

Fiscal Policy and Economic Development in Nigeria

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Abstract

This study examined the short and long run impact of fiscal policy on economic development in Nigeria between a period of 1981 and 2013 using annual time series data sourced from World Development Indicators (2014) and the Central Bank of Nigeria (2014). It used government recurrent expenditure, government capital expenditure, government investment and tax revenue to indicate fiscal policy. Economic development was proxied by real per capita income. The model was estimated using Pair-wise Correlation to ascertain the relationship and then Cointegration and Error Correction Mechanism for impact after confirming the data's stationarity using Unit Root. The result showed that government recurrent expenditure and government investment have significant positive impact on economic development in both the short and long run within the period under consideration. Capital expenditure appeared to have a short run positive impact but not in the long run. Tax revenue had an inverse significant impact in both short and long run. The speed of adjustment to equilibrium was found to be high. The results are all in line with theories and previous studies.

1. Introduction

The use of fiscal policy is very paramount in every society most especially in the less developed countries (LDCs) as a major tool for stabilization and for development to be sporadic. Fiscal policy as in many texts and literatures could mean the government actions affecting its receipts (revenue) and expenditure which is taken as ordinarily a measure by the government's net receipts, its surplus or deficit. The government may offset undesirable variations in private consumption and investment by anti-cyclical variation of public expenditure and tax revenue. Simply put, when the government uses government revenue and expenditure policies to regulate and stabilize the economy toward development, the action is fiscal policy. It thus serves as an economy's "shock-absorber" in specific areas of development.

Fiscal policy is essentially concerned with manipulating the financial operations of the government with a view to furthering certain economic policy objectives. In other words, it consists of government decisions to vary certain fiscal aggregate such as total government spending and tax revenues as opposed to some other aspects of public finance which are primarily concerned with the effect of specific government expenditures and taxes (Stein 1968). Fiscal policy is majorly measured in terms of government expenditure, tax revenue, government investment, budgeting and debts.

Fiscal policy fosters economic growth and development through a number of different channels. These include the macroeconomic (influence on budget deficit on growth) as well as micro (influence on efficiency of resource use). The question is how precisely do these channels work in developing economies? What kind of revenue and expenditure policies should developing countries adopt to help realize these objectives? Realistically, fiscal policy is used in gearing the economy towards achieving a variety of economic transformation such as economic development and growth, price stability, reduction in unemployment, external equilibrium as well as income redistribution. Fiscal policy was not generally recognized as important until the birth of Keynesian Economics in the mid-nineteen thirties which enhanced its significance as a policy tool to overcome the economic depression of Western Europe and North America. The threat of inflation in the immediate post-war years and the desire to maintain continuous full employment following World War II has also meant the continued use of fiscal policy in these same economies. In more recent years, however, the general disenchantment over the limited success in the achievement of the above objectives has brought into sharp focus the question of the effectiveness of fiscal policy in relation to other policies especially monetary policy and the consideration as to whether or not the continued heavy reliance on fiscal policy as an economic stabilization tool is desirable (Samuelson 1970). While in the developing economies, the economic policy objectives of fiscal policy have been pursued to a greater or lesser degree, the one and overriding objective, the furtherance of which has relied greatly on fiscal policy, is economic development, defined not only as a continuous and sustained growth in total output as well as in output per head, but also as the structural transformation from the basically underdeveloped agricultural economies to fully industrialised ones. The reliance on fiscal policy in developing economies for the achievement of the economic development objectives in particular and other objectives in general, has been particularly great in relation to the use of other policies such as monetary policy. (Olaloku, 1987)

The aim of this paper, therefore, on a general term, is to assess the short and long run impact of fiscal policy on economic development in the Nigeria economy between 1981 and 2013 fiscal years. Previous studies have established that fiscal policy affects economic development. This study, in addition to previous studies and

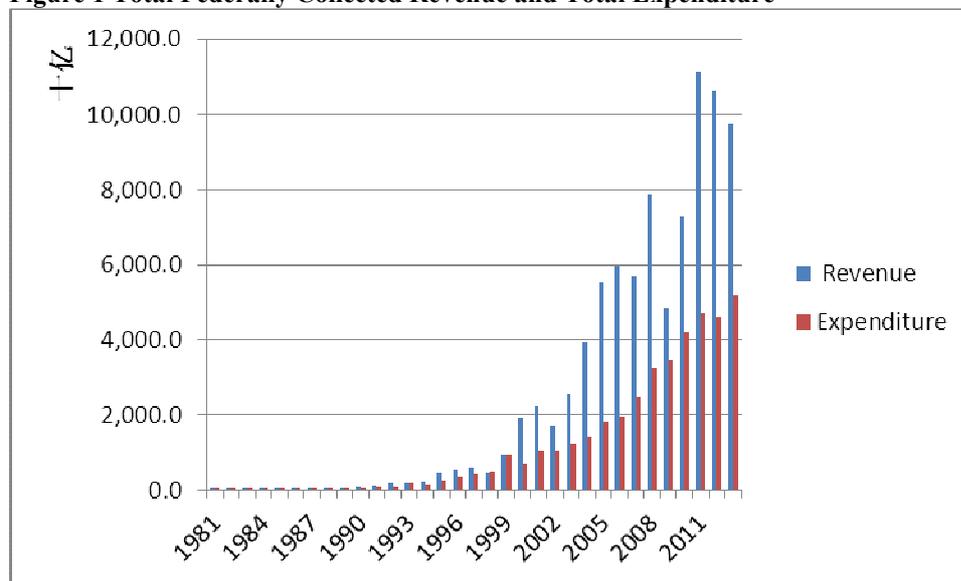
in specific terms, would analyse the short and long run impacts of government expenditure disaggregated into recurrent and capital expenditures, government investment and tax revenue as fiscal policy instruments on economic development proxied by real per capita income between 1981 and 2013, though according to United Nations, the best measure of economic development is the Human Development Index (HDI), whose data is not fully available for the period under consideration.

This paper is structured as follows: Section Two presents an overview of trends in the behaviours of fiscal policy and economic development in Nigeria over the period 1981 to 2013. Section Three provides a review of supporting theoretical and empirical literature. Section Four discusses the methodology and the sources of data. Where Section Five analyses the model and discusses the results of the study. Section Six concludes the study and presents some policy recommendations.

2. An Overview of Fiscal Policy and Economic Development in Nigeria (1981-2013)

About twenty years after independence, the Nigerian fiscal policy, according to the known indicators, underwent a rather rapid development. Total federally collected revenue (tax revenue) and expenditure did not only expand at astronomical rates, but also their structure changed remarkably. Both government revenue and expenditure in relation to GDP rose phenomenally (Figure 1).

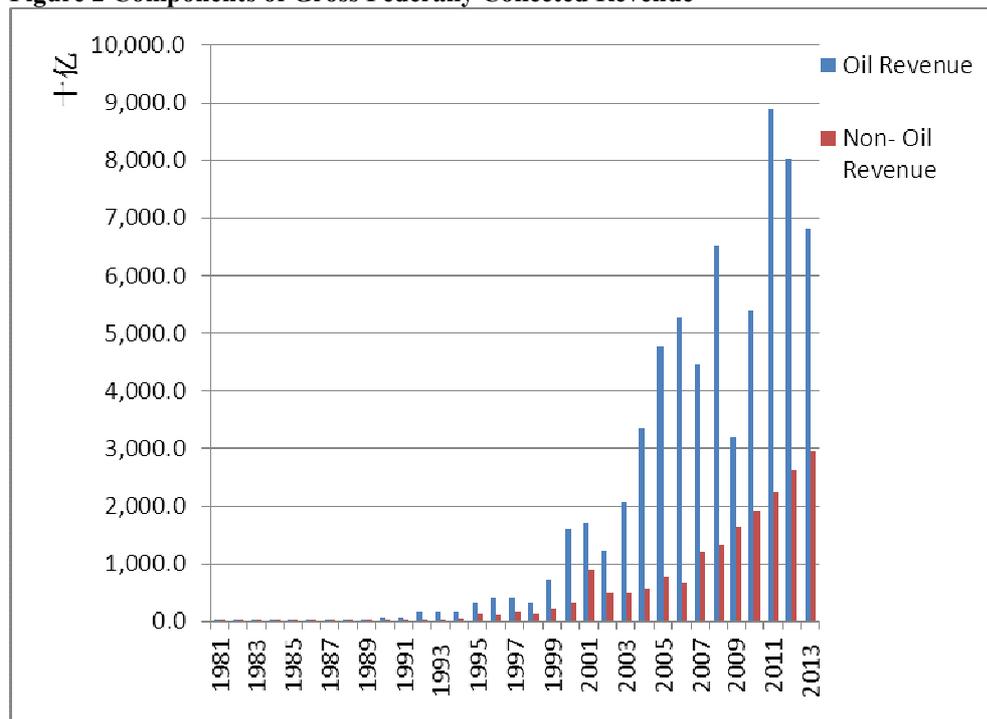
Figure 1 Total Federally Collected Revenue and Total Expenditure



Source: CBN Statistical Bulletin 2013

The government's characteristic dependence on indirect taxes for the bulk of its revenue was marked by a dramatic and steady shift towards greater reliance on direct taxes made up mostly of the oil revenue (petroleum profit taxes) (Figure 2).

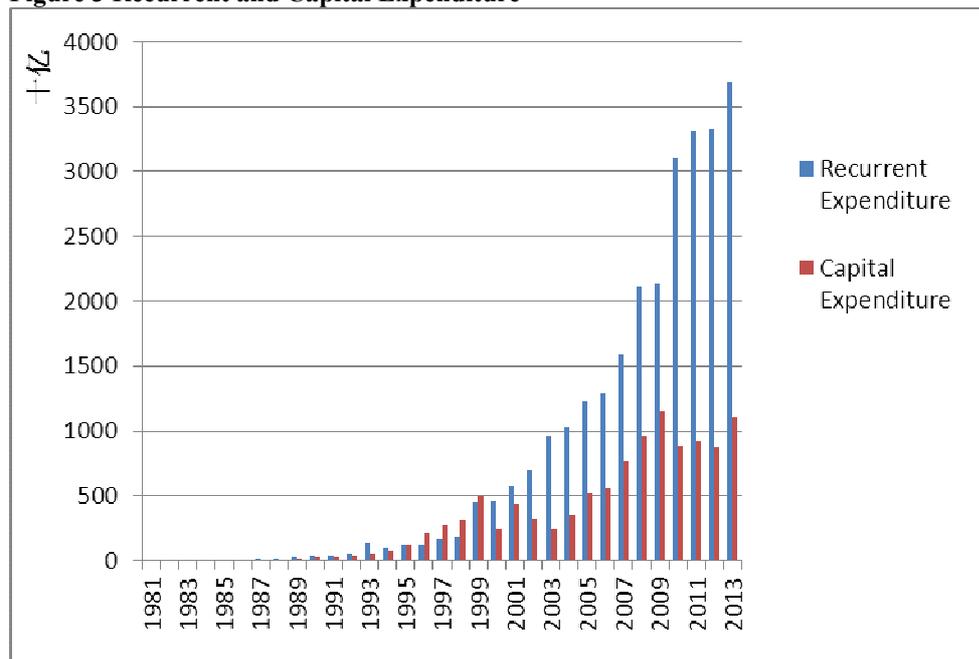
Figure 2 Components of Gross Federally Collected Revenue



Source: CBN Statistical Bulletin 2013

In the early part of 1980s and sometimes between 1996 and 1999, capital expenditure went higher than recurrent expenditure. But after Fiscal Year (FY) 1999, the recurrent expenditure was really at the increase over capital expenditure which is basically meant for development (Figure 3). As rightly put by Ozieingbe (2013) that the margin between recurrent and capital expenditure became very wide beginning from year 2000, just after the country returned to democratic system of government on May 29, 2009, an indication that the country's democratic government has tended to favour recurrent spending more than capital spending. In theories, most especially those of Harrod-Domar and the Lewis, there is the need for increase in capital accumulation and investment in the real sector, as this will hasten development, and hence the need for more capital expenditure in less developed countries (LDCs). In the case of Nigeria, the increase in recurrent over capital expenditure could be attributed to various factors, most especially, expansion in the size of the government as the number of workers on government payroll, as well as wages and salaries of workers in some sectors of the economy has astronomically increased, just as government's purchases of goods and services and grants also skyrocketed. Until recently, when the government had to withdraw subsidies partially from some petroleum products, the amount spent on subsidies as claimed by the government was quite staggering, though it was later revealed that some fraudulent independent marketers of petroleum product in connivance with some top political office holders were responsible for the huge expenditure that went into subsidies.

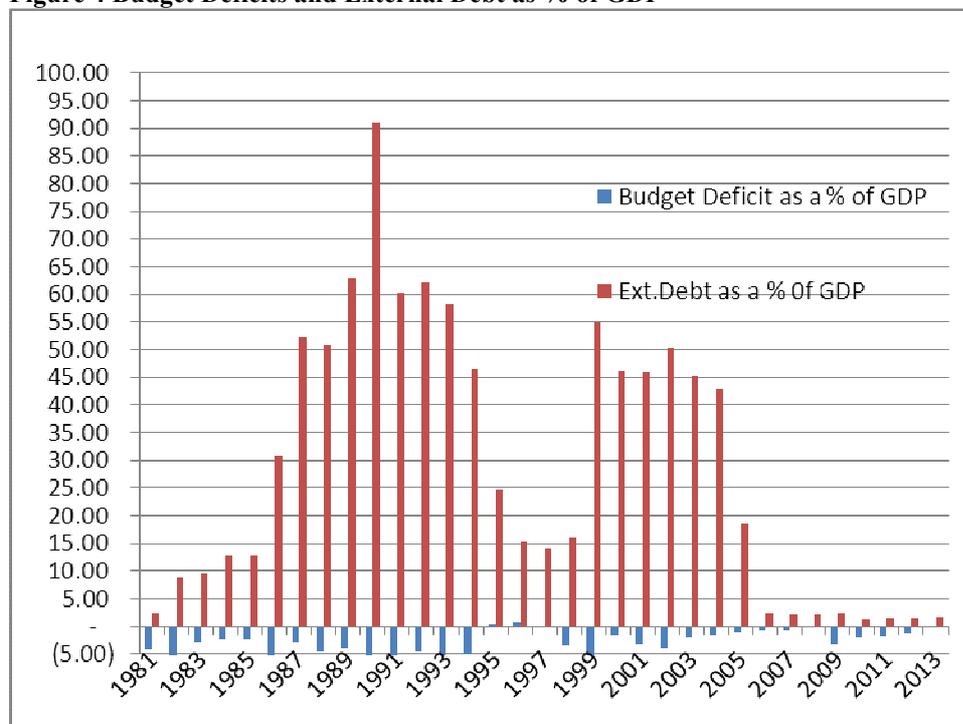
Figure 3 Recurrent and Capital Expenditure



Source: CBN Statistical Bulletin 2013

Except in 1995/96, the government had fiscal deficit all through within the period under consideration (Figure 4). The country experienced a continuous rise in external debt and got to a peak in 1990 with 90.87% of GDP. Since then, debt toll kept fluctuating up to 2005. The country was salvaged from debts through debt forgiveness by international creditors (Paris club etc) in 2006 which made for as low as less than 3% up to 2013, hence, the need for fiscal policy improvement.

Figure 4 Budget Deficits and External Debt as % of GDP



Source: CBN Statistical Bulletin 2013

Evidence reveals that there was a substantial increase in government spending, primary deficit and debt in Nigeria between 1991 - 2005. The oil windfall between 1991-1992 was followed by rapid growth in government spending with an average of about 21 percent of GDP during that period. However, as the oil market weakened in subsequent years, oil receipts were not adequate to meet increasing levels of demands and expenditures as being reinforced by political pressures, were not rationalized. Although the democratically

elected government in 1999 adopted policies to restore fiscal discipline, the rapid monetization of foreign exchange earnings between 2000- 2004, another era of oil windfall, resulted in large increases in government spending. In 2005 alone, the government spending alone increased to 19 percent of GDP from 14 percent in 2000. Extra ordinary budgetary outlays, not initially included in the budget increased. (Appah 2007)

In order to improve public finances and enhance prudence in fiscal policy, tackle the challenges of reducing deficits/debts and restore fiscal sustainability in a regime of weak global economic recovery, many advanced and emerging countries embarked on fiscal consolidation (FC). According to the Organization of Economic Co-operation and Development (OECD, 2011), FC refers to a government economic policy that is intended to reduce deficits and the accumulation of debts. Such policy, which is essential for financial and macroeconomic stability, is expected to spell out government's efforts to lower the level of deficit while simultaneously limiting the generation of new debt obligations. In fact, many of the advanced and emerging economies initiated the FC strategy through a combination of spending cuts and tax hikes. Ostensibly, the essence of FC appears to conflict with the desire to stimulate economic growth, as slamming the brakes on government spending too quickly could hurt economic recovery and worsen job creation prospects. As argued by Trichet Jeane-Claude of the European Central Bank (ECB), the most effective strategy for fiscal consolidation is to systematically adjust fiscal spendings while simultaneously boosting long-term growth". Therefore, the success of FC depends on its design/ implementation and the potential long-run benefits must be balanced against its short-run adverse effects on growth and job creation. The need to embrace FC in Nigeria followed the implementation of various fiscal stimulus packages by the Federal Government (FG), beginning from fiscal year (FY) 2009 through 2010, to arrest the slowdown in economic activities, create the enabling environment for greater private sector participation in the economy and accelerate sustainable economic growth. These included: the disbursement of N200 billion through the deposit money banks (DMBs) under the Commercial Agricultural Credit Scheme (CACS) to boost commercial and mechanized agriculture; the investment of N361.2 billion in critical infrastructure; and the injection of a N100 billion multilateral loan in the critical sectors of the economy. Others were the N113.1 billion Presidential Intervention/Quick-Win projects and the N140.0 billion targeted intervention in critical infrastructure/ job creation. The implementation of these discretionary fiscal measures in the face of revenue leakages significantly raised government expenditure and resulted in a sharp increase in deficit and debt built-up. Consequently, in absolute terms, the fiscal deficit surged from N0.047 trillion in FY2008 to N0.81 trillion in 2009 and further to N1.11 trillion by 2010. Similarly, the consolidated debt rose significantly by 35.7 per cent to N3.82 trillion at the end of 2009 and further ballooned to N5.24 trillion at the end of FY2010, representing a 37.3 per cent hike over the level in 2009. The consequent realization, by the last quarter of 2010, of the burgeoning fiscal deficit and debt, by the last quarter of 2010, necessitated the paradigm shift with regards to stimulus spending. Accordingly, the FG, in the 2011 Budget which was set within the 2011–2013 Medium Term Expenditure and Fiscal Strategy, embraced the FC strategy as a means of curtailing expenditure, reducing fiscal deficits and lessening the accumulation of debt to an optimal level, over a period of three years. (CBN Report 2011).

3. Brief Review of Supporting Literatures

The Classical economists argue that fiscal policy cannot, in the long term, affect the level of real output (GDP). In opposition to this assertion, the Keynesian economists argue that fiscal policy can affect the level of output. (Anderton 2010). The importance of fiscal policy as an instrument of economic development was first envisaged by Keynes in his General Theory wherein he showed that the total national income was an index of economic activity and brought out the relation of economic activity of total spending (Emanuele 2003). Hence fiscal policy could be used to influence economic development proxied by per capita income as this study would confirm. Previous researchers conducted several studies regarding the impact of fiscal policy on economic development through output. However, mixed results were observed due to the models, countries, research methods and data employed.

The principle conclusion of a working paper by Thomas (2012) on effectiveness of fiscal policy is short run effectiveness of fiscal policy turns on the theoretical model of the macro economy that is adopted. That is because fiscal policy works through AD, and the impact of AD on the real economy depends on macroeconomic perspective. The implication is the fiscal policy debate is ultimately a debate over macroeconomic theory. No theoretical paradigm is completely satisfying. Comparison of paradigms spotlights the critical assumptions each makes; provides a better basis of understanding; and can help guide and improve policy.

Empirically, researches conducted in the developed nations include those of Alexiou (2009) which provides evidence on the relationship between economic development and government spending, using panel data methodologies for seven transition economies in South Eastern Europe from 1995 to 2005. The study revealed significant results. More specifically, the evidence generated indicates that four out of the five variables used, including fiscal policy (government spending on capital formation) in particular had positive and

significant impact on economic growth.

Yasin (2003), exploiting the inconclusive evidence of some earlier studies, re-examined the effect of government spending on economic growth/development using panel data set from Sub-Saharan Africa. The estimated model derived from an aggregate production function and had government spending, foreign assistance for development and trade-openness explicitly specified as input factors. Fixed and random-effects techniques were used to estimate the model. The results from both estimation techniques indicate that government spending, trade-openness and private investment spending all have positive and significant effect on economic growth and development.

Amanja and Morrissey (2005) used autoregressive distributed lag (ARDL) model and ordinary least square methods on time series data to analyse the relationship between fiscal policy and growth in Kenya between 1964 -2002. The study reveal that productive expenditure has strong adverse effect on growth while there was no evidence of distortionary effects on growth of distortionary taxes. Government investment was found to be beneficial to growth in the long run.

Adefeso *et al* (2010) examined the impact of fiscal policy on economic growth in Nigeria from 1970 to 2005, using the error-correction technique to test the predictive ability of the endogenous growth model. The findings of the study were consistent with earlier empirical findings in other countries, which revealed that productive government expenditure has positive effect on economic growth. In a study to examine the growth effects of public expenditure for a panel of 30 developing countries over the 1970s and 1980s, Bose *et al* (2007) finds that the share of government capital expenditure in GDP is positively and significantly correlated with economic growth, while current expenditure is observed to be insignificant. At the disaggregated level, government investment in education and total expenditures in education are the only outlays that were observed to be significantly associated with growth if the budget constraint and omitted variables are taken into consideration.

Employing the ordinary least squares estimation technique, Muritala and Taiwo (2011), investigate the effect of recurrent and capital expenditure on GDP and finds that both components of government expenditure have significant positive effects on the GDP. Using different regression models for time series data covering the period 1990-2006 on Jordan, Dandan (2011) finds that government expenditure at the aggregate level has positive impact on the growth of GDP.

By regressing GDP on capital and recurrent expenditure (after deflating data on all variables by the consumer price index, CPI), Sharma (2012) finds an insignificant negative relationship between the capital expenditure and recurrent expenditure, and the real GDP for the Nepalese economy, attributed to mismanagement and embezzlement of public funds by government officials and political appointees. Modebe *et al* (2012), investigate the impact of recurrent and capital expenditure on Nigeria's economic growth using multiple regression analysis for data covering the period 1987 to 2010 and find that the impact of both components of expenditure was statistically insignificant, though the impact of recurrent expenditure was positive and that of capital expenditure, negative. However, the findings cannot be relied upon as the diagnostic statistics prove the estimated model to be invalid.

In another study to examine the relative effectiveness of monetary and fiscal policies in Nigeria, Aigheyisi (2011), employs the method of cointegration and error correction using quarterly data spanning the period 1981Q3 to 2009Q4 and finds that total government expenditure (acting as proxy for fiscal policy) positively affected real gross domestic product (RGDP) in the short run.

Burrows (1974) made us to know, while explaining Keynes full income determination model, that there is a negative relationship between tax and economic development since tax will reduce disposable income and hence consumption.

Summarily, from the above, it was discovered that increase in government recurrent spendings will positively affect output and hence per capita income and development which is in line with economic theory. When government investment rises (spendings on construction of roads, dam, bridges, building of schools, hospitals etc.), it engages workers and thereby reduces unemployment rate and government expenditure on unemployment benefits, increases aggregate income, economic activities and welfare and thus economic development is realized.

4. Methodology

To estimate the impact of fiscal policy on economic development in Nigeria, this study uses a vector autoregression (VAR) model. Data is firstly tested for stationarity using the Dickey-Fuller and the Augmented-Dickey Fuller tests. Subsequently, the Johansen (1991, 1995) cointegration technique is used to test for cointegration, after which a vector error correction model (VECM) is used to estimate the long run equation and the existence of error correction. Finally, impulse response analysis using pair-wise correlation is performed to respectively examine the impact of individual fiscal policy variables on economic development in Nigeria.

5. The Model Specification

This study adopted the different models of various researchers of fiscal policy and economic development and growth as mentioned above, who regressed per capita income (some real GDP) against fiscal and non-fiscal variables. The model is modified in line with the full Keynesian income determination model to test for the effects of fiscal policies on economic development in Nigeria. Economic development (proxy of real per capita income) is modeled as a function of only fiscal policy variables (government consumption spending, government investment spending and tax revenue). The economic model is expressed as follows:

$$ry/p = f(gr, gc, gi, t) \dots\dots\dots (1)$$

The model is put into an econometric model by adding the error term, μ . The variables are converted to logarithms so as to remove trends. The model (in equation 1) thus assumes the form:

$$\ln ry/p = \beta_0 + \beta_1 \ln gr + \beta_2 \ln gc + \beta_3 \ln gi + \beta_4 \ln t + \mu \dots\dots\dots (2)$$

Where:

lnry/p=Logarithm of real per capita income (a proxy of economic development). Real values of per capita income are employed in order to do away with the influence of inflation.

lngr = Logarithm of government recurrent expenditure (aggregate government consumption expenditure) at current prices. Theoretically, when government increases recurrent expenditure, aggregate demand would increase since people now have money to increase activities like consumption, investment project and saving. Thus, it will positively affect development.

lngc = Logarithm of government capital expenditure (aggregate government capital expenditure) at current prices. It is expected that increase in capital expenditure, *ceteris paribus*, will increase development because people’s welfare will improve through government provision of social and infrastructural facilities. This will also directly reduce unemployment. Thus, it has positive impact on development

lngi = Logarithm of government investment as proxy for gross fixed capital formation at current prices. When government increases its investment on road, education, health etc, it will obviously develop the country, meaning that it will have positive relationship with economic development.

lnt= Logarithm of tax revenue (total federally collected revenue). According to Keynes (1936), change in tax revenue will have negative impact on growth. Increase in tax revenue could be in two folds: either through increasing the rate of payment by existing tax payers or expanding the number of tax payers. The former will reduce disposable income, savings, investment and aggregate demand, thus having negative effect on development. This effect could be much. Since the later will make former tax payer to maintain what they use to pay and irresponsible to the policy, it will only affect negatively the very few who have been evading tax.

μ = a stochastic error term.

Hence, our *a priori* expectations are $\beta_1, \beta_2, \beta_3 > 0$ while $\beta_4 < 0$

The study uses annual time series data covering the period 1981 to 2013. Data on fiscal policy aggregates and per capita income are obtained from the Central Bank of Nigeria Statistical Bulletin (December 2013) series and World Development Indicators (2014). To avoid the possibility of drawing up conclusions based on statistically spurious relationships, all data series are tested for stationarity. The Augmented Dickey-Fuller (ADF) and Phillip Peron (PP) unit root tests are used and test results are presented.

6. Empirical Results

For most parts, both the ADF and PP results suggested that the null hypothesis of the presence of unit root in the variables in levels could not be rejected even at 10% significance level indicating that the variables are non-stationary in levels. However, when the variables were first differenced, the null hypothesis of the unit root in each of the series was rejected at 1% significance level. Therefore it can be concluded that all the variables are integrated of order one. This is as presented in table 1.

Table 1: Unit Root Test Result

	ADF		PP	
	At Level	At 1 st Difference	At Level	At 1 st Difference
<i>lry/p</i>	-0.6815	-5.7082*	-0.0073	-9.1627*
<i>Lgr</i>	-0.9238	-7.8436*	-0.9183	-8.0038*
<i>Lgc</i>	-0.7223	-5.7983*	-0.7166	-5.7921*
<i>Lgi</i>	1.1312	-4.4847*	1.0112	-4.3794*
<i>Lt</i>	-1.1040	-8.5390*	-0.8501	-9.9063*

*** denotes significance at 1% level.**

Prior to performing cointegration tests, the study used the pair-wise correlation matrix to guide on the variable selection exercise and simple relationship. Table 2 shows results of the pair-wise correlation matrix used to determine the relationship between *lry_p* and each of the four variables (*lgr*, *lgc*, *lg*, and *lt*) involved in this study. Results from the correlation matrix showed that all the explanatory variables are positively correlated with economic development. This means that high values of government expenditure (capital and recurrent),

government investment and tax are likely to be associated with high values of economic development in Nigeria.

Table 2: Pair-wise Correlation Result

	lry/p	Lgr	Lgc	Lgi	Lt
lry/p	1.0000				
Lgr	0.946661	1.0000			
Lgc	0.939877	0.972489	1.0000		
Lgi	0.949353	0.971141	0.943936	1.0000	
Lt	0.918555	0.975196	0.960600	0.947745	1.0000

Given that variables in this study are integrated of the same order, cointegration tests are performed to determine the existence of a long-run equilibrium relationship amongst the variables. Cointegration of variables means that the linear combination of the variables is stationary even though the individual variables will be non-stationary. The Johansen's (1991, 1995) maximum likelihood approach was used to test for cointegration.

Table 3: Johansen Cointegration Test Result (Trace Statistics)

Hypothesized No.of CE(s)	Eigenvalue	Trace Statistics	0.05 Critical Value	Probability**
None *	0.877971	130.8407	69.81889	0.0000
At most 1 *	0.586492	67.73577	47.85613	0.0003
At most 2 *	0.438393	41.24339	29.79707	0.0016
At most 3 *	0.407085	23.93480	15.49471	0.0021
At most 4 *	0.240520	8.253653	3.841466	0.0041

Trace test indicates 5 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Table 4: Johansen Cointegration Test Result (Max-Eigen Statistics)

Hypothesized No.of CE(s)	Eigenvalue	Max-Eigen Statistics	0.05 Critical Value	Probability**
None *	0.877971	63.10496	33.87687	0.0000
At most 1	0.586492	26.49238	27.58434	0.0685
At most 2	0.438393	17.30859	21.13162	0.1579
At most 3 *	0.407085	15.68115	14.26460	0.0297
At most 4 *	0.240520	8.253653	3.841466	0.0041

Max-Eigen test indicates 3 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Cointegration analysis helps to clarify the long-run relationship between integrated variables.

Johansen's procedure is the maximum likelihood for finite-order vector autoregressions

(VARs) and is easily calculated for such systems, so it is used in this study. Results from the Johansen cointegration trace test in Table 3 reflected that five cointegrating equations exist at 5% significance level. The null hypothesis of no cointegrating vectors is rejected since the trace (test) statistics are all greater than the critical values at 5% significance level. However, the maximum eigenvalue test in Table 4 revealed that there are only three cointegrating equations at 5% significance level. Therefore, it can be concluded that there five significant long run relationship between the variables (using trace test results). Since variables can either have short or long run effects, a vector error correction model (VECM) is used to disaggregate these effects.

Table 5: Long-run Cointegration Equation

Variables	Coefficients	Standard Errors	t-Statistics
Constant	-0.5346		
Dlry_p(-1)	1.0000		
Dlgr(-1)	1.7034	0.3009	5.6604
Dlgc(-1)	-0.8041	0.1964	-4.0941
Dlgi(-1)	0.8489	0.1974	4.3002
Dlt(-1)	-0.3433	0.1168	-2.9398

The result in Table 5 indicates that the explanatory variables are correctly signed except dlgc. This suggests that government recurrent expenditure (dlgr) and government investment (dlgi) have a positive long run relationship with economic development, while government capital expenditure (dlgc) and tax revenue (dlt) are negatively related. All the variables are statistically significant in explaining economic development since their absolute t-values are greater than 2 and their coefficients deflated by two are more than their respective standard errors. The results suggest that in the long run, a unit increase in government recurrent expenditure (dlgr) and

government investment (dlgi) improves economic development by approximately 1.70 and 0.85 percents, while a unit increase in government capital expenditure (dlgc) and tax revenue (dlt) decreases economic development by approximately 0.80 and 0.34 percent. The positive impacts of dlgr and dlgi and negative impact of dlt on economic development are compatible with economic theory except for dlgc with negative impact in the long run which according to Sharm (2012) is attributed to embezzlement and mismanagement. Also it is due to low quality projects and inability of the public to maintain government facilities.

Moreover, the VECM results suggested evidence of error correction as shown in Table 6. The coefficient of the differenced dependent variable (-1.1563) is statistically significant. This shows that the speed of adjustment is approximately 115.6%, implying that if there is a deviation from equilibrium, approximately 116% of economic development is corrected annually as the variable moves towards restoring equilibrium. Therefore, this means there is a strong pressure on economic development to restore long run equilibrium whenever there is a disturbance. The result presented in Table 6 indicates that all explanatory variables included in the model are statistically significant with a t-statistic above 2. Also, in the short run, a 1 per cent increase in government investment, on average, has the potential of increasing economic development by 0.811 percent. It is worth mentioning that, of the included determinant factors, government investment has the greatest impact on economic development both in the short and long run in Nigeria within the period under consideration, which is in consonant with the Harrod-Domar growth model. Coefficients of 0.635 and 0.381 on government recurrent expenditure and capital expenditure imply that a 1 percent increase in government recurrent and capital expenditure, on average, improve economic development by 0.635 and 0.381 percent. This result is supported with earlier studies conducted by Barro (1999); Khosravi and Karimi (2010); and Mishkin (1982). The findings of the study presented in Table 6 suggest that a 1 percent increase in tax revenue, on average, will reduce development by 2.296 per cent. This is in line with the Keynesian full model of income determination in an open economy.

Table 6: Error Correction Model

Variables	Coefficients	Standard Errors	t-Statistics
Dlry_p(-1)	0.3343	0.1549	2.1585
Dlgr(-1)	0.6351	0.2888	2.1989
Dlgc(-1)	0.3808	0.3513	1.0841
Dlgi(-1)	0.8113	0.3548	2.2862
Dlt(-1)	-2.2955	0.0979	-3.0197
ECM	-1.1563	0.2030	-5.6973

7. Conclusion and Policy Implication

This study examined the short and long run impact of fiscal policy on economic development in Nigeria using annual time series data for the period 1981 to 2013. A vector error correction model was used to determine the effects of fiscal policy aggregates on economic development in Nigeria. The fiscal policy aggregates considered in this study were government expenditure disaggregated to recurrent and capital expenditure, government investment and tax revenue.

Results from this study revealed that government recurrent expenditure and government investment both have short and long run positive significant impact on economic development. Government capital expenditure has a short run positive effect but a reversal in the long run. Tax revenue negatively affects development in both the short and long run.

Several policy implications regarding the improvement of economic development using the fiscal policy framework are recommended in this study. The study recommends the Nigerian government to further increase expenditure on economically viable investment to improve individual income through employment and increased output. Capital expenditure should be well monitored and ensure that these expenditures are not diversified to individuals' pockets and also quality assurance be gotten from executors of government projects. The government should reduce the corporate tax rate (direct tax rate). This would help to increase aggregate demand, savings and investments through expansion by individuals and existing businesses. However, the Federal Inland Revenue Service should explore many other untapped ways of getting more tax revenue for the government as there are still many people and firms who do not pay tax out of tax evasion and avoidance.

Importantly, the consistency of government policies in the short to medium term would, to a large extent, determine the extent of success of the FC initiatives as an effective means of reducing fiscal deficits and debt accumulation in Nigeria over time. Also necessary precautions should be taken to ensure that FC strategy does not impede economic growth and job creation, even in the short-run

References

1. Anderton A (2008): Economics 5th edition Pearson Education Edinborough, Harlow Essex.
2. Adefeso *et al* (2010): Bofiscal Policy and Economic Growth in Nigeria: Testing the Prediction of

- Endogenous Growth Model. The Social Sciences, Medwell Journals, Vol. 5, No. 2
3. Alexiou C. (2009): Government Spending and Economic Growth: Econometric Evidence from South Eastern Europe. *Journal of Economic and Social Research*, Vol.11, No.1
 4. Yasin M. (2003): Public Spending and Economic Growth: Empirical Investigation of Sub-Saharan Africa. *Southern Economic Review*. www.ser/cu.edu.
 5. Alex M. and Peter R. (2008): Fiscal Policy and Economic Development. IMF Working Paper 08/155; June 1, 2008.
 6. Amanja D. and Morrissey O. (2005): Fiscal Policy and Economic Growth in Kenya. Centre for Research in Economic Development and International Trade, University of Noringham. www.northingam.ac.uk/economics/research/credit accessed 29/6/10
 7. Barro R. (1999): Notes on Growth Accounting. *Journal of Economic Growth* Vol.4 Page 119-137.
 8. Burrow P. and Hitiris T. (1974) *Macroeconomic Theory: A Mathematical Introduction*. John Willey and Sons Chichester.
 9. CBN Report (2011): Fiscal Policy and Government Finance. Central Bank of Nigeria Annual Report, December 2011.
 10. Bose N. *et al* (2007): Public Expenditure and Economic Growth: A Disaggregated Analysis for Developing Countries, *The Manchester School*, vol. 75, no.5, pp.533-556.
 11. Aigheyisi O. S. (2010): Examining the Relative Effectiveness of Monetary and Fiscal Policies in Nigeria: A Cointegration and Error Correction Approach, [Online]. Available at SSRN:<http://ssrn.com/abstract=1944585> [accessed date:13 May 2013]
 12. Sharma B. (2012): Government Expenditure and Economic Growth in Nepal: A Minute Analysis, *Basic Research Journal of Business Management and Accounts*, vol. 1, no.4, pp.37-40,
 13. Muritala T. and Taiwo A. (2011): Government Expenditure and Economic Development: Empirical Evidence from Nigerial, *European Journal of Business and Management*, vol. 3, no.9, pp. 18-28.
 14. Dandan M. M. (2011): Government Expenditure and Economic Growth in Jordan, *IPEDR*, vol. 4, pp. 467-471.
 15. IMF Country Report (2005): Paper on Recent Developments and Regional Policy Issues. Central African Economic and Monetary Community ; IMF Country Report 05/403; May 25, 2005
 16. Olaloku F.A. *et al* (1987): *Structure of the Nigerian Economy*. Macmillan Publishers. Low cost editions. The University of Lagos Press.
 17. Jhingan M.L. (2003): *Macroeconomic Theory*. 11th edition Vrinda Publicaitions (P) Ltd.
 18. Paul A.S. (1970): *Readings in Economics*. New York McGraw Hill. 6th ed.
 19. Stein H. (1968): Fiscal Policy in David L.Sills (ed). *International Encyclopedia of Social Science* Vol. 5. New York. Macmillian Pg 460)

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