presentation and Analysis of Generalized Method of Moments Results

The results obtained from the Generalized Method of Moments analysis for each of the four objectives of the study are presented and interpreted in this section.

Examine the effect of Tax Incentives on Net Profit Margin of Listed Manufacturing Firms in Nigeria

Table 5.1 Estimated Generalized Methods of Moments Analysis for Objective One

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NPM (-1)	0.0371	0.1171	0.3168	0.0517
AA	0.0033	0.0173	0.1920	0.0479
LSR	0.1189	0.1116	1.0652	0.0281
TH	0.1333	0.2401	0.5555	0.0512
TCR	-0.0012	0.0126	-0.0945	0.9248
LEV	-0.1071	0.3294	-0.3254	0.7452
SIZ	0.1755	0.1048	1.6743	0.0957
Sangan Test (J-Stat)	12.2011			
Prob(J-statistic)	0.1705			
AR (2) P-value	0.7626			
Wald Test x2	2.5955			
P-value	0.0053			

Source: Researchers' Computations, 2025

Tax Incentive and Net Profit Margin of Listed Manufacturing Firms in Nigeria

This section uses difference GMM to report on the relationship between listed manufacturing firms' profitability and tax incentive in Nigeria. This approach was used due to endogeneity issues; panel regression estimates will yield biased and inconsistent results, and regressors are shown to be linked with the error term. Additionally, the results of the diagnostic tests demonstrated the presence of heteroscedasticity and first order serial correlation.

The results as displayed in Table 5.1 revealed the value of J-Statistics to be 12.2011 with p-value of 0.1705, this implies that the null hypothesis of over-identifying restriction is not rejected based on the J-stat p-value that is greater than 0.25 but less than 1. This supports the validity of dynamic panel model specification. The result also showed the coefficients of lagged profitability of 0.2497, which is significant and positive at 5% level for the sectors of manufacturing firms, this showed a moderate degree of persistence and statistically significant. The

result of lagged dependent variable is of importance in the dynamic generalized methods of moment, especially when the coefficients of the lagged variable is between 0 and 1. Furthermore, the outcome of Arellano-Bond Serial Correlation test AR (2) p-value of 0.8134 show there is no evidence of second-order serial correlation. Wald Test x^2 (464.15, p-value =0.0000) showed that tax incentives and control variables used in this study were considered as a part of the determinant's factors of financial performance.

The results as presented in Table 5.1 revealed that the indexes of tax incentives (AA, LSR and TH) had positive and significant effect on NPM. Annual allowance (t-stat. = 0.1920; $p < 0.05$) Loss relief (t-stat. = 1.0652, $p < 0.05$) and Tax holiday (t-stat. = 0.5555; $p < 0.05$). The coefficients of indexes of tax incentives showed that profitability will increase by 0.3% for every unit increase in annual allowance. Profitability will be enhanced by approximately 12% for every unit increase in loss relief and by 13% for a unit increase in tax holiday. The two control

variables in the study were found not to have any significant effect on firms' profitability. The outcome of the study is in line with Apriori expectation and also justified the argument of Neo-classic Theory of incentives that tax incentives have a favourable effect on performance of firms.

Conclusion

This study examined the effect of annual allowance on the performance of listed manufacturing firms in Nigeria. Tax incentive was proxied with annual allowance, loss relief, tax holiday and tax credit whereas performance metrics were net profit margin, Tobin's Q, current ratio and asset turnover. The study revealed that annual allowance, loss relief and tax holiday had positive and significant effect on profitability, indicating that firms that were able to access these incentives have the potential to improve their profitability because of reduction in tax burden. The result also showed that annual allowance, tax holiday and tax credit had favourable impact on firms' value. It could be inferred that tax incentives granted by government attract new investment and also make business more competitive.

The results further revealed that loss relief, tax holiday and tax credit jointly substantially but adversely influenced liquidity of sampled manufacturing firms. The higher the value of tax incentives received in terms of loss relief, tax break and tax credit the lower the liquidity of firm. Finally, the result indicated that all the parameters of tax incentive had significant and optimistic effect on operating efficiency. Sampled manufacturing firms tend to operate efficiently when their tax liabilities reduce as this will lead to an increase in cash flow which will give firm the opportunity of investing in new business which will enhance profitability. The rate at which firm use its

assets to generate revenue will significantly improve with access to tax incentives.

Recommendations

In the light of the findings and conclusion, the following recommendations were made:

- i. Given the positive effect of annual allowance on the market value of Nigerian listed manufacturing firms, it is recommended that companies should take more advantage of tax incentives available to them especially, annual allowance, loss relief and tax holiday and other incentives related to investments that will help in straightening the profitability of the firms.
- ii. To enhance the market value of listed manufacturing firms in Nigeria, the policy makers should adopt strategic incentive plans or targeted incentive schemes that target specific industry or a strategic tax incentive that adds value or contributes positively to the economy through expansion of manufacturing sector by cutting down on imports and in that way promoting the growth of demand for domestic products in the country.
- iii. Based on the outcome of the effect of tax incentives that showed a negative relationship with liquidity of sampled manufacturing firms and in order to ensure survival of firm and improvement in liquidity, there is need for greater diversification and sustainability in the incentives granted. The study recommended that it is essential for government to conduct cost benefit analyses in order to ensure that the goals of granting such incentives are achieved.

Given the significant improvement in the operational efficiency of firms with tax incentives, it is therefore suggested that tax authorities should consider means of introducing more incentives for investors in critical sectors like consumer and industrial goods that have direct relationship with agricultural output and country's export to encourage economic growth and development.

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