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## Tax Incentives and Corporate Financial Performance in Nigeria: Evidence from Firms Level Panel Data

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#### ABSTRACT

While the philosophy behind tax incentives and corporate financial performance is appealing, its analytical content and utility remains somewhat controversial and of empirical interest. This study assesses the causal influence of tax incentives and corporate financial performance on a sample of 50 listed companies in the NSE, covering the period of 2006-2010. The postulated hypotheses were tested, using multiple linear regression (MLR) analysis. With r values of .996, .984, and .948 very basic aprori reasoning established is the existence of a robust dimension and the three measures of corporate financial performance, namely return on equity, return on sales and profit after tax. The significance of this attempt can be seen in the ability of the models to permit inter-sector; inter-industry, interinstitutional, as well as inter-country comparative analysis relating to the specified variables. Further empirical research is however recommended to verify the validity of these submissions and the overall explanatory power of the models constructed, using data drawn from developing countries.

## Introduction

The academic debate concerning the nature, significance, strength, causality, shape, time variance as well as the identification of the underlying factors between Tax Incentive and Corporate Financial Performance is a long standing and controversial one. A number of studies have consequently looked at empirical and theoretical influence between tax incentive and corporate financial performance. Studies in this area include the works of AdenikinJu (2001), Rouse (2003), Boura et al (2006), Olatudun (2008), Hines (2009), Ohaka (2012), Wilson & Tsegba (2013). These studies argue that there is a positive influence between tax incentive and corporate financial performance. On the other hand, the findings of Bondolino & Greenbaum(2007), Ohaka (2012), Auerbaih (2013) Chirinko (2013) contradict most of the earlier evidence of the impact of tax incentive and corporate financial performance. Their results reveal significantly negative effect of tax incentive and corporate financial performance. However, not only did these studies yield conflicting results and conclusions, perhaps due to the methodologies adopted in analyzing their research data, but more importantly, the time frame considered in many of them was rather short. Above all, the contexts of these studies were different from Nigeria. The observed limitations have left a trail on knowledge gap in the literature, thus warranting the need for more systematic examination of the influence between tax incentive and corporate financial performance from the standpoint of Nigeria. This underscores the need for this study.

Our treatment of the study matter differs from the past studies in several important aspects. First, we are able to draw

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on an extensive literature of the latest contributions and methodological short comings of many extant studies (Harris & Skuras, 2010). Second, the study sample comprises broad longitudinal data set spanning 2008-2012. The data set is more robust than those used in the previous studies, especially those on developing countries. The study period also corresponds to and witnessed regimes of economic reforms in Nigeria. Another important shortcoming of most previous studies which the current study seeks to overcome is that explicit attention was not paid to time series characteristics of the data used, using recent developments in time series econometrics as provided by Jorgenson (2003), Harris & Skuras (2004), Devereux etal (2006), Aluko (2010), Botman & Klemm (2011), Elmorchid & Mansouri (2013), this study is able to derive the influence between the variables in the model adopted.

The remainder of this paper is organized as follows: Section II discusses the literature on tax incentives and corporate financial performance. Section III lays out the analytical framework and econometric methodology while empirical results are reported in section IV. Section V concludes the paper

#### **Review of Related Literature**

An appropriate starting point in discussing the economic consequences of tax incentives is to cast the framework in terms of a synthesis of extant theories. This putatively provides a logical sequence to previous research efforts, thereby providing a suitable foundation for the development of a systematic analytical framework for the present study.

#### **Baseline Theories**

Works on the effect of tax incentive and corporate finical performance have been from two main perspectives, namely; taxation on one hand, and corporate financial performance on the other. The theoretical works on tax incentive were built on the foundation laid by Adam Smith (1776). Two broad theories evolved from the four criteria for a good tax system posited by Adam Smith (Heady, 2008). There is the theory of optimal taxation and the theory of tax neutrality.

The revolutionary work on employment, interest and money (Keynes, 2006) provides a plausible theoretical foundation on determinants of corporate financial performance. Three theories are pertinent in the tax incentives and corporate financial performance namely; Neoclassical theory, Tobin's theory of stock market signals and accelerator theory of output level.

Neoclassical theory is the most pertinent approach to this study among other theoretical approaches. Lau (2013) highlighted the appeal of this approach in four folds. First, it achieves fairness in the sense of equitable treatment of citizens before the law; second, it eliminates the rubric of tax neutrality, it eliminates any possibilities for increasing economic inefficiency by redistributing tax burden; thirdly, Jorgenson's (2003) summarizes the information about future consequences of tax incentives and corporate financial performance decisions essential for current decisions about capital allowance and finally, it leads to simplicity by expunging from tax status detailed specifications of transaction subject to special provision. Jorgenson's cost of capital therefore summarizes the information about future firm decisions essential for current decisions about capital allocation. It can therefore be concluded that the cost of capital approach has the ability to absorb unlimited detail on the features of specific tax policies. In addition to the neoclassical theory, we present a review of four other theories on taxation and performance - their propositions, their weaknesses and an assessment of their relative relevance to our study (see table 1)

Tax Incentives: This paper is to enrich the empirical 4. literature on the influence between tax incentives and corporate financial performance in a developing country. Precisely, the purpose is to assess whether tax incentives is an appropriate surrogate for corporate financial performance from a developing country perspective. The study focuses the context of study on Nigeria, a major African and developing country for several reasons. First, research on the phenomenon of interest was conducted, almost exclusively, on the USA and OECD countries (Zee et al, 2002; Taaze, 2011; Chalk, 2011; Watts, 2013; Wilson & Tsegba, 2013). Empirical attention on less developed countries has been scanty, notable exceptions being the works of Harhoff & Ramb (2002), Deverenx et al (2006, Botman & Kleman (2011) on China. In reality, developed country's (DCs) are research conscious and research supportive, unlike DLDCs. In DCs, corporate executive and public officials have a better cultural sense of value of research; they also recognize the need for conceptual framework as a prolegomena to policy formulation, and offer findings and other logistics support for research, including making data readily available in public domain. In contrast, pubic policies in most LDCs, especially sub-Saharan Africa, tend to be guided by and crafted as "the spirit directs' the minister or government official. The development trajectories of accounting in DCs namely; Independent discipline framework and the microeconomic approach seem to have influenced their practice (Wilson, Tsegba & Sar, 2013).

Most of the research has occurred in developed countries (DCs). Evidence from developing countries has largely been anecdotal. But there is proof that tax incentives work for certain kinds of investments, in specific situations, and for specific sectors. such as export-oriented financial performance. As practitioners and policy-makers can attest, political economy exerts a powerful influence on tax incentives. Many tax incentives especially generous ones have persisted because of lobbying by special interests and politicians' desire to scurry favour. Yet little research has been done on how political economy affects incentive policy. This empirical paper sheds light on the role that political economy plays in the popularity of incentives and the related shortcomings. Tax incentives are sometimes used to dole out favours to investors, so investors who benefit from incentives resist attempts to eliminate them.

#### **Corporate Financial Performance**

Although a fairly large body of literature generally exists on the subject of corporate financial performance, Market, accounting and mixed variables can be used in measuring the performance of firms in the context of tax incentives (Aluko, 2010; Abel, 2010; Wilson & Tsegba, 2011; Watts, 2013). The market variable is market capitalization. Accounting variables include Return on Equity (ROE), Return on Assets (ROA), Profit After Tax (PAT). Return on Investment (ROI) and Return on capital employed (ROCE). The mixed variable is the market value Added (MVA). Each of these variables provides credible measure, however, following the lead of Preston and O'Bannon (2009), we select ROE, ROA, and PAT for use in this study. This variable is essentially a financial efficiency measure that seeks to establish the extent to which a firm generates sufficient returns to cover its cost of capital (Wilson and Tsegba, 2012). In many studies, the measure of relationship between tax incentives and corporate financial performance use a wide variety of measures of corporate financial performance (Mahoney and Roberts, 2007; Lee etal, 2009; Aras etal, 2010). The researches on the existing relationship between tax inventive and corporate financial performance is inconclusive. A great portion of them measures corporate financial performance either from the accounting or market view. Ene (2008), Brown (2011), Firer & Williams (2013) pointed out the problems that may occur, using accounting - based measures and market-based measures. Accounting measure is susceptible to other measures due to the fact that investor's evaluation "may not be sufficient".

The advantage of market-based measures is that "we can estimate the value (or the cost) of companies adopting certain strategies to be socially responsible, conditional on the existing information" (Aluko, 2010; Slemrod, 2010; Firer & Williams, 2013). The literature review of Fiori etal, (2009) reveals that the measurement of corporate financial performance can be based on profitability, liquidity, solvency, financial efficiency and repayment capacity. Among 85 studies that Agundu (2010), Klemu (2017) reviewed, 45 used accounting measures, 12 used market measures and the rest used a mixed set. The literature review provides a list with all measures of CFP used in their examined studies. The results of their review concluded that most popular measures are size (Logarithm of total assets), ROA, ROE, and 5 years ROS.

Return of Assets (ROA) was widely used as we observed in the following studies (Asioda, 2008; Anerbach & Hines, 2010; Klemu, 2011; Ohaka, 2012; Watts, 2013).

"S/N	Theory	Propositions	Weakness	Relevance to our study
1	Optimal taxation	It focuses on equality of tax system. It forms the basis of major tax reforms. Central to this theory is that a tax system should minimize the administrative cost and disincentive effects.	The assumption of perfect market is unattainable because income is characterized with uncertainties. To model administrative cost into tax rates has also proved difficult.	The theory provides basis for tax reform efforts towards making a tax system equitable. It does not extend to influence of tax on performance which is our focus.
	Tax neutrality	The central feature is that tax should not affect marginal returns of corporate financial performance nor distort allocation mechanism. It implies that government objective for taxation is solely to raise revenue to fund public expenditure and not to motivate growth	In real life situation, no tax system has proved neutral with respect to performance. The theory can only work in lump sum tax situation like flat levies which is not common	The theory is anchored on the traditional objective for taxation, which is revenue generation. Tax objectives extend beyond raising revenue for fiscal policy considerations. This theory does not anticipate influence of taxation on corporate financial performance.
3	Accelerator	Investment is a linear function of changes in output. This implies that the amount of investment is determined by the output size.	The relationship between corporate financial performance and tax incentive, though, could be positive but not usually Proportional. Where there is excess capacity increase in output would not result in increase in performance	The theory considers a vital variable that drives output. However corporate financial performance does not depend on output only, but also on several other corporate financial performance variables which are relevant in this study.
4	Tobin q	Tax incentives influence corporate financial performance. A firm invests until the ratio of capitalized value of marginal investment to its purchase cost equals one. This implies that a firm invests as long as the value of its shares exceeds the replacement cost of the asset of the firm	It focuses on average return on capital rather than the marginal returns on capital which is more meaningful. It is not an optimization technique. There are difficulties in measuring intangible assets and replacement cost.	The theory is a very useful concept in capital market analysis. Although it incorporates cost of capital as an important variable that determines performance, it is not a marginal concept and hence does not provide sufficient foundation for optimal relationship between tax incentive and corporate financial performance which is the focus of this empirical paper.
5	Neoclassical	Changes in the tax policy induce changes in corporate financial performance by charging rental price of capital service. CFP does not only depend on output but on prices and features of tax laws. CTP as determined by the amount of capital stock optimum is obtained by equating the marginal product with the cost of capital	It ignores the influence of future optimal level of capital stock on CFP completely. Rates of CFP and changes towards optimal stock cannot be determined from the model.	The theory is a standard marginal concept in capital income taxation theory which incorporates detailed aspects of tax influence on CFP variables. It provides a basis for the assessment of tax influence on PAT, ROE, and ROA. It provides a basis for the assessment of tax system projected by tax neutrality and optimal tax theories. It is a flexible concept which gives basis for the incorporation of more relevant economic variables than accelerator theory and Tobin q."

## Table 1. Summary of theoretical positions

Table 2.	Summarv	of Empirical Studies
I ubic 2.	Summary	or Empirical Statutes

S/NO	Author(s)	Relevant	Data/case	Model	Estimation	Main results
	& Year	theory	study		technique	
1	Hall &	User cost of	U.S.A.	Autoregressive	Panel data	Positive significance influence between
	Jorgenson	capital	(1954-	distributed lag model	analysis	tax incentives and corporate financial
	(2000)		1967)	firm specific user cost	Durbin's two	performance
					stage least	
					square method.	
2	Abel	Accelerator	Nigeria	Auto regressive	Panel data	Positive significant relations between tax
	(2000)		(1980-	distributed lag mode firm	analyses,	incentives and financial performance.
			2000)	specific performance	instrument	Negative influence between tax
					variable.	incentives and PAT.
3	Harhoff &	User cost of	Germany	Error correlation model	GMM. Panel	Tax incentives effects are strong and
	Ramb	capital	(1988-	and autoregressive	data analysis.	depend among other factors on corporate
	(2002)		1997)	distributed lag model.		financial performance structure,
						financing policy and industry.
4	Wet &	User cost of	South	Vector auto regressive	Vector error	Average total elasticity of companies
	Koch	capital	Africa	and co-integration	correction	with respect to effective corporate taxes
	(2004)		(1980-	technique, firm specific	model, panel	significantly influences corporate
			2003)	user cost.	data analysis	financial performance.

According to Ohaka (2012), and Nwaiwu (2014), ROA "represents the profitability of the firm with respect to the total set of resources, or assets, under its control" Return on Equity (ROE) was used as an accounting measure in our examining literature (Anerback & Hines, 2010;

Slemrod, 2010; Firer & Williams, 2013). Return on Sales (ROS) is an accounting measure that was also used widely (Mahoney & Roberts, 2007; Lee, 2009; Aras, 2010). The wide use of Tobin's q ratio as we found out in our examining literature (Philips, 2003; Aras, 2010; Toazo, 2011) is justified by its ability to measure long-term investments and is calculated by dividing the sum of firm equity value

#### **Empirical Studies**

The global trend in fiscal policy is towards a steady decline of corporate tax burden. The advocates of this strategy are of the opinion that these measures strengthen the tax incentives of the corporate sector. Several empirical works have been conducted to elucidate the veracity of this view (For example, Hall and Jorgenson, 2007) revealed that tax allowance, re-investment allowance and investment tax credit for tax purposes increased corporate financial performance (ROE, ROA and PAT), while Cummins, Hasset & Hubbard (2014) show that tax reforms have significant effect on corporate financial performance. However, the conclusions of the studies, which specifically used micro-economic evidence to determine the strength of influence tax incentives and corporate financial performance, varied considerably. While economic theory predicts that increasing tax incentives would negatively affect manufacturing investment, some recent empirical works have argued that corporate financial performance is insensitive to interest rates and other determinants of corporate financial performance (Elmorchid & Mansouri, 2013

Empirical studies into tax incentives in the 21<sup>st</sup> century have provided ample evidence that tax incentives is a fundamental characteristic of financial reporting in virtually all the developed countries in the world, and also in many developing countries (Zee et al, 2002; Asiodu, 2003; Olatundum, 2008). This is an active part of research and more studies in this area are currently being undertaken. The phenomenon of Tax incentives and corporate financial performance has intrigued many researchers since the very early stages of the development of accounting theory. However, there has been an eclectic and divided range of opinion about tax incentives and corporate financial performance, much of the argument has still to be resolved even today. Beginning in the last 1980 and until the 2000s, tax incentives and corporate financial performance had been criticized by a number of prominent accounting scholars, including Dondolino & Greebanm (2007), Heady (2008), Wilson & Tsegba (2011).

However, as Watts (2013) has noted, despite the criticisms of tax incentives and corporate financial performance, not only has tax incentives and corporate financial performance survived numerous accounting reforms, regulations and economic crises in the past century, but also the average degree of tax incentives and CFP, in the Nigeria at least, has even increased slightly during the fast 30 years. And this claim has been substantiated by many empirical studies based on large samples of data from the Nigeria and worldwide. It seems that tax incentives and corporate financial performance is extremely resilient in the modern economy. But why do accountants wants to conform to the "practical wisdom" of tax incentives and corporate financial

performance despite its criticisms? After all, is there any logic hidden behind the seeming illogicality of tax incentives and corporate financial performance? In fact, finding that logic to support these two construct has become the main occupation of many positive accounting researchers over the last decade.

#### **Research Hypotheses**

The forgoing discussion provides the empirical context for three important hypotheses that track the influence between tax incentives and corporate financial performance, formulated in the null form, to wit:

 $H_{01}$ : Tax Incentives (Capital allowance; Re-Investment and Investment Tax Credit) does not have significant influence on Return on Equity.

 $H_{02}$ : Tax Incentives (Capital allowance, Re-Investment and Investment Tax Credit) does not have significant influence on Return on Assets.

 $H_{03}$ : Tax Incentives (Capital allowance, Re-Investment and Investment Tax Credit) does not have significant influence on Profit After Tax.

#### **Research Methodology:**

Numerous studies have investigated the influence between Tax incentive and corporate financial performance. Some of these studies are conducted as survey (Chalk, 2011; Wilson & Tsegba, 2011; Ohaka, 2012; Wilson & Tsegba, 2013; Hasset & Hubbard, 2014). The present study employs data analysis of fifty-eight (58) listed companies on the Nigerian Stock Exchange (NSE).which enhances the combination of time series and cross sectional observations, consistence with the works of Bondolino & Green baum, (2007) Heady (2008) Wilson & Tsegba (2011) Ohaka (2012) Wilson & Tsegba (2013).

#### Sample Selection

The study sample was drawn from quoted companies on the first tier of the Nigerian Stock Exchange (NSE) as compiled by the NSE Fact Book, using the census method of sample selection. The census method eliminates sampling error and provides data on all the individuals in the population (Wilson & Tsegba, 2013). This approach is in accordance with prior investigation such as Hines (2009), Slemrod (2010), Firer & Williams (2013). Further, the adoption of panel analysis model in this longitudinal study imposed the following requisite characteristics on the sample elements.

(1) The company's financial statements must cover the 12 month period ending on 31 December of each calendar year. This condition is consequent upon the criterion that the observations must be captured in periods with fixed and constant intervals between them.

(2) Each sample case must have complete data values for each financial year covered in the study period.

(3) The companies must have been quoted on the first tier of the NSE on or before  $1^{st}$  January 2004 and remained listed throughout the five years under study. These criteria yielded research sample of 58 out of 100.

#### Data Analysis Technique

The study investigates the existence of any causal influence between Tax incentives and corporate financial performance. Regression analysis is the most common technique used to determine the influence that exists between variables (See Wilson & Tegba, 2011). The multiple linear regressions will be used to analyze the relationship of Tax incentive on ROE, ROA and PAT of listed companies (Chalk, 2011; Ohaka, 2012; Fire & Williams, 2013).

This article modified the economic models of Demsetz and Villalonga (2001) as follows:

$TI_{it} = B_0 + B_1 ROE_{it} + B_2 ROA_{it} + B_3 PAT_{it} + e_{it} \qquad \dots $				
$CFP_{it} = B_0 + B_1 ROB$	$E_{it} + B_2 R$	$OA_{it} + B_3 PAT_{it} + e_{it} \dots \dots$		
Where:				
TI <sub>it</sub> =	Tax ince	entives from period i to t.		
CFP <sub>it</sub>	=	Corporate financial performance		
from period i to t	•			
ROE <sub>it</sub>	=	Return on equity from period i to t.		
ROA <sub>it</sub>	=	Return on Assets from period i to t.		
PAT <sub>it</sub>	=	Profit After Tax from period i to t.		
CA <sub>it</sub>	=	Capital Allowance from period i to		
t.				
R-In <sub>it</sub>	=	Re-investment from period i to t.		
InvTC <sub>it</sub>	= Invest	ment Tax credit from period i to t.		
	$B_{01}$	$B_1$ , $B_2$ $B_n$ are the correlation		
coefficients.				

e<sub>it</sub> is the random variable.

t is the last period in the time series data

#### **Empirical Results**

This section discuses the empirical results with respect to the three study hypotheses:

 $H_{01}{:}\,Tax$  incentives does not significantly influence Return on equity of quoted manufacturing companies in Nigeria

 Table 1. Influence of Tax incentives on Return on Equity.

Test	<b>Functional Form</b>			
statistics/	Line	Semi-Log	Double-	Exponentia
Variable	ar	_	log	1
Constant	11.100***	279.583*	795*	2.221***
(Intercept)	(7.348)	(1.560)	(716)	(15.830)
Capital	1.84256**	136.402**	.143*	1.024E-7**
Allowance	* (3.625)	*	(.815)	(2.170)
		(-4.8220)		
Re	3.632E-	101.782**	.349*	-1.502E-7*
investment	6**	* (2.841)	(-1.575)	(846)
allowance	(1.899)			
Investment	6.209E-	31.008*	.489***	1.360E-8*
Tax Credit	7***	(1.100)	(2.806)	1.120)
r	.996	.757	.936	.700
$r^2$	.992	.573	.876	.490
f-ratio	2295.	24.12	126.6	17.310
	864***	6***	50***	***

Note: \*\*\* = significant at 1%; \*\* = significant at 5%; and \* = significant at 10% and above, t-values are shown in parenthesis.

In terms of the number of significant variables and the statistical values of the correlation coefficient (v), coefficient of determination  $(r^2)$ , and f-ratio, the linear form yielded the best fit and is accordingly used in our discussion. The linear form produced an r o .996 indicating a strong positive influence between tax incentives and return on equity with an  $r^2$  of .992, the study evidenced that about 99.2% of the changes in return on equity is attributed to variations in capital allowance, re-investment allowance and investment tax credit. The appropriateness of the model specification is further highlighted by the f-ratio of 2295.864 which is significant at 1% level. The result indicates that there is a positive relationship and significant impact between Tax Incentives and return on equity of quoted manufacturing companies in Nigeria. This result corroborates the findings by Andic (2006), Anerbach & Hines (2011) and Klemn (2011).

 $H_{02}$ : Tax incentives does not significantly influence return on assets of quote manufacturing companies in Nigeria.

 Table 2. The influence of tax incentives on return on assets.

Test	Four Functional Forms			
statistics/	Linear	Semi-Log	Double-log	Exponentia
Variable		0	0	1
Constant	10.533***	-7.646**	-1.479***	2.076***
(Intercept)	(10.158)	(-2.014)	(-3.791)	(18.196)
Capital	1.157E6**	389***	.338***	6.332E-8*
Allowance	* (3.319)	(-3.897)	(5.484)	(1.65)
Re-	-1.677E.6*	8.644***	.245***	-8.505E-8*
investment	(-1.277)	(4.935)	(3.148)	(589)
allowance				
Investmen	1.522E-**	.353*	.202***	8-7810-9*
t Tax	(1.696)	(.256)	(3.300)	(.686)
Credit				
R	.833	.956	.984	.540
$r^2$	.694	.915	.968	.291
f-ratio	40.796***	193.22**	538.943**	7.394***
		*	*	

Note: \*\*\* = significant at 1%; \*\* = significant at 5%; and \* = significant at 10% and above it -valued are shown in

#### parenthesis.

In terms of the number of significant variables and the statistical values of the correlation coefficient (r), coefficient of determination  $(r^2)$  and f-ratio, the double-log function yielded the best fit and is accordingly used in our discussion. The double-log function produced an r of .984 indicating a strong positive influence between tax incentives and return on assets with an  $r^2$  of .968. The study evidenced that about 96.8% of the changes in return on assets is attributable to variations in capital allowance, re-investment allowance and investment tax credit. The appropriateness of the model specification is further highlighted by the f-ratio of 538.943 which is significant at 19.level. The result indicates that there is a positive relationship and significant impact between tax incentives and return on assets of quoted manufacturing companies in Nigeria. The results of this study are inconsistent with the findings of Nwaiwu, 2014, who reported no significant influence between Tax incentives and return on assets. The evidence is however consistent with the results obtained by Wilson & Tsegba (2011); Ohaka (2012); Nwaiwu (2014); Hasset & Habbard (2014) who reported significant positive relationship between tax incentives and return on assets. Despite the methodological differences between the two studies, their findings are largely similar.

 $H_{03}$ : Tax Incentives do not significantly influence Profit After Tax of quoted manufacturing companies in Nigeria.

 Table 3. The influence of Tax incentives on Profit After

Test	Four Functional Forms				
statistics/	Linear	Semi-	Double-log	Exponential	
Variable		Log			
Constant	10.533***	-	-1.479***	2.076***	
(Intercept)	(10.158)	17.646**	(-3.791)	(18.198)	
		(-2.014)			
Capital	1.157E6***	-	.338***	-8.505E-8*	
Allowance	(3.319)	5.384***	(5.484)	(589)	
		(-3.897)			
Re-	-1.677E.6*	8.644***	.202***	-6.781E-9*	
investment	(-1.277)	(4.935)	(3.300)	(.686)	
allowance					
Investment	1.522E-7**	.353*	.202***	6.781E.9*	
Tax Credit	(1.696)	(.256)	(3.300)	(.686)	
r	.833	.956	.948	.540	
r <sup>2</sup>	.694	.915	.991	.291	
f-ratio	40.796***	193.22**	538.943***	7.394***	

Note: \*\*\* = significant at 1%; \*\* = significant at 5%; and \* = significant at 10% above, t-values are shown in parenthesis.

In terms of number of significant variables and the statistical values of the correlation coefficient (r), coefficient of determination  $(r^2)$ , and f-ratio, the linear function yielded the best fit and is accordingly used in our discussion. The linear function produced an r of .948 indicating a strong positive relationship between tax incentives and profit after tax with  $r^2$  of .991, the study evidenced that about 99.1% of the changes in profit after tax is attributable to variations in capital allowance, re-investment allowance and investment tax credit. F-ratio of 2025.785 was significant at 1% level. The result revealed that capital allowance and re-investment allowance are found to be significant at 1%, while investment tax credit is significant at 10%, we hereby conclude that capital allowance and re-investment allowance have a strong impact on PAT, while investment tax credit has a weak impact. These result findings offer supports to previous studies on tax incentives such as Botman, etal, (2008); Bloom, et al, (2008) and Asiodu, (2008). Although, our result is not in concordance with Harris & Skuras (2014), which may be attributed to the analytical framework and techniques used by the researcher.

$H_0$	Test	Variables	Decision
$H_{01}$	Influence	Tax incentives	Reject $H_0$ and conclude that
		on Return on	significant positive influence
		Equity, $r^2 =$	exist between Tax Incentives
		.992	on Return on Equity.
H <sub>02</sub>	Influence	Tax incentives	Reject H <sub>0</sub> . Although the f-ratio
		on Return on	is significant at 1%. Only two
		Assets, $r = .968$	of the factors (Capital
			allowance, re-investment
			allowance) are significant at
			1%.
H <sub>03</sub>	Influence	Tax incentives	Reject H <sub>0</sub> : Tax incentives
		on profit after	explain 99.1% of changes in
		Tax, r = .991	profit after tax

Table 3. Summary of empirical Results.

Note:

F = variables specification/definition.

TI = Tax Incentives

TA = Tax Allowance as stipulated by law

ReInA = Re-Investment as stipulated by law

InvTC = Investment tax credit as granted by the law

CFP = Corporate Financial Performance

ROE = Return on Equity represented by Net profit after tax/shareholder equity

ROA = Return on Assets represented by Net profit after

tax + Interest/Total assets

PAT=Profit After tax represented by EBIT-Tax

#### **Concluding Remarks and Recommendations**

This paper attempts to add to the literature by providing evidence from an emerging economy on the influence between Tax incentives and corporate financial performance of listed manufacturing companies in Nigeria. One of the distinguishing features of this study is the development of additional models to consider the influence of tax incentives and corporate financial performance. Furthermore, the use of panel data analysis enhances the results by empirically investigating the issue from both a cross-sectional and a time series dimension.

The main motivation of this study is the lack of empirical evidence regarding issues of tax incentives and corporate financial performance for Nigerian listed companies. Therefore, the results of our study are crucial in terms of providing insight into the influence of tax incentives and corporate financial performance, which is a topic receiving considerable attention after the recent financial reporting scandals.

The findings of the study support the argument that tax incentives enhance corporate financial performance during the observation period after controlling for ROE, ROA and PAT as a result of the analyses.

Tax incentives are found to exert positively significant influence on ROE and this notion is supported with other empirical results of previous studies, as Ronald (2003), klema (2004), Ohaka (2012). However, it has to be empirical that tax incentives influence positively on ROA. This last set of analyses shows more detailed evidence on the positive influence of tax incentives on PAT. In addition, Klema (2004), further observed that Nebraska (2010), record of business success is traced to strong support by the companies through tax incentives.

#### **Recommendations**

The study yielded a number of interesting recommendations:

i) It is recommended that policy makers should channel energy towards addressing data base and information problems; this is very fundamental for planning, research, policy changes and proper economic development in Nigeria

ii)Government should design and fully implement a comprehensive and strategic tax incentive scheme to enhance corporate financial performance of listed manufacturing companies in Nigeria.

iii) Tax Incentive on qualifying assets should be granted within a reasonable time so as to serve as motivation particularly to firms contemplating corporate acquisition.

iv) Tax authorities should intensify monitoring and evaluation of tax incentives implementation to avoid delay on actualization of grants.

v)Government should emphasize investment subsidy as this may be more potent in an environment fraught with uncertainty (Serven 2006) such as the Nigerian economy.

# The contribution of this study to knowledge is of the following specific order.

i. The study augments the stock of knowledge in this topical area through empirical assessment of the influence between tax incentives and corporate financial performance. In the developing country context, extant literature has focused mainly on developed countries.

ii. This study has developed a three – model specification for capturing the causal influence between the dimensions of tax incentives and corporate financial performance. These models are both predicative and provide incremental understanding of the dynamic elements of tax incentives and their effect on corporate financial performance. This contribution is summarized in the flow chart below.

The thick lines indicate strong influence while the dotted line indicates strong relationship.



Figure 1. Operational conceptual framework of TI & CFP

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