Zik Journal of Multidisciplinary Research: Volume 2, 20-30

ZJMR

EFFECT OF FISCAL POLICY ON ECONOMIC GROWTH IN NIGERIA: 1987-2017

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Abstract
The study investigates the effect of fiscal policy on economic growth in Nigeria (1987 to 2017). The variables of capital expenditure; recurrent expenditure, government borrowing and taxation were regressed on gross domestic product in Nigeria over the period 1987 to 2017. Econometric techniques including ordinary least square (OLS) were used for the data analysis. The result of the study indicates that capital expenditure, recurrent expenditure and tax have positive and significant effect on gross domestic product while government borrowing has negative and insignificant effect on gross domestic product. . The study thus concludes that fiscal policy has positive effect on gross domestic product in Nigeria. The study recommends that Government should use an expansionary fiscal policy to encourage increase in investment in Nigeria. Government spending should be channeled to capital projects and social overhead capital that will encourage investment, such as constant electricity supply and good road networks. Government should rely more on petroleum profit tax and value added tax that have greater impact on investment than corporate income tax.

Key Words: Fiscal Policy, Economic Growth, Capital Projects.

Introduction
The growth and development of the Nigerian economy has not been stable over the years as a result, the country's economy has witnessed so many shocks and disturbances both internally and externally over the decades. Internally, the unstable investment and consumption patterns as well as the improper implementation of public policies, changes in future expectations and the acceleration are some of the factors responsible for it. Similarly, the external factors identified are wars, revolutions, population growth rates and migration, technological transfer and changes as well as the openness of the country in Nigerian economy are some of the factors responsible.

Fiscal policy is the means by which the government adjusts its level of spending in order to monitor and influence the nation's economy (Agu, and Idike, 2014). It is used along with the monetary policy which the central bank uses to influence money supply in a nation. These two policies are used to achieve macroeconomic goals in a nation. In other words, fiscal policy is a major economic stabilization weapon that involves measure taken to regulate and control the volume, cost and availability as well as direction of money in an economy to achieve some specified macroeconomic policy objective and to counteract undesirable trends in the Nigerian economy .Therefore, they cannot be left to the market forces of demand and supply as well as other instruments of stabilization such as monetary and exchange rate policies among others. The cyclical fluctuations in the country's economic activities has led to the periodical increase in the country's unemployment and inflation rates as well as the external sector disequilibria.

In other words, fiscal policy is a major economic stabilization weapon that involves measure taken to regulate and control the volume, cost and availability as well as direction of money in an economy to achieve some specified macroeconomic policy objective and to counteract undesirable trends in the economy. The aim of this study is to investigate the impact of fiscal policy on economic growth in Nigeria and to initiate the process of closing this gap by providing some empirical evidence of the impact of fiscal policy components on economic growth in Nigeria.

Fiscal Policy

Peter and Simeon (2011) defined fiscal policy as the process of government management of the economy through the manipulation of its income and expenditure and to achieve certain desired macroeconomic objectives. Central Bank of Nigeria (2011) defined fiscal policy as the use of government expenditure and revenue collection through tax and amount of government spending to influence the economy.

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Samuelson and Nordhaus (2002) defined fiscal policy as government's program with respect to the purchase of goods and services and spending on the transfer of payments, and as well the amount and type of taxes. In finance, fiscal policy is the use of government revenue collection (taxation) and expenditure (spending) to influence the economy. The two main instruments of fiscal policy are government taxation and expenditure.

Theoretical Framework

This study will be anchored upon the endogenous growth theory, Which advocates the stimulation of level and growth rate of per capita output through within the model using fiscal policy (e.g., government spending). The traditional neoclassical growth model assumes that output is a function of capital and labor, while technology is given: $Y = Af(K, L)$, (1) where Y = output, A is technology, being exogenous, while capital (K) and labor (L) are endogenous factors. In the New Growth Model (Endogenous Growth Model) technology is viewed as endogenously determined: $Y = f(K, L, A)$. (2) Technology (A) refers to rate of investment, (K) is the investment in capital stock and (L) is the human capital. This model envisages greater role of government in improving the efficiency or resource allocation and promoting investment to raise the rate of economic growth in the developing countries (Ahuja, 2009).

Ejuvbekpokpo and Sallahuddin (2015) examined the impact of fiscal policy on investment expenditure in Nigeria. It covers the period of 1970 to 2010. The study reveals that fiscal policy has a significant impact on investment expenditure in Nigeria.

Yakubu and Shehu (2013) investigated the effectiveness of capital expenditure interaction on price and output growth in Nigeria. The results suggest that the policy variables, money supply and government revenue have more positive impact on price and economic growth in Nigeria.

Recurrent Expenditure and Economic Growth in Nigeria

Anthony, Edeh and Wilfred (2015) investigated the impact of fiscal policy variables (capital expenditure, recurrent expenditure and direct income tax) on economic growth in Nigeria. The result of the analysis indicates that capital expenditure and recurrent expenditure are positively related and statistically significant in determining economic growth in the long run; direct income tax is inversely related and statistically insignificant in determining economic growth in the long run.

Osinowo (2015) examined the effect of recurrent expenditure on sect oral output growth in Nigeria for the period of 1970-2013. The findings established that manufacturing sector has a positive relationship with all the determinant variables, while inflation rate has negatively impacted output growth of the various sectors with an exception of manufacturing sector.

Taxation and Economic Growth in Nigeria

Greg and Okoiarikpo (2015) examined the relative impact of taxation revenue and fiscal deficits (FSD) on economic growth in Nigeria during the military and democratic regimes. The results indicated that the interest rate did not have a significant growth-impact during both regimes, while the gross fixed capital formation had a significant growth impact during both regimes in view of the findings

Government Borrowing and Economic Growth in Nigeria

Ezeabasili, Isu and Mojekwu (2011), in their study investigated the relationship between Nigeria's external debt and economic growth, between 1975 and 2006. The result of error correction estimates revealed that external debt has negative relationship with economic growth in Nigeria.

Olanrewaju, Abubakar and Abu (2015) examined the effect of government debt on economic growth in Nigeria between 1986 and 2013. The findings of the study reveal that, if the course of consistent borrowing is not curbed, the economy will slump further: resorting to surplus budgeting, and igniting; increases in unemployment, decreases in total investment, falling reserves, increased exchange rate, higher inflation and consequently increased poverty. **Government Borrowing and Economic Growth in Nigeria**

Sulaiman and Azeez (2012) examined the effect of external debt and its servicing on Nigeria economy. The findings from the error correction method show that external debt has contributed positively to the growth of the Nigerian economy.

Imimole and Okhuese (2014) examined the extent to which Nigeria's external debt relates to indices of ability to pay in order to ascertain the sustainability of it and to identify the main determinants of her external indebtedness for the period 1986 to 2010. The result from co integration test showed presence of long run relationship between external debt and the explanatory variables.

Table 1; Webometric Analysis on the Impact of fiscal policy on Nigeria Economic

Author/ year	Time frame	Topic of the study	Variables of the study	Methods of analysis	Findings of the study	Recommendations
Nathan Pelesai Audu(2012	1970 To 2010.	The Impact of Fiscal Policy on the Nigerian Economy	GDP = log of gross domestic product; MS2t = log of broad money supply; Ht= log of fiscal deficit; EXt=log of export. .	The Co-integration Error Correction Mechanism (ECM), a two band recursive least square	The study reveals that there is a significant causal relationship between gross domestic product (GDP) and the Variables used in this research. We also conclude that there was a significant causal relationship between exports and gross domestic product and hence fiscal	The study recommends that fiscal policies have a significant influence on the output growth of the Nigeria economy
Sikiru Jimoh Babalola and Umaru Aminu (2011)	1977 To 2009	Fiscal Policy and Economic Growth Relationship in Nigeria	RGDPt = Log of Real Gross Domestic Product. PGCt = Log of Productive Government Consumption Expenditure. UPGCt = Log of Unproductive Government Consumption Expenditure. DYTt = Log of Direct Income Tax KEt = Log of Capital	Augmented Dickey-Fuller technique ,cointegration test, Error-correction models	The results indicate that productive expenditure positively impacted on economic growth during the period of coverage and a long-run relationship exists between them as confirmed by the cointegration test	The paper recommends improvement in government expenditure on health, education and economic services, as components of productive expenditure, to boost economic growth.
Onyemaechi Joseph Onwe (2014)	1982 To 2012	Impacts of fiscal policy components on economic growth in Nigeria: an empirical trend	RGDPt = periodic real rate of growth of GDP ADMEXPt = periodic expenditures on administration ECONSERVt	The unit root tests of stationary and co-integration tests	The analytical results suggest as follows: (i) existence of unit root problems hence, non-stationary time series on the relevant regression variables; (ii) no	The study recommends for institution of effective and implementable political, social, and economic stabilization policy programmes.

		analysis	= periodic expenditures on economic services SOCMSERVt = periodic expenditures on social and community services TRNSFEXPt = periodic expenditures on transfers PERCGDPt = the ratio of federal government expenditures to GDP		positive impacts of federal expenditures on economic services and transfer payments on growth of the Nigerian economy; and (iii) observed positive impacts of federal expenditures on administration, as well as social and community services on economic growth	The federal government should lay special emphasis on administrative, social and community services in its fiscal policies, as these fiscal components have potential inputs to development of the Nigerian economy.

Ejuvbekpokpo And Sallahuddin (2015)	1970 To 2010	Analysis of the impact of fiscal policy on investment in Nigeria	INV = Investment expenditure CIT = Corporate income tax GEX = Government Expenditure GDP = Gross Domestic Product (used as a proxy for national income).	The ordinary least squares (OLS) method	The study reveals that fiscal policy has a significant impact on investment expenditure in Nigeria. Government expenditure and gross domestic product have significant impact on investment, but corporate income tax has a positive, instead of a negative, impact on investment expenditure in Nigeria.	The study recommended that the government should use an expansionary fiscal policy to encourage increase in investment in Nigeria and government spending should be channeled to capital projects and social overhead capital that will encourage investment, such as constant electricity supply and good road networks.
Abata, Matthew and Adeolu (2012)	1980 To 2010	Fiscal/Monetary Policy and Economic Growth in Nigeria: A Theoretical Exploration	GDP, CPI, MSP, EXG, MPR, REV and EXPT;	Augmented Dickey-Fuller technique, cointegration test, Error-correction models and the ordinary	The results suggest that the policy variables money supply and government revenue have more positive impact on price	The study recommends that the coordination between the stabilization policy (fiscal and monetary

				least squire (OLS)	and economic growth in Nigeria	policies) be sustained.
Alex & Ebieri Jones (2014)	1986 To 2010	Empirical analysis of the Impact of Fiscal Policy on Economic Growth of Nigeria	Recurrent and capital expenditures, on-oil taxes and on real GDP	The ordinary least square method of multivariate regression The Augmented Dickey-Fuller unit root test	The findings were that, there is evidence of long run equilibrium relationship between fiscal policy and economic growth in Nigeria during the period studied.	The study recommended that government should establish a strong fiscal responsibility and transparency system in the fiscal institutions; and tax reforms should be such that would encourage increase in investment and fight corruption.
Anthonyand Chukwudi (2015)	1970 To 2012	Impact of fiscal policy variables on economic growth in Nigeria (1970-2012): a managerial economics perspective	Capital Expenditure and Recurrent Expenditure, Direct Income tax on GDP	unit root test, using the augmented Dickey-Fuller test The Johansen co integration. The VECM analysis	The result indicates that capital expenditure and recurrent expenditure are positively related and statistically significant in determining economic growth in the long run. As expected, direct income tax is inversely related and statistically significant in determining economic growth in the long run.	The study recommends the adoption of tax policies that would spur growth instead of retarding growth with a wide margin, as has been observed from the study. Efforts should be made to Skew the pattern of public spending towards capital expenditure as it leads to higher growth than recurrent expenditure

Method

Research Design

The study adopts an ex-post facto research design because the data for the study are secondary data that already exist in the archive of well acclaimed financial publication such as the Central Bank of Nigeria.

Nature and Sources of Data

Secondary data will be sourced from Central Bank of Nigeria (CBN), Statistical Bulletin and statement of accounts, Federal Office of Statistics (FOS) for the period under study. The variables of Gross domestic product (GDPR) which is the dependent(Y) variable while the major explanatory variables (X) considered in the study are capital expenditure, recurrent expenditure, government borrowing and taxation are independent variables.

Model Specification

The model to be used for the study is the adaptation and modifications from the work of Alex, and Ebieri, (2014). They empirically analyzed the Impact of Fiscal Policy on Economic

Growth in Nigeria

The model was adapted and modified.
The model is stated thus:
GDPR= f (CEP, REP, GVB and TAX) - - - - - - - - - -1

The estimation equation:

$GDPR = \beta_0 + \beta_1 CEP + \beta_2 REP + \beta_3 GVB + \beta_4 TAX \mu$
Where:
GDPR = Annual Growth Rate of Gross Domestic Product
CE = Capital Expenditure
REP= Recurrent Expenditure
TAX=Taxation
GVB= Government Borrowing
β_0 and μ are the constant and error term respectively while β_1, β_2, β_3 and β_4 are the coefficient of fiscal policy on economic growth.
The equation form of the model is:
$GDPR = \beta_0 + \beta_1 CEP + \beta_2 REP + \beta_3 TAX + \beta_4 GVB \mu$
Where:
β_0 and μ are the constant and error term respectively while β_1, β_2, β_3 and β_4 are the coefficient of capital expenditure , recurrent expenditure, Government Borrowing and taxation respectively.

Method of Analyses

The data will be analyzed with econometric techniques involving Descriptive Statistics, Augmented Dicker Fuller and Philip Perron tests for unit roots, Johansson Technique for co integration test for long run relationship, Granger Causality Test and the Ordinary least square (OLS)

The Ordinary Least Square Regressions

In this section, we provide the benchmark test of the significance of the independent variables in explaining the effect of public expenditure on economic growth in Nigeria.

Dependent Variable: RGDP
Method: Least Squares
Date: 05/24/19 Time: 12:07
Sample: 1987 2017
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.19959	0.473190	2.535498	0.0000
CEP	5.379378	0.031406	2.527495	0.0021
REP	7.023766	0.063750	2.372804	0.0024
GVB	-3.053499	0.058387	-1.416286	0.7482
TAX	3.267337	0.385615	3.362468	0.0032
R-squared	0.757334			
Adjusted R-squared	0.735801			
F-statistic	4.788675	Durbin-Watson stat		2.487265
5Prob(F-statistic)	0.00021			

Sources: Computation from the E-view 9.0
From the regression result obtained the regression equation can be presented thus:
RGDP = 10.19959 + CEP 5.379378 + REP 7.023766+ GVB-3.053499 + TAX 3.267337 + u
From the results of the OLS, the constant parameter is positive at 3.332806. This means that if all the independent variables are held constant, GDP as a dependent variable will grow by 3.332806

Capital Expenditure: For capital expenditure, the coefficient of (CEP) is positive at 5.379378 with t-Statistic of 2.527495 and probability value of 0.0021 which means that capital expenditure has positive and significant effect on gross domestic product (GDP), a unit increase in capital expenditure (CEP) will cause (GDP) to increase by 5.379378 units.

Recurrent Expenditure: The coefficient of recurrent expenditure (REP) is positive at 7.023766 with t-Statistic of 2.372804 and probability value of 0.0024 which means that, recurrent expenditure has positive and insignificant effect on (GDP). A unit increase in recurrent expenditure will lead to a unit increase in (GDP) by 1.832566

GVB: the coefficient of (GVB) is negative at -3.053499with t-Statistic of -1.416286 and probability value of 0.7482 which means that, (GVB) has negative and insignificant effect on gross domestic product (GDP). A unit increase in (GVB) will cause gross domestic product (GDP) to decrease by 0.301044 units.

TAX: the coefficient of (TAX) is positive at 3.267337 with t-Statistic of 3.362468 and probability value of 0.0032 which means that, (TAX) has positive and significant effect

on gross domestic product (GDP). A unit increase in (TAX) will cause gross domestic product (GDP) to increase by 1.342700 units.

Above all, the Adjusted R-squared is 0.735801 which means that 73% of total variation in gross domestic product (GDP) can be explained by the variables, namely CEP, REP, GVB and TAX while the remaining 28% is due to other stochastic variables. The Durbin-Watson statistics at (2.173199) which means the model is free from autocorrelation. The F-statistic is 0.000340 which means that all the explanatory variables in the study have significant effect on gross domestic product within the period under study.

Conclusion

The result of the study indicates that capital expenditure, recurrent expenditure and tax have positive and significant effect on gross domestic product while government borrowing has negative and insignificant effect on gross domestic product.

The study thus concludes that fiscal policy have positive effect on gross domestic product in Nigeria and has helped to improve economic growth and development in Nigeria within the period under review.

Recommendations

Reiterating to the findings of the study, we recommend that:

Government should use an expansionary fiscal policy to encourage increase in investment in Nigeria.

Government spending should be channeled to capital projects and social overhead capital that will encourage investment, such as constant electricity supply and good road networks.

Government should rely more on tax that have greater impact on investment than borrowing

Borrowing should be contemplated only if it is designed to deepen the economy and the amount of debt to borrow should be sustainable to reduce the pressure exerted by its servicing requirements so as to improve gross domestic product in Nigerian.

Again, borrowing should be contracted solely for economic reasons and not for social or political reasons. This is to avoid accumulation of external debt stock overtime and prevent an obscuring of the motive behind borrowing. The authorities responsible for managing Nigeria's debt should adequately keep track of the debt payment obligations and the debt should not be allowed to pass a maximum limit so as to avoid debt overhang.

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