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Tax Incentives and Investment Performance of Listed Non-Financial Companies in Nigeria

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ABSTRCT

This study examined the relationship between investment allowance, tax exemption and investment performance of listed non-financial companies in Nigeria. The study adopted ex-post facto research design. The population comprised of 110 listed non-financial companies in Nigeria as at 31st December, 2020. The sample included twenty listed non-financial companies in Nigeria which were selected based on specified criteria. Data for the research work were sourced from the published financial statements of the sampled companies as well as from the Central Bank of Nigeria (CBN) annual bulletin including the World Bank Development Indicators Database. Based on the empirical results, tax exemption has a positive significant relationship with investment performance of listed non-financial companies in Nigeria. On the other hand, investment allowance shows a positive but insignificant relationship with investment performance of listed non-financial companies in Nigeria. The study concluded that tax incentives have a positive significant relationship with investment performance of listed non-financial companies in Nigeria. This result is supported by the agency theory. The study recommended that managers of the sampled companies should intensify their efforts in the area of gaining more tax exemptions from the relevant tax authorities. This is because increased exemptions from tax may cause significant improvement in the investment performance of listed non-financial companies in Nigeria. This would motivate companies to invest into products and services that are innovative and could lead to inventing new ideas and strategies that may lead to the creation of new and improved goods and services that will contribute towards solving the ever evolving and dynamic customer taste and preference.

Keywords: Investment allowance, tax exemption, investment performance, agency theory.

1. Introduction

Nations use either fiscal or monetary policies to control and enhance their economic activities (Munongo, Akanbi & Robinson, 2017). These policies are usually geared towards improving the economic activities in a nation (Chukwumerije & Akinyomi, 2011). To Githaiga (2013), taxation is viewed as a claim made by the central state of an economy for an obligatory payment of a specified sum of money from the households, employees and business organizations with the aim of generating adequate resources to support government activities and also to coordinate and stimulate the economic activities by providing infrastructures that aid production activities in an economy.

Beyond the popularly known objectives of revenue generation and wealth redistribution, governments adopt tax policies that provide tax incentives such as tax holidays, lower taxes, exemptions, allowances, credits, rate relief, tax deferrals, import duty exemptions and Value Added Tax (VAT) exemptions/zero-rating in order to improve the investment performance of companies in some preferred sectors of the economy (Sabastian, 2013; Etim, Mfon & Ofonime, 2019).

Iormbagah, Abianhu and Ibiam (2021) recently posited that, increase in tax incentives to firms usually translates to increase in performance and growth where the firm in question can reinvest claimed tax incentives into the business. As such, tax incentives have a significant influence on the investment performance, growth and productivity of firms in a given economy even though other factors exist (Ohaka & Agundu, 2012; Mayende, 2013). Investment performance in terms of profitability measures the marginal contribution of firms' assets to growth in profit after tax of a firm (Wilson & Wildasin, 2004). This is measured as the ratio of profit after tax to total assets of a firm. Lumpkin and Dess (1999) opined that, there are several other methods and means of measuring of investment performance, which include; return on equity, asset management ratios, leverage ratios and market value ratios. The study is aware of these varying measures of investment performance but has limited its proxy of investment performance to return on investment (ROI); which is meant to measure how the incentives enjoyed by the firms on the assets used for production have been influenced to the extent they contribute to higher profitability.

In line with the agency theory, Ohaka and Agundu (2012) argued that, firm managers take advantage of tax incentives normally to achieve higher returns in order to get higher compensations.

As a developing country, the Government of Nigeria has put in place a number of tax incentives for companies to help improve their investment performance (Iormbagah et al. 2021). While some of these incentives cover all sectors, others are limited to some specific non-financial companies (Ugwu, Okwa & Inyang, 2020). Non-financial 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 GDP and the currency power. This affirms the importance of tax incentives and investment performance study in the context of listed non-financial companies.

Despite the growth in activities of the government in granting tax incentives, companies are still winding up. There has been an increased closure of companies in recent years, like GlaxoSmithKline Nigeria, in 2021 all because of high cost of production (ICIR, 2022). The economic competition has seen developed countries dominate the domestic firms, a situation that calls for government intervention by way of increasing tax incentives to encourage investment by local companies in Nigeria.

Though listed non-financial companies have been pivotal to economic growth in Nigeria, it is still observed that the objectives of the government to attaining the effective use of tax incentives is yet to influence investment performance of the firms significantly which has made the policy strides of the government to be unattainable (Oluwaremi, Odelabu, Lawal & Obisesan, 2016; Iormbagah et al., 2021).These issues have been a ranging topical discussion for academics and policy makers; as to what aspect of tax incentive contribute more to investment performance of companies in order to ascertain the impact of tax incentive policies.

As a result, several authors have researched on tax incentives. Previous authors reviewed, carried out studies on tax incentives and investment performance. Authors like Iormbagah et al. (2021) used deferred tax as a proxy for tax incentives; Yatskovskaya (2012), Mayende (2013), Onyango (2015), Tembur (2016), Olaleye et al. (2016), Kuria et al. (2017), and Olowo et al. (2020), used corporate income tax allowance and investment allowance as proxy for tax incentives. They reported contradictory results on tax incentives as a catalyst for investment performance. The reports of previous researchers have shown mixed results. The results lack consensus, which have created an empirical gap. Again, most of the studies used primary data in their analysis. This shows a methodological gap which this study has filled by using secondary data.

The main objective of this study is to examine the relationship between tax incentives and investment performance of listed non-financial companies in Nigeria. Specifically, the study sought to determine the relationship between investment allowance and investment performance of listed non-financial companies in Nigeria and also examine the relationship between tax exemption and investment performance of listed non-financial companies in Nigeria;

In line with the research objectives, two hypotheses are tested in this study.

Ho_1: There is no significant relationship between investment allowance and investment performance of listed non-financial companies in Nigeria,

Ho_2: Tax exemption has no significant relationship with investment performance of listed non-financial companies in Nigeria,

The paper is organized into five sections, including introduction as section one. Section two reviews the literature related to the phenomenon of interest. Section three presents the methodology while the results and discussion are contained in section four. Section five comprises of conclusion and recommendations

2. Review of Related Literature

The related literature is reviewed under three sub-themes, namely conceptual framework, theoretical and empirical reviews.

6.1 Conceptual Framework

The section reviews two major concepts that are germane to this research work. They are: tax incentives and investment performance. The concepts are diagrammatically presented as in figure 1.

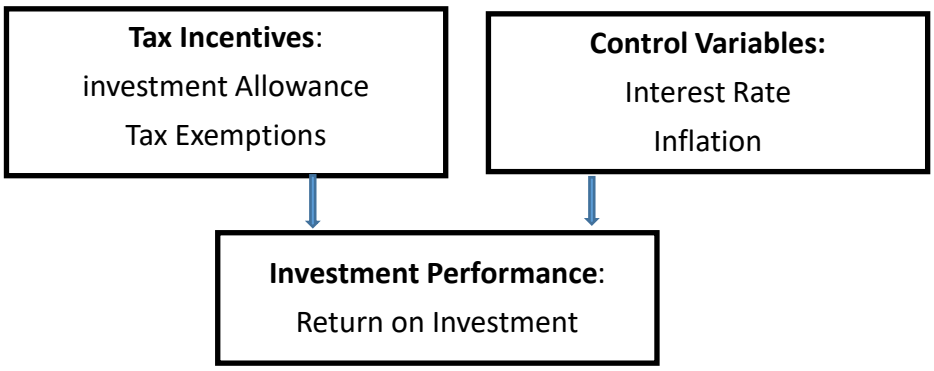


Figure 1: Conceptual Framework

21.1 Tax Incentives

The United Nations Conference on Trade and Development (UNCTAD) (2000) defined tax incentives as any incentives that reduce the tax burden of enterprises in order to induce them to invest in particular projects or sectors. They are exceptions to the general tax regime. Tax incentives include, reduced tax rates on profits, tax holidays, accounting rules that allow accelerated depreciation and loss carry forwards for tax purposes, and reduced tariffs on imported equipment, components, and raw materials, or increased tariffs to protect the domestic market for import substituting investment projects.

According to Tapang, Onodi and Amaraihu (2018) tax incentive is a deliberate reduction in the liability granted by government in order to encourage particular economic unit (e.g. corporate bodies) to act in some desirable way (e.g. invest more, consume more, import less, Pollute less etc.). In the views of Oko (2014); Effiok, Tapang and Eton (2013), and Ugwu et al. (2020) tax incentives are simply the reduction in liability of tax rate, reduction in tax base, outright tax exemption, tax deferment, etc. Tax incentives are those special exclusions, exemptions, or deductions that provide special credits, preferential tax rates or deferral of tax liability (Fletcher, 2003; Onyango, 2015)

Tax incentives encompass all the measures adopted by government to motivate tax payers to respond favorably to their tax obligations (Oriakhi & Osemwengie, 2013). It includes adjustments to tax policy aimed at lessening the effects of taxation on an industry, a group of persons or the provision of certain services.

Types of tax incentives

Tax incentives can be split into two broad categories: cost-based incentives and profit-based incentives (The Institute for Fiscal Studies, 2018). Cost-based incentives include investment allowances, tax credits and accelerated capital allowance, which decrease the cost of capital. Potential additional investment gained per unit of revenue forgone is higher for cost-based incentives, since the benefits to investors only accrued if capital investments are made. Profit-based reduce tax rates on taxable income or wave tax altogether, like tax holidays, and apply to all profits.

The types of incentives that are considered in this study as variables to be tested are explained as follows;

a) **Investment Allowance**: Investment allowance is one of several forms of corporate tax incentives (Institute for Fiscal Studies, 2018). In order to reduce the effective price of acquiring new capital, the tax policy allows some deductions from the taxable income based on a given percentage of the qualifying new investment. Such deduction is referred to as an investment allowance (Ndagi, 2016). The magnitude of this incentive is sometimes defined by location or zone where the foreign investor is investing (FIRS, 2017). Company income tax Act (CITA) allows companies, including those in the solid minerals sector, an investment allowance of 10% on the actual expenditure incurred on plant and equipment (FIRS, 2017). The essence of this incentive is to reduce the cost of qualifying new investments with a view to increasing their investment performance.
b) **Tax exemptions:** Tax exemptions are generally regarded as industrial investment device; many developing countries like Nigeria offer them as one of their major incentives (Uwaoma & Ordu, 2016). These are available for export products. Exports are zero-rated (Holland & Vann, 1998). Costs of buildings, plants and machinery of a manufacturing company are granted in full as tax relief. Profits or gains of a company that is 100 per cent export-oriented are tax exempt for the first three years. This applies if the company is new, exports 75 per cent of its turnover, and repatriates it to Nigeria. Old plant and machinery of the company, if any, must be less than 25 per cent of total cost of plant and machinery (Ndagi, 2016). Plant and machinery imported for use in an EPZ is subject to the VAT drawback scheme. Profits of a company in respect of exported goods used to buy raw materials, plants, equipment and spare parts are tax exempt (Holland & Vann, 1998), this leads to improved financial performance of the companies.

2.1.2 Investment Performance

An investment is an asset or item that is purchased with the hope that it will generate income or appreciate in value at some point in the future. It always concerns the outlay of some asset today (time, money, effort, etc.) in hopes of a greater payoff in the future than what was originally put in. To invest is to allocate money in the expectation of some benefit/return in the future. In other words, to invest means owning an asset or an item with the goal of generating income from the investment or the appreciation of such investment. The category of investment that receives the most attention is business fixed investment, which is the purchase of new structures and equipment by business firms for production purposes (Tsegba, Musa and Ibe, 2021; Maine & Nguyen, 2010). However, Tsegba, Musa and Ibe (2021) added that there are two other categories (inventory investment and residential investment) and they are also important.

Bottom of Form Investment performance is the Return on Investment (ROI) portfolio. The investment portfolio can contain a single asset or multiple assets. The investment performance is measured over a specific period of time and in a specific currency (Eugene, 1972). World Bank Group (2020) and Hedia, Amira, Jameleddine and Jaleleddine (2011) relied on the premise that tax incentives are considered effective if they allow a company to become profitable when they would be otherwise unprofitable without tax incentives.

Investment performance is defined as exceeding a minimum return to investment benchmark or the "hurdle rate" related to the investment. Tax incentives are considered as the most important ways of reducing cost so that a firm can maximize profit on its

investment. This is so because, it is generally believed that the lower the cost of an investment the higher the performance of that investment.
It has been argued by Lumpkin and Dess (1999) that there are many different ways to measure investment performance, but the most frequently use measure is the Return on Investment (ROI).

Return on Investment (ROI)

In the world of investments, **returns** remain one of the most important components that every investor must pay close attention to. Investments are made to the end that returns might be generated over time. **Return on Investment** also abbreviated as **ROI**, is a measure of how much money or profit made on an investment as a percentage of its cost. In other words, **ROI** is a degree of the profit made on a particular investment in relation to investment capital. As an investor in listed non-financial companies or other business sectors, ROI is often used to measure and determine the profitability metric to evaluate how well an investment has performed over time. The obtained results can act as a guide to compare and aid in the decision-making process to determine and rank the investments in different assets or projects according to their value (Kuria, 2017).

ROI can be determined in different ways, but the most frequently used method involves dividing net profit by total assets (Ogungbade, Adekoya, & Akeredolu, 2020). In some cases, return on investment ratio is also called the "return on assets" ratio because that investment refers to the firm's investment in its assets. As reiterated by Tsegba et, al. (2021), Zamfir, Manea & Lonescu (2016) Other metrics of ROI include total asset (TA), earnings per share (EPS), market capitalization, and percentage change in performance. All these metrics allow the investors to swiftly visualize the overall performance of their portfolios so that they monitor their fluctuations and respond fast.

Tax Incentives and Investment Performance

According to Wade (1990); Tanzi and Shome (1992) as cited in The World Bank Group (2020) the role of tax incentives in influencing companies' investment performance is generally quite impressive, they have demonstrated some results in specific contexts. To keep the issue of policy design in perspective, it is worth reiterating that most investment decisions are dictated by tax incentive considerations (Bolnick, 2004). Hedia, Amira, Jameleddine and Jaleleddine, (2011), argue that, tax is a heavy cost to the company wishing to reduce its expenses. Reducing the tax through tax incentive will obviously reduce business costs which can improve its financial performance.

If framework conditions and market characteristics for investors are strong, it is reasonable to assume that a low tax burden can compensate by impacting favourably on investment performance of listed non-financial companies in Nigeria. Ample worldwide evidence suggests that where framework conditions or market characteristics are relatively strong, a low tax burden can impact on investment performance positively. Moreover, where framework conditions are strong, a low tax burden achieved through the use of special tax incentives may operate to encourage rather than discourage investment, by contributing to reduce project cost and risk (OECD, 2013).

The success of incentives in influencing investment performance depends strongly on country-level characteristics. Tax incentives are more effective in countries with better infrastructure, reasonable transport costs, and a policy framework favoring investment (Bellak, Leibrecht, & Damijan 2009; Kinda 2014). In fact, tax incentives have been shown

to be eight times more effective in influencing investment performance in countries with good investment climates (Sabastian 2014; Bolnick, 2004)). In general, a low tax burden can trigger a good environment for investment performance (Göndör & Nistor 2012).

2.2. Theoretical Framework

The theory that has anchored this work is the agency theory. The idea of agency theory was envisaged by Smith in (1776) before Berle and means in 1932 built on the theory. Agency theory is built on the premises that there is an agency relationship between the principal and the agent, where the principal delegates work to the agent. There evolves risk sharing and conflict of interest between these parties. The theory is of the view that the conflicts that arise are as a result of separation of ownership and control. There is considerable information asymmetry between the agent and the principal which leads to contractual conflict

Despite the work of Berle and Means in 1932, the emergence of a coherent agency theory did not occur until the 1970s-1980s, when the theory was developed by Jensen and Meckling (1976). The thesis of Jensen and Meckling (1976) is that the market provides incentives to limit agency cost (Bendickson, Liguori & Davis, 2016). Companies, especially the decision makers, should have incentives to reduce agency costs. Corporations not reducing agency costs as advocated by the theory will thus suffer negative consequences. The main essence for firms having incentives is to try and avoid the problem between the agent and the principal. In essence, agency theory stems from an economic view of risk sharing (Bendickson, Liguori & Davis, 2016), which occurs between two parties, principals and agents, yet each of the two parties may possess different approaches to solve the problem (Jensen & Meckling, 1976). Seeking for tax incentives is one of the approaches adapted by the agent to enable him minimize cost, be more efficient and increase or maximize the principal's wealth.

According to agency theory, tax incentives offer an easy way to compensate for other government-created obstacles in the business environment; which can help managers of companies to take advantage of it to reduce cost of capital in order to enhance performance. This is one of the strategies managers take to resolve agency problems with owners of their companies (Bendickson, Liguori & Davis, 2016). This is the area in which a relationship between tax incentives and investment performance seems to exist. Wells et al., (2001) emphasized that since the obstacles in business financial performance are created by the government, tax incentives should be granted by the government to improve investment performance as a way of compensating for government created obstacles.

2.3 Empirical review

Scholars and practitioners are now interested in researching in the area of tax incentives because it is one of the most important government policies that attract investment in the country and also improve investment performance of firms in the economy. Some of the studies carried out in the last 10(ten) years have been reviewed as shown below;

Gumo (2013) examined the effect of tax incentives on performance of manufacturing firms in Kenya. The study adopted a descriptive research design. The study made use of secondary sources of data from Kenya revenue authority to collect secondary data on (tax incentives). The data was also collected from the Kenya National Bureau of Statistics to enhance depth. The study further collected primary data through structured

questionnaires to capture quantitative data. The study established that Kenya had various tax incentives including capital investment allowances offered to resident companies such as Industrial Building Allowance (IBA). Capital investment allowances were offered on the expenditure on capital which is incurred on an industrial building construction. The results show that tax incentives were positive to financial performance of manufacturing companies in Kenya.

Mayende (2013) examined the effects of tax incentives on firm Performance: Evidence from Uganda. The paper analysed the effect of tax incentives on the performance of Ugandan manufacturing firms. The study employed panel data estimation techniques for data analysis. The study findings show that firms with tax incentives perform better in terms of gross sales, profits and value added than their counterparts. The capital allowance and value added tax incentives including the control variables of firm-size, and age of the firm have positive impact on firm performance. The major policy implication of the study findings indicates that Government needs to streamline the provision of tax incentives for better firm performance. Access to quality and technical education and skills development is necessary in order to have qualified managers with high level of management skills to utilize the available tax incentives so as to improve firm performance.

Olaleye, Riro, and Memba (2016) examined the effect of company income tax incentives on performance of listed Nigerian manufacturing companies. Descriptive research design was adopted in this particular study. The target population in the study was the one hundred and seventy four listed manufacturing companies. The number of employees in these companies was found to be in excess of 56000. The study made use of primary data that was collected using self-administered questionnaires. The questionnaires were administered by trained research assistants. Data was collected for a period of one month. The method of data collection involved drop and pick method to enhance the response rate. Furthermore, snowballing method was also adopted. This method involves the respondents referring each other. There was also the use of emails and phone calls for follow ups. The findings showed strong positive linear relationships between reduced company income tax incentives and the performance of manufacturing firms in Nigeria. The study recommended that there was need to conduct a cost benefit analysis for tax incentives available to various sectors of the economy.

Kuria et al. (2017), similarly undertook a study to investigate the influence of effect of corporate income tax incentive on the performance of Export Processing Zones (EPZ) firms in Kenya. The research design was correlation research design. Correlation research design was best suited since panel data was used. Census survey was adopted because the population of interest was small. A sample size of all the 86 registered EPZs firms were used in the study. Primary data was obtained using questionnaire. Secondary data from the registered firms was collected on; ROA, number and value of jobs and the length of stay of the firms. The study used both descriptive and inferential statistics to conduct data analysis. The results of study revealed that at 5% significance level, corporate income tax incentives had a positive and significant relationship with performance of EPZ firms measured using ROA. The results further revealed that corporate income tax incentives were found to have positive and significant effect on number of jobs by EPZ firms and length of stay. The study concluded that increase incorporate income incentive led to an increase in the ROA, number of jobs and length of stay of the EPZ firms in Kenya. The study recommended that stakeholders in tax policy should reconsider the economic value of corporate tax incentive and increase or create more incentives to the sector.

Nnate, Oduneka and Uche (2021) investigated the effect of Capital Allowance on Manufacturing Companies in Enugu State Nigeria. The study adopted the Survey research design. The primary source of data was adopted for the study. This was sourced from Forty-five Staff members from three Accounting units of three manufacturing companies in Enugu state through the administration of copies of the questionnaire. The study tested the research hypotheses with Z test statistical tool with the aid of the Statistical Package for Social Sciences (SPSS). Finding from this study revealed that Annual allowance have significant effect on the profitability of manufacturing companies in Enugu state. The study also revealed that initial allowance does not have significant effect on the efficiency of manufacturing companies in Enugu state. The study consequently recommends that all manufacturing companies in Enugu state should endeavor to engage the services of professional Accountants for the purpose of maximum performance which are necessary for its survival and sustainability.

Mwangi, Gitau and Kung'u (2021) investigated the effect of corporate income tax incentives on financial performance of manufacturing firms in Kenya. They adopted descriptive research design and the data collected was analyzed using descriptive and inferential analysis. The study established that, corporate income tax incentives has a statistically significant effect on financial performance of manufacturing companies measured by return on assets.

3. Methodology

This study employed expo-facto research design and used pooled panel data, where all the variables are observed for each cross-section and each time period. The study has a time period of 5 years from 2016-2020 and a cross-section segment which considered 20 listed non-financial companies in Nigeria from 10 different sectors listed on the floor of the Nigeria Exchange Group (NGX) as at 31st December, 2020 as sample for the study.

Secondary data were used to appraised the effect of tax incentives on investment performance of listed non-financial companies in Nigeria. References were made to written journals and articles, internet, the annual reports and accounts of the sampled companies and the other needed data were sourced from the NGX. Data generated for this study were first summarized using descriptive statistics. Thereafter, the data were analyzed using the pooled panel regression model based on Ordinary Least Square (OLS) and random effects model with the aid of STATA. In this study, a multiple (POLS) regression model was estimated in order to determine the extent to which the explanatory variable (independent variables) affect the investment performance proxy by Return on Investment (ROI) of listed non-financial companies in Nigeria. The model is stated as shown below:

$ROI_{it} = \alpha + \beta_1 INV\ ALL_{it} + \beta_2 TAX\ EXEM_{it} + INTR_{itt} + INFL_{itt} + \varepsilon_{it}$ ….. (1)

Where;

ROI	= Return on Investment
INV ALL	= Investment allowance
TAX EXEM	= Tax Exemptions
INTR	= Interest Rate,
INFL	= Inflation,
α	= Constant of the regression
$\beta_1 - \beta_5$	= The coefficient of the predictor variables.
I	= Cross section
T	= Time
ε	Residual (error) term

Tax incentives are expected to be positively related to investment performance in line with the Agency theory mentioned earlier.

Decision rule: To accept the null hypothesis if the calculated P-value is greater than the accepted significant p-value of 0.05.

3.1 Variable definition and Measurement

There are various definitions and measurement of variables in this study. The variables used in this study are segmented into three categories, namely: the dependent variable, the independent variables and the control variables.

3.1.1 Dependent variable

Investment performance is the dependent variable in the model of the study and is proxied by Return on Investment (ROI). ROI is measured by dividing the net income (profit after tax) by total average assets (cost of investment). It can be interpreted as a percentage of income to its total average assets.

3.1.2 Independent variables

The independent or explanatory variable in this research is tax incentives. Tax incentives is proxied by Investment allowance, Tax exemption, Deferred Tax, Investment tax credit and accelerated capital allowance,

Investment allowance: Investment Allowance is a form of corporate tax incentives that reduce the effective price of acquiring new capital. It is measured by allowing some deductions from the taxable income based on a given percentage of the qualifying new investment. (i.e 10% investment allowance).

Tax exemptions: These are available for export products. Exports are zero-rated (Holland & Vann, 1998). Costs of buildings, plants and machinery of a manufacturing company are granted in full as tax relief. Property used in manufacture of other goods (which goods may ultimately be taxable), Property used by a tax exempt or other parties for a charitable or other not for profit purpose. Other exemptions include; Vehicle tax exemption, Airline tax exemption, Gasoline tax exemption, Utility tax exemption and Income tax exemption. Any exemption enjoyed by the companies selected as samples is taken into account. It is measured in naira by the total of tax exemptions gained for the year.

3.1.3 Control Variables

Interest Rate:

Interest rate is the price paid for the use of money. It is the opportunity cost of borrowing money from a lender. It can also be seen as the return being paid to the provider of financial resources. Wuhan (2015) states that the influence of interest rate on investment scale is viewed as the opportunity cost of investment on total investment. The rising interest rates increase the cost of investment and then inevitably cause lower income investors have for their investment; so, the demand for investment is reduced. However, falling interest

rates means that investment costs decline, thereby stimulating investment and the total return on investments (ROI) increase. It is measured by the total interest rate for the year.

Inflation: Inflation is the reduction in the purchasing power of a currency of a nation (Fashagba, Atsanan, Yadok, and Adebayo, 2022). There is said to be an inflation in the economy when the general price levels of goods and services keep increasing. Zamfir *et al*., (2016) found out that inflation affects return on investment as it responds to change in investment. Investment responds inversely to change in inflation. The implication is that as inflation level rises; investment level will reduce along with return on investment. Investment choice is driven by the rate of return and the rate of inflation that can affect the real rate of return. It is measured by the total inflation for the year.

4. Results and Discussions

This section presents the results obtained from data analysis. The salient features of the data used are examined through descriptive statistics followed by regression result and discussion of results.

4.1 Descriptive Statistics

The descriptive Statistics for the dependent and independent variables is presented as shown below;

Table 1: Descriptive statistics

Variables	Obs	Mean	Std Dev	Min	Max
ROI	100	5.5279	0.2588	-19.91	63.04
INV ALL	100	143,334.7	218,239.1	1,247	1,205,0355
TAX EX	100	570,293.4	1,307,054	480	7,119,427
IR	100	13.4	0.9744	11.5	14
INF	100	13.8	2.0088	11.4	16.52

Source: Researcher's Compilation, 2023.

Table 1 shows the descriptive characteristics of the variables. It shows that investment performance represented by ROI has a mean of 5.53% among the sampled companies. The mean value of 5.53% indicates that the sampled companies have a moderate return on assets which they obtained in the course of carrying out their operations. This implies that the companies were moderately efficient in utilizing their assets for optimal performance. The minimum and maximum values were -19.91% and 63.05% with a standard deviation value of 10.26%. This suggests that the values of ROI of the sampled listed non-financial companies were vulnerable since the standard deviation is larger than the mean itself. This means that obtaining these ROI value amongst the sampled listed non-financial service companies is highly unlikely and so management should closely monitor investments in assets so as to maintain a level of assets that can enhance the revenue generation potentials of their companies.

The table also shows that investment allowance has a mean of N143.3347 million and a standard deviation of N218.2391 million. With a maximum and minimum values of N1,205.035 million and N1.247 million respectively, it can be seen that most of the sampled companies have wide variations in the amounts of investment allowances they enjoyed during the period under investigation. The data also suggests that the companies enjoyed considerable amount of investment allowances from relevant tax authorities as an incentive to encourage manufacturing and related activities in the industry.

Tax exemption as depicted by the table shows a mean value of N570.2934 million. This indicates that the sampled listed non-financial service companies enjoyed huge amount of tax exemptions such that its investment performance can be enhanced. The maximum and minimum values are N7,119.427 million and N0.480 million respectively. This shows wide variations amongst the companies' tax exemptions as depicted by the standard deviation value of N1,307.054 million. This implies that the tax exemptions enjoyed by the companies vary considerably and show difficult signs of obtaining the mean values.

For the control variables, interest rates have a mean value of 13.4% among the companies. This interest rate is high although when compared to bank borrowing, it may be less. The borrowing potential of a company is intended to provide more financial assistance for the acquisition of assets that can support the company's operations both in the short and long run. The interest rate values have maximum and minimum of 14% and 11.5% respectively. The closeness of these values connotes that the interest rates are relatively stable among the companies' borrowing profiles as supported by the low standard deviation of 0.97%.

Meanwhile, the mean inflation rate within the study period stood at 13.78% with maximum and minimum values at 16.52% and 11.40%. Inflation rates have remained relatively stable within the study period as supported by the low standard deviation value of 2%. This may provide stability in the amount of inputs that these companies may need in their production processes as well as consistence with economic realities befalling their working environment.

4.2 Regression Result

The results here provide information as to the strength and direction of the relationship between variables of tax incentives and investment performance variable proxy by ROI used in this study

Table 2: Regression result (Robust) of Tax Incentives and Investment Performance

Number of	100			
Prob	0.0086			
R –squared	0.4679			
Wald-Chi2	14.64			
ROI	Coefficients	Std Error	Z	p- value
INV ALL	0.0082318	0.237848	0.35	0.729
TAX EX	0.0502522	0.0280439	2.79	0.003
IR	0.4699936	1.048829	0.45	0.654
INF	- 0.4932805	0.5368941	-0.92	0.358
Constant	0.0450277	0.1739405	0.26	0.796

Source: Researcher's compilation, 2022.

In Table 2, the R-squared of 0.4679 indicates that tax incentives accounts for only 46.79% of variations in investment performance (ROI) while 53.21% is accounted for by factors outside this study. This means that tax incentives have accounted for moderate variations in ROI and so it is not partial determinant of investment performance. This conforms with most of the prior studies in this area that reported low to no explanatory power of tax incentives and its disaggregated dimensions and their effect on investment performance. The Wald-statistics chi square reveals a value of 14.64 and a p- value of

0.0120 which is significance at less than 5% level of significance. This reveals that the model is fit and adequate. It also shows that the variables jointly have significant effect on investment performance of listed non-financial companies in Nigeria.

4.3 Discussion of findings

Investment allowance and Investment performance

Table 2 shows that an increase in investment allowance will improve ROI by 0.823%. This implies that investment allowance has the ability to influence investment performance of the sampled companies positively. Investment allowance has a positive coefficient of 0.82318 and a P-value of 0.729 which is insignificant at 5% level. The null hypothesis is therefore accepted that there is no significant relationship between investment allowance and investment performance of listed non-financial companies in Nigeria. However, this finding is a little different from the studies conducted by Onyango (2015); Tembur (2016), Olaleye et al., (2016), Kuria et al., (2017), who in their separate studies discovered that investment allowance incentive has not only a positive effect on investment performance (ROI) but was also significant.

Tax Exemptions and Investment performance

More so, a unit increase in tax exemption will also increase ROI by 5.025%. This implies that the companies do not only see it good to have tax exemptions for nothing sake, but they also go ahead to ensure that the incentives are adequately utilized for the benefit and wellbeing of the stakeholders as advanced by the agency theory. This will make the companies have a relief in such a way that the excess funds if adequately channeled towards profitable ventures can boost the operations of the company. Most especially in the period of incessant economic meltdowns and recession, tax incentives such as exemptions will help companies in coping with the harsh economic conditions. This will help the companies in amassing huge funds for investment in qualifying capital expenditure that will also lead to chunk reliefs in form of capital allowances.

The test of hypothesis two revealed that tax exemption has a positive significant effect on investment performance represented by ROI. This result is in consonance with the studies of Tsegba, et al., (2021) Ohaka and Dagogo (2015), Kuria, et al. (2017), *Mwangi and Gitau* (2022) who assessed various forms of tax exemptions and found that, tax exemptions have a positive significant effect on investment performance. This suggests that as companies start to go into manufacturing business, the exemptions obtained from capital expenditures on production machines goes a long way in encouraging companies to have reduced tax incidence and to upscale productivity, more so that the heavy cost of acquisition and installation of heavy machinery distorts cash flows initially, these exemptions serve as an opportunity for such companies to reduce cost thereby, relieving the companies from incurring heavy losses.

5. Conclusion and Recommendation

5.1 Conclusion

From the findings of the study, the following conclusions can be drawn:

Investment allowance is a very important veritable tax incentive for companies to explore as it has a positive effect on ROI. It does not have a significant effect to enhance investment performance of listed non-financial companies in Nigeria.

Tax exemption is also an important tax incentive which makes it possible for companies to gain improved performance. This is a good tax incentive for companies to explore because, it has a positive effect on listed non-financial companies in Nigeria and can significantly enhance investment performance of such companies.

5.2 Recommendations

Based on the study findings, the following recommendations are advanced:

i. Managers of listed non-financial companies in Nigeria who are involved in manufacture and service business should be encouraged by the federal government by providing more investment allowance to a higher level so that they can make more investments in qualifying capital expenditure in order to access higher investment allowance. This is because it is statistically shown to have insignificant effect on investment performance. The additive nature of the allowance and its statistical insignificance here are indications that managers have been utilizing the allowance very well but it is not enough to improve the return on investment.
ii. Managers of the listed non-financial companies should intensify their efforts in the area of gaining more tax exemptions from the relevant tax authorities. This is because increased exemptions from tax may cause significant improvement in the investment performance. This will motivate companies to invest into products and services that are innovative and could lead to inventing new ideas and strategies that may lead to the creation of new and improved goods and services that will contribute towards solving the ever evolving and dynamic customer taste and preferences.

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