The Impact Fiscal Policy on Economic Development in Nigeria (1986-2017)

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Abstract

This study examined the relationship between fiscal policy and economic development in Nigeria using time series annual data spanning from 1986-2017. The study used secondary data sourced from the Central Bank of Nigeria(CBN) statistical bulletin, World Development Indicator (WDI)2017 and Federal Inland Revenue Service(FIRS) publications. Fiscal policy instruments were proxied by government recurrent expenditure (GRE), government capital expenditure (GCE), Direct tax revenue (DTR) and Indirect tax revenue (ITR). The data were analyzed using the Autoregressive Distributed Lag (ARDL). The stationarity test and cointegration test revealed that all the series were stationary at I(0) and I(1) and adequately cointegrated respectively. The study revealed a positive and significant relationship between fiscal policy and economic development in Nigeria. The study also found that recurrent expenditure exerts negative relationship while the capital expenditure, direct tax revenue and indirect tax revenue exert positive but insignificant relationship with economic development in Nigeria. The study recommends that government should increase investment in productive expenditure including expenditure on education, health, manufacturing, mining and agriculture and also ensure that funds meant for development of these sectors are properly utilized. Again, government should strive to reduce expenditure on recreational, cultural and religious affairs and other functions like political administrative expenses in order to stabilize the economy.

Keywords: *Human Development, Economic Development, Fiscal Policy, Taxation*

Introduction

Fiscal policy is a government measure designed to influence the quantum and allocation of revenue and expenditure with the aim to achieving internal and external economic balance, as well as economic development. Fiscal policy plays a significant role in an economic policy due to its ability to realize goals aimed at by a national economy. Its tools are considered one of the main economic tools to achieving economic development and overcome obstacles to economic stability. In addition to its distributional and specialist effects, fiscal policy has stability-inducing effects such as government spending and taxes which influence aggregate demand, thereby affecting overall economic variables and economic growth (Al-Masaeed & Tsaregorodtsev,2018)

Fiscal policy foster economic growth and increase through a number of different channels. These include the macroeconomic (influence on financial plan deficit on development) as well as micro (influence on competence of resource use). sensibly, fiscal policy is used in gearing the economy towards achieve a variety of economic alteration such as economic development and growth, price constancy, reduction in being without a job, external equilibrium as well as income redistribution (Babalola, 2015) Fiscal policy was not generally recognized as important until the birth of Keynessian 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 Millennium Development Goals (MDGs) and now the Sustainable Development Goals (SDGs) have placed fiscal policy at the centre of national and international development efforts (United Nations, 2015). The SDGs imply large and sustained public expenditures to continue the success of the MDGs in improving economic development indicators, especially in the areas of access to basic health care and primary education, with a particular emphasis on ending gender discrimination (Addison, Niño-Zarazúa, & Tarp, 2015; Grown, Addison, & Tarp, 2016). Moreover, the SDGs also imply large-scale public expenditures to support improved livelihoods for poor people—via better infrastructure access, more research into smallholder crops, etc.—not only to end poverty but also to help close gaps in the distribution of wealth and income by gender, region, and income-category (Addison, Niño-Zarazúa &Pirttilä)

In sum, the role of fiscal policy in development has broadened over time, and tax policy and revenue mobilization have moved up the policy agenda. Accordingly, there is now a renewed interest in economic literature over fiscal policy in relation to economic development, poverty reduction, and income inequality (Alberto and Silvia, 2010; Muinelo-Gallo and Roca-Sagalés, 2013; 2014). Notably, the economics research literature on tax policy in low-income countries (LICs) and middle-income countries (MICs) is now closer to the literature on tax policy in advanced economies. This includes a greater emphasis on the quality of tax institutions, including benchmarking progress in tax administrations and issues around compliance and how this can be best improved without damaging real economic activity.

A common alternative for measuring economic development has been using the rate of growth of income per capita or per capita GNP, which expresses the ability of a country to expand its output at a rate faster than the growth rate of its population (monetary growth of GNP per capita minus the rate of inflation). The GNP per capita is used to measure the overall economic well-being of the population, expressing the amount of real goods and services that is available to the average citizen for consumption and investment (Todaro & Smith, 2003). Recently, however, economic development is defined in terms of the quality of life of the majority of the population. According to Todaro & Smith (2003), the experience of the 1950s and 1960s when many developing nations failed to realise their economic growth targets and the quality of life of the majority of their people remained for the most part unchanged, signalled that something was very wrong with this narrow definition of development.

Statement of the Problem

The role of fiscal policy in any economy most especially a developing country like Nigeria is to pursue macro-economic objectives. Fiscal policy is supposedly the driver of economic development. The government over the years had implemented several fiscal policy measures in the economy to ensure economic development. Government in a bid to achieve these set objectives through fiscal policy has to make use of the tools of taxation, government expenditure, annual budget and public debt management (Unachukwu, 2010). The question is why is it that Nigerian economy is still classified as developing or underdeveloped? Does it mean that fiscal policies carried out in the past had no effect on Nigeria's economic development?

Nigeria ranks among the poorest countries of the world with low per capita income ranging from US$480 to US$645, high rate of unemployment of 23.1%, low access to safe and healthy life, low access to quality and affordable education, and low standard of living (UNDP, 2016) Vast researches have been done in the area of the nature of fiscal policy and economic growth for years, most of these studies centered on fiscal policy impact on the growth of economy in both the developed and developing countries. However, recent literatures have justified the need to jointly take into consideration fiscal policy and economic development. Osuala and Ebieri (2014) asserted that there is a long run equilibrium relationship between fiscal policy and economic growth of Nigeria. This conclusion was in conformity with several studies that have been carried out worldwide to investigate the nature of relationship that exists between fiscal policy and economic growth, but not much have been done in the area of fiscal and economic development in Africa most especially in Nigeria viz-a-viz economic development. Even the few studies carried out in Nigeria have not been able to effectively resolve the issues on the problem of fiscal policy and economic development (Oyeleke 2013, Odetayo and Adeyemi 2017, Babalola 2015, Adesoye,Alimi and Adelowokan 2016). Some of these studies (Babalola, 2015; Adesoye,Alimi and Adelowokan, 2016) investigated a positive relationship between fiscal policy and economic development which is in line with the Keynesian approach to fiscal policy which states that fiscal policy stimulates economic growth in the Nigeria during regulation and deregulation periods. While a few found out a weak or no relationship between fiscal policy and economic development in Nigeria (Oyeleke, 2013; Aigbokhan, 2005: Enache, 2009)

Based on these divergent findings, the researchers consider this area of interest and re-examine the effect of fiscal policy on economic development in Nigeria. In this study, per capita income is used as a proxy for economic development.. This study was carried out on a country specific analysis on the effect of fiscal policy on economic development in Nigeria between 1986 and 2017 which were loosely considered in the existing literature. This study departed from the earlier studies and filled a gap in the literature by decomposing fiscal policy into recurrent expenditure, capital expenditure, direct tax revenue and indirect tax revenue.

Objectives of the Study

The main objective of this study is to examine the relationship that exists between fiscal policy and economic development in Nigeria between 1986 and 2017. The specific objectives are to;

1. examine the relationship between government capital expenditure and economic development in Nigeria,
2. establish the relationship between government recurrent expenditure and economic development in Nigeria,
3. determine the relationship between direct tax revenue and economic development in Nigeria,
4. determine the relationship between indirect tax revenue an economic development in Nigeria.

Research Hypotheses

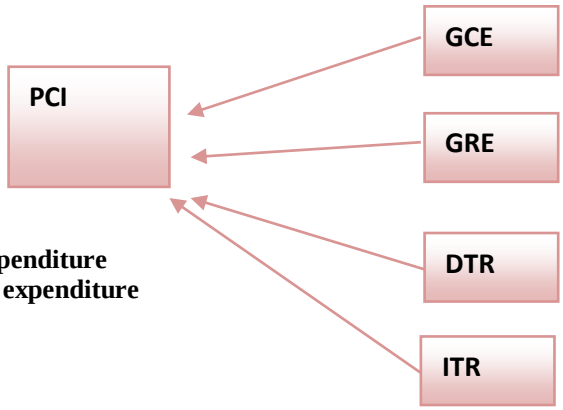
To give a better direction to the research work we need to formulate and test the following hypotheses;

1. **HO_1**: There is no significant relationship between government capital expenditure and economic development in Nigeria.
2. **HO_2:** Government recurrent expenditure has no significant relationship with economic development in Nigeria.
3. **HO_3:** Direct tax revenue does not significantly affect economic development in Nigeria.
4. **HO_4:** There is no significant relationship between indirect tax revenue and economic development in Nigeria.

Review of Related Literature

This chapter reviews existing literature related to the subject matter of this research. Essentially, the reviews are packaged in three separate sub-sections including Conceptual Review, Theoretical Review and Empirical Review. In the course of this review, efforts were made to link the objectives of the study to existing literature to enable us do a detailed discussion of findings in this research

Conceptual Review



Where,
GCE= Government capital expenditure
GRE= Government recurrent expenditure
DTR= Direct tax revenue
ITR=Indirect tax revenue
PCI= Per capita index

Fiscal policy is majorly measured in terms of government expenditure, tax revenue and government investment. Bhatia (2008) noted that fiscal policy consists of steps and measures which the government takes both on the revenue and expenditure sides of its budget and that it is the aggregate effects of government expenditures and taxation on income, production and employment. Dwivedi (2009) stated that it is government's programme of

taxation, expenditure and other financial operations to achieve certain national goals. He was of the view that whatever the objectives and the order of priorities, the two basic instruments of fiscal policy used to achieve social goals are taxation and public expenditure.

Concept of Government Budget

The budget is the principal instrument of fiscal policy. Budget policy exercises control over size and relationship of government receipts (revenue) and expenditures (Edame, 2010).The concept of government budget from a layman's perspective can be seen as an estimate of government income and expenditure for a set period of time. It could also be regarded as a regular estimate of expenditure put forward by a finance minister. This view seems narrow in explaining the concept of government budgeting. Samuel and Wilfred (2009) provided a broader concept. They opined that budget is a comprehensive document that outlines what economic and non-economic activities a government wants to undertake with special focus on policies, objectives and strategies for accomplishment that are substantiated with revenue and expenditure projections.

Budget has been classified into different types. They are:

i. **Surplus Budget:** It refers to a situation where the expected revenue surpasses the expenditure. This has been the dream of every government.

ii. **Balanced Budget:** This occurs the moment the proposed expenditure is equaled to the expected revenue. This situation, however, is always difficult to attain. In fact, it requires a high financial prudence and acumen to accomplish.

iii**. Deficit Budget:** The expenditure is higher than the projected revenue in this type of budget. This is where government spends more than it earns. It comes with the need to finance government projects despite the non-availability of funds.

Types of Government Expenditure in Nigeria

There are two major types of government expenditure, they are:

- Capital expenditure and
- Recurrent expenditure

Capital Expenditure

Capital expenditure refers to government expenditure on capital projects (goods and services for future benefits). For instance expenditure on infrastructure like roads, schools, hospitals, industries, airport and seaport, expenditure on health, education, agriculture, communication and transportation.

Recurrent Expenditure

These are government expenses on administration such as wages, salaries, interest on loans and maintenance etc. Government provides goods and services for current consumption, in other to satisfy the needs of the citizens in a country.

Tax Structure in Nigeria

The Nigerian Tax System has undergone important change in current times. Though, the tax system is on the whole prearranged in such a way as to add to economic growth from side to side income generation. Taxes can be planned into direct and indirect.

Direct Tax

It is a tax that is collected directly from individual's incomes and profit of companies which cannot be shared or transferred to any other person but are borne by the tax payer. There are different components of direct taxation. These include the personal income tax, petroleum profit tax, companies' income tax, educational tax.

Indirect Tax.
The different prominent components of indirect taxation in Nigeria include, Value Added Tax and Custom and Excise Duty (Umoru and Anyiwe, 2013).

Economic Development

Economic development is a policy intervention efforts targeted at the economic and social well-being of people. Its concern is on improvement in the quality of life of people, introduction of new goods and services using modern technological, mitigation of risk and dynamics of innovation and entrepreneurship (Hadjimichael, 2014). The objective of economic development is to create an enabling environment for local communities and regions to develop new ways of production of goods in such quantities that may lead to exportation to other countries. Availability of financial resources from exportation leads to more investment in infrastructure for the benefit of the society and improvement in living conditions of the people, in education, transportation networks, health conditions, water supply, sewage and sanitation conditions (SVBIC, 2014). The changes create the conditions for long-run economic growth by positioning the economy on a higher growth trajectory (Hadjimichael , 2014).

Economic development differs from economic growth. Economic growth specifically means an increase in the value of goods and services produced by a country over a period and Economists use an increase in country's GDP to measure it. Thus, it is possible to have economic growth without economic development in the short or even medium term (Hadjimichael, 2014). In other words, there could be an increase in GDP without any increase in standard of living of people in a state. Environmental conditions that would enhance economic growth must be created through an investment of the national income in infrastructural development for subsequent improvement in the standard of life of the population of a country (Wilkins and Zarawski, 2014).

Theoretical Review

Musgrave Theory of Public Expenditure Growth

This theory was propounded by Musgrave as he found changes in the income elasticity of demand for public services in three ranges of per capita income. He posited that at low levels of per capita income, demand for public services tends to be very low, this is so because according to him such income is devoted to satisfying primary needs and that when per capita income starts to rise above these levels of low income, the demand for services supplied by the public sector such as health, education and transport starts to rise, thereby forcing government to increase expenditure on them. He observed that at the high levels of per capita income, typical of developed economics, the rate of public sector growth tends to fall as the more basic wants are being satisfied (Musgrave and Musgrave,1989, Nnamocha, 2002)

The Wagner's Law/ Theory of increasing State Activities

Wagner's law is a principle named after the German economist Adolph Wagner. Wagner advanced his 'law of rising public expenditures' by analyzing trends in the growth of public expenditure and in the size of public sector.

The theory postulates that the government expenditure increases as a result of increase in industries and economic growth in an economy. According to Efobi and Osabuohien (2015) the theory emphasizes that there are both an absolute and a relative expansion of the public sector at the cost of the growth in the private sector. This according to Serena and Andrea (2011) and Babatunde (2011) quoted in Efobi (2012) is rooted on the assumption that during an industrialization process, as real per capital income of the country increases, the share of public expenditure is also expected to increase. That is to say that development in the industrial sector of any country, Nigeria inclusive was followed, all things being equal, by increase in the public expenditure (capital and recurrent).

Keynesian Income-Expenditure Technique

According to Keynesians, fiscal policy has a significant cause on income, employment and productivity in the short term without money supply. It declares that aggregate demand is a determinant of output. An expansion in government expenditure will reveal a cause and surge in domestic income. As internal income rises, imports will likewise rises lastly lessen the surplus in the trade cycle. Additionally, the Keynesians open economy model proves that a casual relation runs from budget deficit to aggregate demand. Particularly rise in budget deficit will increase

the interest rates as a compensation of the misfortune and a wellspring of fund. Thus, as capital flows rises, the demand on local currency as well rises (Barro, 1989).

The Ricardian Equivalence Theory

The Ricardian Equivalence theory stated that if the balance of payments is utilized to simply raise the share of consumption and no concrete enhancement in the economies capital stock or exports, this increment will lead to less capacity to repay the hired funds in the future.

Empirical Literature

In the study of Babalola (2015) which examined the short and long run impact of fiscal policy on economic development in Nigeria between a period of 1981 and 2013 and employed cointegration and pair-wise correlation to ascertain the relationship. 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.

Morakinyo, David &Alao (2018) examined the impact of fiscal policy instrument on economic growth in Nigeria using time series annual data from 1981-2014 which constitutes 34 years observations. This study used secondary data obtained from the CBN annual statistical bulletin and the data were analysed using Ordinary Least Square method and vector error correction mechanism was conducted. The study found that recurrent expenditure and public domestic debt exert negative relationship while the capital expenditure and external debt exert positive relationship in the long run on economic growth (GDP) and in the short-run the entire variables are having positive influence except REC (recurrent expenditure) on economic growth (GDP)

Al-Masaeed &Tsaregorodtsev (2018) examined the impact of fiscal policy on the economic growth of Jordan for the period 1990-2010. The study used multiple linear regression and least squares method (OLS) to test the study hypotheses. The study found that government spending; exports and administration revenues have a constructive and important impact on the Jordanian GDP enlargement.

Oke (2011) empirically investigated the effect of fiscal policy on Nigerian construction sector from 1980-2006**.** The data was presented and analyzed using tables, Pearson moment correlation coefficient(r) and regression analysis. The study confirmed that there is significant relationship between the three variables (taxes, government expenditure and government borrowing). However, it revealed that the combined effect of taxation and government spending on construction sector in Lagos state has a very high and positive effect.

Okoli, Njoku and Kaka (2014) studied taxation and economic growth in Nigeria; A Granger Causality Approach. The data collected were analyzed using the granger causality approach. The results of the analysis revealed that a significant positive relationship exists between Taxation and economic growth in Nigeria

Agu,Idike, Okwor and Ugwunta(2014) used ordinary least square to determine the impact of various components of fiscal policy on the Nigerian economy (1961 to 2010) Findings revealed that total government expenditures have tend to enhance with government income, with expenditures peaking earlier than revenue. Asset expenditures were much lower than regular expenditures evidence the poor growth in the country's financial system. Hence there is some proof of optimistic association between government expenditure on financial services and financial growth.

Osuala and Ebieri (2014) empirically examined the impact of fiscal policy on economic growth of Nigeria from 1986- 2010. The ordinary least square method of multivariate regression was utilized in analyzing the log-linearized model. The findings revealed that there is evidence of long run equilibrium relationship between fiscal policy and economic growth in Nigeria during the period studied.

Onwe (2014) carried out an empirical trend analysis on the impact of fiscal policy components on economic growth in Nigeria (1981-2012) using cointegration analysis showed significant impact of federal expenditures on economic services and transfer payments on growth of the Nigerian economy and also observed positive impact of federal expenditures on administration, as well as social and community services on economic growth.

Chibu and Njoku (2015) investigated the impact of taxation on the Nigerian economy for the period 1994 - 2012. The co-integration test also revealed that the variables are co-integrated and that long run relationship existed between the variables. The results of the statistical analysis revealed that positive relationship also existed between

the explanatory variables (Custom and Excise Duties, Company Income Tax, and Petroleum Profit Tax) and the dependent Variables (Gross Domestic Product, and Unemployment). But, the individual explanatory variables have not significantly contributed to the growth of the economy

Ofoegbu, Akwu and Oliver (2016) empirically examined the effect of tax revenue on the economic development of Nigeria from 2005 to 2014 and to ascertain whether there is any difference in using Human Development Index (HDI) and GDP in establishing the relationship. The study adopted ordinary least square (OLS) regression technique and findings revealed a positive and significant relationship between tax revenue and economic development. The result also exposed that measuring the effect of tax revenue on economic development using HDI gave lower relationship than measuring the relationship with GDP thus suggestive of that using gross domestic product (GDP) gave a painted picture of the relationship between tax revenue and economic development in Nigeria.

This study on the impact of fiscal policy and economic development in Nigeria from 1986 to 2017 was undertaken to compare the result with what already existed. The purpose is to make a difference through the use of different methodology and coverage in the study. From what existed in literature, we looked at this study from a global perspective and compared the results with what other studies that were carried out in Nigeria. This helped us to identify the gap which we want to fill and the point of departure of the study from existing studies.

Thus, it is evident from the review that there is no consensus theoretically and empirically among studies on the effect of fiscal policy on economic development globally and in Nigeria particularly. On the basis of this controversy, this study was carried out on a country specific analysis on the effect of fiscal policy on economic development in Nigeria between 1986 and 2017. Also this research considered these as independent variables; government recurrent expenditure, government capital expenditure, indirect tax revenue, direct tax revenue which actually is a departure from what existed in the literature so far reviewed.

METHODOLOGY

This study utilized the Ex post facto design. It is a quasi-experimental study examining how an independent variable present prior to the study in the participants, affects a dependent variable. An ex post facto research design is a method in which groups with qualities that already exist are compared on some dependent variable**.** To extensively access the impact of fiscal policy on the economic development of Nigeria, the theoretical analysis was followed up by an empirical investigation. To achieve this, data was sourced from secondary sources which included; Central Bank of Nigeria statistical bulletin, Federal Inland Revenue Services (FIRS) publication, Federal bureau of Statistics (FOS)**,** World development indicator (WDI), 2017.

The analytical framework of this study includes pre estimation analysis such as descriptive statistics and stationarity test. This is to reveal the behaviour of the data on the variables. The applicable analytical tools should be able to address the research problem, purpose of the study, as well as the research hypotheses in the most efficient manner. The major statistical tool used in this research is the Autoregressive Distributed Lag (ARDL). This technique is used to estimate model in this research and testing of the formulated hypotheses. However, the diagnostic tests like Breusch-Godfrey serial correlation LM test, the ARCH test for heteroscedasticity, Jarque-Bera test for normality of the residual term, were performed on the model.

Model Specification

The choice of the variables that were considered here were drawn from the literature of this research. In view of this, to specify the models needed for this study, the dependent variable, economic development, was proxied by Per Capita Income (PCI). Also, the independent variable, fiscal policy, was disaggregated into, government capital expenditure, government recurrent expenditure, direct tax revenue and indirect tax revenue.

Therefore, following the detailed review of previous studies, the model is specified thus:

$PCI = f(GCE, GRE, DTR, ITR)$……..(.1)

The above functional relationship of our model can be transformed to econometric form as presented below:

$PCI = = \alpha_0 + \alpha_1 GCE + \alpha_2 GRE + \alpha_3 DTR + \alpha_4 ITR + \mu$…….(.2)

Where;

PCI= Per Capita Income

GCE=Government Capital Expenditure

GRE= Government Recurrent Expenditure

DTR=Direct Tax Revenue

ITR= Indirect Tax Revenue
α0= Constant
α_{1-} $\alpha_{4=}$ parameters to be estimated
μ= Error term.

Appriori Expectation:
The appriori expectation is that all the independent variables; GCE, GRE, DTR and ITR will have a direct positive relationship with the dependent variable; PCI.
This is thus stated; $\alpha_{1,}$ $\alpha_{2,}$ $\alpha_{3,}$ $\alpha_4 > 0$.

Data Analysis and Interpretations

Unit Root Test

The unit root tests are conducted in this study to find out if there are mixtures in the order of integration of our variables.

Table 1 : **Test of Stationarity**

Series	ADF Test Statistic	5% Critical Value	Order	Remarks
PCI	5.187795	2.963972	I(1)	Stationary
GCE	3.052987	2.963972	I(0)	Stationary
GRE	7.957322	2.963972	I(1)	Stationary
DTR	4.701800	2.963972	I(1)	Stationary
ITR	3.334525	2.971853	I(0)	Stationary

Source: E- views7.
In the results shown in Table 1 above, the ADF test statistic for each of the variables are greater than the respective critical values. Thus, we accept the hypothesis of unit roots in each of the time series. In our final evaluation, PCI, DTR and GRE are stationary at first difference *I* (1) while GCE and ITR became stationary at level I (0) . Once all the series are non-stationary in the level, one can estimate an econometric model only if they are co-integrated. Thus co-integration tests can be applied for all variables

Tabble 2 ARDL Bounds Test
ARDL Bounds Test
Null Hypothesis: No long-run relationships exist

Test Statistic	Value	k
F-statistic	6.137279	4

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.45	3.52
5%	2.86	4.01
2.5%	3.25	4.49
1%	3.74	5.06

The ARDL model estimation on Table 2 allows for the bounds co-integration tests. The bounds test result on Table above showed that the f-statistic value of 6.137279 is greater than the Critical Value Bounds for the upper bound I(1) at 5% level of significance (4.01), thus, there is co-integration as such there is long-run relationship

Table 3: ARDL

Dependent Variable: PCI
Dynamic regressors (4 lags, fixed): GRE GCE ITR DTR
Fixed regressors: C

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
GRE	-1.718612	0.390871	-4.396878	0.0218
GCE	0.908367	0.386067	2.352876	0.1000
ITR	0.013345	0.358186	0.037258	0.9726
DTR	0.229544	0.295470	0.776879	0.4939
C	33.43331	11.79303	2.835005	0.0659

R-squared	0.994251	Mean dependent var	7.185184
Adjusted R-squared	0.948263	S.D. dependent var	0.616737
S.E. of regression	0.140282	Akaike info criterion	-1.538201
Sum squared resid	0.059037	Schwarz criterion	-0.348733
Log likelihood	46.53482	Hannan-Quinn criter.	-1.174569
F-statistic	21.61941	Durbin-Watson stat	3.051890
Prob(F-statistic)	0.013528		

Source: E-views

Global Statistical Results Analysis

The econometric property of the estimated equation shows that the global utility or the overall goodness of fit is moderate with an F- statistics of 21.61941 and probability value of 0.013528. From ARDL result, R^2 is 0.994251 or 99.42% and the adjusted R^{-2} is 94.82%. This implies that, at level series, about 94.82% of the total variations in economic development in Nigeria are explained by the changes in fiscal policy variables; GCE, GRE, ITR and DTR

The Durbin – Watson statistic from the output result is 3.051890 and it is close to 3 than O. This depicts the absence of autocorrelation. But in order to be sure of data employed, a more reliable test is conducted to check for serial correlation which is more serious than autocorrelation.

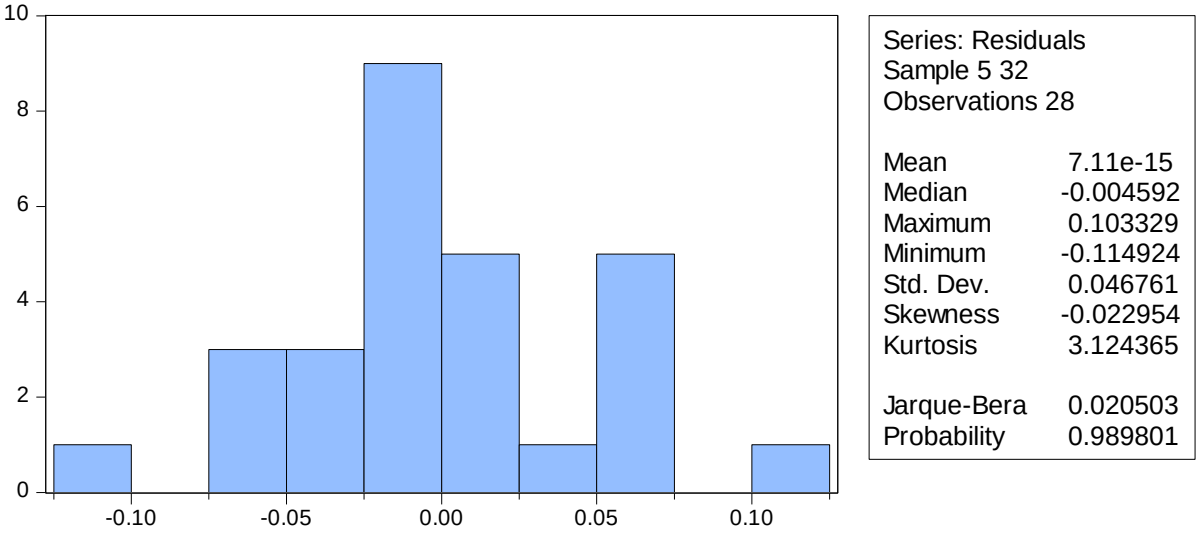


Fig 2.

Table 4: Breusch-Godfrey Serial Correlation LM Test:

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	37.20706	Prob. F(2,1)	0.1152
Obs*R-squared	27.62872	Prob. Chi-Square(2)	0.0000

Table 5. Ramsey RESET Test

Ramsey RESET Test

Equation: UNTITLED

Specification: PCI PCI(-1) PCI(-2) PCI(-3) PCI(-4) GRE GRE(-1) GRE(-2) GRE(-3) GRE(-4) GCE GCE(-1) GCE(-2) GCE(-3) GCE(-4) ITR ITR(-1) ITR(-2) ITR(-3) ITR(-4) DTR DTR(-1) DTR(-2) DTR(-3) DTR(-4) C

Omitted Variables: Squares of fitted values

	Value	df	Probability
t-statistic	0.329787	2	0.7729
F-statistic	0.108759	(1, 2)	0.7729

The post estimation test captured by Jarque-Bera, Ramsey reset test, Breusch among others on the long and short run regression, reveal not only the robustness of the estimated equation results but the desired properties of an econometric model. The diagnostic tests confirm the suitability of the estimated models. Thus, the model residual series are normally distributed as suggested by the Jarque–Bera statistics, while the Breusch–Godfrey LM test statistics indicate that the model does not have significant serial correlation problem. Moreover, the Ramsey RESET shows that the residuals are homoscedastic and the model has correct functional form.

Test of Hypotheses

Table 6: Hypotheses Result

Variables	T-Statistic	Prob.Value	Observation	Decision
LOGGRE	-4.396878	0.0218	p-value<0.05	Reject Null
LOGGCE	2.352876	0.1000	p-value> 0.05	Accept Null
LOGDTR	0.776879	0.4939	p -value>0.05	Accept Null
LOGITR	0.037258	0.9726	p -value >0.05	Accept Null

Source: Extracted from E-views

However, the study will go on and test for individual contributions of each of these variables by looking at the hypotheses stated earlier

HO_1: There is no significant relationship between government capital expenditure and economic development in Nigeria.

Based on table 6 above, and the decision criteria stated earlier (P-value of 0.1000 is greater than 0.05), we accept the null hypothesis and reject the alternative hypothesis and conclude government capital expenditure has no significant relationship with economic development in Nigeria. This finding does not agree with the appriori expectation stated earlier. The cause of this is not far-fetched as funds appropriated for capital expenditure is not always utilized and sometimes elephant projects are undertaken and completion of some of them become impossible.

HO_2: There is no significant relationship between government recurrent expenditure and economic development in Nigeria.

From table 6 above, and in line with the decision rule as stated earlier (P-value of 0.0218) is less than 0.05), H0 is rejected thereby leading to the acceptance of the H_1 and conclude that government recurrent

expenditure has significant relationship with economic development in Nigeria. This finding revealed a significant but negative relationship with economic development in Nigeria. This inverse relationship suggests that as government spends more money on recurrent expenditure, the economic development of the country dwindles. More attention should be given to capital projects that have the capacity to transform the economy of the country.

HO_3: There is no significant relationship between direct tax revenue and economic development in Nigeria.

From the table 6 above, the t-statistic is 0.776879 with a P-value of 0.4939 which is greater than 0.05. With this result, we accept the null hypothesis and reject the alternative hypothesis and conclude that direct tax revenue has no significant impact on economic development in Nigeria. The cause of the anomaly might be the inefficiency in tax collection and tax evasion. Misappropriation of tax revenue by tax officials may also account for this glitch.

$H1_4$: There is no significant relationship between indirect tax revenue and economic development in Nigeria.

From the table above, Ho is accepted because the P-value of 0.9726 is greater than 0.05, we therefore reject the H_I and conclude that indirect tax revenue has no significant relationship with economic development in Nigeria. This is contrary to the apriori expectation of this study. The two major sources of this tax revenue; VAT, custom and excise duty have not contributed significantly due to insincerity and fraudulent practices among the tax officials.

From the above results, the study revealed that there is significant relationship between fiscal policy and economic development in Nigeria within the period under study (1986-2017). This finding is in line with the Keynesian Income-Expenditure technique**.** While government recurrent expenditure negatively influenced economic development in Nigeria, government capital expenditure, direct tax revenue and indirect tax revenues had no effect on economic development of Nigeria within the period under study. The inverse relationship of the recurrent expenditure is worrisome. It means all the funds committed to recurrent expenditure in Nigeria yielded no positive impact on per capita income

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary

This study entitled "**Fiscal policy and economic development in Nigeria"** has the main objective of finding out the effect of fiscal policy on economic development in Nigeria over the period (1986-2017) .The study utilized the ex-post facto design. Time series data for thirty one year period (1986-2017) were collated from secondary sources. The test for autocorrelation and serial correlation revealed absence of both autocorrelation and serial correlation. Also, the probability of the Jarque-berra statistics of the transformed series of all variables showed that the series are normally distributed. Breusch-Godfrey serial correlation LM test is used to test whether Residuals are auto-correlated or not. A p-value of 0.989801 reported in the table is above 5% implying that the residual of the values is not serially correlated or auto-correlated and hence fits for regression model.

The test for stationarity proved that all the variables are stationary at level I(0) and at first difference I (I) as seen table 4.2 and this was the reason for application of the Autoregressive Distributed Lag (ARDL). Hypotheses were formulated and tested using the Autoregressive Distributed Lag (ARDL). Of all the four hypotheses tested, the government recurrent expenditure (GRE) exerts significant negative relationship on economic development in Nigeria. The government capital expenditure (GCE), direct tax revenue (DTR) and indirect tax revenue (ITR) revealed no significant relationship on economic development. The coefficient of determination (R^2) indicated that about 94 percent of the variations in economic development are explained by changes in fiscal policy variables in Nigeria within the period of study. The study therefore, concluded that fiscal policy variables induced economic development in Nigeria and therefore recommended that government should increase investment in productive expenditure including expenditure on education, health, manufacturing, mining and agriculture and also ensure that funds meant for development of these sectors be properly utilized. Also, government should strive to reduce expenditure on recreational, cultural and religious affairs and other functions like political administrative expenses in order to stabilize the economy.

Conclusion

Economic development is the ultimate goal of every government and another criterion for measuring the development is the per capita income. The higher the per capita income, the higher is the economic development

level. In this study, we explored one of the major government policy i.e. fiscal policies and Nigerian economic development which spanned between 1986 and 2017. Econometric model was specified and estimated via econometric techniques to ascertain the relationship between fiscal policy variables and economic development. The variables were tested for stationarity, co-integration analysis was carried and their result revealed that the variables were stationary and conitegrated . The study found that economic development and the selected fiscal policy variables included in the model have a long run relationship within the period under study. This finding is in line with the Keynesian theory. The study also revealed that only the government recurrent expenditure (GRE) has major impact on economic development (though negative impact) in Nigeria within the period of this study. Fiscal policy variables such as government capital expenditure, direct tax revenue and indirect tax revenue were not statistically significant in determining economic development in Nigeria. The study therefore, concluded that fiscal policy variables induced economic development in Nigeria during the period of this study.

Recommendations

Based on the forgoing, this study recommends as follows;

1. That government should increase investment in productive expenditure including expenditure on education, health, manufacturing, mining and agriculture and also ensure that funds meant for development of these sectors are properly utilized.
2. Government should strive to reduce expenditure on recreational, cultural and religious affairs and other functions like political administrative expenses in order to stabilize the economy.
3. Government fiscal policies should place greater emphasis on the principles of effective taxation aimed at promoting investment and the growth of human capital development in the country. The inverse relationship of total government recurrent expenditure and insignificant effect of government capital expenditure on Nigeria's economic development revealed that the increasing and huge government expenditure during the this era still fall short of achieving and boosting Nigeria's standard of living.

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Logged data on Per Capita Income, Government Capital Expenditure, Government Recurrent Expenditure, Direct Tax Revenue and Indirect Tax Revenue from 1986– 2017.

YEAR	PCI	ITR	GRE	GCE	DTR
1986	5.486704	8.172164	2.040818	2.143214	9.527994
1987	5.611192	8.643297	2.750228	1.851992	9.031931
1988	5.550204	8.668368	2.965757	2.121075	9.434443
1989	5.564482	9.064274	3.257873	2.710321	10.30581
1990	6.531606	9.346356	3.5896	3.180077	10.65594
1991	6.470025	9.683776	3.643974	3.344306	10.85888
1992	6.302802	9.647627	3.970935	3.682944	11.13841
1993	6.358708	10.14077	4.917987	3.998234	10.91651
1994	6.675571	10.97035	4.499531	4.261529	11.07807
1995	7.149367	11.3621	4.849134	4.796933	11.49951
1996	7.389131	11.48247	4.824236	5.360946	11.45714
1997	7.446235	11.44785	5.066155	5.597131	11.52584
1998	7.528923	11.81303	5.182333	5.733392	12.25724
1999	6.207583	11.97666	6.108497	6.210655	13.26421
2000	6.345987	12.47763	6.134699	5.478348	13.47006

2001	6.394092	12.57764	6.36182	6.083808	13.08425
2002	6.617804	12.71259	6.546498	5.772618	13.59024
2003	6.681607	12.8392	6.891931	5.487649	14.07526
2004	6.890609	12.92611	7.012695	5.861498	14.53101
2005	7.126971	12.89747	7.186318	6.252809	14.64109
2006	7.372307	13.18252	7.237132	6.314247	14.4446
2007	7.508129	13.3162	7.37103	6.632372	14.72437
2008	7.711728	13.46556	7.657926	6.86786	14.24729
2009	7.579985	13.56599	7.774753	7.049946	14.57931
2010	7.768533	13.39871	8.167663	6.784315	15.13197
2011	7.856552	13.4738	8.253669	6.822795	15.20625
2012	7.936624	13.59572	8.295163	6.773881	15.10472
2013	8.02027	13.59607	8.304756	7.010661	15.10594
2014	8.092056	13.36193	8.382207	6.663285	14.66007
2015	7.924145	13.50842	8.49543	6.707293	14.73614
2016	7.699797	13.51449	8.659162	6.453291	14.60027
2017	7.597998	13.52053	8.873314	7.05893	14.44299

Sources: Central Bank of Nigeria Statistical bulletin 2017, Federal Inland Revenue Service publications and World Development Indicator (WDI)- 2017