

# Impact of Tax Incentive on Industrial Development in Nigeria: 1985-2019

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#### Abstract

This article investigates the impact of tax incentives on Industrial Development in Nigeria between the periods of 1985 to 2020. Secondary data were sourced from Central Bank of Nigeria, National Bureau of Statistics and Federal Inland Revenue Services on Gross Domestic Product (GDP), Company Income Tax (CIT), Value Added Tax (VAT) and Industrial Output (IoP) using a multiple regression technique of econometrics via E-view 9.0. We tested for unit root to ascertain the status of the data, used co-integration test to establish the long run relationship and applied the ARDL estimation technique to establish the impact of the explanatory variables on the dependent variable. The result showed that company income tax has a negative impact on industrial development while the lag of industrial output, value added tax and gross domestic product has a positive impact on the industrial output during the periods under study. We recommend among others that certain taxes should be waived for firms at the early stage of their takeoff and available tax incentives should be legalized and made known to all.

**KEYWORDS**: Industrial Development, Value Added Tax, Company Income Tax, Tax Incentives

## **1.0 Introduction**

Prior to the Great Depression of 1930s, Governments' focus economic in management was largely laissez-faire - an economic philosophy that is opposed to government intervention. With the emergence of the Keynesian economic model after the 2nd World War, there was a paradigm shift from the hitherto invisible price mechanism to government intervention in the economic system. Government intervenes through the process of legislation, regulation and the use of fiscal policy mechanism aimed at smoothing the procyclical trajectory in the economy (Magaji &Ayo, 2016). The Keynesian doctrine became widely acceptable for ensuring steady growth, full employment and price stability as well as repositioning the private sector as the engine of growth through the provision of incentives to attract private sector investment in targeted sectors of the economy.

Incentives have become increasingly recognized globally, as most countries of the world, irrespective of their stages of industrial and economic developments, now employ a wide variety of incentives in pursuing their economic goals (Magaji & Musa, 2015). The application of incentives now exists virtually in all sectors of the economy namely: industrial, agriculture, manufacturing, petroleum, solid minerals, energy, and tourism, among others (CBN, 2013).

There are different kinds of incentives. The three basic categories considered by most governments are financial, fiscal, and regulatory. The financial incentives are public-support mechanisms in the form of grants or repayable subsidies, it is common with developed countries (Magaji & Darma, 2021), while developing countries prefer fiscal incentives (tax) because of the fact that they are easily affordable in promoting investment and do not require up-front use of government funds. The regulatory incentives on the other hand are in the form of concessions, exemptions from labour or environmental standards and subsidized infrastructure which are also applicable in most countries (CBN, 2013).

Generally, these incentives are in the areas of manufacturing, export, agriculture and solid mineral, VAT, individuals and other areas. These incentives include: Personal allowance, Capital allowance, Investment allowance, Loss relief, Roll over relief, Annual allowance, Pioneer relief, Tax free dividend, Export Processing Zones Relief, Research and development and Tax free holiday (Dickson and Presley, 2013).

Since the introduction of the structural adjustment programme (SAP) in September 1986, Nigerian economy has experienced instability and dwindling industrial growth rate. This was traceable to inadequacy of tax incentives available to our industries. A major problem facing the industrial sector thereby impeding its development is the problem of excessive taxation in the form of high tax rate, double or multiple taxation. It is a problem of interest to us to find out whether tax incentive affects industrial Development in Nigeria

Based on the problem statement, the following research question is set:

Does tax have any impact on industrial development in Nigeria?

The main objective of the study is to investigate the impact of tax incentives on industrial development in Nigeria. The specific objective is to examine the impact of tax incentives on industrial development in Nigeria.

We constructed research hypotheses to achieve the specific Objective above

H01: Tax incentives do not have any impact on industrial development in Nigeria.

# 2.0 Literature Review

CBN (2013) defines tax as a compulsory contribution to state revenue, levied by the government on workers' income and business profits, or added to the cost of some goods, services and transactions. Also Black's dictionary describes tax as a ratable portion of the produce of the property and labour of the individual citizens taken by the nation in exercise of its sovereign right for the support of government, for the administration of the laws and as a means for continuing in operation, the various legitimate functions of the state.

United Nations (2018) defines tax incentive as those special provisions that allow for exclusions, credits, preferential tax rates or deferral of tax liability. Tax incentives can take many forms: tax holidays for a limited duration, current deductibility for certain types of expenditures or reduced import tariffs or customs duties. At another level, it can be difficult to distinguish between provisions considered part of the general tax structure and those that provide special treatment. This distinction will become more important when countries become limited in their ability to adopt targeted tax incentives. For example, a country can provide a 10 per cent corporate tax rate for income from manufacturing. This low tax rate can be considered simply an attractive feature of the general tax structure as it applies to all taxpayers (domestic and foreign) or it can be seen as a special tax incentive (restricted to manufacturing) in the context of the entire tax system. Tax incentives can also be defined in terms of their effect on reducing the effective tax burden for a specific project (Howell, Stotsky & Eduardo, 2001).

This approach compares the relative tax burden on a project that qualifies for a tax incentive to the tax burden that would be borne in the absence of a special tax provision. This approach is useful in comparing the relative effectiveness of different types of tax incentives in reducing the tax burden associated with a project. Commentators contend tax incentives may now play a larger role in influencing investment decisions than in past years. Several factors explain why tax considerations may have become more important in investment decisions (Easson, 2001).

First, tax incentives may be more generous now than in past years. The effective reduction in tax burden for investment projects may be greater than in the past, as tax holiday periods increase from 2 years to 10 years or the tax relief provided in certain enterprise zones comes to include trade taxes as well as income taxes. Second, over the past several decades there has been substantial trade liberalization and greater capital mobility. As non-tax barriers decline, the significance of taxes as an important factor in decisions increases. investment Third. business has changed in many ways. Firms have made major changes in organizational structure, production and distribution methods and the types of products being manufactured and sold. Highly mobile services and intangibles are a much higher portion of cross-border transactions than in past years (United Nations, 2018).

# 2.1 Empirical Literature Review

Tasie&Akinyomi (2018) examine the impact of tax incentives on the performance of small-scale enterprises. The study employed descriptive analysis technique via structured questionnaire and chi-square to test the stated hypothesis. The findings revealed that there are various tax incentives available to small scale industries and the operators in these industries are very familiar with them. It was also discovered that tax incentives do significantly affect the profitability, staff strength and the growth and development of small scale industries positively. The key recommendation includes that government should periodically review the tax incentives so as to reflect the prevailing economic conditions.

Raphael et al (2019) examine Attracting Foreign Direct Investment in Nigeria through Effective Tax Policy Incentives. They used multiple regression technique in analyzing the model. The findings revealed that although the cost based tax policy incentives had some relatively stronger effect on Foreign Direct Investment compared to profit based tax policy incentives. The study recommends both tax based and non-tax based incentives to attract FDI and encourages domestic entrepreneurs to grow.

Alexander & Van Parys, (2009) in their study consider two empirical questions about tax incentives: (1) are incentives used as tools of tax competition and (2) how effective are incentives in attracting investment? To answer these, we prepared a new dataset of tax incentives in over 40 Latin American, Caribbean and African countries for the period 1985-2004. Using spatial econometrics techniques for panel data to answer the first question, we find evidence for strategic interaction in tax holidays, in addition to the well-known competition over the corporate income tax rate. We find no evidence, however, for competition over investment allowances and tax credits. Using dynamic panel data econometrics to answer the second question, we find evidence that lower corporate income tax rates and longer tax holidays are effective in attracting FDI, but not in boosting gross private fixed capital formation or growth.

## 2.2 Theoretical Issues

New Economic Geography

One theory was reviewed related to explain tax incentives. Namely: New Economic Geography (NEG) theory.

The NEG theory was built on the neoclassical investment theory which concludes that there is a direct positive relationship between lowered tax rates and increased investment. Van Parys & James (2001). The model introduces the concept of core-periphery. This concept suggests that business concentration reinforces itself and thus the world is left with a core region that attracts the most FDI. NEG models emphasize the role of business concentration that is selfreinforcing leaving the world with a core region.

## **2.3Theoretical Framework**

The aim of the study is to examine tax incentives and its investments in the industrial private corporate sector offered by the tax system in the country. Clearly, taxes are only one of the determinants of capital formation, but, the structure of the tax system is often cited as an impediment to industrial and economic growth, and it is under the direct control of government. Since the exercise of "enterprise" usually involves some investment; that is, some sacrifice of present consumption for future returns, our estimated effective tax rates bear closely on the incentives or dis-incentives provided by government to channel resources into entrepreneurs (Mervyn & Don, 1984).

The total tax liability of the company; that is, total taxes excluding personal income tax on both dividends and interest and excluding any capital gains tax on retained earnings is given by

 $I=iY(\theta^{\beta}1+\beta^{\beta}2+\beta^{\beta}3)G...$  i

Where Y denotes taxable income and G denotes gross dividends paid by the company and  $\theta$  represents tax incentives.

# 3.0 Methodology

In order to empirically analyze the impact of tax incentives on industrial development in Nigeria, the study adapts the tax competition theory coined by (Van Parys & James, 2001). The theory states that the functional relationship between industrial output (I) and tax revenue/incentives ( $\theta$ ) is, in general, non-linear. We used data from Central Bank Statistical Bulletin, Federal Inland Revenue and National Bureau of Statistics. The values of the industrial output/growth and the tax incentives thus depend upon the values of  $\beta$ 1,  $\beta$ 2, $\beta$ 3 and  $\beta$ 4as stated below

The econometric form is expressed as:

 $LnIoP = \beta 0 + \beta 1lnIoPt-1 + \beta 2lnCiT + \beta 3InVAT + \beta 4RGDP + \mu \dots vi$ 

Where:

IoP = Value of Industrial Output

CIT = Company Income Tax VAT = Value Added Tax

RGDP = Real Gross Domestic Product

#### **Empirical Results Unit Root Test Result**

#### **Table 3.1: Augmented Dickey-Fuller Unit Root Test**

Variab	les	TAU Stat.				
At Level		Critical Value				
At 5% Tau Stat.						
At 1st	Diff.	Critical Value				
At 5% Order of integration						
IOP	3.3652	2 -1.9510	Not Considered	ed	N/C	I(0)
CiT	3.3875	5 -1.9510	Not Considered	ed	N/C	I(0)
VAT	6.2403	8 1.9550 Not Co	onsidered	N/C	I(0)	
RGDP	0.6894	-1.9510	-5.6765	-1.951	3	I(1)

Source: Author Computation 2021 from Mckinnon (1996) using E-view Version 9.0

#### Hypothesis for Test of Stationarity

Null Hypothesis: Has a unit root (that is, non-Stationary) Alternative Hypothesis: Has no unit root (that is, Stationary)

#### **Decision Rule**

Reject the null hypothesis when the Augmented Dickey-Fuller (ADF) test statistics is greater than the critical value in absolute term at the chosen level of significance, on the contrary accept Null hypothesis.

Bound Test Result

Bound Test for Co-integration

#### **Test Coefficient Lag Length Significance**

# Peseran et al. (2001) BOUND CRITICAL VALUE

The table showed that the Bound test fstatistic value 15.70 exceeds the 99% (4.84), 95% (3.63) and 90% (3.10) Upper Bound critical value of Peseran et al (2001). Thus, the null hypothesis of no co-integration is not accepted, therefore we conclude that long run relationships exist among the variables; industrial output (IOP), company income tax (CiT), value added tax (VAT) and real gross domestic product (RGDP). This indicates that the variables move together in the long run with industrial output (IOP) as the explained variable. According to Peseran et al (2001) existence of a single co-integrating equation indicates that there is unique long run relationship among the variables under consideration. Having established the existence of co-integration among the

variables, we proceed with evaluating the impact of the regressors on the regressand in the long run.

### 4.0 Data Analysis and Result

The result of the study is analyzed as follows.

ARDL Cointegration Test Result

The estimated long run equation is expressed below:

IOP = 0.304OP(-1) - 0.008CIT + 0.024VAT + 3.93RGDP

t-Stat (1.56) (-1.49) (5.46) (0.29)

Prob. (0.13) (0.00) (0.25) (0.86)

R2 = 0.97

DW = 1.69

Interpretation and Discussion of Results

From the above result and analysis, the following conclusions are drawn:

Since the t-statistic value (1.54) of the lag of industrial output is less than the t- critical value at the chosen 5% significance level (1.87), the null hypothesis of non- significant impact is accepted. That is, previous industrial output has no significant impact on the current industrial output in the long run.

Also, the t-statistic value of company income tax of (/-1.47) is less than the critical value at 5% significance level (1.87), the null hypothesis of non-significant impact is accepted. This implies that company income tax is not important in determining the industrial output in the long run during the period under review.

On the contrary, the t-statistic value of the value added tax of (5.46) is greater than the tcritical value at 5% significance level (1.87), the null hypothesis of non-significant impact is rejected, and thus the alternative hypothesis is accepted. This implies that value added tax as incentive will boost the purchasing power of the consumer which will lead to increased demand and consequently, increased output on the part of the producer.

Furthermore, the t-statistic value of real gross domestic product of 0.29 is less than the tcritical value at 5% significance level of (1.87), the null hypothesis of nonsignificance impact is rejected. That is, real gross domestic product has no significant impact on the country industrial output in the long run.

The study showed that the data series of industrial output (IoP), company income tax (CiT) and value added tax (VAT) were stationary at level, that is [I(0)] while that data series on real gross domestic product (RGDP) became stationary after the first differencing [I(1)] justifying the need for the chosen analytical technique. The study also showed that the independent variables have a long run

Relationship (i.e. they are co-integrated) with the dependent variable (industrial output).

From the ARDL equation, the lag of industrial output has a positive but nonsignificant impact on the current output of the firm in the short and long run. Also, value added tax was found to have a positive and a significant impact on the industrial output in the short run but in the long run, its impact is negative. Gross domestic product which served as the proxy for economic growth has a positive and non-significant impact on the country industrial output in the short run but its long run impact is significant.

Contrarily, company income tax was found to have a negative but insignificant impact on industrial output in the short run but has a significant impact in the long run. The post estimation test showed that the residual estimate of the estimated ARDL model was found to be free from serial correlation given the Durbin-Watson result. The coefficient of determination of about 97% showed that the regressors in the model are capable of predicting what happened to the Regressand and that only about 3% were unexplained as captured by the error term.

Also, the f-statistic result showed that the overall policy parameters are significant enough to forecast the relationship between the Regressand and the regressors.

## **5.0 Conclusion and Recommendations**

This article investigated on whether tax incentive affects industrial Development in Nigeria. We have been able to establish based on the available data and the research questions and objective that company income negatively tax affect the industrial development in Nigeria during the period under review. It can be seen as earlier mentioned that one of the reasons for encouraging private investment (foreign and indigenous) the expectation is that investment activities will generate employment opportunities for Nigerian nationals. The aim of development planning growth should be is that economic accompanied by general development. In benefit economic other words. of advancement should be distributed as widely as possible over the entire society.

Having x-rayed the cardinal impact of tax incentives in the advancement of industrial development and base on the findings and conclusion of this work, it is pertinent to make valuable recommendation, these includes:

i. The government should waive certain taxes on corporate bodies to help them develop and mature especially at their early stage. They should not focus on the revenue that may be lost at this point because in the long-run the benefit surpasses what is lost at the initial time.

- The administrative machinery should be well assisted and equipped to enable them render the necessary services and achieve the objectives for which they are established. The financial institutions established to assist on fund raising also need to be given a reorientation so that fund could be made available when needed at attainable cost and procedures.
- iii. Government should enact tax incentive legislation with emphasis on the utilization of local inputs in the form of raw materials, labour and fabricated machinery against imported ones.

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