

Effect Of Tax Policy Changes On Revenue Generation In Nigeria

Inyang Ethel O¹, Otuagoma Florence², Jadi Maitala B³, Nwafor Chidi Benson⁴, Umagu Udemeobong B⁵, Ekwe Mike C⁶

^{1,2,4,5}*Department of Accounting, Faculty of Management Science, University of Calabar, Cross River State, Nigeria*

^{3,6}*Department of Accounting, Michael Opara University of Agriculture, Umudike, Abia state*

¹*ethelinyang@gmail.com* ³*jadimaitala@gmail.com*, ⁴*chidibenson@gmail.com*, ⁵*udyumagu@gmail.com*

⁶*ekwemike16@gmail.com*

ABSTRACT

This study is an empirical assessment of the effect of tax policy changes on the revenue generation in Nigeria. Specific changes and recent reforms on personal income taxes and company income taxes reforms are the focus of this study. Time series data was extracted from the statistical bulletin of the NBS, Federal Inland Revenue Service and Federal Ministry of Finance for the period 2004-2016. Both student t-test and multiple regression were used to analyse the data. The findings revealed a statistical significance in the overall model on both the t- test and the regression analyses. It was discovered that changes in total tax between periods has statistical significance, with significant values of 0.002 and 0.007 respectively. While a unit increase in PIT decreased tax revenue by - 2.4% which is in consonant with the classical theory of marginal tax, underpinning the theoretical framework adopted in this study. The study concludes that poor policy formulation and implementation including lack of anti-tax avoidance laws may be responsible for the high level of tax evasion which affects the Nigerian tax system. The study recommends a systematic approach to tax voluntary compliance strategy and deliberate effort by government in formulating tax policy that will guarantee voluntary compliance and efficient administration in line with macro-economic objectives of taxation.

Keywords: classical theory, voluntary tax compliance, tax policy.

1.1 INTRODUCTION

Tax is one of the primary sources of public revenue to governments across the world. It is equally the oldest source of revenue as well as an important fiscal policy tool of most governments. Over the decades since then, the Nigerian tax system has witnessed a series of reforms which were not necessarily informed or induced by the country's level of economic activities. Tax reform is a fiscal policy strategy designed to enhance tax administration and efficient collection. Essentially, it entails changing the way taxes are collected or managed by the government with a view to improving national income and gross domestic

product, and providing economic and social benefits to the citizenry.

Tax policy reforms can influence economic choices and can be more complex, as it involves tax rate cuts as well as base-broadening changes. A well designed tax policies have the potential to raise economic growth, but there are usually unanticipated stumbling blocks along the way which pose no guarantee that all tax changes will improve economic performance. The purpose of this study is to assess the impact of changes in Nigeria's tax policy on revenue focusing on personal income tax (PIT), company income tax (CIT) and value added tax (VAT) respectively.

1.2 Research Problem

Tax policy reforms in Nigeria and some vital changes that have taken place in recent times were majorly carried out with little or no consideration to the prevailing economic changes which forms the reality of their effective compliance. For example, what tax rates are favourable during inflation, recession and depression? What is the psychology of the tax payers in respect to any policy or reform being formulated, will they comply in terms of voluntarily payment of taxes

James and Nobes (2008) decried the inability of tax policy to meet up with efficiency and equity criteria against which it is being judged. It is further noted that tax policy is continually subjected to pressure and changes which most time does not guarantee outcome that are in line with the overall goal and the canons of taxation (James and Nobes 2008). Non-Compliance Strategy is also a major problem. Accordingly government in 2011 amended the 1973 PIT Act to make non-compliance employers liable to penalties up to #5000.00 as well as liable for the payment of all tax arrears. Employers that failed to keep proper records were to face a penalty of #10, 000.00, These sanctions have not been sustained to the later.

Multiple Taxes: According to Odusola (2006), the imposition of multiple taxes in the system poses restrictions on inter-state commerce and trade, making locally produced goods uncompetitive and in some instances causing business closure. The failure of government to address this issue has affected resources that could have accrued to it, and those who have remained in business usually put up hostile and confrontational attitudes when approached to pay these taxes. It is in the researcher's opinion that the premise of multiple taxation and double taxation have not been effectively addressed.

Tax evasion and tax avoidance: Nigeria has no strong anti -tax-avoidance laws which should minimise tax evasion and avoidance. Individuals will always look for a means –legal or otherwise–to reduce or even completely avoid paying taxes. This result in heavy revenue losses to governments and ultimately affects their ability to meet their obligations. Therefore it is upon this backdrop that the researcher tends to objectively examine whether tax policy changes have any effect on revenue generation considering the recent changes made in the PIT, VAT and CIT.

1.3 Research Objective

This paper examines the effects of changes in tax policies on the revenue generation in Nigeria while

focusing on areas of reforms in personal income tax, and company income tax in two periods, first 2004-2010 and 2011- 2016 respectively. The specific objectives include;

1. To determine whether changes in personal income tax within these periods affect revenue generation in Nigeria
2. To measure the extent to which company income tax changes for these periods affect revenue generation in Nigeria.
3. To ascertain if changes in value added tax over these periods affect revenue generation in Nigeria

1.4 Research Questions

1. To what extent does change in personal income tax within these periods affect revenue generation in Nigeria?
2. How do changes in company income tax for the two periods affect revenue income?
3. What effects have changes in value added tax over these periods affect tax revenue?

1.5 Research Hypotheses

1. Changes in personal income tax` within these periods have no significant effect on revenue generation
2. Revenue generation is not significantly affected by changes in company income tax over these periods.
3. There is no significant effect between changes in value added tax for the periods and revenue generation in Nigeria.

2.0 LITERATURE REVIEW

2.1.1 Tax Reforms and Revenue Generation in Nigeria

Taxation has rightly been identified as a major tool in the strengthening of domestic resource mobilization and consequently, the search for ways and means of expanding the tax base and also strengthening tax administration has been intensified. Tax is considered a veritable source of revenue for financing developmental as well as people oriented programs in virtually all countries, irrespective of whether they are classified as developed or developing economies. Taxation has been one of the most important weapon available to government for marshalling financial resources is undisputable (Oloyede, 2010).The existence of well-defined tax laws alone cannot guarantee the success

of tax collection effort. There must always exist an efficient and effective tax administration as a sine qua non to successful domestic resource mobilization. In some developing countries, Governments impose many types of taxes, individuals pay income taxes when they earn money, consumption taxes when they spend it, property taxes when they own a home or land.

Ogbonna and Appah (2012) had investigated the relationship between tax reforms and economic growth in Nigeria, using reforms on petroleum profit tax, company income tax, value added tax, personal income tax, education tax and customs and excise duties as explanatory variables. They argued that an increase in taxation reduces investible funds while lower returns mean less disposable income and less funds for growth. The recent reforms include:

- The introduction of TIN (Tax Payers Identification Number), which became effective since February, 2008.
- Automated Tax System (ATS) that facilitates tracking of tax positions and issues by individual tax payer.
- E-Payment System (EPS) which enhances smooth payment procedure and reduces the incidence of tax touts, and
- Enforcement scheme (special purpose tax officers), all these have led to an improvement in the tax administration in the country.

There is an anti-tax avoidance legislation put in place by developed countries like US, UK and Canada to curtail tax evasion and avoidance (William & Andrew 2014). The anti-tax avoidance law contains five legally binding anti abuse measures which should be apply against common forms of aggressive tax planning. The document creates a minimum level of protection against corporate tax avoidance and includes;

- i. Controlled- foreign company, a rule to deter profit shifting to a low or no tax country.
- ii. Switchover rule propounded to prevent double-taxation of certain income
- iii. Exit taxation rule, which will prevent companies from avoiding tax when relocating assets.
- iv. Interest limitation rule which discourages artificial debt arrangements design to minimise taxes.

- v. General anti abuse rule to counteract aggressive tax planning when other rules don't apply.

Summarised Timeline of Major Tax Reforms in Nigeria, 1961-2011

Year	Description
1961	Income Tax Management Act (ITMA), Personal Income Tax Lagos Act
1967	Establishment of the Lagos State Inland Revenue Department
1979	Promulgation of Company Income Tax Act (CITA), C174
1990	Capital Gains Tax Act (CGTA), Minerals and Mining Act, Stamp Duties Act
1993	Finance (Misc. Tax Provisions) (Amendment) Dec No 3, Establishment of FIRS
1998	Tax and Levies (Approved List for Collection)
1999	Constitution of Federal Republic of Nigeria
2001	Tax Policy and Administration Reforms Amendments
2004	FIRS Act, CIT Act (CITA), PPT Act, PITA, VAT act, Educ. Tax Act etc.
2007	Nigerian technology Development Agency (NITDA) Act, FIRS Est. Act
2011	Personal Income Tax Act Amendment including non-compliance.

Tax reform became imperative in Nigeria because of the nature of its structure, which according to Anyanwu (1997) was complex, inelastic, inefficient, inequitable and unfair. Moreover, the country depended on import and export duties, while there were no opportunities to generate revenue through consumption-based tax such as VAT. The dependency of the country on taxes relating to foreign trade activities had made the revenue base of the country to be very unstable. In addition, the Nigeria's tax base was very narrow while the tax rate was very high.

The main objective behind the tax reform was to create an efficient tax system based on taxes that are politically feasible and administratively practicable, thereby generating more revenue and at the same time reducing the tendency for economic distortions (Jones & Daberechi, 2016)..

The tax reform of 1991 was assigned to assess both direct and indirect tax regime of Nigeria. To this extent the value-added tax (VAT) came into existence by decree 102 of 1993, but its implementation started from January 1994. VAT replaced the sales tax, which has been in existence since 1986. It was a consumption-based tax imposed on both domestic and imported goods. However, several items such as food, medical and pharmaceutical product, books, newspapers, magazine, house rent, commercial vehicles and spare parts including services rendered by community and people's banks were VAT-free (Odusola, 2006). Initially, the federal government's share of the VAT proceeds was 20 percent and state and local governments received 50 and 30 percent respectively. This situation was reversed in the year 1995, as the share of the federal government was increased to 50 percent while state and local governments respectively received 30 and 20 percent. The tax reform of 2004 under the chairmanship of Ifueko Omoigie marked a milestone improvement in tax administration in Nigeria. The achievements and progress made is one that has not been surpassed in the history of tax administration in Nigeria. The reforms of 2004 constitute an integral part of the National Economic Empowerment and Development Strategies (NEEDS). It was the outcome of recommendations made by the study group (2002) and the working group (2003) which came out with nine bills that were presented by the federal executive council (FEC) and to the national assembly for ratification. These bills are: the federal Inland Revenue service act 2004, personal income tax act 2004, petroleum profit tax act 2004, value-added tax act 2004, education tax act 2004, custom excise tariff etc. (consolidation) Act 2004, National Sugar Development Act 2004 and National Automotive Council Act 2004. Essentially, the study group (2003) recommended that Nigeria needed national tax policy that is principally directed towards national development. Such national policy will constitute a means of attracting foreign direct investment, providing direction and focus on general tax practices, blending various opinions on taxes of different kinds as well as the issues surrounding those opinions, consolidation of several policy documents into a single document for easy reference (FIRS Hand Book, 2012).

In addition, certain recommendations were made by the study group, which among others include: the reduction of company income tax rate from 30

percent to 20 percent and personal income tax; reducing the personal income tax from 25 percent to 17.5 percent, and company income tax from 30 to 20 percent, strategically increasing VAT from 5 to 15 percent. Since the reform in 2004, tax collected revenue has been increasing on an average of 26% per annum. As reported, the ratio of tax revenue to the GDP stood at 7%. This however is dismal when compare with what is obtainable in emerging economies where the ratio lies between 15 and 20% (OkonjoIweala, 2012).

2.2 Theoretical Framework

The theoretical framework for this study is underpinned on the traditional economic school of taxation (the classical school) which was propounded by Robert Barro (1967), in his views as summarized in the work of Slemrod (2003) low tax rates and low government spending were associated with higher economic growth. This means that the higher the marginal tax rate, the greater the chances of higher income diversion by tax payers. From the point of view of economic theory, marginal tax rates are particularly important because they affect the incentives of individuals to earn more income. Consequently, as marginal tax rates increases, individuals get to keep less of their additional earnings. While economic theory predicts a negative relationship between marginal tax rates and economic growth, it also suggests several factors that will complicate measurement of the linkage. According to Gwartney and Lawson (2006), such factors includes the difference between the short-run response to change marginal rates so much so that an increase in marginal tax rates reduces the supply of labour and capital which will tend to slow the growth of real gross domestic product (RGDP).

Secondly, the linkage between marginal tax rates and GDP growth may be weakened because GDP figures often fail to register the negative impact of the price distortions accompanying high marginal tax rates and consequently, the linkage between marginal tax rates and GDP growth may also be weakened by the pattern of government expenditures. In most countries, high marginal tax rates are imposed in order to derive revenues that are utilized to subsidized social safety needs such as child – care services, retirement benefits and payment to the unemployed. Generally, the impact of tax policies is greater in the highest tax brackets – where changes in tax rates will exert their largest effect on both labour supply and tax – avoidance activities.

2.3 Empirical Review

A survey by the OECD (2016) revealed that a comparative review of tax revenue as percentage of Gross Domestic Product (GDP) noted that only 4% of the total GDP (20-12) % was derived from non-oil revenue as cited by Jones and Daberechi (2016). This indicates that revenue derivation from tax contributes a very low margin to economic development in Nigeria. In an attempt to bridge the above expectation gap, several articles have pointed out the need for a formidable tax policy capable of restructuring the Nigerian tax system. As Jones and Daberechi (2016) while surveying an empirical assessment of the impact of tax reforms on the economic growth of Nigeria using time series data from the period 1985-2011 measure total variation in gross domestic product, as a result of variation in petroleum profit tax, company income tax, customs and excise duties, value added tax, personal income tax and education tax using the ordinary least squares based multiple regression was adopted to analyse the data. They found that the adjusted R-square of 0.99 implies that 99% of the variables have no statistical significant impact on economic growth at 5% level of significance. However, Petroleum profit tax and company income tax each has positive significant impact on economic growth at 0.35% and 2.87% level of significance respectively. The Durbin Watson statistic of 1.98 indicates that there is no presence of serial autocorrelation in the model. The probability of the F statistic, a test for the overall significance of the model is rightly specified at zero level of significance. They therefore concluded that, tax reforms have significant impact on the economic growth in Nigeria which confirms the existence of long-run equilibrating relationship between the variables, i.e. economic growth and all the independent variables in the model. They recommended that chartered tax practitioners should be allowed to play leading roles in any tax reform process to ensure a robust tax system and there should be harmony in the objectives of tax reforms with macro-economic objectives.

In a similar note, Innocent et al. (2016) assess the impact of tax reforms on Nigeria's national income for the period, 1971 to 2014. Using a variety of growth indicators signifying tax reforms and regression model which specified growth rate of national income (proxied by GDP) as a function of growth rates in these indicators. Diagnostic tests (F-statistics, Adjusted R-Square and Durbin-Watson) were carried out to ascertain the robustness of the

parameter estimates. They found that tax reforms significantly improved national income and economic growth during the period of study, especially growth rates of value added tax and personal income tax. Their results show that growth rate of personal income tax has a positive significant effect on the national income and economic growth, while that of value added tax has a negative significant effect on growth of national income. The growth components of company income tax and petroleum profit tax were positive but not statistically significant. On the other hand, reforms in custom and excise duties were found to yield negative and statistically non-significant effect. Their leading conclusions from the findings were: (1) strategic tax reforms significantly influence the behaviour of national income and GDP; (2) tax policy significantly fosters the growth of national income. They recommended that policy makers, especially Ministry of Finance and Federal Inland Revenue Service and their state counterparts, should give requisite attention to tax policy issues, in the light of their obvious implications on growth of the national income and economic development.

In the work of William (2014) he examines how changes to the individual income tax affect long-term economic growth investigating the structure and financing of a tax change as critical to achieving economic growth. He observed that tax rate cuts may encourage individuals to work, save, and invest, but if the tax cuts are not financed by immediate spending cuts they will likely also result in an increased federal budget deficit, which in the long-term will reduce national saving and raise interest rates. He equally observed that base-broadening measures can eliminate the effect of tax rate cuts on budget deficits, but at the same time they also reduce the impact on labour supply, saving, and investment and thus reduce the direct impact on growth. However, they also reallocate resources across sectors toward their highest-value economic use, resulting in increased efficiency and potentially raising the overall size of the economy. The results suggest that not all tax changes will have the same impact on growth. He concluded that reforms which improve incentives, reduce existing subsidies, avoid windfall gains, and avoid deficit financing will have more auspicious effects on the long-term size of the economy, but may also create trade-offs between equity and efficiency.

Tax policy changes can affect the level of tax revenue as opined by Ochieng et al. (2016) in their

examination of the effects of tax reforms on tax buoyancy and elasticity estimates in Kenya. The study employed regression analysis and used annual time series data for the period 1963 to 2010. Secondary data from Kenya National Bureau of Statistics, Kenya Revenue Authority, Central Bank of Kenya and World Bank was used. Elasticity estimates were determined by adjusting data for discretionary changes using the proportional adjustment method. The study revealed that both revenue administration reform and modernization programme (RARMP) and tax modernization programme (TMP) were important in explaining the variations in buoyancy and elasticity of the tax system in Kenya. Although the reforms analysed had positive effect on both tax buoyancy and elasticity, the result was not sufficient to help generate adequate revenue to finance the ever increasing government expenditure. With an inelastic tax system, the Kenya government has to re-evaluate the implementation strategies and pursue further reforms for it to fully exploit the tax revenue potential in the economy.

According Adudu and Ojonye (2015) in their survey to investigate the impact of tax policies on economic growth in Nigeria. They observed that there exist, considerable disagreement about how tax policies influence economic growth and development. While attempting to compare the traditional schools of thought which advocated the theory of low income tax rates as major factor influencing economic development with the modern schools theory of higher income tax rates that is capable of developing nations. Using time series data between 1990 and 2011, and making attempts to justify these lines of thinking by making Nigeria as a case study with the main objective of identifying the impact of tax policy on economic growth in the country. Applying the Granger – causality co integrations framework, this study finds statistical evidence that efficient tax reforms are necessary conditions for enhanced sustainable economic growth. On the basis of the findings, the study recommends among other issues that improvement in tax regimes, removal of distortions in taxation, discouragement of tax holidays to MNCs and diversification of revenue base as necessary catalysts for sustained economic growth and development.

The major gap identified in this work is the fact that changes in tax policy reforms as reviewed by this work is so voluminous in the sense that the approach

used by several authors to measure the proxies for tax changes, reforms/policy and tax frauds are not objectively categorised. Most reviews do not focus on the numerical or quantitative value effects of changes in such tax policies.

3.1 RESEARCH METHODOLOGY

This study seeks to examine the effect of changes in tax policies and reforms on the Nigeria revenue focusing on three periods; 2004, 2007 and 2011 tax reforms respectively. Cross sectional research design was used. It is a form of research design which focuses on observational study and patterns of data behaviours, that is more considerable in time series analysis of data. An econometric model which is informed by standard economic theory of both classical and Keynesian genres was adopted. The model is designed to capture the time series impact of various forms of tax policy changes on national revenue income and draws from Ekeocha et al. (2012).

3.2 Source Of Data And Analysis

The data on PIT, CIT, VAT and TOTAL REVENUE was collected from available tax publications (FIRS), annual reports from NBS and economic review papers both from CBN and ministry of finance. The data were group into two, 2004-2010 and 2011-2016. In each of these period the values for taxes were extracted and analysed to determine the empirical effect of each change that has taken place within the period.

3.3 Model Specification

To empirically investigate the relationship between Federally Collected Revenue (FCR) from tax and Tax reform proxies by the various income tax, Company Income Tax (CIT), Personal Income Tax (PIT). This paper hypothesizes that federally collected revenue depends behaviourally on the various income tax.

$TCR = f(\Delta (PIT, VAT \text{ and } CIT))$ and can be re-specified in a stochastic form.

$TCR = \beta_0 + \Delta\beta_1PIT + \Delta\beta_2VAT + \Delta\beta_3CIT + U_{it}$
Where U_{it} is the error term.

$TRC = \beta_0 + \Delta\beta_1PIT + U_{it} \dots 1$

$TRC = \beta_0 + \Delta\beta_3CIT + U_{it} \dots 2$

$TRC = \beta_0 + \Delta\beta_1VAT + U_{it} \dots 3$

Where TRC is tax revenue, CIT is company income tax, PIT is personal income tax and VAT, value added tax respectively.

3.3 Techniques for Data Analysis

This work used regression and student t-test analyses to measure the outcome of the data collected. The following assumptions were tested; auto-linearity, unit root test and stationary test respectively. Empirically, TAX revenue was regressed against the tax components used as proxy for tax policy changes (Okafor, 2012).

4.1 T- Test Statistics

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
								Lower	Upper
CIT	Equal var assumed	3.959	.075	-.574	10	.579	-14665	-71600	42270
	Equal var not assumed			-.574	5.265	.590	-14665	-79369	50039
PIT	Equal var assumed	17.144	.002	1.645	10	.131	65348	-23150	15384
	Equal var not assumed			1.645	6.504	.147	65348	-30042	16073
TAX	Equal var assumed	4.045	.072	-4.287	10	.002	-52072	-79135	-25009
	Equal var not assumed			-4.287	5.266	.007	-52072	-82826	-21318
VAT	Equal var assumed	20.012	.001	-1.843	10	.095	-23064	-50945	48152
	Equal var not assumed			-1.843	5.006	.125	-23064	-55219	90893

The table above presents the mean variations and the confidence interval difference amongst the variables. From the above results, the tax components do not show any significant changes in respect to revenue income. But changes in total tax collected has a statistical significance for the period under review with probability value of 0.002 and 0.007 respectively.

4.1.1 Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.924 ^a	.854	.634	1762414.24780
a. Predictors: (Constant), VAT, PIT, CIT				

From the model summary of the test-statistic, the coefficient of determination showed a value of 92.4% suggesting that the model is free from first error order. This also indicates goodness of fit of the model and the strength of the variables explained.

4.1.2 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	362368	3	120789	3.889	.211 ^b
	Residual	621220	2	310610		
	Total	424490	5			
a. Dependent Variable: TAX						
b. Predictors: (Constant), VAT, PIT, CIT						

The ANOVA result displayed the sum of squares and mean squares of the variables, VAT, PIT and CIT. The result also showed a significant probability of the variables and the F-statistics with values 0.211 and 3.889 respectively. This result is not statistically significant at 5% level of significance, hence changes in VAT, PIT and CIT for the period do not statistically affect tax revenue of government.

4. DATA PRESENTATION

This chapter presented the t-test statistic and the regression results on the variables been examined. The variables include company income tax (CIT), personal income tax (PIT) and value added tax (VAT) respectively.

4.2 Regression Analysis

4.2.1 Test of Hypotheses. Changes In CIT, PIT and VAT Have No Significant Effect on Tax Revenue

Dependent Variable: TRG				
Method: Least Squares				
Date: 01/23/18 Time: 21:24				
Sample: 2004 2013				
Included observations: 10				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CIT	1.99E-05	2.01E-05	0.988525	0.3611
C	100.4883	343.3431	0.292676	0.7796
PIT	-2.84E-08	5.56E-08	-0.510057	0.6282
VAT	0.150195	0.029378	5.112546	0.0022
R-squared	0.928465	Mean dependent var		485.4000
Adjusted R-squared	0.892697	S.D. dependent var		255.1192
S.E. of regression	83.56985	Akaike info criterion		11.97842
Sum squared resid	41903.52	Schwarz criterion		12.09945
Log likelihood	-55.89209	F-statistic		25.95815
Durbin-Watson stat	1.977182	Prob(F-statistic)		0.000779

The result shows an overall statistical significance of the model with F-statistic of 0.0007 while total revenue is significantly affected by VAT with a p-value of 0.0022 at 5% level of significance. The result also displays the coefficient of determination of 92.8%, and DW statistic of 1.977 which is an indication that the entire variables fitted in the model are free from first-order correlation problems. The model also showed that tax revenue will increase by 0.15% as a result of unit increase in VAT and higher at about 2% as CIT increases by 1% respectively.

4.4 SUMMARY OF FINDINGS

The findings from this work give an overall result between the variables being investigated which include company income taxes (CIT), personal income taxes (PIT), and vat (VAT). The results are summarised as follow: Tax policy changes have both positive and negative effects on revenue. For example CIT increases revenue annually by about 6.3%, while PIT decreases revenue by about -2.4% annually. Changes in tax revenue for the periods have significant effect, but the tax components do not show any significant effects on the tax revenue.

5.1 SUMMAY CONCLUSION AND RECOMMENDATIONS

This study was carried out with the purpose of investigating the effect of tax policy changes on tax revenue generation in Nigeria, within two reform regimes i.e. 2004-2011. Data were collected from the books and reports of the Federal Inland Revenue

Service and statistical bulletin of the Nigeria bureau of statistics from 2004-2016 to cover the recent tax reforms. Student t-test and regression were used in the analysis of the data collected. The student t- test was used to measure the changes between the variables within the periods under review. The residual result was subjected under regression in order to examine the effects of such changes on the tax revenue. Both results showed that changes in tax revenue within the periods were significant with values 0.002, 0.007 and the F-statistic of 0.0079 from the t-test and regression.

It was concluded that taxes collected between these periods have changed significantly as shown in the overall regression model and the independent t- test. This indicate that the combined effects of tax policy changes on PIT, CIT, and VAT have significance on the revenue collected from tax within the periods.

To ensure an efficient tax system that guarantee sustained economic growth, there should be an improved tax regime that is capable of generating funds for the Government to provide basic social services. Efforts should be made to address all complexities involving effective tax system such as multiplicity of tax payment by individuals and organizations and putting strategy to minimize tax avoidance and evasion. Nigeria needs to adopt the anti-tax avoidance laws which will mitigate tax evasion, avoidance and enhance tax compliance.

This study will continue to be of interest to majorly the governments, civil servants, government establishments in providing general insight on the challenges affecting tax reforms, policy changes and administration in Nigeria.

This research would contribute to the existing literature by focusing on tax administration in Nigeria with a view to identifying the critical problems that are confronting the tax system so that appropriate measures could be taken to tackle them.

REFERENCES

- Ajakaiye, D. O., & Odusola, A. F. (1996). Price Effects of value added tax in Nigeria. NCEMA Policy Analysis Series, 2(2), 48-68.
- Central Bank of Nigeria (CBN). (2015). Statistical Bulletin and Annual Report and Statement. Abuja: Central Bank of Nigeria.
- Dickey, D. A., & Fuller, W. A. (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American Statistical Association*, 74, 427-431.
- 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.
- Dickson .E. Oriakhi & Rolle R. Ahuru (2014). The Impact Of Tax Reform On Federal Revenue Generation In Nigeria. *Journal of Policy and Development Studies* Vol. 9, No. 1
- Ezeabasili, V. N., Tsegba, I. N., & Herbert, W. E. (2012). Economic Growth and Fiscal Deficits: Empirical ijef.ccsenet.org *International Journal of Economics and Finance* Vol. 8, No. 8; 2016 51 Evidence from Nigeria. *Economics and Finance Review*, 2(6), 85-96. Retrieved from <http://www.businessjournalz.org/efr>.
- Ezeoha, A. E., & Ogamba, E. O. (2010). Corporate Tax Shield or Fraud? Insight from Nigeria. *International-Journal-of-Law-and-Management*, -52(1), -5-20. <http://dx.doi.org/10.1108/17542431011018516>
- FIRS. (2012). Excerpts of the Handbook: Federal Inland Revenue Service and Taxation Reforms in Democratic Nigeria, Abuja: Federal Inland Revenue Service.
- Innocent Augustine Nwaorgu¹, Wilson E. Herbert & Francis Onyilo (2016). A Longitudinal Assessment of Tax Reforms and National Income in Nigeria: 1971-2014. *International Journal of Economics and Finance*; Vol. 8, No. 8; 2016 ISSN 1916-971X E-ISSN 1916-9728
- Jones, Ebieri and Ekwueme, DaberechiChikezi (2016). Assessment of the Impact of Tax Reforms on Economic Growth in Nigeria. *Journal of Accounting and Financial Management* Vol. 2 No.2
- Leyira, C. M., Chukwumma, E., & Asian, A. U. (2012). Tax System in Nigeria: Challenge and the Way Forward. *Research Journal of Finance and Accounting*, 3(5), 9-15.
- Musgrave, R. A. (1969). *Fiscal Systems*. New Haven: Yale University Press. Musgrave, R. A., & Musgrave, P. (2004). *Public Finance in Theory and Practice*. India: Tata McGraw-Hill.
- Odusola, A. (2006). Tax policy Reforms in Nigeria. *World Institute for Development Economics Research*, Paper No. 2006/03.
- Ochieng V. Omondi¹, Nelson H. W. Wawire¹, Emmanuel O. Manyasa¹ & Gideon KiguruThuku (2014). Effects of Tax Reforms on Buoyancy and Elasticity of the Tax System in Kenya: 1963–2010. *International Journal of Economics and Finance*; Vol. 6, No. 10;
- OECD. (2010). Tax Policy Reform and Economic Growth. *OECD Tax Policy Studies*, (20). OECD Publishing. <http://dx.doi.org/10.1787/9789264091085-en>
- Ogbonna, G. N., & Appah, E. (2012). Impact of Tax Reforms and Economic Growth of Nigeria: A Time Series Analysis. *Current Research Journal of Social Sciences*, 4(1), 62-68.
- Padovano, F., & Galli, E. (2002). Comparing the growth effects of marginal vs. Average tax rates and progressivity. *European Journal of Political Economy*, 18, 529-544. [http://dx.doi.org/10.1016/S0176-2680\(02\)00104-0](http://dx.doi.org/10.1016/S0176-2680(02)00104-0)
- S.A. ADUDU and OJONYE, M. SIMON (2015). The Impact of Tax Policy on Economic Growth in Nigeria. *Journal of Economics and Sustainable Development* Vol.6, No.8, p124
- Somorin, T. (2012). Overview of the Nigeria tax System stakeholders, Issues and Challenges. Paper Presented at the Chartered Institute of

Taxation of Nigeria Mandatory Professional Training Programme, Enugu.

- Ukeje, S. (2010). Lessons of the global financial and economic crisis for fiscal policy and public expenditure management in Nigeria. The Global Economic Crisis and Nigeria. Enugu. African Institute for Applied Economics.
- William G. Gale, & Andrew A. Samwick, (2014). Effects of Income Tax Changes on Economic Growth. Economic studies at Brookings.