

The Nexus between Tax Structure and Economic Growth in Nigeria: A Prognosis

Ehigiamusoe Uyi Kizito¹

Department of Research and Training
National Institute for Legislative Studies, National Assembly,
Abuja, Nigeria.
ehiuyikizexcel@yahoo.com

Abstract: *One of the most commonly discussed issues in Economics is how tax rates relate to economic growth. An effective tax system ought to satisfy the twin purposes of raising maximum revenue as well as encourage production. In light of this, the paper examined the nexus between the Nigerian Tax System and economic growth using correlation method and Granger Causality to establish the relationship. The paper revealed that the tax system has no significant impact on growth because of the numerous challenges confronting the system. Further analysis of the components of the tax system shows that Custom Duties have more impact on economic growth than Company Income Tax, Value Added Tax and Petroleum Profit Tax. The paper also revealed a negative and insignificant relationship between Petroleum Profit Tax and Company Income Tax on the one hand, and between Petroleum Profit Tax and Value Added Tax on the other hand. Consequently, the paper recommended that the Nigerian tax system should be reformed so that it can have a significant impact on economic growth. Government should also embark on policies and programmes that will enhance the level of income of the citizens with a view*

Keywords: *Nigerian Tax System, Economic Growth, Tax Revenue, Consumption, Investment*

JEL Classification:
H2, O1, E0

Article History

Submitted: 11 Jun 2013

Resubmitted: 24 July 2013

Accepted: 29 July 2013

The importance of taxation in promoting economic growth and development as well as the survival of many nations cannot be

overemphasized. Through it, government ensures that resources are channelled towards important projects in the society. According to Emmanuel (2010), many developed and developing economies around the world had experimented and proven that no nation can truly develop without developing its tax system. Consequently, many countries have embarked on tax reforms and restructuring with a view to developing a tax system that maximizes government revenue without creating disincentiveness for investment.

According to Kiabel and Nwokah (2009), within the last decade, the issue of domestic resource mobilization has attracted considerable attention in many developing countries due to unabating debt difficulties coupled with domestic and external financial imbalances. It is not surprising that many developing nations have been forced to adopt stabilization and adjustment policies which demand better and more efficient methods of mobilizing domestic financial resources with a view to achieving financial stability and promoting economic growth. A critical challenge of tax administration in the 21st century is how to advance the frontiers of professionalism, accountability and awareness of the general public on the imperatives and benefits of taxation in our personal and business lives which include: promoting economic activity; facilitating savings and investment; and generating strategic competitive advantage (Kiabel and Nwokah, 2009). If tax administration does not for any reason meet the above challenges, then there is a desperate need for reform.

One of the most commonly discussed issues in Economics is how tax rates relate to economic 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. What does economic theory suggest about the relationship between economic growth and taxation? Economic theory provides an explanation for a negative relationship between taxes and economic growth. Taxes raise the cost or lower the return to the taxed activity. Income taxes create a disincentive to earning taxable income. Individuals and firms have incentives to engage in activities that minimize their tax burden. As they substitute activities that are taxed at a lower rate for activities taxed at a higher rate, individuals and firms will engage in less productive activity, leading to lower rates of economic growth. In addition, government expenditures (how the taxes are spent) will also have impact on economic growth (Poulson and Kaplan, 2008).

In the case where government can finance spending out of taxation, productivity declines as the tax rate increases, as people choose to work less. The higher the tax rate, the more time people spend evading taxes and the less time they spend on more productive activity. So the lower the tax rate, the higher the value of all the goods and services produced. Secondly, government tax revenue does not necessarily increase as the tax rate increases. The government will earn more tax income at 1% rate than at 0%, but will not earn more at 100% than at 10% due to the disincentives high tax rates cause. Thus there is a peak tax rate where government revenue is highest. The relationship between income tax rates and government revenue can be graphed on what is known as Laffer curveⁱⁱ.

The Nigerian tax system has undergone significant changes in recent times. The Tax Laws are being reviewed with the aim of repelling obsolete provisions and simplifying the main ones. Under current Nigerian law, taxation is enforced by the three tiers of government- federal, state, and local governments with each having its sphere clearly spelt out in the Taxes and Levies (approved list for Collection) (Decree, 1998). According to the Decree, notwithstanding anything contained in the Constitution of the Federal Republic of Nigeria 1999, as amended, or in any other enactment or law, the federal, state and local governments shall be responsible for collecting the taxes and levies listed in Part I, II and III of the Schedule, respectively.

Emmanuel (2010) observed that the realisation was dawned on Nigeria's government at a very critical period when its main source of revenue for decades, oil, witnessed an unprecedented crisis and decline due to general fall in the prices of oil at the international market. This affected the overall revenue of the country and the general performance of government at various levels, especially as it concerns execution of capital projects, which to a large extent, is key to national development. Consequently the federal government came up with a National Tax Policy which seeks to provide a set of guidelines, rules and modus operandi that would regulate Nigeria's tax system and provide a basis for tax legislation and tax administration in the country. The primary objective of revamping, restructuring and reforming the Nigerian tax system is to make it the main source of revenue generation for the government.

Many analysts have argued that the Nigerian tax system is repugnant to economic growth and development and that more reform is needed to reposition the system for utmost efficiency. On the other hand, some analysts have deposited that the Nigerian Tax System is an agent of economic growth due to the reforms and restructuring which took place in

the system in recent times. As the arguments on the relationship between the Nigerian Tax system and economic growth continue, it becomes pertinent to examine the Nigerian Tax System and its implications on economic growth. The primary objective of this paper is to investigate the role of the Nigerian Tax System in economic growth.

Following this introduction, the remaining part of the paper is divided into four parts. Section two presents the theoretical and empirical issues. Section three contains an appraisal of the Nigerian tax system and economic growth, while section four presents the methodology adopted in the study. The fifth section presents the results of the study while the summary of major findings and conclusion are contained in the last section.

Theoretical and Empirical Issues

Theoretical Issues

According to Barro's (1979) tax- smoothening hypothesis, if the marginal cost of raising tax revenue is increasing, the optimal tax rate is a martingale. This implies that changes in the tax rate will be permanent. But a crucial question to ask about this hypothesis is whether government tax policies affect its output permanently or transitory? The endogenous growth theories posit that permanent change in a variable that is potentially influenced by government policies cause permanent change in the growth rate (Romer, 1986, 1987, 1990; Lucas, 1988; Rebelo, 1991; Grossman and Helpman, 1991; and Jones, Mannulli and Rossi, 1993). The policy effect in the endogenous growth model is contradictory to that of the neo-classical growth model (exogenous growth model) which anticipates that such changes will alter growth rate only temporary. The endogenous growth model argued that financing government activities through taxes may have impact on welfare and/or on growth (Ramsey, 1928; Solow, 1956; Cass, 1965; Feldstein, 1974).

One of the prepositions of both the old and new growth theory is that income taxes have negative impact on the rate of economic growth. The endogenous growth models predict that temporary government spending policies have positive effects on output but a zero effect for permanent spending shocks. Similarly, a permanent changes in government policies can have permanent effects on the per capita growth rate of output but neo-classical growth model predicts that such policies cannot affect the per capita level of output permanently (Haq-Padda and Akram, 2011; Kocherlakota and Yi, 1999). Tax policy can affect economic growth by discouraging new investment and entrepreneurial incentives or by

distorting investment decisions since tax codes make some forms of investment more or less profitable than others or by discouraging work effort and workers' acquisition of skills (Scully, 2006).

It is necessary to note that several research works reveal an indirect relationship between tax burden and economic growth, hence, the higher the tax burdens, the lower the rate of growth, vice versa. Consequently, only optimal rate of taxation increases economic output in the future. The finding from the study conducted by Devereux and Love, (1995) using a two-sector endogenous growth model, observed that a permanent increase in the share of government spending in income that is financed by lump-sum tax will endorse interest and the long-run economic growth rate at the cost of social welfare. They further showed that a permanent increase in government spending reduces the long-run growth rates when it is funded with an increase tax, wage income taxes, while a temporary rise increases output but has no impact on long-run growth rate (Karras, 1999; Tomljanovich, 2004; Haq-Padda and Akram, 2011).

Evan (1997) presents a procedure to examine whether fiscal policies (taxes) cause endogenous or exogenous growth (have permanent or transitory effect on economic growth). He used simple stochastic growth model that nests both endogenous and exogenous growth models and observed that growth rate should be stationary at level if growth is exogenous and difference stationary if it is endogenous when any policy variable which affect investment is difference stationary. This present study adopts tax rate as a policy variable which affects investment to check whether its effect is endogenous or exogenous on economic growth focusing on the Nigerian economy.

Overview and Challenges of the Nigerian Tax System

The Nigerian Tax System has undergone significant changes in recent times and under the current law, taxation is enforced by the three tiers of Government, namely the Federal, State, and Local, with each having its sphere clearly spelt out in the Taxes and Levies (approved list for Collection) (Decree, 1998). The Decree gives the Federal, State and Local Governments the responsibilities for collecting the taxes and levies listed in Parts I, II and III of the schedule to the Decree, respectively. Part 1 of the schedule contains taxes to be collected by the Federal Government and they include: Companies Income Taxes; Withholding tax on companies, residents of the Federal Capital Territory, Abuja and non-resident individuals; Petroleum profits tax; Value added tax; Education tax; Capital gains tax on residents of the Federal Capital Territory, Abuja, bodies

corporate and non-resident individuals; Stamp duties on bodies corporate and residents of the Federal Capital Territory, Abuja; and personal income tax of members of the Armed Forces of the Federation, members of the Nigeria Police Force, residents of the Federal Capital Territory, and staff of the Ministry of Foreign Affairs and non-resident individuals.

Similarly, Part II of the Schedule presents taxes and levies to be collected by the State Government and they include: Personal Income Tax in respect of –Pay-As-You-Earn (PAYE) and direct taxation (Self Assessment); Withholding tax (individuals only); Capital gains tax (individuals only); Stamp duties on instruments executed by individuals; Pools betting and lotteries, gaming and casino taxes; Road taxes; Business premises registration fee; Development levy (individuals Only); Right of Occupancy fees on lands owned by the State Government in urban areas of the State; and Market taxes and levies where State finance is involved. Part III of the Schedule contains taxes and levies to be collected by the local government and these include: Shops and kiosks rates; Tenement rates; On and Off Liquor Licence fees; Slaughter slab fees; Marriage, birth and death registration fees; Naming of street registration fee, excluding any street in the State Capital; Right of Occupancy fees on lands in rural areas, excluding those collectable by the Federal and State Governments; Market taxes and levies excluding any market where State finance is involved; Motor park levies; Domestic animal licence fees; Bicycle, truck, canoe, wheelbarrow and cart fees, other than a mechanically propelled truck; Cattle tax payable by cattle farmers only; Merriment and road closure levy; Radio and television licence fees (other than radio and television transmitter); Vehicle radio licence fees (to be imposed by the Local Government of the State in which the car is registered); Wrong parking charges; Public convenience, sewage and refuse disposal fees; Customary burial ground permit fees; Religious places establishment permit fees; and Signboard and Advertisement permit fees (See Taxes and Levies (Approved list for collection) Decree No 21 of 1998 Laws of the Federation of Nigeria).

Micah et al. (2012) asserted that the current tax laws were enacted by the Military regimes while the civilian regimes since 1999 are yet to enact any tax law. However, these laws have been amended on a yearly basis to correct loopholes and promote the use of taxes as macroeconomic management instruments. He identified the major tax laws in existence as of September 2003 and various related amendment to include; Personal Income Tax Act of 1993; Companies Profits Tax Act of 1990; Petroleum Profits Tax Act of 1990; Value Added Tax Act of 1990; Education Tax Act of 1993; Capital Gain Act of 1990; Customs and Excise Management Act of

1990; Minerals and Mining Act of 1999; Stamp Duties Act of 1990; and 1999 Constitution of the Federal Republic of Nigeria.

The Nigerian tax system is faced with several challenges which prevent it from optimal performance. Some of these challenges as highlighted by FRN, 1997, 2002; Ariyo, 1997; Ola, 2001; Odusola, 2002, 2003, and Micahet al., 2012; include the following:

a. Non availability of Tax Statistics: Tax statistics are not readily available in adequate quantity in Nigeria. Most of the Federal and State tax agencies such as Inland Revenue Services do not have adequate tax statistics that will enable them carry out their duties effectively. There is no adequate effort at collating, analyzing, storage, accessibility and retrieval of tax information. This, results to a serious problem of data management which does not provide much input to policy process.

b. Inability to Prioritize Tax Effort: The political economy of revenue allocation in Nigeria does not prioritize tax efforts instead anchored on such factors as equality of states, population, landmass and terrain, social development needs, and internal revenue efforts (Micahet al., 2012). Of all these factors, internal revenue effort is accorded the least percentage. This scenario act as disincentive for a proactive internal revenue drive by the three tiers of governments, instead, encourages them to continue to rely heavily on volatile oil revenue.

c. Poor Tax Administration: The Nigerian Tax System is characterized by poor tax administration because most of the tax agencies suffer from limitation in manpower, money, tools and machinery to meet the ever increasing challenges and difficulties. Micah,et al (2012) submitted that the negative attitude of most tax collectors toward taxpayers can be linked to poor remuneration and motivation. Similarly, Philips (1997) considered the paucity of administrative capacity as a major impediment to the government in its attempts to raise revenue in Nigeria. Most Inland Revenue Services in Nigeria do not have adequate tax professionals/officers. Micahet al. (2012) opined that anecdotal evidence shows that staffs are not provided with regular training to keep them abreast of developments in tax-related matters. This makes the administration of taxes in terms of total coverage and accurate assessment very weak.

d. Multiplicity of Tax: The Nigerian tax system is characterized by multiplicity of taxes and as such many individuals and corporate bodies complain of the ripple effects associated with the duplication of taxes by the Federal and state governments. This problem arose from the states'

complaints about the mismatch between their fiscal responsibilities and fiscal powers or jurisdiction. To compensate, some states took the initiative of levying certain taxes, which has led to arbitrariness, harassment and even closure of businesses (Micah et al., 2012). However, the list of Approved Taxes and Levies published by the Joint Tax Board has attempted to solve this multiple taxation.

e. Regulatory Challenges: Micah et al. (2012) deposited that political risk and exchange controls pose some of the greatest business and regulatory challenges for companies doing business in Nigeria. Other challenging areas to companies include company law, protection of intellectual property, protection of investment and workforce. Political instability also poses a serious threat to business operations and by extension a serious problem to tax administration in Nigeria.

f. Structural Problems in the Economy: The potential for maximizing the benefits of taxation in Nigeria is constrained by structural problems in the economy. More than 50 per cent of the Nigerian economy is predominantly informal sector which circumvent VAT because their operations are rudimentary and lack of adequate record keeping is low. Consequently many tax administrators resort to estimates to calculate taxes to be paid by those in informal sector which are prone to a wide margin of error or open up tax evasion opportunities (Micah et al., 2012). Similarly, Ariyo (1997) points out that the proportion of self-employed relative to the total working population is substantial, yet tax authorities have not devised appropriate means of collection effective personal income tax from this group. In fact, income from the self-employed or informal sector activities is grossly untapped. The same situation applies to income tax and excise tax.

g. Underground Economy: According to Micah et al. (2012) the hidden or underground economy is usually taken to mean any undeclared economic activity and the major issue is how Inland Revenue Authorities can tackle hidden economy. These cover business that should be registered to pay tax such as VAT but are not; people who work in the hidden economy such as the rural areas with difficult terrain and pay no tax at all on their earnings; and people who pay tax on some earnings but fail to declare other additional sources of income. The serious policy issues that may results from the growth of the underground economy in Nigeria include tax evasion and inadequate official statistics on economic growth and this faulty information may lead to incorrect economic policy decision. As argued by Micah et al. (2012), the underground economy is just one of many concerns that affects the tax system and whenever there are taxes,

there will be tax evasion, and its consequences alters the way in which taxes impact on economic efficiency and income distribution.

Empirical Issues

Several studies have been conducted to investigate the relationship between tax policies and economic growth. Some of these studies suggest that tax policies have positive and significant impact on the rate of growth of output, while others observed that there is an inverse relationship between the two variables. Haq-Padda and Akram (2011) conducted a research to examine the impact of tax policies on economic growth using data from Asian economies and discovered that tax policies adopted by developing countries have no evidence that taxes permanently affect the rate of economic growth. Even though government policies can affect per capita income in the transitory path of the steady- state growth, this seems to be inconsistent with the endogenous class of growth models. The results of their study suggest that the relationship between output and the tax rate is best described by the neo-classical growth models because a higher tax rate permanently reduces the level of output but has no permanent effect on the output growth rate. Consequently, they recommended an optimal tax rate to finance the budget, with debt instrument used in financing transitory expenditure while permanent expenditure are to be financed through taxes.

Ramot and Ichihashi (2012) used panel data from 65 countries during the period 1970 to 2006 to examine the effects of tax structure on economic growth and income inequality and discovered that company income tax (CIT) rates have a negative impact both on economic growth and income inequality. They also discovered that personal income tax rate does not significantly affect economic growth and income inequality. The authors therefore recommended the need to develop a modest design into the tax system because countries which are able to mobilize tax resources through broad-based tax structures with efficient administration and enforcement will be likely to enjoy faster growth rates than countries with lower efficiency. Also, the government should focus to reduce tax evasion, which is believed happen in the highest income group that could distort the horizontal and vertical equity in redistributing the income. Finally, very high earners or the highest income group should be subject to high and rising marginal tax rates, especially in the statutory top corporate tax rate.

Ariyo (1997) evaluated the productivity of the Nigerian tax system given the negative impact of persistent unsustainable fiscal deficits on the Nigerian economy for the period 1970-1990 to devise a reasonably

accurate estimation of Nigeria's sustainable revenue profile. The results of his study showed a satisfactory level of productivity of the Nigerian tax system. The author therefore recommended an urgent need for the improvement of the tax information system to enhance the evaluation of the performance of the Nigerian tax system and facilitate adequate macroeconomic planning and implementation.

Omoruyi (1983) in his study took a comprehensive assessment of the productivity of the Nigeria tax system by evaluating the buoyancy of the tax system for the period 1960-1979. Focusing on both the indirect taxes such as import, export and excise duties, as well as direct taxes such as personal income tax and petroleum profit tax, evidence abound to support low level of productivity of the Nigerian tax system.

Widmalm (2001) discovered in his study that a negative relationship exist between personal income tax and economic growth, while corporate income tax does not correlate with growth at all. The author measured personal income tax by using the average income tax. Lee and Gordon (2005) employed the top statutory income tax rate in their estimations and proposed that the concrete tax rates that greatly affect economic growth are the top statutory Company Income Tax (CIT) rates. From their estimation, it was discovered that only the CIT rate had a significant negative impact on economic growth in all their regressions by controlling the endogeneity of tax measures while the Personal Income Tax (PIT) rate and its progressivity did not significantly affect economic growth. Similarly, Arnold (2008) supports the results of Lee and Gordon (2005). He found that the CIT and PIT rate could reduce the economic performance of a country and compared progressive taxes and other tax indicators such as consumption tax and property tax. Analogously, Padovano and Galli (2002) argued that average tax rates lead to several biases which in turn lead to the conclusion that taxation has no impact on growth because of the possibility of high correlation with average fiscal spending.

Poulson and Kaplan (2008) explored the impact of tax policy on economic growth in the states within the framework of an endogenous growth model from 1964 to 2004. In this model, differences in tax policy pursued by the states can lead to different paths of long-run equilibrium growth. Regression analysis was used to estimate the impact of taxes on economic growth in the states and the analysis reveals that higher marginal tax rates had a negative impact on economic growth in the states. The analysis underscores the negative impact of income taxes on economic growth in the states.

Ekeocha et al. (2012) examined the properties of the Nigeria's tax system from 1970 to 2008 particularly the bases of the company income tax, value added tax and personal income tax. The result shows that company income tax base is not persistent, volatile, but sensitive, or pro-cyclical to the state of the economy. The value added tax base is not sensitive to the current state of the economy, not persistent and relatively volatile. It was also discovered that the base of the personal income tax is so volatile, and not persistent, but sensitive to the state of the economy. The policy implication of their finding supports the recent government tax policy reform of a shift in focus in the tax system from direct taxation to indirect taxation (*Ekeocha et al 2012*).

Jibrin et al., (2012) used Ordinary Least Squares method to examine the impact of Petroleum Profit Tax on Economic Development in Nigeria for the period 2000- 2010. His finding revealed that Petroleum Profit Tax has a positive and significant impact on Gross Domestic Product in Nigeria. The author therefore recommended that government should improve on the effectiveness and efficiency of the administration and collection of taxes with a view to increasing government revenue.

Enokela (2010) in his study, explore the relationship between Value Added Tax and economic growth of Nigeria using secondary data and multiple regressions. The results revealed that Gross Domestic Product (GDP) is positive and statistically significant to Value Added Tax, Government Capital Expenditure (GCE) is positive but insignificant to Value Added Tax, and Gross Domestic Product per Capita (GDPPC) is negative and statistically significant to Value Added Tax. The researcher recommended a zero tolerance for corruption to enable the revenue generated from VAT to be channelled to appropriate developmental projects.

Emmanuel (2013) examined the effects of VAT on economic growth and total tax revenue in Nigeria using data covering 1994-2010. He formulated two hypotheses that VAT does not have significant effects on GDP and also on total tax revenue. The results of the regression analysis show that VAT has significant effect on GDP and also on total tax revenue. He therefore encouraged government to sensitize the people to enable it increase the tax rate so as to enlarge its annual revenue for economic development.

An Appraisal of the Nigerian Tax System and Economic Growth

Taxation serves several useful purposes, some of which have political, economic or social bearings. These include; generation of revenue for the sustenance of the economic and social needs of the nation; control consumers demand, encourage investment and savings, fight economic depression, inflation and deflation, guarantee equitable distribution of income and wealth, control the general trend of the national economy, and ensure a proper allocation of national resources (Asada, 2011). Unfortunately, the structure of the Nigerian tax system has not been able to achieve these important purposes of taxation because of several impediments.

Value Added Tax (VAT) was introduced in Nigeria as a substitute for sales taxes and is charged at a single rate of 5 percent on the supply of all taxable goods and services except those specifically exempted by the VAT Act. It has become one of the major sources of tax revenue for financing government expenditures. However, there are several issues emanating from the operation of VAT in the country, which has made many analysts to submit that the operation of VAT is far from what is desirable. Firstly, VAT rate in Nigeria is one of the factors contributing to the collapse of the real sector of the economy, because it disrupts the manufacturing sector by accelerating astronomical increase in the prices of goods and services. This is in addition to other teething problems already plaguing the sector such as inadequate power supply, poor transportation network, multiple taxation, etc. Even though VAT may not increase the production cost of companies, but it can increase the volume of unsold goods thereby reducing capacity utilization, increasing poverty levels, increase unemployment, discourage local and foreign investors and subject the country to economic volatility. Also, the removal of subsidy from petroleum products in January, 2012 by the Federal government has significant impact on tax revenue because this has significantly increase costs of production and distribution of companies leading to lower profits and the consequential lower revenue from company profit tax. Similarly, many companies and individuals will consume less, and therefore pay less VAT. If consumption among individuals and companies is reduced, this could have a knock-on effect on economic growth, profitability and employment, leading to less personal income taxes (Oyedele, 2011). Furthermore, the operation of VAT in Nigeria is capable of causing inflation because VAT is a consumption tax and as such increases the prices of goods and services. The real income of the final consumers is reduced leading to low purchasing power and further compound the poverty situation in the country.

Asada, (2011) provided evident to show that the operation of Personal Income Tax (PIT) in Nigeria remains the most unsatisfactory, disappointing and problematic of all the taxes in the tax system. Section 3 of the 1990 Decree enumerated the kinds of personal incomes chargeable to tax to include; (i) the gains or profits from any trade, business, profession or vocation; (ii) the salary, wages, fees, allowances or other gains or profits from any employment including gratuities, compensations, bonuses, premiums, benefits or other prerequisites allowed, given or granted to an employer; (iii) the gains or profits including premiums from the grant of rights for the use of occupation of any property; (iv) dividends, interests or discounts; (v) a pension, charge or annuity; (vi) any profits or gains not mentioned in the above categories. Despite this stipulation, the problem with income taxation in Nigeria is associated with the administration of the tax system bordering on tax collection, assessment, widespread corruption, and absence of competent administrators. Consequently, the problem of tax avoidance and evasion has reached an alarming proportion. It is thus important to note that the problem of tax collection lies more with direct assessment of the income and collection of taxes from the self employed rather than those under Pay-As-You-Earn (PAYE). Thus the problems of tax avoidance and evasion are more common with the self employed such as, distributors of manufactured goods, petrol dealers, contractors, doctors, and lawyers and other professionals in private practice, rather than those that derive their income from rents, dividends, interests, and properties. Infact, data or statistics had shown consistently over the years that while the self-employed paid less than 9.9% of their personal income as income taxes, employees under the (PAYE) scheme paid well over 90 percent (Asada, 2011). Asada, (2011, p. 8) observed that the

“...assessment and collection of personal income tax from taxable individuals have been difficult in this country. There is apathy not only on the part of the educated but also the uneducated. While the illiterates refuse to pay taxes because they are unaware of the purpose of taxation and therefore regard a tax collector or rather a tax officer as an instrument of oppression, the rich ones refuse because they are not encouraged not only by the Government which wastes taxpayer's money on white elephant projects but also by the tax official who lives above his means.”

An effective tax system ought to satisfy the twin purpose of raising maximum revenue and at the same time encourage production. Personal income tax is closely related to the pace of development and growth of the

economy; hence, there is the need for radical handling of the PIT system in Nigeria to reduce the incidence of tax avoidance and evasion. Besides, other problems plaguing personal income tax include; fraudulent practices of tax officials; high handedness on the part of tax officials in the process of dealing with tax payers; and undue delay in remitting approved benefits to legitimately entitled tax payers; problems of wilful default; delayed payment of tax; problem of lack of co-ordination between the various government departments especially when information is required from other government departments about certain tax payers which in most cases are not forthcoming (Asada, 2011).

Petroleum Profit Tax (PPT) is the tax imposed on companies which are engaged in the extraction and transportation of petroleum products. It is particularly related to rents, royalties, margins and profit-sharing elements associated with oil mining, prospecting and exploration leases (Ekeocha et al., 2012). Government imposes Petroleum Profit Tax (PPT) to serve a number of useful purposes. Apart from providing revenue for the government, PPT also serves as instrument through which the government regulate the number of participants in the petroleum industry and gain control over public assets (Abdul-Rahamoh et al., 2013). It is an instrument for wealth re-distribution between the wealthy and industrialized economics represented by the multinational organizations, who own the technology, expertise and capital needed to develop the industry and the poor and emerging economies from where the petroleum resources are extracted (Jubrin et al., 2012). However, most of these objectives of PPT are not achieved in Nigeria because of several challenges such as lack of adequately trained tax inspectors and officials; inadequate application of technology; poor assessment of taxpayers; tax evasion and avoidance and ineffective tax laws and regulations

Companies Income Tax (CIT) is charged on the profit or gain of any company accruing in, derived from, brought into, earned in or received in Nigeria. The tax rate has been 30% and it is applied on the total profit or chargeable profit of the company but the new tax policy has reduced it from 30% to 20%. It should be noted that Oil Marketing Companies, Oil Services Companies are liable to tax under CITA at the rate 20% and Education Tax at the rate of 2% on the assessable profit. According to Owizy, (2010) Companies Income Tax has significant impact on the economy of any nation because it serves as a stimulus to economic growth in the areas of fiscal and monetary policies. But the Nigerian case is difference because the revenue derived from CIT has been grossly understated as a result of several challenges. The factors responsible for the poor performance of CIT revenue in Nigeria include: high rate of tax

evasion and avoidance by companies, poor tax administration, poor taxpayers education, inconsistent government policies, lack of adequate statistical data, inadequate manpower and corruption among tax officials.

Custom Duties constitute one of the oldest kinds of modern taxation in Nigeria having been introduced in 1860 as import duties. They are taxes on Nigeria's imports charged either as a percentage of the value of the imports or as a fixed amount contingent on quality. Imports duties are the country's highest yielding indirect tax and are administered by the Nigerian Custom Service. Like PIT, CIT and PIT, the operation of custom duties in Nigeria is characterized by multidimensional challenges. These include; porous borders, problem of smuggling, security challenges, poor custom duty administration, inadequate data, shortage of adequately trained personnel, etc. these factors have contributed to the slow rate of growth of custom duties in Nigeria.

Other taxes in the Nigeria's tax system include the Education Tax which was introduced in 1993 and is seen as a social obligation placed on all companies in ensuring that they contribute their own quota in developing educational facilities in the country to prevent the education system from total collapse due to financial crisis that had rocked the sector for years. Excise duties are an ad-valorem tax on the output of manufactured goods and are administered by the country's custom services. Stamp duty is a tax raised by requiring stamps sold by the government to be affixed to designated documents, for example, conveyance document concerning land transfers bonds, debentures, conventions and warrants (Ekeocha et al., 2012). Capital gains tax is computed at the rate of 10% of the chargeable gain or profit made from the sales of goods or assets. In 1998, gains on sale of shares and stock of all forms were exempted from capital gains tax.

Methodology

This study adopts descriptive and analytical approaches to appraise the Nigerian tax system. To examine the relationship between the components of the Nigerian tax structure (PIT, CIT, VAT, PPT and Duties) and economic growth, the study employed correlation method for the investigation. But correlation is not causation, to establish the relationship between the components of the Nigerian tax system and growth the study adopted econometric techniques such as cointegration test. This enables us establish a long-run relationship between the variables and growth and as a basis for causality (Granger, 1986; Engle and Granger, 1987). If variables are cointegrated, it means causality exist.

However, since most time series are prone to unit root problem, therefore, before carrying out cointegration test, the unit root test is conducted on the series using Augmented Dickey-Fuller (ADF) and Philips Perron test. This enables us test for stationarity of the variables under consideration.

Data for the study covered the period 1980 - 2011 and they were obtained from the Federal Inland Revenue Services (FIRS) and Central Bank of Nigeria (CBN) Statistical Bulletin, Economic Reports, and Annual Reports & Statement.

Presentation of Results

As a necessary but not sufficient condition for cointegration, each of the variables has been examined to determine whether it is stationary and, its level of stationarity. To achieve this, two set of unit root tests for stationarity are applied and these include the Augmented Dickey-Fuller (ADF) and the Philips-Perron (PP) tests (Dickey and Fuller, 1979; Phillips and Perron, 1988). The results of the Augmented Dickey-Fuller (ADF) and Phillips-Peron (PP) unit roots test results are reported in Table 1.

Table 1. Unit Root Results

Variables	ADF Test Statistic		Philips-Perron Test Statistic		Conclusion
	Level	1 st Difference	Level	1 st Difference	
GDP	- 3.269889**	-7.262526*	-4.089735*	-13.30042	I(O)
CIT	- 2.929596**	-6.134331*	-4.508666*	-10.56448	I(O)
PPT	- 3.589488**	-6.659538*	-6.706078*	-14.71899	I(O)
VAT	- 2.723028**	-4.095043*	- 3.301270**	-7.236022	I(O)
DUTIES	- 3.022049**	-5.902162*	-5.274464*	-12.48892	I(O)
1% Critical Value	-3.6752	-3.6752	-3.6752	-3.6752	
5% Critical Value	-2.9665	-2.9665	-2.9665	-2.9665	
10% Critical Value	-2.6220	-2.6220	-2.6220	-2.6220	

Sources of data used: Central Bank of Nigeria (CBN) Statistical Bulletin, Economic and Annual Reports; World Bank National Accounts Data, CIA World Factbook.

**indicates significant at 1% or a rejection of the null hypothesis of no unit root at the 1% level*

*** indicates significant at 5% or a rejection of the null hypothesis of no unit root at the 5% level*

**** indicates significant at 10% or a rejection of the null hypothesis of no unit root at the 10% level*

Philips-Perron (PP) tests revealed that all the components of the Nigerian tax system are stationary at one percent except VAT variable which is significant at five percent and are all integrated of order zero with intercept terms, meaning that each series is level stationary. This shows that the hypothesis the states the presence of a unit root in any of the variables under the PP tests is rejected. However, the ADF test result is not as impressive as PP tests because all the components of Nigerian tax structure are significant at five percent and integrated of order zero. The ADF also showed that the absence of a unit root in any of the tax variables. Even though both PP and ADF arrived at similar results but the PP did so at lower significant percentage level. Therefore, this give more credence to the PP test because of its validity even if the disturbances are serially correlated and heterogeneous while the ADF tests require that the error term should be serially uncorrelated and homogeneous.

Given the unit-root properties of the variables, we proceeded to establish whether or not there exists a relationship between tax variables and Gross Domestic Product using the correlation analysis. The result is presented in table 2.

Table 2. Correlation Matrix

	GDP	CIT	PPT	VAT	DUTIES
GDP	1.000000	0.306578	0.141539	0.043940	0.347506
CIT	0.306578	1.000000	-0.046138	0.566577	0.349796
PPT	0.141539	-0.046138	1.000000	-0.126909	0.205628
VAT	0.043940	0.566577	-0.126909	1.000000	0.282507
DUTIES	0.347506	0.349796	0.205628	0.282507	1.000000

Sources of data used: Central Bank of Nigeria (CBN) Statistical Bulletin, Economic and Annual Reports: World Bank National Accounts Data, CIA World Factbook.

The results of the correlation analysis presented in table 2 show a positive and statistically insignificant (weak) relationship between real GDP (growth) and Nigerian tax structure (CIT, VAT, PPT, Duties) during the period under review. The correlation theory states that any correlation coefficient that is less than 5.0 is a weak correlation while that above 5.0 is strong. But the results of the correlation matrix presented in table 2

revealed that the correlation coefficient between economic growth and CIT is 0.31, while the correlation coefficient between economic growth and PPT is 0.14. Furthermore, the correlation coefficient between economic growth and VAT is 0.04, while the relationship between economic growth and Duties showed a coefficient of 0.35. Cross correlation among the components of tax structure showed that CIT and PPT are negatively and insignificantly related (-0.04), even though CIT is positively related to VAT (0.57) and Duties (0.35). This implies that as the growth rate of revenue from CIT increases, those of VAT and Duties will also increase, while the growth rate of revenue from PPT would be decreasing, vice versa. The correlation matrix also revealed that PPT and VAT have negative and insignificant relationship (-0.13) whereas a positive correlation exist between PPT and Duties (0.21). This means that as the growth rate of PPT's revenue increases, VAT's revenue would be experiencing declining growth rate. A positive and insignificant relationship also exists between VAT and Duties (0.28). This implies that as the growth rate of revenue from VAT is increasing, revenue from Duties would also be rising. The way the Nigerian tax system is administered focused mainly on the generation of revenue to the detriment of using taxation as an instrument of stimulating economic growth and development; creation of conducive environment for private sector development; provision of infrastructure and basic social amenities as well as accelerating the production of goods and services.

Given that a relationship exist between the components of the Nigerian tax system and economic growth on the one hand and among the components of tax structure (CIT, PPT, VAT, Duties) on the other hand, it becomes pertinent to established the direction of the relationship. Having also established the unit-root properties of the variables, we proceeded to establish whether or not there is a long-run relationship among the tax variables by using Granger Causality method (Granger, 1986; Engle and Granger, 1987).

Table 3. Causality Test Results

Null Hypothesis	Obs	F-Statistic	Probability Value	Remarks
CIT does not Granger Cause GDP	30	1.43071	0.25805	Accept H ₀
GDP does not Granger Cause CIT	30	3.62916	0.04133*	Reject H ₀
PPT does not Granger Cause GDP	30	2.79415	0.08032**	Reject H ₀
GDP does not Granger Cause PPT	30	1.00218	0.38135	Accept H ₀
VAT does not Granger Cause GDP	30	1.96257	0.16155	Accept H ₀
GDP does not Granger Cause VAT	30	0.86268	0.43422	Accept H ₀
DUTIES does not Granger Cause GDP	30	0.28335	0.75564	Accept H ₀
GDP does not Granger Cause DUTIES	30	2.07053	0.14721	Accept H ₀
VAT does not Granger Cause CIT	30	1.26130	0.30070	Accept H ₀
CIT does not Granger Cause VAT	30	2.62629	0.09220**	Reject H ₀
PPT does not Granger Cause CIT	30	0.10421	0.90143	Accept H ₀
CIT does not Granger Cause PPT	30	0.47002	0.63040	Accept H ₀
DUTIES does not Granger Cause CIT	30	2.05660	0.14898	Accept H ₀
CIT does not Granger Cause DUTIES	30	0.68207	0.51473	Accept H ₀
PPT does not Granger Cause VAT	30	0.33391	0.71926	Accept H ₀
VAT does not Granger Cause PPT	30	0.64127	0.53507	Accept H ₀
DUTIES does not Granger Cause VAT	30	1.03461	0.37009	Accept H ₀
VAT does not Granger Cause DUTIES	30	0.16600	0.84797	Accept H ₀
DUTIES does not Granger Cause PPT	30	0.53125	0.59436	Accept H ₀
PPT does not Granger Cause DUTIES	30	0.50671	0.60853	Accept H ₀

Sources of data used: Central Bank of Nigeria (CBN) Statistical Bulletin, Economic and Annual Reports: World Bank National Accounts Data, CIA World Factbook.

* indicates significant at 5% or a rejection of the null hypothesis of no Granger causality at the 5% level

*** indicates significant at 10% or a rejection of the null hypothesis of no Granger causality at the 10% level*

Table 3 presents the results of the Granger Causality tests between the components of the Nigerian tax system and economic growth. The test is carried out to capture the direction of the causation between the components of the Nigerian tax system and economic growth. In other words, it is meant to show which out of the two variables drives the other and in which direction. The results show that CIT, VAT and Duties do not granger cause economic growth, while PPT granger causes economic growth. Instead, it is GDP that granger cause CIT, whereas GDP does not granger cause PPT, VAT and Duties. Similarly, all the components of tax system do not granger causes one another, except CIT which granger causes VAT.

Summary of Major Findings, Policy Implications and Conclusion

The paper discovered that the Nigerian tax system has no significant impact on economic growth. This could be adduced to several challenges confronting the system. This finding is consistent with the findings of Ramot and Ichihashi, (2012); Haq-Padda and Akram, (2011); and Poulson and Kaplan (2008). However, this finding is inconsistent with the findings of Kusi, (1998) who opined that the tax reform succeeded in improving revenue generation, enhancing the efficiency of the tax administration and improving equity in the tax system, as well as removed market distortions and strengthened economic incentives.

Secondly, the paper also discovered that custom duties have more impact on economic growth than CIT, VAT and PPT. The reason for this revelation could be adduced to the high rate of imports in the country. As imports increases, the duties on imports will continue to experience growth, and ultimately increase output. The insignificant impact of VAT on growth is because VAT has effect on consumption which inturns has effects on investment and employment and ultimately income and output. Despite the dominance of the petroleum sector in the Nigerian economy, the growth rate of PPT revenue and its contribution to economic growth seems to be the least of the components of the tax system reviewed.

Thirdly, it was also discovered that a negative relationship exists between PPT and CIT as well as PPT and VAT. This implies that as the growth rate of revenue from PPT increases, the growth rate of revenue from CIT will

continue to decline, vice versa. Similarly, as the growth rate of PPT revenue increases, the growth rate of VAT revenue declines, vice versa.

The policy implication of the above findings is that the Nigerian tax system should be reformed to engineer a system that would have a significant impact on economic growth. If this is done, the growth rate of tax revenue would increase thereby accelerating the internally generated revenue in the country and make the tax system effective. An effective tax system should satisfy the twin purpose of raising maximum revenue and at the same time encourage production.

For Petroleum Profit Tax (PPT) to have a significant impact on economic growth in Nigeria there is the need for the government to minimize or eliminate the widespread corruption and leakages that permeate the PPT's assessment, collection and administration.

The low growth rate of VAT revenue and its contribution to economic growth is a reflection of the low level of income of majority of Nigerians who purchase the goods and services which VAT is imposed on. It becomes pertinent therefore for the government to embark on policies and programmes that will enhance the level of income of the citizens so as to raise the consumption level of the people with a view to accelerating investment, employment, output, and ultimately tax revenue.

VAT, being a consumption tax levied at each stage of consumption chain, is borne by the final consumer and is capable of increasing the prices of products thereby fuelling inflation and reducing real output. It may become necessary for the government to adopt the appropriate fiscal and monetary policies to control inflation arising from the imposition of VAT.

To increase the rate of growth of custom duties, the government should tackle the challenges of porous borders, smuggling, security and shortage of adequately trained personnel at the agencies responsible for the assessment, collection and administration of custom duties in Nigeria.

Tax inspectors and officials should be professionally trained through on-shore and off-shore training programs with a view to equipping them with the necessary skills and expertise of tax assessment and administration.

It may also be necessary to re-visit and review some tax laws and regulations that are repugnant to the performance of the tax system so as to block and discourage the loopholes that are being exploited by taxpayers to either evade or avoid tax payments.

The revenue collection agencies should be equipped with the appropriate infrastructure and technology to effectively modernize the tax system in Nigeria to ease tax assessment, payment, monitoring and back-duty audit. To sanitize the tax system, the anti-graft agencies such as Economic and Financial Crime Commission (EFCC) and Independent Corrupt Practices and other related Offences Commission (ICPC) should be empowered to arrest and prosecute tax defaulters and corrupt tax officials to serve as deterrent to others.

Also, tax revenue should be transparently and judiciously utilized for investment and in the provision of infrastructure and public goods and services so as to accelerate economic growth, employment and wealth creation. If the government is transparent and accountable to the people in the utilization of tax revenue in providing good roads, electricity supply, social amenities and other infrastructural facilities, taxpayers such as individuals and companies would be committed to tax payments and tax evasion and avoidance will be drastically reduced.

In conclusion, if the country's drive to diversify the economy from being a mono-product economy that depends principally on the oil sector to other sectors such as the industrial and agricultural sectors is to be achieved, there is the need to re-examine and restructure the taxes which affect the performance of these sectors and reposition them as the major drivers of the Nigerian economy.

References

Abdul-Rahamoh, O.A., Taiwo, F.H. & Adejare, A.T. (2013). The Analysis of the Effect of Petroleum Profit Tax on Nigerian Economy. *Asian Journal of Humanities and Social Sciences (AJHSS)* 1(1)

Ariyo, A. (1997). Productivity of the Nigerian Tax System: 1970–1990. *AERC Research Paper 67* African Economic Research Consortium, Nairobi, Kenya, 1-50

Asada, Dominic (2011). *The Administration of Personal Income Tax in Nigeria: Some Problem Areas*. Department of Property and Commercial Law, University of Jos.

Barro, R.J. (1979). On the Determination of the Public Debt. *Journal of Political Economy*, 87(5), 940- 971.

Cass, D. (1965). Optimum Growth in an Aggregative Model of Capital Accumulation. *The Review of Economic Studies*, 32 (3), 233-240.

- Devereux, M.B. & Love, D.R. (1995). The Dynamic Effects of Government spending Policies in a Two- Sector Endogenous Growth Model. *Journal of Money, Credit and Banking*, 27(1) 232-256.
- Emmanuel, M. (2010). *Nigerian Tax System: Entrenching New National Tax Policy*. Nigerian Tribune.
- Emmanuel, C.U. (2013). The Effects of Value Added Tax on the Economic Growth in Nigeria. *Journal of Economics and Sustainable Development*, 4(6), 190-202
- Ekeocha, P. C. Ekeocha, C. S., Malaolu, V., & Oduh, M. O. (2012). Revenue Implications of Nigeria's Tax System. *Journal of Economics and Sustainable Development*, 3(8), 206-215
- Enokela, S. A. (2010). The Impact of Value Added Tax on Economic Development of Nigeria.
- Haq-Padda, I. & Akram, N. (2011). The Impact of Tax Policies on Economic Growth: Evidence from Asian Economies.
- Jibrin, S.M., Blessing, S.E. and Ifurueze, M.S.K. (2012). Impact of Petroleum Profit Tax on Economic Development of Nigeria. *British Journal of Economics, Finance and Management Sciences*, September, 5(2), 60-72
- Jones, C.I (1995). Times Series Tests of Endogenous Growth Models. *Quarterly Journal of Economics*, 110 (2), 495-525.
- Karras, G. (1999). Taxes & Growth: Testing the Neo-Classical and Endogenous Growth Models. *Contemporary Economic Policy*, 17 (3), 177-188.
- Kiabel B. D. & Nwokah N. G. (2009). Boosting Revenue Generation by State Governments in Nigeria: The Tax Consultants Option Revisited. *European Journal of Social Sciences*, 8(4)
- Kocherlokota, N.R. & Yi, K.M (1996). A Simple Time Series Test of Endogenous Vs Exogenous Growth Models: An Application to the United States. *Review of Economic & Statistics*, 78, 126-136.
- Kusi, N. K. (1998). Tax Reform and Revenue Productivity in Ghana. *AERC Research Paper 74*, African Economic Research Consortium, Nairobi

- Moffatt, Mike (2010). The Effect of Income Taxes on Economic Growth: Income Taxes - Looking at Extreme Cases. PwC Nigeria Website, December 19.
- Micah, L.C., Chukwuma, E. and Umobong, A. A. (2012). Tax System in Nigeria: Challenges and the Way Forward. *Research Journal of Finance and Accounting*, 3(5), 1-14
- Omoruyi, S.E. (1983). Growth and Flexibility of Federal Government Tax Revenue: 1960-1979. *Economic and Financial Review*, 21(1), 11-19.
- Osoro, N.E (1993). Revenue Productivity Implications of Tax Reform In Tanzania. *AERC Research Paper*, September.
- Owizy, S.O. (2010). The Problems of Companies Income Tax Administration in Nigeria: A Case Study of Federal Inland Revenue Service, Makurdi.
- Oyedele, Taiwo (2011). Fuel Subsidy Removal and Tax. PwC Nigeria Website, December 19.
- Poulson, B.W. & Kaplan, J.G. (2008). State Income Taxes and Economic Growth. *Cato Journal*, 28(1)
- Ramot, I. & Ichihashi, M. (2012). The Effects of Tax Structure on Economic Growth and Income Inequality. *IDEA Discussion paper 2012*, Hiroshima University, Japan.
- Romer, P. M (1990). Endogenous Technological Change. *The Journal of Political Economy*, 98(5), 71-102.
- Romer, P. M (1986). Increasing Returns and Long-Run Growth. *The Journal of Political Economy*. 94(5), 1002-1037.
- Solow, R. M. (1956). A Contribution to the Theory of Economic Growth. *Quarterly Journal of Economics*, 70, 65-94.
- Tomljanovich, M. (2004). The Role of State Fiscal Policy in State Economic Growth. *Contemporary Economic Policy*, 22(3), 318-330.

The Nexus between Tax Structure and Economic Growth in Nigeria: A Prognosis

Appendix 1. The Growth Rate of GDP and Tax Structure Revenue in Nigeria 1980 -2011

Year	CIT (N'billion)	Growth rate of CIT (%)	VAT* (N'billion)	Growth rate of VAT	PPT (N'billion)	Growth rate of PPT	Duties (N'billion)	Growth rate of Duties	Growth rate of GDP
1980	0.56	8.9	0.41	42.6	8.6	20.1	1.41	17.8	4.20
1981	0.48	-14.3	0.65	58.5	6.3	26.7	1.88	-25.0	-13.13
1982	0.73	52.1	0.68	4.6	4.8	-23.8	1.80	-4.3	-0.23
1983	0.61	-16.4	0.87	2.8	3.7	-22.9	1.11	-38.3	-5.29
1984	0.79	29.5	0.69	20.7	4.7	28.6	0.92	-17.1	-4.82
1985	1.0	26.5	0.98	42.1	6.7	42.6	1.20	30.4	9.70
1986	1.02	2.0	1.04	6.1	4.8	-28.4	1.29	7.5	2.51
1987	1.24	21.6	0.82	-21.2	12.5	160.4	2.72	110.8	-0.70
1988	1.57	26.6	0.98	19.5	14.5	16.0	3.28	20.5	9.90
1989	1.98	41.0	1.37	39.8	24.2	66.9	4.58	39.6	7.20
1990	3.41	72.2	2.01	46.7	26.9	11.2	6.72	46.7	8.20
1991	6.8	99.4	4.9	143.7	36.2	34.6	10.72	59.5	4.76
1992	9.6	41.2	8.9	81.6	43.5	20.2	14.21	32.6	2.92
1993	18.8	95.8	16.2	82.1	50.2	15.4	24.51	68.9	2.20
1994	23.4	24.5	19.1	17.9	67.9	34.9	41.75	-80.6	0.10
1995	26.9	14.9	25.3	32.5	80.1	17.9	44.78	7.3	2.50
1996	31.4	16.7	29.4	16.2	92.8	15.8	55.0	22.8	4.30
1997	37.8	20.4	33.5	13.9	120.8	30.2	59.15	7.6	2.70
1998	40.1	6.1	39.3	17.3	140.0	15.9	65.3	10.3	1.88
1999	46.2	15.2	47.1	19.8	164.3	17.4	87.9	34.6	2.70
2000	51.1	10.6	58.5	24.2	525.1	219.6	101.5	15.5	3.50
2001	68.7	34.4	91.8	56.9	639.2	21.8	170.6	68.0	3.50
2002	89.1	29.7	108.6	18.3	392.3	38.8	181.4	6.3	3.0
2003	114.8	28.8	136.4	25.5	683.5	74.2	195.5	7.8	7.1
2004	113.0	-1.6	159.5	16.9	1183.5	78.4	217.2	11.1	6.2
2005	140.3	24.1	178.1	11.7	1104.9	-6.6	232.8	6.9	6.9
2006	244.9	74.6	221.6	24.4	2038.3	84.5	177.9	-23.6	5.3
2007	327.0	33.5	289.6	30.7	1500.6	-26.4	241.4	35.7	6.4
2008	361.9	10.7	394.4	36.2	1951.3	30	280.2	16.1	5.3
2009	568.1	57.0	468.5	18.8	1256.5	35.6	295.5	5.5	5.6
2010	654.3	15.2	549.5	17.3	3797.3	202.3	365.7	23.8	8.4
2011	700.5	7.1	649.5	18.2	3976.3	4.7	438.3	19.9	7.2

Sources: Central Bank of Nigeria (CBN) Statistical Bulletins, Economic & Annual Reports; World Bank National Accounts Data, CIA World Factbook. *Note that VAT replaced Sales tax in 1994.

ⁱEhigiamusoe, Uyi Kizito is a Research Economist at the Research Division in the National Institute for Legislative Studies, National Assembly, Abuja, Nigeria.

ⁱⁱThe Laffer curve was developed in 1979 by Economist Arthur Laffer. According to Laffer's theory, changes in tax rates affect government revenues in two ways.

One is immediate, which Laffer describes as "arithmetic." Every dollar in tax cuts translates directly to one less dollar in government revenue. The other effect is longer-term, which Laffer describes as the "economic" effect. This works in the opposite direction. Lower tax rates put more money into the hands of taxpayers, who then spend it. This creates more business activity to meet consumer demand.