Taxation and the Nigerian Economy: (1994-2012)

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ABSTRACT:
The study investigates the impact of taxation on the Nigerian economy for the period 1994 -2012. The dependent variables used in the model includes: Gross Domestic Product (GDP) as a parameter for measuring economic growth, inflation and unemployment. The objective is this study is to determine how taxation affects these macroeconomic variables. To avoid spurious results, the data set collected from the Central Bank of Nigeria statistical bulletin and Federal Inland Revenue Services was subjected to Augmented Dickey Fuller Unit Root test, which reveals that the variables are stationary. The cointegration test also reveals that the variables are cointegrated and long run relationships exist between the variables. The results of the statistical analysis reveal that positive relationships exist between the explanatory variables (Custom and Excise Duties, Company Income Tax, Personal Income Tax, Petroleum profit tax and Value Added Tax) and the dependent Variables (Gross Domestic Product, Unemployment). But, the individual explanatory variables have not significantly contributed to the growth of the economy; also the explanatory variables have not significantly contributed to the reduction of the high rate unemployment and inflation in Nigeria for the period under review. Study recommends total restructuring of the tax system in the country and the provision of basic amenities (good roads, steady power supply, internal security, etc) which will encourage individuals and corporate organizations to honor their tax obligations in Nigeria.

Keywords: Economic growth, Unemployment, Taxation, Inflation, Economic development

INTRODUCTION

The primary aim of taxation is usually to generate revenue capable of financing government expenditure at all levels of government. The importance of taxation to any government cannot be over emphasized. Chigbu et al. (2012) explained that Taxes are levied on individuals, groups, business or corporate bodies, by constituted authorities for funds used by state in the maintenance of peace, security, economic growth and development and social engineering for the benefit of the citizenry. Taxation as a major source of revenue has made it so important for researchers to establish a link between taxation and economic growth of the country.

This research work examines the link between taxation and economic development in Nigeria for the period 1994 to 2012. It investigates how the value added tax introduced in the country in May 1993 and other types of taxation in operation in Nigeria like the personal income tax, petroleum income tax, company income tax custom and excise duties have affected the Nigerian economy. Attempts will be made to evaluate their impacts on the Gross Domestic Product, inflation and unemployment

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in the country. Government increases tax during recession period and decreases tax during economic boom. Taxation is also used to promote other objectives like equity, close the gap between the rich and the poor and to address social and economic concerns. Taxation as a fiscal policy instruments affects the macro economic variables of the economy, as it affects the level of aggregate demand in the economy, it affects income distribution thereby reduces the gap between the rich and the poor in the country. Taxation reduces the purchasing power of individuals thereby serving as an inflationary measure. Anyafo (1996) also affirms that a good tax system should be able to stimulate employment, control inflation and enhance economic growth. Tax is also used as a measure to discourage the consumption of those goods and services considered to be harmful or non essential commodities.

Appah (2004) defined tax as a compulsory levy imposed on a subject or upon his property by the government to provide security, social amenities and create conditions for the economic well-being of the society. In his own view, Bhartia (2009) argues that a tax is a compulsory levy payable by an economic unit to the government without any corresponding entitlement to receive a definite and *direct quid pro quo* from the government. Wikipedia defined tax as a financial charge or other levy imposed upon a taxpayer (an individual or legal entity) by a state or the functional equivalent of a state such that failure to pay is punishable by law.

Anyafo (1996), defined taxation as a compulsory payment by individuals and organizations to the relevant inland or internal revenue authorities at the federal, state and local government levels. All the definitions of tax center on the fact that it is a major source of revenue that finances government expenditure at all levels. It is believed that the tax system of a nation determines who bears the burden of payment and how the tax collected should be spent. Anyafo (1996) maintained that a good tax system should be able to stimulate employment and enhance economic growth in the country. However, the use of tax as an instrument of fiscal policy to achieve economic growth in most developing countries like Nigeria cannot be reliable because of dwindling level of revenue

generation and the country's mono dependence on oil revenue.

According to Engen and Skinner (1996), a number of recent theoretical studies have used endogenous growth models to stimulate the effects of a fundamental tax reform on economic growth. These studies conclude that reducing the distorting effects of the current tax structure would permanently increase growth. Advocates of tax cuts claim that a reduction in the tax rate will lead to increased economic growth and prosperity. Others claim that if we reduce taxes, almost all of the benefits will go to the rich, as those are the ones who pay the most taxes.

Gustavo et al. (2013) opined that an understanding of the public policies that can be effective in improving economic growth performance is critically an important issue at the national and international levels. The general well-being of the population and reduction in poverty level are related to economic growth and development. And the issue of potential growth is at the heart of recent discussions on stabilization policy. Different public policies are being applied to boost growth and to reduce poverty in different regions of the world, but fiscal policies have become the most common and relevant instruments in the heart of policy-makers (Tanzi and Zee, 1997).

United Nations (2005) suggests that, to achieve the Millennium Development Goals (MDGs), low-income countries (LICs) are required to increase their domestic revenues by around 4 percent of the GDP. To meet the MDGs, OECD countries have been urged to raise their level of aid to LICs to about 0.7 percent of their Gross National Income, but this can't be compared with potential tax revenues (Worlu and Nkoro, 2012). The infrastructural developments demand a lot of resources and funding. In many rich countries, tax constitutes 30-40 percent of the GDP (Golit, 2008 and TJN, 2012).

Despite the revenue generated from tax at all levels of government in Nigeria, the majority of the population still wallow in abject poverty, majority of the population live below ($1) one US Dollar per day. The gap between the rich and the widens day by day. The country is still ranked among the economically less advanced states. Again, unemployment is one of the macro economic problems facing the country. This

problem increases day by day. Consider the recent failed employment test conducted by the Nigeria Immigration Service (NIS), where over twenty unemployed youths lost their lives in their attempt to partake in the employment test in various states of the country. Over 6.5m Nigerians applied for 4500 vacant positions in the Nigeria Immigration Service.

Literature Review

According to Chigbu (2012) for the government to achieve macroeconomic objectives of price stability, full employment, external balance and sustainable economic growth and development in the long run, the government must have sound fiscal and monetary policy instruments in place. Taxation and government expenditure are the fiscal policy instruments of the government while the monetary policy instruments include: reserve requirements, discount rates and open market operations. This study focuses on taxation as a fiscal policy instrument and how it affects the economy. This section reviews the related literature necessary to explain the relationship between taxation and economic development.

Economic Effects of Taxation

The effect of taxation on economic growth means what happens to the Gross Domestic Product of the country when tax is imposed. Anyanwu (1997) maintained that tax affects the pattern of production, consumption, investment and employment. These effects are either positive or negative. Taxation affects both production and economic growth by distorting capacity and the will to work, save and invest. Taxation is a major source of revenue to every economy, and the money generated is used in the provision of basic amenities, providing defense and security to the populace, generating employment thereby enhancing the growth and development of the country.

Taxation is usually an instrument used in reducing the gap between the rich and the poor. Economies are characterized by a high level of inequality as a result of private properties and inheritance. Taxation has the objective of equalizing income and wealth inequalities which conflicts with increasing production and economic growth (Anyanwu, 1997). This inequality can be reduced with the use of progressive tax, wealth tax, expenditure tax, gifts tax etc as this will achieve redistribution in the long run.

According to the Keynesian theory, there is no inherent tendency for the market economy to stabilize, and this calls for government action in the short-run. Taxation and expenditure are used to correct market incompatibilities existing between demand and supply. Therefore, to neutralize the fluctuations in incomes, outputs, employment, prices etc, progressive taxation should be employed. The income of the poor with a high marginal propensity to consume (MPC) should not be taxed, and this will balance the aggregate consumption in the economy.

Angahar and Sani (2012) confirmed that Taxation is a fiscal policy tool used in controlling inflation. In inflationary times, government should increase direct tax thereby straining away excess purchasing power. They should be selective in the choice of indirect taxes to be employed in controlling inflation, putting into consideration the elasticity of the demand and supply of the commodities. Commodities with low demand elasticity and high supply elasticity will not increase inflation when taxation is increased. Commodities that are of necessities should be taxed lower, while luxuries should be highly taxed as this will reduce the inflationary pressure on the economy.

Economic growth and economic development are often used interchangeably but there is a great difference between them. Worlu and Nkoro (2012) maintained that economic growth is an increase in the amount of the goods and services produced over a specific period of time in a country. Economic growth is a sub category of economic development. Economic development is a prolonged and sustainable increases in the real national income of a country accompanied with positive changes in the economic, political, technological and social structures of the country, with the result that the real income per capita of the people increases over a long period of time, subject to the stipulation that the number of people below the poverty line does not increase, the distribution of income does not become more unequal and development does not become less environmentally sustainable. Economic development is the policymakers' actions which promote the health, political, and social well-

being of a country. Common areas of development include: literacy rates, life expectancy, unemployment, and poverty rates.

Custom and Excise Duties (CED)

These are the oldest forms of indirect tax which dated back to the 19th century. Custom duties are commodity taxes imports and exports. According to Ayodele (2006), custom duties are the highest yielding indirect tax. The tax is administered by the Nigerian Custom Services (NCS). It is believed that duties on imports are against the principle of comparative cost thereby restricts the full development of international trade. Import duties are also used in protecting infant industries in the country. The burden of export duties are passed on to the foreign country in form of increased prices. The burden of import duties fall on the consumers of the goods and services that it is levied on.

Excise duties are commodity taxes levied on goods manufactured within the country. This indirect tax does not only serve the purpose of raising revenue for the country but also to discourage the consumption of certain goods (Fasoranti, 2013). Who bears the burden of excise duties depend on the type of commodity taxed. Excise duty on luxuries is borne by the rich, while excise duty on necessities is borne by the poorer people (Anyafo, 1996).

Company Income Tax (CIT)

This is also known as company profit tax or corporation tax. Company income tax is a tax on the profit made by companies. It was introduced in Nigeria in1961 and administered by the Federal Internal Revenue Services. Since enactment, the law on CIT has passed through series of amendment. The rate of CIT varies according to operation and size of turnover per annum. According to Onaolapo et al. (2013), Companies condemn this Company taxes on profit as it is seen as a penalty for success without compensation for failure. Company taxes are designed to collect revenue from firm's economic profit. The tax is on the net accounting profit: gross profit less administrating, operating and interest expenses. The revenue from company income tax has been low due to tax concessions, rebates and tax holidays allowed to newly established companies. Tax evasion and

tax avoidance are also responsible for this low yield (Ebiringa and Emeh, 2012).

Petroleum Profit Tax (PPT)

This is a tax levied on the profit of oil companies. According to Akintoye and Tashie (2013), petroleum profit tax is singled out because of the significance of oil in the Nigerian public revenue performance. The petroleum profit tax act 1959 no 15 imposes with effect from January 1st 1959, a tax on the profits from the mining of petroleum in Nigeria. This is to take care of economic rent on the land used for mining. The PPT is applicable to upstream operation in the oil sector i.e. production of crude oil and gas and sale of these as primary products to downstream operations (Ayodele, 2006). It is the most important tax in Nigeria in terms of its share of 95% of government revenue and 70% of total foreign exchange earnings. The major problem of this source of revenue is the fluctuation resulting from price fluctuation of crude oil process in the world market. The operation of the petroleum profits tax was extended to the companies engaged in liquefied natural gas operations under PPT amendment no. 3 Decree 1979 No 95.

Personal Income Tax (PIT)

According to Akintoye and Tashie (2013), Personal income tax is tax paid on one's personal income as distinct from the tax paid on the firm's earnings. In an incorporated firm, the owners (shareholders) pay taxes on both their income (salary or dividend from the firm) firm's income (profits). In partnerships and sole-ownerships, the tax is paid only once on the firm's profits. Personal Income Tax Rate in Nigeria is reported by the Federal Inland Revenue Service, Nigeria. The Personal Income Tax is a tax collected from individuals and is imposed on different sources of income like labor, pensions, interest and dividends. Revenues from the Personal Income Tax Rate are an important source of income for the government of Nigeria (Anyafo, 1996).

Empirical Review

Adereti et al. (2011), in their study on Value added tax and economic growth in Nigeria, using the regression model revealed that a strong positive relationship exists between value added

tax and economic growth in Nigeria within the period under review (1994-2008). Onaolapo et al. (2013) investigated the Effect of Petroleum Profit Tax on Nigerian economy, the study covered the period between 1970 and 2010. Their study revealed that Income from a nation's natural resource has a positive influence on economic growth and development. They recommended that Government should transparently and judiciously account for the revenue it generates through PPT by investing in the provision of infrastructure and public goods and services. Chigbu et al. (2012) in the empirical study on economic growth and taxation using the Granger Causality approach concluded that taxation is a very important instrument of fiscal policy that contributes to economic growth of any country.

Anyanwu (1997) in his study of the effects of taxes on Nigeria Economic Growth (1981-1996) reveal that companies' income tax positively and significantly affects GDP, also customs and excise duties significantly affects economic growth in Nigeria. While petroleum profit tax positively and insignificantly affects Nigeria's GDP. The same is true of other direct taxes (capital gains and stamp duties). However, all direct taxes positively and significantly affect Nigeria's GDP.

Ergete and Dahlby (2012), in their study "The Impact of Tax Cuts on Economic Growth: Evidence from the Canadian Provinces" revealed that a negative relationship exist between taxation and economic growth in Canada. The finding concludes that reducing corporate income tax 1 percentage point raises annual growth by 0.1 to 0.2 points. Arnold et al. (2011) based their research on 21 countries and their findings reveal that Corporate taxes most harmful to economic growth, followed by taxes on personal income, consumption, and property. Progressivity of PIT harms growth. A 1 percent shift of tax revenues from income taxes (both personal and corporate) to consumption and property taxes would increase GDP per capita by between 0.25 percent and 1 percent in the long run. Corporate taxes, both in terms of the statutory rate and depreciation allowances, reduce investment and productivity growth. Raising the top marginal rate on personal income reduces productivity growth. Karel and Ravn

(2012) studied the exogenous changes in personal and corporate income taxes and how they affect USA economy. The study revealed a negative relationship existing between the dependent variable and the explanatory variables. They concluded that A 1 percentage point cut in the average personal income tax rate raises real GDP per capita by 1.4 percent in the first quarter and by up to 1.8 percent after three quarters. A 1 percentage point cut in the average corporate income tax rate raises real GDP per capita by 0.4 percent in the first quarter and by 0.6 percent after one year.

To the best of our knowledge we are not aware of any study yet on the effect of taxation on these macroeconomic economic variables: economic growth, inflation and unemployment in Nigeria. This research work seeks to fill this gap in our study.

Objectives of the Study

The main of this study is to examine how the various types of tax in operation in Nigeria have affected economic growth of Nigeria (using GDP as a proxy for economic growth) from 1994 to 2012. Other objectives include:

(i.) To examine the effect of taxation on inflation in Nigeria,

(ii.) To determine the effect of taxation on unemployment in Nigeria.

RESEARCH METHOD

This study makes use of time series data sourced from the CBN statistical Bulletin, Economic and Financial Review and Annual Reports and Statement of Accounts of the Central Bank of Nigeria (CBN), the Federal Office of Statistics (FOS) and the Federal Inland Revenue Services Statistics as contained in Appendix I. The macroeconomic data cover gross domestic product (GDP), unemployment and inflation as the dependent variables and Company Income tax, Petroleum profit tax, Value added tax, Custom and Excise Duties and Personal income tax as the explanatory variable for the period 1994 -2012 in Nigeria.

Model Specification

All data collection for the purpose of the study were evaluated, cross checked, compared and critically analyzed.

To explain the relationship between taxation and economic growth in Nigeria, the model is specified below:

GDP = f (PIT, VAT, PPT, CED and CIT)……………… (i)

GDP = $B_O + B_1 CED_t + B_2 CIT_t + B_3 PIT_t + B_4 PPT_t + B_5 VAT_t + U_t$…………. (ii)

The a priori expectation is $B_1, B_2, B_3, B_4, B_5, > 0$

To explain the relationship between taxation and Unemployment in Nigeria, the model is specified below:

UNP = f(PIT, VAT, PPT, CED and CIT)……………… (iii)

UNP = $B_O + B_1 CED_t + B_2 CIT_t + B_3 PIT_t + B_4 PPT_t + B_5 VAT_t + U_t$......... (iv)

The a priori expectation is $B_1, B_2, B_3, B_4, B_5 < 0$

For the relationship between taxation and inflation, the model is specified below:

INF = f(PIT, VAT, PPT, CED and CIT)……………… (v)

INF = $B_O + B_1 CED_t + B_2 CIT_t + B_3 PIT_t + B_4 PPT_t + B_5 VAT_t + U_t$............. (vi)

The a priori expectation is $B_1, B_2, B_3, B_4, B_5 < 0$
Where; GDP = Gross Domestic Product
      INF= Inflation Rate
      UNP= Unemployment Rate
      PIT= Personal Income Tax
      VAT= Value Added Tax
      PPT= Petroleum Profit Tax
      CED= Custom and Excise Duties
      CIT= Company Income Tax
  B_0= Intercept of the relationship
  B_1, B_2, B_3, B_4 and B_5 = Measure of the slope
  U = Error term/stochastic variable.

Test for Stationarity

To avoid spurious regressions which may arise as a result of carrying out regressions on time series data, we first subject the data to stationarity test by using the Augmented Dicker Fuller (ADF) tests.

The ADF test was done with the following hypothesis:

H_0: Variable contains unit root and hence is non-stationary.

H_1: Variable does not contain unit root and hence is stationary

The decision rule was that: If the calculated ADF Test statistic is greater than the MacKinnon critical values, reject the null hypothesis of non-statonarity and accept the alternative of stationarity, otherwise accept the null hypothesis of non stationarity.

Co-Integration Tests

Theoretically, it is expected that a regression involving non-stationary time series may produce spurious results. Co-integration tests prove that the combination of stationary and non-stationary variables has a long-term relationship. In this study the Johansen Test for Co-integration test on the residuals were used.

Presentation and Interpretation of Results

Empirical findings are discussed under the following sub-sections: result of the stationarity (unit root), Johansen co-integration test, regression result. The result of the Stationarity (unit root) test using the Augmented Dicky-Fuller Test is summarized below:

Result of Stationarity (Unit Root) Test

The result of the Augmented Dicker Fuller (ADF) unit root test for stationarity indicates that PIT and INF variables are stationary at level, CED, PPT, GDP and UNP are stationary at first difference while CIT and VAT are stationary at second difference as shown in Appendix II. Therefore, study rejects the null hypothesis and concludes that there is no unit root in the variables (table 1).

Table 1: The result of the unit root test

VARIABLES	ADF-STATISTIC	CRITICAL VALUES @ 5%	ORDER OF INTEGRATION
CED	-5.319475	-3.052169	Stationary at first difference
CIT	-5.393648	-3.065585	Stationary at second difference
PIT	-6.057888	-3.081002	Stationary at level
PPT	-4.212838	-3.052169	Stationary at first difference
VAT	-4.977828	-3.081002	Stationary at second difference
GDP	-3.408241	-1.964418	Stationary at first difference
INF	-5.884434	-3.081002	Stationary at level
UNP	-5.042325	-3.052169	Stationary at first difference

Table 2: Johanson co-integration test result (dependent variable: GDP)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.999710	138.4981	33.87687	0.0000
At most 1 *	0.866420	34.22191	27.58434	0.0061
At most 2*	0.696616	25.86048	21.13162	0.0331
At most 3 *	0.577436	14.64406	14.26460	0.0435
At most 4 *	0.274474	5.454601	3.841466	0.0195

Table 3: Johanson co-integration test result (dependent variable: inflation)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.999829	211.5801	69.81889	0.0000
At most 1 *	0.858117	64.17377	47.85613	0.0007
At most 2 *	0.651386	30.97694	29.79707	0.0364
At most 3	0.516575	13.06253	15.49471	0.1125
At most 4	0.040675	0.705925	3.841466	0.4008

Table 4: Johanson co-integration test result (dependent variable: unemployment)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.999490	224.4828	69.81889	0.0000
At most 1 *	0.983105	95.59128	47.85613	0.0000
At most 2	0.612094	26.21887	29.79707	0.1223
At most 3	0.443207	10.12001	15.49471	0.2716
At most 4	0.009687	0.165475	3.841466	0.6842

The cointegration test result in table 2 above shows that there are at most five cointegrating equations in the model, In table 3 above the result indicates that there are at most three cointegrating equations in the model, while table 4 shows that there are at most two cointegrating equations in the model. These results show that there exists a long run equilibrium relationship between the dependent variables and the explanatory variables, allowing us to conclude that the variables are cointegrated.

RESULTS:

Table 5: Least square result (dependent variable: GDP)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3849963.	6688549.	-0.575605	0.5747
CED	41212.20	121370.4	8.339557	0.0096
CIT	-83831.50	509379.3	-0.164576	0.8718
PIT	-0.368572	0.822064	-0.448350	0.6613
PPT	-3.347833	104.0264	-0.032183	0.9748
VAT	47.94912	60.86303	6.787820	0.0049
R-squared	0.620213			
Adjusted R-squared	0.474141			
F-statistic	4.245939	Durbin-Watson stat		1.943918
Prob (F-statistic)	0.016497			

From table 5 above, the equation is estimated below:

$$GDP = -3849963 + 41212.20CED_t - 83831.50CIT_t - 0.367PIT_t - 3.348PPT_t + 47.949VAT_t$$

In table 5 above, the negative intercept of B_0 in the equation above, indicated that when the independent variables explained in the model is zero, Gross Domestic product is expected to be -N3,849,963m. From the result also, Custom and Excise duties, and Value added tax met the apriori expectation of the model, they have significant positive effects on the Gross Domestic Product. While Company Income tax, Personal Income tax and Petroleum Profit tax did not meet the apriori expectation of the model so, they negatively impact on the Gross Domestic Product.

Table 6: Least square result (dependent variable: unemployment)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	35171.40	36446.28	0.965020	0.3521
CED	-272.8958	661.3541	-0.412632	0.6866
CIT	5220.776	2775.636	1.880929	0.0826
PIT	0.003864	0.004479	0.862658	0.4040
PPT	0.019538	0.566846	0.034469	0.9730
VAT	0.115223	0.331646	0.347429	0.7338
R-squared	0.934086			
Adjusted R-squared	0.908735			
F-statistic	36.84562	Durbin-Watson stat		2.137544
Prob (F-statistic)	0.000000			

From table 6 above, the model equation is estimated below:

$$UNP = 35171.40 - 272.9CED_t + 5220.78CIT_t + 0.00364PIT_t + O.0195PPT_t + 0.11522VAT_t$$

The positive intercept of B_0 in the equation above indicates that when the independent variables are zero, Unemployment is expected to be 35171.40 units. Only Custom and Excise Duties met the apriori expectation, while Value Added Tax, Company Income Tax, Petroleum Profit Tax and Personal Income Tax did not meet the apriori expectation.

Table: 7: Least square result (dependent variable: inflation)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-14084.84	32165.87	-0.437881	0.6687
CIT	0.977762	0.500273	1.954458	0.0725
VAT	0.408866	0.292696	1.396896	0.1858
PPT	149.2390	583.6817	0.255686	0.8022
PIT	-0.004535	0.003953	-1.147148	0.2720
CED	-2284.905	2449.653	-0.932746	0.3680
R-squared	0.988558			
Adjusted R-squared	0.984157			
F-statistic	224.6286	Durbin-Watson stat		1.635406
Prob (F-statistic)	0.000000			

$$INF = -14084.84 - 2284.905CED_t + 0.97776CIT_t - 0.00454PIT_t + 149.24PPT_t + 0.40887VAT_t$$

In table 7 above, the negative intercept of B_0 in table 7 above, indicates that when the independent variables are zero, Inflation rate is -14084.84units. Custom and Excise Duties (CED) and Personal Income Tax (PIT) met the apriori expectation, while Company income tax, Value Added Tax and Petroleum Profit Tax did not meet the apriori expectation.

DISCUSSION

Durbin Watson Stat. values of 1.94, 2.14 and 1.64 in tables 5, 6 and 7 respectively, illustrate the absence of auto-correlation.

In table 5 above, the coefficient of determination (R^2) from our results is given as 0.62. This implies that 62% of the variations in the growth rate of the GDP of Nigeria are accounted for by the included explanatory variables of Custom and Excise Duties, Company Income Tax, Personal Income Tax, Petroleum Profit Tax and Value Added Tax. The adjusted coefficient of determination (adjusted R^2) is given as 0.4741. This means that precisely 47.41% of the variations in the growth rate of the Gross Domestic Product of Nigeria are accounted for by the included variables, after the co-efficient of determination has been adjusted to make it insensitive to the number of included variables. The statistical test for significance of the individual parameter estimates (i.e t-statistic) using 95% confidence interval indicates that only Value Added Tax T.stat. 6.788 (Prob.0.0049) and Custom and Excise duties (t. stat. 8.3396 Prob. 0.0096) are statistically significant in explaining the changes in economic growth in Nigeria, at 5% level of significance, while other variables (Company Income tax, Personal Income Tax and Petroleum Profit Tax) are not statistically significant and have not significantly contributed to economic growth in Nigeria for the period under review.

In table 6 above, the coefficient of determination (R^2) with 0.93 values, implies that 93% of the variations in Unemployment in the country are accounted for by the included explanatory variables of Custom and excise

Duties, Company Income Tax, Personal Income Tax, Petroleum Profit Tax and Value Added Tax. The adjusted coefficient of determination (adjusted R^2) value of 0.91, means that 91% of the variations in Unemployment in Nigeria are accounted for by the included explanatory variables, after the co-efficient of determination has been adjusted to make it insensitive to the number of included variable. The t. stat. test for the significance of the individual included explanatory variables indicate that all the included explanatory variables (Custom and Excise Duties, Company Income Tax, Personal Income Tax, Petroleum Profit Tax and Value Added Tax) are not statistically significant in explaining the variations in the dependent variable. These explanatory variables have not significantly contributed in reducing the rate of unemployment in Nigeria.

Table 7 above reveals the coefficient of determinant (R^2) as 0.99, meaning that 99% of the variations in Inflation in Nigeria are accounted for by the explanatory variables included in the model. So 99% relationship exists between the dependent variable (inflation) and the independent variables (Custom and Excise Duties, Company Income Tax, Personal Income Tax, Petroleum Profit Tax and Value Added Tax). The adjusted coefficient of determination (adjusted R^2) is given as 0.9842. This means that precisely 98.42% of the variations in the growth rate of the Gross Domestic Product of Nigeria are accounted for by the included variables, after the co-efficient of determination has been adjusted to make it insensitive to the number of included variables. The t. stat. test for the significance of the individual explanatory variables at 5% significance level, reveals that Custom and Excise Duties (T. stat. -0.932746 Prob.0.3680), Company Income Tax (T. Stat. 1.954458 Prob. 0.725) , Personal Income Tax (T. Stat. -1.147148 Prob. 0.2720) , Petroleum Profit Tax (T. Stat. 0.2557 Prob.0.802) and Value Added Tax (T. Stat.1.3969 Prob. 0.186) are not statistically insignificiat in explaining the variations in the model.

CONCLUSION

The purpose of this study is to examine the impact taxation on economic growth, Inflation and Unemployment in Nigeria using the time series data for the period 1994 to 2012. In other to achieve this, three econometric models were developed and analyzed using Eviews statistical package version 7.2 (Students version). The results of the analysis reveal that in the first model, value added tax and custom and excise duties are statistically significant and have significantly contributed to economic growth in Nigeria while Personal income tax, company income tax, petroleum profit tax are not statistically significant and have not significantly contributed to economic growth in Nigeria.

The results of the analysis also indicate that the explanatory variables (Custom and excise duties, company income tax, personal income tax, petroleum profit tax and value added tax) have no significant effect on both unemployment and inflation in Nigeria. Therefore research concludes that taxation in Nigeria have not significantly impacted on economic growth, unemployment and inflation. This research is in line with the views of Karel and Ravn (2012) and Jens Arnold et al. (2011).

RECOMMENDATIONS

Based on these findings, study recommends the following:

Government should ensure that taxation is properly managed in a manner that will accelerate economic growth, reduce inflation rate and generate employment in the country.

There is also need for the Nigeria government to restructure the tax system to meet the demands of the 21st century.

There should be adequate provision of infrastructures and basic amenities like: electricity good water good roads etc as this will enhance people's compliance in tax payment.

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Appendix I

YR	PPT	CIT	CED	VAT	PIT	GDP	INF	UNP
1994	42803	12275	18295	7261	29453	964005	57.416	3.2
1995	42858	21878	37364	20761	30140	1934831	72.729	1.9
1996	76667	22000	55000	31000	60160	2703809	29.292	2.8
1997	68574	26000	63000	34000	65600	2801973	10.673	3.4
1998	68000	33300	57700	36000	64900	2721179	7.862	3.5
1999	164300	46200	87900	47100	68000	3313563	6.618	17.5
2000	525100	51100	101500	58500	95600	4727522	6.938	13.1
2001	639200	68700	170600	91800	159300	5374339	18.869	13.6
2002	392200	89100	181400	108600	183100	6232244	12.883	12.6
2003	683500	114800	195500	136400	193010	6061700	14.033	14.8
2004	1183600	113000	217200	159500	253010	11411067	15.001	13.4
2005	1904900	140300	232800	178100	221800	15610882	17.856	11.9
2006	2038300	244900	177700	221600	320010	18564595	8.218	12.3
2007	1500600	275300	241400	289600	334410	23280715	5.413	12.7
2008	2812300	420600	281300	404500	450000	25424948	11.581	14.9
2009	1256500	593700	297500	468400	630100	25236056	12.543	19.7
2010	1944700	658400	309200	562900	712000	34494583	13.72	21.1
2011	30700000	663020	438300	649500	806000	38016970	10.841	23.9
2012	32010000	847500	438300	710200	963200	40115340	12.217	24.3

Appendix II

Null Hypothesis: D (CED) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.319475	0.0006
Test critical values:	1% level	-3.886751	
	5% level	-3.052169	
	10% level	-2.666593	

*MacKinnon (1996) one-sided p-values.

Warning: Probabilities and critical values calculated for 20 observations
and may not be accurate for a sample size of 17

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(CED,2)
Method: Least Squares
Date: 04/24/14   Time: 07:07
Sample (adjusted): 1996 2012
Included observations: 17 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D (CED(-1))	-1.294894	0.243425	-5.319475	0.0001
C	1.676724	0.963860	1.739592	0.1024
R-squared	0.653554	Mean dependent var		0.100000
Adjusted R-squared	0.630458	S.D. dependent var		6.220631
S.E. of regression	3.781521	Akaike info criterion		5.608260
Sum squared resid	214.4985	Schwarz criterion		5.706286
Log likelihood	-45.67021	Hannan-Quinn criter.		5.618004
F-statistic	28.29681	Durbin-Watson stat		2.043389
Prob (F-statistic)	0.000086			

Null Hypothesis: D(CIT,2) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.393648	0.0006
Test critical values:	1% level	-3.920350	
	5% level	-3.065585	
	10% level	-2.673459	

*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations
and may not be accurate for a sample size of 16

Augmented Dickey-Fuller Test Equation
Dependent Variable: D (CIT,3)
Method: Least Squares
Date: 04/24/14   Time: 07:08
Sample (adjusted): 1997 2012
Included observations: 16 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D (CIT(-1),2)	-1.402111	0.259956	-5.393648	0.0001
C	4990.958	5842.428	0.854261	0.4073
R-squared	0.675109	Mean dependent var		-1414.938
Adjusted R-squared	0.651903	S.D. dependent var		38782.79
S.E. of regression	22881.75	Akaike info criterion		23.03054

Sum squared resid	7.33E+09	Schwarz criterion	23.12711
Log likelihood	-182.2443	Hannan-Quinn criter.	23.03548
F-statistic	29.09144	Durbin-Watson stat	1.903060
Prob (F-statistic)	0.000095		

Null Hypothesis: D (GDP) has a unit root
Exogenous: None
Lag Length: 1 (Automatic - based on SIC, maxlag=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.408241	0.0021
Test critical values:	1% level	-2.717511	
	5% level	-1.964418	
	10% level	-1.605603	

*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations
and may not be accurate for a sample size of 16

Augmented Dickey-Fuller Test Equation
Dependent Variable: D (GDP,2)
Method: Least Squares
Date: 04/24/14 Time: 07:10
Sample (adjusted): 1997 2012
Included observations: 16 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D (GDP(-1))	-8.421977	2.471062	-3.408241	0.0042
D (GDP(-1),2)	7.638121	2.512065	3.040574	0.0088

R-squared	0.678952	Mean dependent var	79761.94
Adjusted R-squared	0.656020	S.D. dependent var	10194881
S.E. of regression	5979279.	Akaike info criterion	34.16197
Sum squared resid	5.01E+14	Schwarz criterion	34.25854
Log likelihood	-271.2957	Hannan-Quinn criter.	34.16691
Durbin-Watson stat	1.395123		

Null Hypothesis: INF has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.884434	0.0003
Test critical values:	1% level	-3.959148	
	5% level	-3.081002	
	10% level	-2.681330	

*MacKinnon (1996) one-sided p-values.

Warning: Probabilities and critical values calculated for 20 observations

and may not be accurate for a sample size of 15

Augmented Dickey-Fuller Test Equation

Dependent Variable:INF

Method: Least Squares

Date: 04/24/14   Time: 07:11

Sample (adjusted): 1998 2012

Included observations: 15 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(INF(-1),2)	-2.433759	0.413593	-5.884434	0.0001
D(INF(-1),3)	0.897502	0.278110	3.227147	0.0073
C	15489.45	14047.69	1.102634	0.2918

R-squared	0.764509	Mean dependent var	11732.13
Adjusted R-squared	0.725261	S.D. dependent var	103515.1
S.E. of regression	54258.02	Akaike info criterion	24.81775
Sum squared resid	3.53E+10	Schwarz criterion	24.95936
Log likelihood	-183.1331	Hannan-Quinn criter.	24.81624
F-statistic	19.47872	Durbin-Watson stat	2.302453
Prob (F-statistic)	0.000171		

Null Hypothesis: PIT has a unit root

Exogenous: Constant

Lag Length: 1 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.057888	0.0002
Test critical values:	1% level	-3.959148	
	5% level	-3.081002	
	10% level	-2.681330	

*MacKinnon (1996) one-sided p-values.

Warning: Probabilities and critical values calculated for 20 observations

and may not be accurate for a sample size of 15

Augmented Dickey-Fuller Test Equation

Dependent Variable: PIT

Method: Least Squares

Date: 04/24/14   Time: 07:12

Sample (adjusted): 1998 2012

Included observations: 15 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(PIT(-1),2)	-2.708627	0.447124	-6.057888	0.0001
D(PIT(-1),3)	0.822399	0.266363	3.087511	0.0094
C	750410.2	677347.6	1.107866	0.2896

R-squared	0.848745	Mean dependent var		-50213.53
Adjusted R-squared	0.823536	S.D. dependent var		6030589.
S.E. of regression	2533306.	Akaike info criterion		32.50481
Sum squared resid	7.70E+13	Schwarz criterion		32.64642
Log likelihood	-240.7860	Hannan-Quinn criter.		32.50330
F-statistic	33.66816	Durbin-Watson stat		1.973165
Prob (F-statistic)	0.000012			

Null Hypothesis: D (PPT) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.212838	0.0052
Test critical values:	1% level	-3.886751	
	5% level	-3.052169	
	10% level	-2.666593	

*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations
and may not be accurate for a sample size of 17

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(PPT,2)
Method: Least Squares
Date: 04/24/14   Time: 07:14
Sample (adjusted): 1996 2012
Included observations: 17 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D (PPT(-1))	-1.020619	0.242264	-4.212838	0.0008
C	-3.616019	3.117742	-1.159820	0.2643

R-squared	0.541957	Mean dependent var		-0.819824
Adjusted R-squared	0.511421	S.D. dependent var		17.96907
S.E. of regression	12.56010	Akaike info criterion		8.009059
Sum squared resid	2366.342	Schwarz criterion		8.107084
Log likelihood	-66.07700	Hannan-Quinn criter.		8.018802
F-statistic	17.74800	Durbin-Watson stat		0.704706
Prob (F-statistic)	0.000753			

Null Hypothesis: D (UNP) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.042325	0.0010
Test critical values:	1% level	-3.886751	
	5% level	-3.052169	
	10% level	-2.666593	

*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations
and may not be accurate for a sample size of 17

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(UNP,2)
Method: Least Squares
Date: 04/24/14   Time: 07:14
Sample (adjusted): 1996 2012
Included observations: 17 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D (UNP(-1))	-1.269863	0.251841	-5.042325	0.0001
C	30251.74	11166.20	2.709225	0.0162

R-squared	0.628943	Mean dependent var	-1121.706
Adjusted R-squared	0.604206	S.D. dependent var	60766.51
S.E. of regression	38229.54	Akaike info criterion	24.05074
Sum squared resid	2.19E+10	Schwarz criterion	24.14876
Log likelihood	-202.4313	Hannan-Quinn criter.	24.06048
F-statistic	25.42504	Durbin-Watson stat	2.071197
Prob (F-statistic)	0.000146		

Null Hypothesis: D (VAT,2) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.977828	0.0016
Test critical values:	1% level	-3.959148	
	5% level	-3.081002	
	10% level	-2.681330	

*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations
 and may not be accurate for a sample size of 15

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(VAT,3)
Method: Least Squares
Date: 04/24/14   Time: 07:15
Sample (adjusted): 1998 2012
Included observations: 15 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D (VAT(-1),2)	-2.366780	0.475464	-4.977828	0.0003
D (VAT(-1),3)	0.483327	0.264748	1.825609	0.0929
C	16502.38	13889.70	1.188102	0.2578

R-squared	0.832792	Mean dependent var		5852.000
Adjusted R-squared	0.804924	S.D. dependent var		120109.1
S.E. of regression	53049.09	Akaike info criterion		24.77268
Sum squared resid	3.38E+10	Schwarz criterion		24.91429
Log likelihood	-182.7951	Hannan-Quinn criter.		24.77117
F-statistic	29.88344	Durbin-Watson stat		2.020832
Prob (F-statistic)	0.000022			