Tax Reforms and Revenue Trend in Nigeria: The Dyadic Interact

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Abstract
The study examines tax reforms and revenue trend in Nigeria from 1981 to 2014. Specifically, an attempt was made to verify the dyadic interaction between total federally collected revenue and tax reforms process. To achieve the objective of the study, relevant secondary data were sourced from the Central Bank of Nigeria (CBN) statistical bulletin and Federal Inland Revenue Service (FIRS) gauge. The data collected were analyzed using relevant descriptive statistics and econometric models such as the Augmented Dickey Fuller and Philip-Peron unit root tests, Johansen co-integration test and Engle Granger Causality test. By way of preliminary test, the Augmented Dickey Fuller and Philip-Peron tests were employed to test for unit root. Most of the time series variables were non-stationary at levels but became stationary after first differencing. The Johansen rank test indicates that long-run dynamic trend exists between tax reforms and total federally collected revenue in Nigeria. The pair wise Granger Causality shows that tax reforms granger-caused total federally collected revenue. The model equally shows that the various income taxes were statistically significant and have positive relationship with total federally collected revenue. The coefficient of the Error Correction Model (ECM) is negative and statistically significant; showing that an established long-run dynamic relationship can be attained giving that 76.6114 percent of the deviation in total federally collected revenue is reconciled annually. The Durbin-Watson (DW) statistic value of (1.677412) falls in the no autocorrelation region and hence autocorrelation do not exist. Nevertheless, promotion of tax reform by improving on the structural dimension of the tax system; minimizing the level of tax evasion and avoidance; reducing tax burden; granting of full autonomy for the Federal Inland Revenue Service (FIRS); eliminating multiple taxation; reviewing obsolete laws and rates to align with current changes in macroeconomic fundamentals for the promotion of fiscal responsibility and sustainability; a corruption-free and efficient tax administrative machinery with staff who are well trained, equipped and motivated to ensure accountability and transparency in tax administration, will help the public sector to generate more revenue through taxation.

Keywords: Tax reform, total federally collected revenue, trend, dyadic interact, granger causality, unit root, co-integration, Nigeria and Error Correction Model (ECM).

1.0 INTRODUCTION
The critical burden hindering the Nigerian economy is how to diversify its revenue generation base; which is relevant predicated on the fact that consistent dependence on earnings from crude oil sales failed to accommodate the rising trend of public expenditure profile. The Nigerian economy may go down the drain if alternative sources of revenue generation are not urgently made towards sustaining the drive for diversifying the revenue base of the economy. The demand for Nigeria’s crude in international market has reduced by major oil consuming nations of the world. This is not a good pointer for the country which depends on oil revenue for its survival and sustainability. The United States and other crude oil-importing nations have designed alternative new energy policies which enhance the creation of synthetic products that may eventually reduce their dependency on crude oil. These strategies are clear indication to Nigeria to make appropriate move towards diversification of its revenue base (Oriakhi & Ahuru, 2014).

One means of generating the needed finance for the provision of public goods and services is through a well structured tax system. According to Azubike (2009), taxation is seen as a key player in every society globally. The government pressing functions are discharged through the additional revenue collected from taxation. One of the most efficient and effective means of harnessing a country’s internal resources for sustainable economic development is through a well structured tax system.

Nzotta (2007) opined that taxes constitute key revenue sources to the various tiers of government in Nigeria. A tax policy represents a model for resource mobilization and allocation. The imposition of taxes is premised on the following objectives: protection of infant industries, regulation of the production of certain goods and services, control business activities, curtail persistent rise in the price level as well as reducing inequalities in income brackets. Tax reform according to Azubike (2009) is an ongoing process which tax policymakers and tax administrators in consonance with the economic and socio-political realities continued to adopt so as to restructure the tax system for efficiency revenue generation in the country. Ogbonna and Appah (2012) revealed that tax reforms improve the revenue generating machinery of government to undertake socially
desirable expenditure that will translate to economic growth in real output and per capita basis. Several studies pertaining to tax reforms in Nigeria have tied tax reform on economic growth process, thereby undermining the changes in public revenue generation. Against this backdrop, this paper is designed to examine the dyadic interact of tax reforms and public revenue in Nigeria, as well as finding out the nexus between tax reforms and the trend in public revenue in the country, and adding value to the scanty literature in this area, beginning from 1981 to 2014. The paper is subdivided into five sections. The first section is the introductory part; the second section dealt with the review of some empirical literature and theoretical issues, the methods of analysis is presented in the third section while the trend as well as the regression analyses is captured in section four. The conclusion and recommendations are presented in section five of the paper.

2.0 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Theoretical Underpinnings

The supply-siders lay the theoretical block of tax reform. The supply-siders existed in the late 1970s and early 1980s, with the emergence of stagflation. They began to observe that deficient aggregate demand may not adequately explain unemployment nor excessive aggregate spending explain persistent inflation. To these economists the problem of unemployment and inflation are due mainly to constraints in aggregate supply. To the supply-siders, unemployment can be reduced if the policy to increase the incentives of the people to work, save and invest is undertaken by the public sector. To them, high income tax will both discourage labour supply and investment and thus, lead to high unemployment and low output. The supply-siders posited that tax evasion and avoidance, which reduced publicly generated revenue, can be encouraged through higher marginal tax rate which will equally create disincentive to work, invest and save. Using what is known today as laffer curve, the leader of the group, Arthur Laffer, demonstrated that the level of savings, investment and labour supply can be encouraged if the tax rate is optimally set to motivate the obligation in tax remittances. Consequently, disincentive to the trend of revenue generation is observed when optimal tax rate is set over and above a certain threshold.

As a result of the large-scale adoption of supply-side policies by the Reagan administration in the United State during the 1990s, tax reform became an important element of adjustment programmes in developing countries and aggressively supported by the Britton Wood institutions. The fundamental rationale for tax reform in both developed and developing economies of the world is to reduce or eradicate government fiscal deficits through suitable restructuring of the tax system in order to attract higher revenue. The optimal tax reform theory is another strand to the theory of tax reform. It is required under this theory that the most excellent means to raise government revenue generating capacity is through taxing goods and services which demand or supply is perfectly or fairly inelastic, and that distribution and externalities or market failures related taxes should concentrate on identifying the source or origin of the problem. Thus, for distribution one should look for the source of inequality and taxation should be concentrated there. Regarding externalities, an attempt should be made to tax or subsidize directly the good or activity that produces the externality (Oriakhi & Ahuru, 2014). In addition, optimal taxation assumes the existence of perfect tax administration, which does not exist in developing countries, including Nigeria. The supply-siders and optimal tax reform theories are applied in this work because they provide the basis at which tax reform impact on public revenue generation for sustainable economic development.

2.2 Empirical Studies

Ajakaiye (1999) in his analytical studies found that Value Added Tax (VAT) impact negatively on economic growth in Nigeria. Myles (2000), in his study revealed that the policy of direct taxation is a stimulant to economic performance. Djankor, Ganser, Mcliesh, Ramalho & Shteifer (2009) on their findings of the relationship between output growth and personal income tax submits that strong negative effect exist between the variables.

Adereti, Adesina & Sanni (2011) using the ordinary least square techniques regressed the GDP, which was a proxy for economic growth on Value – Added Tax (VAT). The model estimated has a high explanatory power as the coefficient of determination was put at 0.9505, showing that substantial proportion of the variation in economic growth proxy by the GDP is accounted for by the variation of VAT revenue earnings. This lends credence to the catalytic role of tax reform to public revenue generation.

In a closely relative study, Oriakhi & Ahuru (2014) in an empirical work captioned "the impact of tax reform on Federal revenue generation in Nigeria” used annual time series data spanning the years (1981 - 2011) and employed various income taxes as proxy for tax reforms. By way of preliminary test, the Augmented Dickey Fuller test was employed to test for the unit root. The entire time series variable were non-stationary at levels but became stationary after first differencing. The Johansen’s co-integration test employed showed that long-run relationship exists between tax reform and federally collected revenue in Nigeria. The partial stock adjustment model shows that the various income taxes are statistically significant and have positive relationship with federally collected revenue. The coefficient of the error correction model showed that 66.2940 percent of the
deviation of federally collected revenue from its long-run equilibrium value can be reconciled yearly. The study showed that tax reform by improving the tax system and reducing tax burden enhances the ability of the government to generate more revenue.

Salami, Apelogun, Omidiya & Ojoye (2015) carried out empirical investigation on taxation and Nigerian economic growth process, and employing the use of both simple and multiple linear regression analysis of the ordinary least squares method, they opined that fiscal laws and regulations of government should be strengthened so as to checkmate tax offenders, improve tax administrative machinery and transparency of government officials that are involved in tax administration.

### 2.3 Conceptual Issues

#### 2.3.1 Tax Reforms in Nigeria

Tax reform became relevant in Nigeria due to the nature of its tax structure, which according to Anyanwu (1997) was complex, inelastic, insufficient, unreliable and unfair. Furthermore, the country depended on import and export duties, while there were no opportunities to generate revenue through consumption-based tax such as Value – Added Tax (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 tax base was very narrow while the tax rate was very high. It is against this backdrop that the federal government of Nigeria decided to reform the tax system. 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 at the same time reducing the tendency for economic distortion (Oriakhi & Ahuru, 2014).

Two study groups preceded the tax reforms of the 1990s. The first group with respect to direct tax was inaugurated on the 9th of January, 1991, with assigned duty of critically examining the Nigeria’s tax system since independence, evaluate the possible changes that have been made and assess its effectiveness and proffer necessary recommendations. The second group which was inaugurated on the 20th of April, 1991 was assigned to assess the indirect tax regime of Nigeria. A major outcome of the study was the shift from foreign trade activity towards consumption-based tax. 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 sale tax, which has been in existence since 1986.


On April 7, 2012 the national tax policy document was launched by President Goodluck Jonathan. Some of the salient provisions of the nation tax policy are the provision of a stable reference point for all stakeholders in the country on which they shall be held accountable, shifting the focus of the tax system from direct to indirect tax that is considered less distortionary, reducing the personal income tax from 25% to 17.5%, and company income tax from 30% to 20%, strategically increasing VAT from 5 to 15%, avoiding internal multiple taxation on income, property, imports, production and turnover by the various tiers of government, reducing and streamlining the number of tax incentives in the Nigeria tax system, collection of taxes only by career administrators that are public servants, thereby prohibiting the use of ad-hoc tax administrators, vesting of the power to impose, reduce, increase, review or cancel any rate of tax on the National Assembly, especially with respect to taxes from the executive, subjecting the Nigeria’s tax system to comprehensive reviews every three years pertaining to existing tax legislations.

The introduction of tax payers identification number (TIN) was another essential component of the national tax policy reforms. This was made possible by co-operations between the states and federal government. It is a nation – wide electronic based system for the registration and storage of data of tax payers in Nigeria. TIN by revolutionizing tax administration in Nigeria will broaden the country’s tax base and increase the opportunity for tax revenue generation.

The restructuring of the Federal Inland Revenue Service (FIRS) was another milestone of the tax reform in Nigeria. This was premised on the fact that the existing structure was ineffective, chaotic and gave room to indiscipline and fraud and had caused the government to lose huge amount of tax revenue. The first step in the restructuring of FIRS was to make tax collection a function of information and communication technology (ICT). In addition, all the various VAT offices and the Area Tax Offices (ATOs) were lumped together and renamed Integrated Tax Offices (ITOs). Furthermore, after wide and due consultation, the management of FIRS concluded that there were seven strategic pillars on which the reform agenda hinges. These strategic flanks were
funding/authority, capacity building (improve structure and staffing), process re-engineering, auditing oil/gas, tax payer education, strengthening investigation and enforcement, and automate tax collection (FIRS handbook, 2012).

2.3.2 Tax Reform and Revenue Generation in Nigeria
The simple most important index to measure the performance and outcome of the recent tax reform is the improvement in revenue collection, particularly non-oil tax revenue. Revenue collection serves as baseline for assessing the impact of the recent tax reform and restructuring of the Federal Inland Revenue Service (FIRS). Since the reform in 2004, tax revenue has been increasing on an average of 26% per annum. Today, the ratio of tax revenue to the GDP is at 7%. This however is dismal when compared with what is obtainable in emerging economies where the ratio lies between 15 and 20% (Okonjo – Iweala, 2012).

3.0 METHODOLOGY
In order to lend empiricism to the work, we employed the use of multiple regression analysis. Total revenue collected by the federal government was regressed on several tax revenue (petroleum profit tax, company income tax, custom and excise duties, and value added tax) which were used as proxy for tax reform (as cited in Okafor, 2012). Time series variables obtained from published journals of FIRS and Central Bank of Nigeria statistical bulletins were employed. The scope of the work spanned from 1981 – 2014, giving us a total sample observation of 33. There is high tendency that economic time series variables are non – stationary at levels, but may become stationary only after first or second differencing. Our study employed the methodology of Granger causality, co-integration and error correction modeling.

By way of preliminary test, we employed the Augmented Dickey Fuller and Philip –Peron tests in ascertaining the stationary state of the time series data. In order to ascertain if a common stochastic drift exist among the variable, the Engle – Granger two – stage test was used, by using the co – integration and error correction model, we have combined short – run dynamic with long – run equilibrium in a broad Macro econometric modeling. The E-view software version 8 is used.

3.1 Model Specification
To empirically ascertain the behavioural relationship between total federally collected revenue (TFCR) and tax reform proxied by the various income taxes – Value Added Tax (VAT), Company Income Tax (CIT), Petroleum Profit Tax (PPT) and Custom and Excise Duties (CED), we hypothesized that total federally collected revenue depends on the various income taxes.

Thus, the model is specified as follows.

\[
\text{TFCR} = F(\text{PPT}, \text{CIT}, \text{CED}, \text{VAT}) - - - - - - 1
\]

The above equation 1 can be re-specified in the stochastic form as:

\[
\text{TFCR} = \beta_0 + \beta_1\text{PPT} + \beta_2\text{CIT} + \beta_3\text{CED} + \beta_4\text{VAT} + u_i - - - - 2
\]

Where,

\[
\text{TFCR} = \text{Total federally collected revenue}
\]

\[
\text{PPT} = \text{Petroleum profit tax}
\]

\[
\text{VAT} = \text{Value added tax}
\]

\[
\text{CED} = \text{Custom and excise duties}
\]

\[
\text{CIT} = \text{Company income tax}
\]

\[
u_i = \text{Gaussian stochastic term with white noise.}
\]

Predicated on a priori expectations, all the various income taxes are expected to be positively related with total federally collected revenue. Thus, \(\beta_0, \beta_1, \beta_2, \beta_3, \beta_4 > 0\)
4.0 ANALYSIS AND DISCUSSION OF RESULTS


The petroleum profit tax increased steadily between 1981 and the year 2000, but the increase became impactful from 2005 immediately after the major tax reforms of 2004. Most of the revenue generated came from petroleum profit tax and hence proved the reliance of the country on the oil sector with gross neglect of the other critical sectors of the economy like agriculture and manufacturing.


The company income tax increased unsteadily between 1981 and 1999, but the increase became significant from 2000 after the democratic era and government effort to shore-up the revenue generating capacity of the country.
The increase in customs and excise duties followed a zigzag trend between 1981 and 1999 but became significant from the year 2000 and reached its highest pick in 2014. The proportion of customs and excise duties to total federally collected revenue was minimal compared to other sources of tax revenues.

The value added tax which replaced the sales tax increased steadily over the years under review but became more significant from 2001, and reached its highest pick in 2013.

4.2.1 Unit Root Tests
In ascertaining the characteristics of time series variables, a preliminary analysis is to test for the presence of unit root in the series. This is important since we are ignorant of the data generating process. The Augmented Dickey Fuller (ADF) and Philip Peron (PP) unit root tests were applied as shown in table 1 below:
Summary of ADF and PP Unit Root Tests (At 0.05 Critical Levels)

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>ADF</th>
<th>DECISION</th>
<th>PP</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTFCR</td>
<td>-6.776126</td>
<td>I(1)</td>
<td>DTFCR</td>
<td>-6.776126</td>
</tr>
<tr>
<td>PPT</td>
<td>-3.758312</td>
<td>I(0)</td>
<td>PPT</td>
<td>-5.060342</td>
</tr>
<tr>
<td>DCIT</td>
<td>-5.370418</td>
<td>I(1)</td>
<td>CIT</td>
<td>-3.483660</td>
</tr>
<tr>
<td>CED</td>
<td>-3.362653</td>
<td>I(0)</td>
<td>DCED</td>
<td>-5.656318</td>
</tr>
<tr>
<td>VAT</td>
<td>-1.299015</td>
<td>I(0)</td>
<td>DVAT</td>
<td>-5.422660</td>
</tr>
</tbody>
</table>

Source: Authors’ Computation using E-Views 8

Critical values:

<table>
<thead>
<tr>
<th></th>
<th>ADF</th>
<th>PP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1%</td>
<td>-3.711</td>
<td>-3.646</td>
</tr>
<tr>
<td>5%</td>
<td>-2.981</td>
<td>-2.954</td>
</tr>
<tr>
<td>10%</td>
<td>-2.629</td>
<td>-2.615</td>
</tr>
</tbody>
</table>

The empirical results of the unit root test at 5 percent level indicates that PPT and CED were stationary at levels while TFCR and CIT were stationary after first differencing using ADF, hence the variables have mixed order of integration, zero and one. Employing the Phillip Peron test at 5 percent level shows that PPT and CIT were stationary at levels while TFCR, CED and VAT became stationary only after first differencing. This conclusion is based on comparison of the Augmented Dickey Fuller and Philip Peron statistics and the critical values provided by Mackinnon (1996). Hence, this permits us to carry out the Johansen’s co-integration test designed to determine whether a common stochastic drift exist among our time series variables.

4.2.2 Johansen’s Co-integration Test

Series: TFCR PPT CIT CED VAT

Table 2: Unrestricted Co-integration Rank Test (Trace test)

<table>
<thead>
<tr>
<th>Hypothesize</th>
<th>Trace 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of CE(s)</td>
<td>Eigen-value</td>
</tr>
<tr>
<td>None *</td>
<td>0.996243</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>0.930317</td>
</tr>
<tr>
<td>At most 2 *</td>
<td>0.874963</td>
</tr>
<tr>
<td>At most 3</td>
<td>0.416314</td>
</tr>
<tr>
<td>At most 4 *</td>
<td>0.220630</td>
</tr>
</tbody>
</table>

Trace test indicates 3 co-integrating equation(s) at the 0.05 level

Table 3: Unrestricted Co-integration Rank Test (Maximum Eigen-value)

<table>
<thead>
<tr>
<th>Hypothesize</th>
<th>Max-Eigen 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of CE(s)</td>
<td>Eigen-value</td>
</tr>
<tr>
<td>None *</td>
<td>0.996243</td>
</tr>
<tr>
<td>At most 1 *</td>
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</tr>
<tr>
<td>At most 3</td>
<td>0.416314</td>
</tr>
<tr>
<td>At most 4 *</td>
<td>0.220630</td>
</tr>
</tbody>
</table>

Max-Eigen-value test indicates 3 co-integrating equation(s) at the 0.05 level

Source: Authors, Computation using E-Views 8

Tables 2 and 3 indicate three co-integrating equation at 5% level of significance

The above co-integration results based on the trace statistic and maximum Eigen value showed that the variables are co-integrated at 5 percent level of significance since there are three co-integrating vectors. Hence, there is a meaningful long-run relationship among the variables in the model.

4.2.3 Pair wise Granger Causality Test

To determine the pattern of causality among all the variables in the model, we employed the pair wise Granger Causality test as shown in the table below.
Pair wise Granger Causality Tests
Lags: 1

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Obs</th>
<th>F-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPT does not Granger Cause TFCR</td>
<td>33</td>
<td>1.65600</td>
<td>0.208</td>
</tr>
<tr>
<td>TFCR does not Granger Cause PPT</td>
<td></td>
<td>3.39116</td>
<td>0.0755</td>
</tr>
<tr>
<td>CIT does not Granger Cause TFCR</td>
<td>33</td>
<td>3.85071</td>
<td>0.0591</td>
</tr>
<tr>
<td>TFCR does not Granger Cause CIT</td>
<td></td>
<td>33.5238</td>
<td>3.0E-06</td>
</tr>
<tr>
<td>CED does not Granger Cause TFCR</td>
<td>33</td>
<td>4.15573</td>
<td>0.0504</td>
</tr>
<tr>
<td>TFCR does not Granger Cause CED</td>
<td></td>
<td>1.33975</td>
<td>0.2562</td>
</tr>
<tr>
<td>VAT does not Granger Cause TFCR</td>
<td>33</td>
<td>4.06413</td>
<td>0.0599</td>
</tr>
<tr>
<td>TFCR does not Granger Cause VAT</td>
<td></td>
<td>7.00938</td>
<td>0.0169</td>
</tr>
</tbody>
</table>

Source: Authors’ Computation using E-views 8
Table 4: Pair wise Granger Causality Tests
The Granger Causality test for the causality between tax reforms and total federally collected revenue as presented in table 4 above reveals that Petroleum Profit Tax (PPT) with p-value of 0.208 is greater than the critical value of 0.05, which implies the rejection of the null hypothesis and the acceptance of the alternative hypothesis that Petroleum Profit Tax (PPT) in Nigeria granger cause Total Federally Collected Revenue (TFCR) but Total Federally Collected Revenue (TFCR) does not granger cause Petroleum Profit Tax (PPT). The table however shows that Company Income Tax (CIT), Customs and Excise Duties (CED) and Value Added Tax (VAT) does not granger-cause Total Federally Collected Revenue (TFCR) but Total Federally Collected Revenue (TFCR) granger cause Company Income Tax (CIT) but does not granger cause Customs and Excise Duties (CED) and Value Added Tax (VAT). On the whole, the relationship between the variables is unidirectional.

4.2.4 Error Correction Estimates
Dependent variable: TFCR

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPPT</td>
<td>0.972899</td>
<td>0.394277</td>
<td>2.467552</td>
<td>0.0718</td>
</tr>
<tr>
<td>DCIT</td>
<td>0.853895</td>
<td>0.263610</td>
<td>3.239236</td>
<td>0.0073</td>
</tr>
<tr>
<td>DCED</td>
<td>1.079654</td>
<td>0.371858</td>
<td>2.903404</td>
<td>0.0337</td>
</tr>
<tr>
<td>DVAT</td>
<td>1.905690</td>
<td>0.805474</td>
<td>2.365923</td>
<td>0.0912</td>
</tr>
<tr>
<td>ECM(-1)</td>
<td>-0.766114</td>
<td>0.283680</td>
<td>-2.700629</td>
<td>0.0114</td>
</tr>
</tbody>
</table>

R2 = 0.946543; Adjusted R2 = 0.930095; DW = 1.677412
Table 5: Error Correction Estimates
The above table 5 indicates the results of the error correction estimates with adjusted coefficient of determination put at 0.930095, showing that about 93 percent of the total federally collected revenue is accounted for by the various income taxes, leaving only 7 percent for the unexplained variables not captured in the estimated model. Hence, judging from the R-Squared and Adjusted R-Squared values, the estimated model has high explanatory power and appreciable goodness of fit. The explanatory variables are rightly signed indicating positive relationship between tax reforms and total federally collected revenue in Nigeria. Similarly, the coefficients of the variables are statistically significant at 5 percent. Importantly, the speed of adjustment from short-run to long-run equilibrium put at 0.766114 shows that 76.6114 percent of the deviation from short-run to long-run equilibrium can be reconciled annually. The Durbin-Watson statistic which is used to test for the absence of autocorrelation in the model shows that the value of DW statistic (1.677412) falls in the no autocorrelation region and hence we can conspicuously ascertain that autocorrelation do not exist.

5.0 CONCLUSION AND RECOMMENDATION
The main objective of this study is to empirically investigate the trend relationship between tax reforms and total federally generated revenue in Nigeria. It goes further to ascertain whether tax reforms proxied by various income taxes such as petroleum profit tax, company income tax, customs and excise duties and value added tax have trended relationship with total federally generated revenue in Nigeria. In order to embark on this exercise, annual time series data from Central Bank of Nigeria and Federal Inland Revenue Service spanning the years
(1981-2014) was employed. The Johansen Co-integration test confirmed that a long run dynamic relationship exists between tax reforms and total federally generated revenue and the Granger Causality result shows that the various taxes granger cause total federally collected revenue.

This goes to show that tax reforms have significantly altered the way and manner their agencies function leading to enhanced revenue generation through robust tax administrative system. Tax reform by improving on the structural dimension of the tax system, minimizing the level of tax evasion and avoidance, reducing tax burden by scaling downward the personal income tax from 25 to the envisaged 17.5 percent and company income tax from 30 to 20 percent as well as broadening the tax base and reducing the weighted incidence on tax payers will improve the capacity of the public sector to generate more revenue through taxation. The broadening of the tax base and neutralization of the tax burden will help to enhance efficiency in public spending and disaggregate Nigeria’s public spending from the recent occurrence in the international oil market, thereby hedges the economy away from oil price volatility and misalignment. However, in order to consolidate the dividends from tax reforms, efforts should be geared towards achieving full autonomy for the Federal Inland Revenue Service (FIRS); eliminate multiple taxation; review obsolete laws and rates to align with current changes in macroeconomic fundamentals for the promotion of fiscal responsibility and sustainability; a corruption-free and efficient tax administrative machinery with staff who are well trained, equipped and motivated to ensure accountability and transparency in tax administration for the benefit of Nigerian citizens. Government should address the spate of corruption in high places as the high incidence of abuse of office by public officers offers a basis of fraud rationalization by those saddled with the responsibility of revenue administration. There should be a monitoring and evaluation mechanism to measure the seven strategic pillars proffered by the Federal Inland Revenue Service.

REFERENCES


