

## Taxation and Tax policy as government strategy tools for Economic development in Nigeria

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**Abstract :** Taxation, besides its revenue generation capacity, can also be used as a fiscal policy tool to shape the economy. Considering that the Nigerian tax laws have witnessed significant changes over the period, it becomes imperative to assess the performance of such policies through its effect on the economy. The research therefore examines the various tax incentives currently available in the different tax laws, evaluates how taxation and tax policies have affected the economy of Nigeria and the effectiveness of taxation as a government strategy tool for the Nigerian economic development, using time series data of taxation and economic development of the period 1960 to 2007. From correlation, time series and multivariable regression analyses of relationships among variables, the research found out that taxation and tax policies make positive contributions to economic development. The Nigerian government is advised to improve the provision of social infrastructures because availability and maintenance of public goods are popular ways tax payers conventionally assess the justification of tax collection by the government.

**Keywords:** Critical Success Factor, Economic Development, Strategy, Taxation, Time series

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### I. INTRODUCTION

Taxation is the means by which the government of nations generate revenue to finance their expenditure through the imposition of compulsory charges on citizens and artificial persons (corporate entities). In Nigeria, all persons in employment, individuals in business, non-residents who derive income from Nigeria as well as companies that operate in Nigeria are liable to pay tax.

The government of a nation will typically have other sources of income besides tax such as oil revenue, revenue from government parastatals, grants, rendering of services to the public, revenue from granting of licences, sales proceeds from disposal of government assets, etc. as it is in the case of Nigeria, tax is however a principal source of income. Besides its revenue generation capacity, tax can also be used as a fiscal policy tool to shape the economy through the tax policies formulated, revisited reviewed and reformulated from time to time, since the policy determines the tax structure, tax elasticity and tax incidence.

Tax policies are used by Governments to regulate the economy by encouraging or discouraging certain economic decisions. For example, reduction in taxable personal income by the amount paid as interest on home mortgage loans results in greater construction activity, and generates more jobs. The Nigerian tax laws have witnessed significant changes over the period. There has been various tax incentives introduced, occasioned by tax reforms which have implications for the economy.

The United Nations in 2000 submitted that tax revenue contributes substantially to development [1]. Taxation is utilized by government to finance her expenditure to redistribute wealth which translates to financing development of the country [2; 3; 4; 5]. Whether the taxes collected are enough to finance the development of the country will depend on the needs of the country [6].

The research therefore examines the different tax incentives currently existing in the different tax laws, evaluate how taxation and tax policies have affected economy of Nigeria and how it has been used as strategy for the Nigerian economic development from the date of existence of Nigeria to recent times (1960 to 2007). The study used year 2007 as the cut-off period because of the challenges of data paucity. The 48 years' time duration is however considered adequate to study taxation and economic development of the country.

### II. LITERATURE REVIEW

The approach used for the literature review is the scrutiny of Nigerian tax laws to identify existing policies and incentives that enhance the development of the Nigerian economy by encouraging investments by local and foreign investors, discussed below on a sector-by-sector basis [7; 8; 9; 10]:

#### 2.1 Industrial sector

- Fiscal measures have been provided to serve as deductions in the determination of taxable income of manufacturing companies including adequate allowances

- Granting of Pioneer status in communities that are economically disadvantaged, with a tax holiday period of five to seven years and additional 5% Capital allowance can be claimed over and above the initial capital depreciation
- Companies that are involved in local raw materials development; local value added labour intensive processing; export oriented activities are also qualified for additional concessions
- Up to 120% of expenses on research and development are tax deductible provided that such activities are carried out in Nigeria and are connected with business to which allowances are granted. The result of such research could be patented and protected in accordance with internationally accepted industrial property and copyright laws.
- Companies utilizing local raw materials can claim tax concession for five years, if the raw material utilization is up to minimum thresholds such as agro 80%, agro allied 70%, engineering 65%, chemical 60% and Petro-chemical 70%
- Companies utilizing labour intensive production method can claim 15% tax concession for five years. The rate is graduated in such a way that an industry employing one thousand persons or more will enjoy 15% tax concession while an industry employing one hundred people will enjoy only 6%, while those employing two hundred will enjoy 7%.
- Engineering industries, where some finished imported products serve as inputs have a 10% tax concession. This is aimed at encouraging local fabrication rather than the mere assembly of completely knocked down parts. In plant training attracts a 2% tax concession for five years, of the cost of the facilities for training. Export oriented industries enjoys a 10% tax concession for five years. This concession will apply to industries that export not less than 6% of their products. Infrastructure attracts 20% of the cost of providing basic infrastructure such as roads, water, electricity etc. Where they do not exist, it is tax deductible once and for all.
- Excise duty has been abolished effective January 1999 to encourage economic development and a 25% import duty rebate introduced in 1995 to ameliorate the adverse effect of inflation and to ensure an increase in capacity utilization in the manufacturing sector.
- Re-investment allowance incentive is given to manufacturing companies that incur capital expenditure for purposes of enhancement of production capacity and investment in modern production facilities.
- Investment tax allowance, allows a company would enjoy generous tax allowance in respect of qualifying capital expenditure incurred within five years from the date of the approval of the project.
- Dividends derived from manufacturing companies in petro-chemical and liquefied natural gas sub-sector is tax exempt.
- Companies with turnover of less than N1 million are taxed at a low rate of 20% for the first five years of operation if they are into manufacturing.
- Dividend from companies *in* manufacturing sector with turnover of less than N100 million is tax-free for the first five years of their operation.
- Investment guarantees/effective protection: Transferability of funds under Section 24 of NIPC Act provides that a foreign investor in an enterprise shall be guaranteed unconditional transferability of funds through an authorized dealer in freely convertible currency of, Dividends or profit (net of taxes) attributable to the investment; Payments in respect of loan servicing where a foreign loan has been obtained; Remittance of proceeds (net of all taxes) and other obligations in the event of a sale or liquidation of the enterprise or Any interest attributable to the investment.
- Guarantees against expropriation; By the provision of Section 25 of the same NIPC Act, no enterprise shall be nationalized or expropriated by any government of the federation, unless the acquisition is in the national interest or for public purpose; and no person who owns either wholly or in part, the capital of any enterprise shall be compelled by law to surrender his interest in the capital to any other person.

## **2.2 Oil & gas sector**

### **a) Gas Production Phase**

- Tax rate under petroleum profit tax (PPT) act to be at the same rate as the company income tax which is currently at 30%
- Capital allowance at the rate of 20% per annum in the first 4 years, 19% in the 5th year and the remaining 1% in the books
- Investment tax credit at the current rate of 5%;
- Royalty at the rate of 7% on shore and 5% offshore.

### **b) Gas transmission and distribution**

- Capital allowance as in production phase;
- Tax rate as in production phase;
- Tax holiday under pioneer status.

- c) Liquefied Natural Gas (LNG) projects
  - Applicable tax rate under PPT is 45%
  - Capital allowance is 33% per annum under-straight-line basis in the first three years with 1% remaining in the books
  - Investment tax credit of 10%;
  - Royalty of 7% on shore, 5% offshore tax deductible.

**d) Gas exploitation (upstream operations)**

- All investments necessary to separate oil from gas out of the reserves into suitable products are considered part of the oil field development;
- Capital investment facilities to deliver associated gas in usable form at utilisation or transfer points will be treated for fiscal purposes as part of the capital investment for oil development;
- Capital allowances, operating expenses and basis for assessment will be subjected to the provisions of the PPT Act and the revised memorandum of understanding (MOU).

**e) Gas Utilization (downstream operations)**

Incentives for encouragement of exploitation and utilization of associated gas for commercial purpose include:

- An initial tax free period of three years renewable for an additional two years;
- 15% investment capital allowance which shall not reduce the value of the asset;
- All fiscal incentives under the gas utilisation down-stream operations in 1997 are to be extended to industrial projects that uses gas in power plants, gas to liquid plants, fertiliser plants and gas distribution/transmission plants;
- The initial tax holiday is to extend from three to five years;
- Gas is transferred at 0% PPT and 0% royalty;
- Investment capital allowance is increased from 5% to 15%;

**f) Oil & gas free zone**

- No personal income tax;
- 100% repatriation of capital & profit;
- No foreign exchange regulation;
- No expatriate quota;
- Initial tax holidays period has been extended from 3 to 5 years and renewable for another 2 years;
- Investment capital allowance has been increased from 5% to 15%;
- All dividends distributed during the tax holiday shall be tax-free, etc.

**2.3 Agriculture Sector**

- Companies in the agro-allied business do not have their capital allowance restricted to 60% but graduated in full - 100%;
- Agro-allied plant and equipment enjoy enhanced capital allowances of up to 50%.

**2.4 Energy Sector**

All the area of investment in this sector are considered to be pioneer product or industry. As a result, there is a tax holiday of 5 to 7 years for investments in the sector. There has been a deregulation of this sector in recent times resulting in the emergence of independent power producers that have started to operate in Nigeria.

**2.5 Telecommunications Sector**

Government provides non-fiscal incentives to private investors in addition to a tariff structure that ensures that investors recover their investment over a reasonable period of time, bearing in mind the need for differential tariffs between urban and rural areas. Rebate and tax relief are provided for the local manufacture of telecommunications equipment and provision of telecommunication services. The telecommunication sector is rapidly being deregulated and privatized. This has led to the emergence of many operators of mobile phone service providers in Nigeria.

**2.6 Export incentives for non-oil sector**

- Export proceeds can be retained in foreign currency in a domiciliary account with any authorized bank in Nigeria.
- A special export development fund has been set up by the government to provide financial assistance to private sector exporting companies to cover a part of their initial expenses in some export promotion

activities, including training courses, symposia, seminars and workshops, export market research, advertising and publicity campaigns in foreign markets, trade missions, etc.

- There is also an export adjustment fund scheme which serves as supplementary export subsidy to compensate exporters for the high cost of local production arising mainly from infrastructural deficiencies and other negative factors beyond the control of the exporter.
- The Nigerian government established in 1991, an export processing zone (EPZ), which allows interested parties to set up industries and businesses within demarcated zones, with the objective of exporting the goods and services manufactured or produced within the zones. Calabar in Cross River State has been designated as the primary EPZ territory in Nigeria. Incentives within the territory include, tax holiday relief; unrestricted remittance of profits and dividends earned by foreign investors; no import or export licenses are required; up to 100% foreign ownership of enterprises; sale of up to 25% of production is permitted in domestic market; etc.,
- All exports under the Nigerian value added tax (VAT) system are zero-rated and dividends received from investment in export-oriented businesses are to be free of tax

### 2.7 Tax incentives for other sectors in the economy

- Companies profits in respect of goods exported from Nigeria are exempt from tax provided the proceeds are repatriated to Nigeria and used exclusively for the purchase of raw materials, plants equipment and spare parts.
- Profits of companies, whose supplies are exclusive inputs to the manufacturing of products for exports, are excluded from tax.
- All new industrial undertakings including foreign companies and individuals operating in an export processing zone (EPZ), are allowed full tax holidays for three consecutive years.
- As a means of encouraging industrial technology, companies and other organizations that engage in research and development activities for commercialization are to enjoy 20% investment tax credit on their qualifying expenditure.
- All companies engaged wholly in the fabrication of tools, spare parts and simple machinery for local consumption and export are to enjoy 25% investment tax credit on their qualifying capital expenditure while any tax payer who purchases locally manufactured plants and machinery are similarly entitled to 15% investment tax credit on such fixed assets bought for use.

### 2.8 Government Taxation and Economic Development in Nigeria

The federal government collect various taxes in Nigeria such as Companies Income Tax, Education Tax, Personal Income Tax of persons resident in the federal Capital, armed forces, Petroleum Profits Tax, Value Added Tax which is administered by the agency of the federal government but the bulk of the proceeds accrue to the State government and Withholding Tax, Customs and Exercise duty, etc.

The figures below graph the time series of some federally collected taxes over a period of 48 years (1960 to 2007)

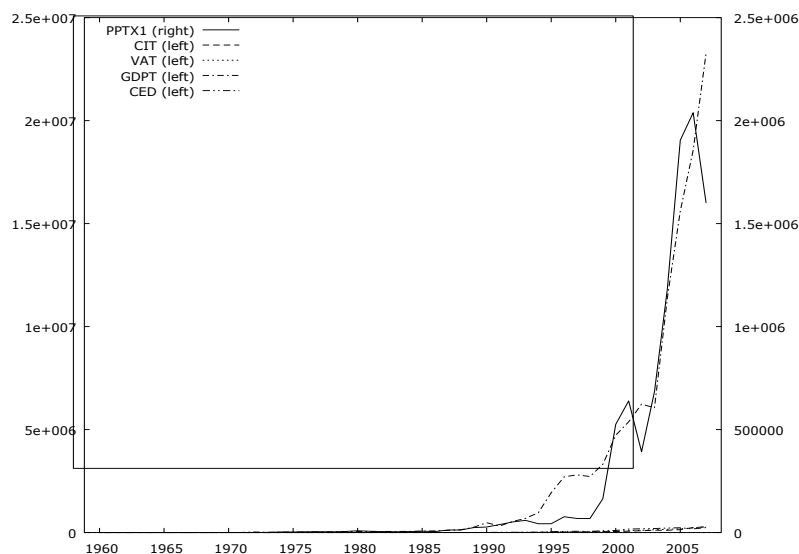


Fig. 2.1 Time series plot of Variables (PPT, CIT, CED, VAT and GDP)

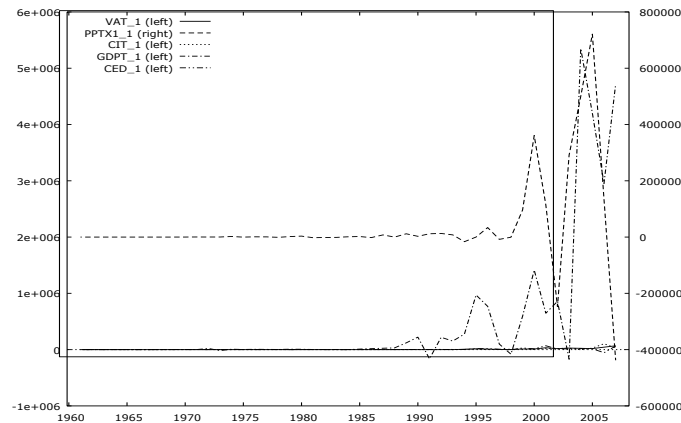


Fig. 2.2 Time series plot for First differences of Variables (PPT, CIT, CED, VAT and GDP)

### III. RESEARCH METHODOLOGY

The research made use of 48 years’ time-series data collected from CBN statistical bulletins, Federal Inland Revenue Service and previous for study variables. Taxation was captured using 4 federally collected taxes as parameters such as PPT, CIT, CED and VAT. Economic development was captured using the GDP for the period 1960 to 2007. The VAT data was however for the period 1994 to 2007, since VAT was introduced in 1993 and annual generated from 1994. The study therefore made use of 206 observations (158 observations for taxation and 48 observations for economic development ) for time series analysis

We first analyse if there is any form of relationship between Taxation and Economic Development by correlating the variables before formulating a model .Results are in the table below

Table 3.1 Correlation between GDP and PPT, CIT, CED and VAT

Correlations						
		PETROLEUM PROFIT TAX	COMPANY INCOME TAX	VALUE ADDED TAX	GROSS DOMESTIC PRODUCT	CUSTO M AND EXERCI SE DUTIES
GROSS DOMESTIC PRODUCT	Pearson Correlation	.961**	.984**	.984**	1	.898**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	48	48	48	48	48

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Since there is a significant relationship between GDP and each of the variables, we proceed to write the first equation

The model is specified below

$$GDP = f(PPT, CIT, CED, VAT) \dots \dots \dots \text{Equation (1)}$$

Where:

- PPT is Petroleum Profit Tax
- CIT is Company Income Tax
- CED-Custom and Exercise Duty
- VAT-Value Added Tax
- GDP-Gross Domestic Product

In time series regressions, the data need to be stationary i.e. the means, variances and covariances of the data series cannot depend on the time period in which they are observed.

Considering that the study utilizes a time series data, Business and macroeconomic times series often have strong contemporaneous correlations, but significant leading correlations if the independent and dependent variables are non-stationary [11; 12 ; 13].

In order to satisfy ourselves that the data is stationary, we carry out a test using the ADF(Augmented Dickey Fuller Test)unit root test statistics

By visually inspecting the figure 2.2 that graphs first differences of variables, there is a constant and trend because the series appears to be wandering or fluctuating around a linear trend. We therefore select the ADF model with a constant and trend.

Table 3.1 Unitroot: ADF test for stationarity

Parameter	t-ratio	P value	Order of integration	Stationarity status
PPT	-4.791	7.07e-05 ***	1	stationary
CIT	-7.230	1.80e-07 ***	1	stationary
CED	-3.615	0.0285 **	1	Stationary
VAT	-10.70	1.30e-010 ***	1	Stationary
GDPT	-3.527	0.0017 ***	1	stationary

\*\*\*significant at 1% level of significance, \*\*significant at 5% level of significance

The Decision rule for the ADF test is that if p value > ADF critical value of 0.05, we accept null hypothesis that unit root exists and the series is non-stationary but if p value < ADF critical value, we reject null hypothesis that unit root does not exist and the series is stationary). Since p value is < ADF critical value for all parameters, we do not accept the null and conclude that the data is stationary.

Engle-Granger statistics was used to test for cointegration between the dependent variable and the four independent variables and it was observed that co-integration exists but was corrected using the ECM (Error Correction Mechanism).

Since most of the parameters are stationary at the 1<sup>st</sup> level of integration (Level of difference that variable was stationary) 1(I), we adapted the first-order difference equation with constant coefficient which takes the form:

$$\text{DIFF}(PPT_t, 1) = aPPT_{t-1} + b_t \dots \dots \dots \text{equation (2)}$$

$$\text{DIFF}(CIT_t, 1) = aCIT_{t-1} + b_t \dots \dots \dots \text{equation (3)}$$

$$\text{DIFF}(CED_t, 1) = aCED_{t-1} + b_t \dots \dots \dots \text{equation (4)}$$

$$\text{DIFF}(VAT_t, 1) = aVAT_{t-1} + b_t \dots \dots \dots \text{equation (5)}$$

$$\text{DIFF}(GDP_t, 1) = aGDP_{t-1} + b_t \dots \dots \dots \text{equation (6)}$$

Where  $b_t$  for  $t = 1$ , are constants (the constant that multiplies  $x_{t-1}$  is constant)

Combining equations (1) to (6) produces the equation below which is our multivariable regression equation:

$$\text{DIFF}(GDP_t, 1) = Co + \text{DIFF}(PPT_t, 1) + \text{DIFF}(CIT_t, 1) + \text{DIFF}(CED_t, 1) + \text{DIFF}(VAT_t, 1) \dots \dots \text{equation (7)}$$

Where:

DIFF (PPT<sub>t</sub>, 1) is first difference of PPT

DIFF (CIT<sub>t</sub>, 1) is first difference of CIT

DIFF (CED<sub>t</sub>, 1) is first difference of CED

DIFF (VAT<sub>t</sub>, 1) is first difference of VAT

DIFF (GDP<sub>t</sub>, 1) is first difference of GDP

We then conduct a regression analysis using our stationary time series data set.

Table 3.2: Multivariable Least Square, using observations 1961-2007 (T = 47)

Dependent variable: DIFF (GDP<sub>t</sub>, 1)

Variable	coefficient	std. error	t-ratio	p-value
Const (Co)	43439.4	102311	0.4246	0.6733
DIFF (PPT <sub>t</sub> , 1)	3.17464	0.571279	5.557	1.72e-06 ***
DIFF (CIT <sub>t</sub> , 1)	-56.0015	15.2673	-3.668	0.0007 ***
DIFF (VAT <sub>t</sub> , 1)	140.449	20.9095	6.717	3.70e-08 ***
DIFF (CED <sub>t</sub> , 1)	-37.7232	11.6247	-3.245	0.0023 ***

\*\*\* Significant at 1% significance level

Mean dependent var	495286.6	S.E. of regression	616582.7
R-squared	0.775157	Durbin-Watson	2.603410
Adjusted R-squared	0.753743		

**Test of Autocorrelation.**

The presence of autocorrelation (a relationship between values separated from each other by a given time lag) was tested using the Durbin–Watson statistic [11]. Since in a positive serial correlation a positive error for one observation increases the chances of a positive error for another observation, it was important to carry out an autocorrelation test to check the appropriateness, error-freeness and robustness of the regression result. The observed Durbin-Watson value produced by the regression model (d) is 2.603410. The tabulated upper bound ( $d_{U,\alpha}$ ) is 1.7206 while the corresponding tabulated lower bound ( $d_{L,\alpha}$ ) at 5% significant level is 1.3619. Since  $d > d_{U,\alpha}$ , we infer that there is no statistical evidence that the error terms are positively auto-correlated.

#### IV. DISCUSSION OF FINDINGS

Table 3.1 presents the correlation analysis result at 1% level of significance, the correlation coefficients (r) between the GDP and each of the tax variables PPT, CIT, VAT and CED are .961, .984, .984 and .898 respectively, all significant at 1% confidence level implying a very strong positive relationship between Economic Development and Taxation. Taxation and tax policies can be used as strategic tools by the government to develop the economy.

This supports the theoretical findings from the review of Nigerian tax laws that various tax policies and incentives in different sectors of the economy has been used to attract local and international investors to develop the Nigerian economy.

In the regression table 3.2, all the parameters (except the constant) are significant at 1% which implies that the model fits. To check the goodness of our fit, we inspect the 'p value.' for all the regressors. The 'p value' is less than 0.01 and we conclude that the model is significant at 99%, fits and there is a significant relationship between GDP and PPT, CED, VAT. This supports the correlation analysis in table 3.1.

The Coefficient of determination (the R square parameter) shows how much of the variance in the dependent variable (GDP) is explained by the model. The regressors (PPT, VAT, CIT, CED) explains 77.5% of the variance in Gross Domestic Product while 22.5% is left unaccounted for which is attributed to error term.

Our empirical findings agrees with submission by other researches that VAT revenue (one of the forms of indirect tax and one of the exogenous variables in our model) contributed positively to the development of the respective sectors also corroborates the findings of our research [6; 14; 15; 16; 17; 18].

There is a strong significant relationship between Taxation and economic development. Taxation makes positive contributions to the economic development of Nigeria.

#### V. CONCLUSION

Taxation and tax policies have been used as strategy by government to develop the Nigerian economy. This notwithstanding, there are certain challenges currently bedeviling the Nigerian tax system such as double taxation, diseconomy of tax administration and collection, ignorance and tax-illiteracy of the citizenry, tax evasion and avoidance practices, flaws in some of the tax laws, which all have to be addressed to make taxation more effective in Nigeria. Convincing the citizenry as to the judicious use of tax collected from them by government at all levels (federal, state and local) is a critical success factor for enhanced tax effectiveness in the Nigeria state development. The provision, availability and maintenance of basic amenities and public goods are popular ways tax payers conventionally assess the justification of tax collection by the government but this currently leaves much to be desired in the country. With the provision of infrastructures by the government, Nigerian tax payers are likely to submit themselves for self-assessment and voluntary compliance with tax payment, thereby reducing the incidence of tax avoidance and evasion practices.

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